

Journal of the Simplified Spelling Society

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The Journal

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1. Editorial

Chris Upward

National or international standards?

Languages spoken predominantly in a single country (eg, Czech, Greek) can reform their spelling with little concern for the outside world. Languages spoken more widely need to co-ordinate their reforms between user-countries, as French, German and Spanish recently did. By contrast, reforming English should mean co-ordination on a world scale, involving English-speaking and non-English-speaking countries alike.

This world dimension is sometimes forgotten, especially in Britain and America, both of which all too easily think of themselves as linguistically self-sufficient. Thus a radio debate recently held in Oxford argued over whether a *national* regulatory authority for English was needed; and the *Queen's English Society* (see Item 7) by definition appeals only to subjects of the *British* monarch. Similar expressions of proprietorial parochialism emanate from time to time from America.

Yet there is also a growing awareness of the globalization of the English language. New books appear with titles like *English as a Global Language* (Crystal — see [JSSS 23](#), Item 11) and *The English Languages* (McArthur). Periodicals like *English Today* and the Internet *GEN* (Global English Newsletter) continuously promote that awareness. Research projects embrace the world: the Langscape survey stretches out to every continent from its native Australia, and the *ICE* (International Corpus of English) draws its data from 18 sites around the world.

Such studies tend to highlight the diversity of English and prompt the fear that the unity of the language may be, now or in the future, at risk. In *English Today* 55 (p24) Tom McArthur quotes a heartfelt plea from a Japanese user of English for the plight of non-native-speakers faced by this diversity to be catered for, and McArthur accordingly calls for a concept of *ISE* (International Standard English) to be developed, independent of any one national variety.

Though as yet the English spelling problem does not significantly feature in any of the above publications or research programs, spelling reformers will wish to encourage any move toward an *ISE*. For one thing, it implies a global co-ordinating body which could take spelling onto its agenda; and for another it would take account of people's linguistic needs, one of the most desperate of which is the rationalization of English spelling.

Features of this issue

Not widely known outside America is the bold initiative taken by the *Chicago Tribune* in using a range of novel spellings through several decades of the mid-20th century. Burke Shipley's meticulous and original research into this landmark in the history of English spelling reform is immensely revealing. The full significance of the initiative is not yet discussed in this first part of the study published in the current issue of *JSSS*, but already it will be clear to readers how hazardous such an idiosyncratic attempt at reform was, supported neither by linguistic or psychological research, nor by a concerted campaign for the reforms to be adopted across America, let alone the world. This intriguing story holds some awful lessons for reformers of subsequent generations.

Over the years *JSSS* has published several analyses of misspellings (eg, [JSSS 22](#), Item 11). Bernard Lamb's study introduces an important new dimension, the spelling of specialist terminology, in this case from genetics. Many errors he found were typical of general misspelling in English (eg, confusion of single and doubled consonants), but some infringed the specific conventions of the science concerned (eg, upper case for the name of a genus). This reminds us that reformers have so far given little thought to the spelling of technical terms, where special conventions may apply. A further common problem, prevalent in all the life sciences, is how to spell terms of Greek derivation, such as *haemophilia* and *staphylococcus*. That this problem is self-inflicted by English, and not imposed by Greek, is seen from their simplification in Italian (*emofilia*, *stafilocco*) and Spanish (*hemofilia*, *estafilococo*) and other languages.

Chris Upward's article is unashamedly utopian, envisaging the harmonization of spelling between languages to enhance their mutual comprehensibility. As an example, it examines how often the redundant letters that litter written English obscure parallels with other languages: thus *committee* has but one m and one t elsewhere in Europe (eg, German *Komitee*). Utopian or not, however, reducing arbitrary divergences from the spelling of other languages is a factor that deserves to be taken into account when we consider the world context of English spelling reform.

Ken Spencer's analysis of misspellings by 7- and 11-year-olds gives statistical evidence for the relative importance of three factors implicated in spelling difficulty. The most important, as we know, is unpredictability of sound-symbol correspondence, which is the primary target of all reform proposals. Another factor is the frequency of occurrence (ie, familiarity) of any given word, which is something spelling reform cannot directly address. The third factor is the length of words, ie, the number of letters they contain: the fewer the letters in a word, the more transparent is its spelling and the easier it is to spell correctly. This criterion for improved spelling, brevity, is one that reformers have not always taken seriously enough.

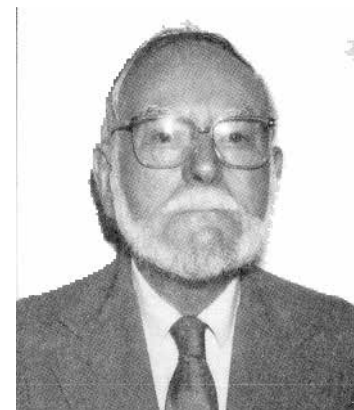
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2. Spelling the Chicago Tribune Way, 1934–1975, part 1

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[Part II](#) and [Part III](#) of this article will appear in subsequent issues of *JSSS*.



Abstract

This article has three parts:

Pt. I The spelling reforms

1. From 1934 to 1939;
2. From 1940 until autumn 1955, soon after the death of the owner-publisher, Col. Robert R. McCormick;
3. From late 1955 into 1975.

Pt. II Responses

1. The *Tribune* staff;
2. Readers; and
3. Books, periodicals, domestic and foreign newspapers.

Pt. III Conclusions

1. Dictionary publishers as possible allies;
2. Causes of abandonment of the reforms;
3. Possible influence.

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Part 1

1 The spelling reforms: from 1934 to 1939

1.1 McCormick's 1934 launch

The New York *Times*, Sunday, January 28, 1934, ran the following item, date-lined Chicago, Jan. 27:

Colonel Robert R. McCormick, publisher of The Chicago Tribune, has changed the spelling of his name to M'Cormik. The dropping of the first and third "c" coincided with the publication in the Sunday Tribune of a list of twenty-four words 'spelled in a manner harmonizing with sane trends toward simpler spelling of the English language.'

The revised spelling of the publisher's name will appear on the editorial page of Tomorrow's Tribune over the text of an address entitled: 'The Prospect for America' given recently at Northwestern University [in Evanston, Illinois]. [1]

This minor and, as some might choose to see it, ironic 'scoop' was confirmed that Sunday when the name Col. Robert R. M'Cormik appeared as author. [2] Other publications duly noted the change: *News-Week* got it right in its issue of February 3rd, while *The Literary Digest* got it wrong:

"... McCormick is credited by ironic editors with making the supreme sacrifice in the cause of simplified spelling, in changing the spelling of his own name to McCormik [sic] [3]

Both weeklies noted, of course, that the *Tribune* had adopted 24 simpler spellings that day. Within a few weeks, the spelling of the publisher's name went to M'Cormick and returned to conventional form some months later; or, as *Advertising Age*, also published in Chicago, put it somewhat prematurely, "Col. Robert R. McCormick, editor and publisher of the *Chicago Tribune*, will continue to spell his name that way, reports to the contrary notwithstanding." [4]

Had McCormick read the New York *Times* news item about new-spelling his name he might well have smiled: they take me seriously; let them float on their sense of linguistic superiority — they cannot recognize a joke. For to an interviewer from *Editor & Publisher*, on Monday, January 29, McCormick, in effect, confirmed what *Advertising Age* was later to state:

As to the report that he has changed the spelling of his own name to M'cormik, the Tribune publisher said that it was more or less a joke. An article did appear under the name of Col. M'Cormik [as we have seen], after members of his editorial staff had suggested that if he was to be consistent, he should eliminate the unnecessary c's in his own name. This he did, suggesting also that Clifford Raymond, [chief] editorial writer, eliminate the y from his last name and that John T. McCutcheon, [editorial] cartoonist, do away with the c, t, and e in his name. Col. McCormick stated, however, that it was difficult to change the signature of one's name and therefore impractical. [5]

1.2 A 19th century tradition

McCormick had doubtless approved the spelling-change of his name to emphasize the *Tribune's* reinvigorated and now much more public effort at spelling reform. Why he chose January 1934 to commence this effort when he had already begun mighty battle with President Franklin D. Roosevelt's New Deal is not clear. What is, is that McCormick saw his spelling reforms as part of a long-standing tradition, orthographic change being, one later editorial was to state, as old as the English language itself. The same theme was taken up again and again over the first 15 years of the experiment. [6]

This sense of purpose and of tradition, in both the short and long term, motivated McCormick and James O'Donnell Bennett, the most scholarly reporter then on the *Tribune*, to whom McCormick initially entrusted the enterprise. In an interview, McCormick said,

"I have instructed Mr. Bennett to make suggestions in this matter [of simplified spelling] and Mr. Edward S. Beck, managing editor, to pass upon them. We feel that much can be accomplished in regard to saner spelling for many words." [7]

Tribune interest in spelling reform, as both McCormick and Bennett knew, had actually begun some 50 to 60 years earlier. Joseph Medill, publisher and editor-in-chief of the *Tribune* from October/November 1874 until his death in March 1899 — and, most to the point, McCormick's grandfather — had initiated its

experiment with simpler spelling. Various sources furnish details of Medill's interest in and experiments with spelling reform. [8] It is appropriate here, therefore, to examine briefly certain less well-known aspects of Medill's reform efforts, especially those relevant to his grandson's.

Medill, like McCormick later on, received both praise and criticism, some of it mocking, for his spelling reforms. As early as 1867, Medill had declared himself for simpler spelling in a monograph, *An Easy Method of Spelling the English Language*, that *Tribune* editorial writers in McCormick's day were to quote from. "Dhi Shicago Tribyun," according to Professor Francis A. March, in his presidential address to the Spelling Reform Association at its annual meeting, July 15, 1880,

wez dhi furst tu mec dhi plunj. On dhi secund de ev September in dhi yir ev aur Lord wun thauzand et hundred and seventi-nain, dhis gret progresiv representativ peper ev dhi Northwest apird in amended speling thruaut. [9]

Words such as *definit* and *indefinite la'd 'laid'*, *favorit*, *infinet*, *assasinated*, *opposit* and *hight* as in ... "the hight of folly" began to appear in the *Tribune* from September 1879 on. Indeed, if a broadside, headed "Corrected Spellings" to be used in the *Tribune*, dates from that time, then a high degree of correlation exists between these words and those that McCormick/Bennett came to simplify." [10]

Some three years later, the *Tribune* reprinted a letter on the subject from the New York *Evening Post* headlined "THE SPELLING REFORM. / Opinions of American Collegians in its Favor. / Discard Silent and Useless Letters in Words." [11] McCormick's *Tribune* would similarly cite prominent individuals supporting reformed spelling, but could never quite match that letter-writer's list.

In the larger world during the late 1800s reformed spelling received significant support. In Chicago itself, Medill's *Tribune* was engaged in lively, often rancorous conflict with rival newspapers in which his spelling reforms received their share of hits. After one such newspaper, the *Inter Ocean*, had been taken over by a William Penn Nixon in 1875, yet another journal, the Chicago *Times* satirized Medill's simplified spelling: "William Penn Nix / Is at his old trix." [12]

But Medill's *Tribune* did not fly — John Tebbel to the contrary — "in the face of outraged public opinion for years..." or "found few converts ..." to simplified spelling, as another recent book asserted. [13] Quite otherwise. Medill's reform efforts came when distinguished Americans and Englishmen, in academic circles and beyond, enthusiastically supported simpler spelling. Theirs was, after all, the age of progress when, with the aid of science and technology, manifold improvements in the human condition seemed just — a light bulb away. "To the would-be visionaries," Eric Zorn wrote, "the great lesson of the Industrial Revolution was that all things seemed perfectible through standardization, mathematical order and logic. Our often impenetrable spelling conventions seemed a perfect target." [14]

Thus the Spelling Reform Association was created in August 1876 in Philadelphia. Medill joined it early and became a member of its Council. Organizations both old and new, whose rolls were studded with the names of illustrious persons — the Philological Society of England, founded in 1842; the American Philological Association, in 1869; and the British Spelling Reform Association, in 1879 — were at one with the S.R.A. in promoting systems of simpler spelling. Efforts to put it into practice were certainly widespread in the United States, as the 19th century drew to a close. They continued into the present century.

1.3 Restarting from a low point

By 1934, when McCormick began his reforms, the interest energizing those efforts, and thus the efforts themselves, had largely dissipated. World War I had finished off the idea of progress, and now the Great Depression seemed to bury it. Apple and pencil sellers on street corners gave little thought to the spelling of their wares. In the academy . . . intricate and esoteric theories about language and culture..." had also begun to move men's minds away from simpler spelling." [15] The Simplified Spelling Board, founded in New York in 1906, the most important American organization then supporting such reforms . . . [had been] reduced:" H.L. Mencken wrote in 1936, "to a corporal's guard of despairing gaffers, its luxurious quarters have shrunk to desk room at the Lake Placid [New York] Club..." [16] When McCormick publicly took up the cause, no organized support in America existed to encourage him. Only one or two dictionary publishers were there, as we shall see, as potential allies.

Thus it was to a generally indifferent public that the *Tribune* announced on January 28, 1934, its adding 24 "new selections ...," in Bennett's words, to those it had "long ... spelled in a manner harmonizing with sane trends toward simpler spelling of the English language." [17] He may have had in mind Medill's efforts a half century earlier. He may also have had in mind *the Tribune's* more recent, unheralded spelling innovations, the likes of *ameba*, *calk* and *clew*, and *kidnaped*. [18] Whatever precedents Bennett invoked, he was inaugurating a very public effort to reform English spelling when response — local and national and from the wider English-speaking community — was an unknown quantity.

This effort lasted 21 years, just to bring it to McCormick's death, April 1, 1955. Relevant news articles and editorials, along with resultant letters to the editor (discussed later), fall chronologically into three groups: the 1930s, primarily Bennett and his successor, the Rev. John Astley-Cock; the mid and later 1940s, Astley-Cock and then the Rev. John Evans; and the mid-1950s, at and shortly after McCormick's death, the writers undesignated.

1.4 Here a little, there a little

From the outset Bennett and his successors furnished a mixed bag of reasons for the proposed changes. The guiding principle behind word selection, at least for the first several years, was, as Bennett said, "a case of 'here a little and there a little'..." [19] Of the 24 words in that first list of January 28, 22 were shortened simply by eliding a letter or two (e.g. *advertisment*, *catalog*, *extoled*, *skillful* (American spelling *skillful*), *tranquility*). Bennett was aware, of course, of the two orthographic group *changes* — *analog/analogue*, *patroled/patrolled* — in this list, but chose to obscure them. Thus instead of alphabetizing the relevant words within each group and arranging the others separately, he alphabetized them from first to last, then took up each word in turn to justify the given change.

In what came to characterize his method over four such lists by mid March, Bennett employed analogy and logic, etymology, phonetics, and philology, and cited as authorities the American Philological Association, the Philological Society of England, and the (American) Simplified Spelling Board, as well as certain dictionaries, primarily *Webster's New International Dictionary*, and Funk & Wagnalls' *Standard Dictionary*. He knew his material and, for the most part, reasoned well. Yet the overall effect seemed to be, to use his own words, "here a little and there a little."

The two exceptions in that first list (*drouth* for *drought*, *fantom* for *phantom* — forms changed by other than simple elision), which Bennett reserved to discuss last, deserve brief notice. The latter change, *fantom*, he justified by precedent (Chaucer, Evelyn, and Addison so spelled it), authority (Funk & Wagnalls preferred it), and analogy (it relates to *fantasy*). *Drouth*, however, Bennett adopted — though the *Tribune* had apparently been using this spelling since 1921 — because, he said, most American farmers thus pronounced it. It soon put him on the defensive, a posture the *Tribune* was forced, uncharacteristically, to adopt regarding spelling choices over the years. [20] On February 11, [21] Bennett added 18 more words, again presented in alphabetical order and thus again giving the impression of an apparently random selection. Yet buried in this list were also certain recognizable orthographical patterns, such as dropping a second L (eg, *crystalize*, *instalment*) and reducing the -EY ending (*rocky*, *pully*). But these, plus one or two other possible groupings, involved relatively few words. He then proceeded deliberately through each change, even those seemingly arbitrary — *agast* for *aghastr*, *aille* for *aisle*, [22] *burocracy* for *bureaucracy*, *crum* for *crumb*. Two weeks later, [23] another 18 words received similar treatment. Again, certain patterns showed themselves: *distaf*, *sherif*, and *staf*, *hammoc*, *hassoc*, and *hemloc*. And again Bennett used the word-by-word approach, recognizant as he was of these patterns. It is here that he changed *rhyme* to *rime*, a change that "is everlastingly right ..." and for which he gave sound reason. The change lasted into 1939, to be reinstated in 1949, for another short life.

The final list in this sequence, with 20 words, was issued mid-March, bringing the total to 80. [24] For the most part, the words fell into orthographic groups already tacitly established, as *eclog*, *hummoc*, *lacky*, *quill*, *tarif*, *tonsillitis*. Here Bennett flung down his boldest spellings yet — *derth* for *dearth*, *glamor* for *glamour*, *iland* for *island*, *lether* for *leather*, among them. *Glamor*, Bennett wrote, "has to stand on its own merits". But "both etymology and phonetics... recommend..." the change to *lether*. *Iland*, he said, corrects the erroneous analogy with Old French *isle* and reverts to its Anglo-Saxon origins. Reaction quickly set in. Many readers and even the *Tribune* itself stood "agast" at *iland*. [25]

Adopting *iland* led the *Tribune*, a few months later, to a rare linkage between its spelling reforms and one

of McCormick's larger antipathies, Roosevelt's New Deal. The editorial, headed "Cast on a Dismal Iland", runs thus:

Sometimes THE TRIBUNE views certain aspects of its new deal in spelling with doubt if not dismay, just as that other distinguished New Dealer, Gen. [Hugh S.] Johnson, the big Blue Eagle, looks at his centipede, the NRA [the National Recovery Administration, which Johnson headed], and wonders if it ever will be possible to get all its legs going in one direction at once and where it would get if it tried to go one place at a time.

Nothing in THE TRIBUNE's new spelling deal looks more like something the cat might have brought in than 'Iland'. You may have your own pet aversion in the revised list. 'Iland' is THE TRIBUNE's . Why, then, you say, keep on doing it? That's the worst of a new deal. You start out with *catalog* and go on to *staf and* then you are at *iland*, lost on an uninhabited island.

Words often contain pictures. They mean pictures. They are not merely so many letters logically arranged and phonetically true, but they are pictures of things. 'Island' is the picture of a body of land surrounded by water. It should have some palm trees on it. It may have Robinson Crusoe on it. He'd never get off an iland. There is no such picture in iland. Iland is an animal, a strange one, but somehow related to an eland. ' The picture in iland is that of a head with horns and distended nostrils arising from the water. It is swimming desperately and may make land, but it is being chased by simplified spellers. They want its antlers, a distressing sight.

THE TRIBUNE's only consolation is that its own new dealing with the alphabet will be easier to bear in the long run than the alphabetical new dealing in Washington. [\[26\]](#)

1.5 Chopping and changing

Some time between then and March 26, 1939, but probably sooner than later, the *Tribune* dropped *iland*, "because it always looked [to us] like something bounding across the veldt." [\[27\]](#) Thus could the *Tribune*, and therefore McCormick who okayed everything on its editorial page, treat humorously a signal stylistic feature of the newspaper. Sarcasm, rather than humor, marked the editorial, "How to End War?", establishing seemingly the only other linkage in McCormick's *Tribune* between spelling reform and one of his antipathies, in this instance, pacifism.

Alerted apparently by a review in the *Manchester Guardian*, the *Tribune* editorialists learned of a book, *The Influence of English*, published earlier in 1934 with the intent "nothing less ambitious and desirable than the abolition of war". If his system of "automatic spelling" of English was to be adopted world-wide, the author, Mont Follick [\[28\]](#), stated, universal understanding and thus universal peace would result. The editorial concluded "... [W]e hopefully pass his theory on to the pacifists of our own country who have less promising panaceas in their armory." [\[29\]](#) Reader response, if any, stayed in the *Tribune* files.

Except for two editorials, both headed 'Spelling', during the years up to 1939, McCormick and his spelling editor let matters stand. "Some day," the second editorial said, "when the process of digestion has gone a little farther, more words may be added to the list", though the writer struck a largely defensive note. [\[30\]](#) Yet that total of 80 words achieved in March 1934 represented the high point. Occasional additions and more substantial subtractions would ultimately bring this number down by half, these to remain stabilized until the end. A change of spelling editor now seems to have occurred, from Bennett to the Rev. John Astley-Cock, who, if he is to be believed, "began ... to organize and classify the paper's spelling reform policy ..." in 1935. [\[31\]](#) If such was Astley-Cock's aim, subsequent orthographic changes in the *Tribune* show minimal evidence of it for the better part of a decade.

In 1939, two new phases of the reforms occurred. On one day that March, an early editorial, "Lucky, Pass the Hemloc", gave the enterprise its quietus, along with an adjacent list of the 80 words, "Headed for the Herse". A later editorial, "Not Yet the Hemloc," resurrected the cause. That McCormick was not somehow responsible for both editorials staggers belief. Yet "by all accounts" — to quote John H. Vivian — "Colonel McCormick had not authorized the policy change ... and ordered the [first] editorial yanked." [\[32\]](#) Appended to the later editorial was the list of now 79 words, minus *iland*, that the *Tribune* "has employed during the last five years." [\[33\]](#)

Changes, however, were in process. Four days later, a memo from the then managing editor conveyed

McCormick's directive to "go back to Webster effective ... Monday, April 10th" for 38 of these words — including *drouth* and *itand*, which seems to have continued bounding across the veldt, or was it rising from the water? [34] Yet another memo issued forth two days later dropping some more, but restoring others, among them *drouth*. (We seem to be entering the leaner years here.) Controversy over the spelling reforms had apparently risen to its highest pitch thus far in-house. "Our own writers and compositors", an editorial on April 9 admitted, "have not become fully accustomed to these forms". It all settled down in this editorial on 'Simplified Spelling', officially cutting the number of reformed spellings almost by half. [35]

A September 24 editorial constituted the second stage of changes that year, in introducing *tho*, *thru*, *thoro* and related spellings. Readers had responded favorably to a query about these contractions the previous month. [36] The editorial did not end there, but with yet another list, this of 40 words. It returned a few spellings standardized the preceding spring but was basically a shorter list. Any of that order and classifying Astley-Cock supposedly imposed upon the spelling is hard to find.

2 The spelling reforms: from 1940 to 1955

2.1 Post-war phreight reights

For six years the *Tribune* stood pat with its 40-some words. [37] Then, six years to the day, September 24, 1945, it brought forth *frate* and *frater* (ie, *freight* and *freighter*) upon an unsuspecting world. Oh brother, was the in-house remonstrance ever so swift, especially against *frater*. "When," according to a possibly apocryphal account in *Time* magazine, "his own orthographer (probably Astley-Cock) and key men on the *Tribune* staff objected to *frater*, McCormick splashed on their memo one red-ink sentence: 'We will keep *frater* because the *Tribune* likes it.'..." [38] The editorial itself, announcing these spellings and at one point employing the phrase "frate reights," to *ipater* the Old Subscribers, hinted at the episode. The two spellings gave rise, the following year, to the best-known of *Tribune* editorials on reformed spelling — "To Phyllis Who Might Spell It Phreight", this in answer to a query from a California school girl, why *frate*? [39] Almost as an after-thought, the editorialist noted that the *Tribune* had "recently...adopted *telegraf*, *geografy*, etc., ..." as well — a clear-cut instance of an orthographic (*Tribunese*: orthografic) principle at work. [40] The *Tribune*, it explained to Phyllis, sought "to clean up the mess [that is English spelling], a little at a time", but would return to the old forms if the changes unduly annoyed its readers. They were asked, in turn, to submit words for spelling change.

This deference to reader wishes, to Vox Pop, both in considering words for simpler spelling and in returning them to conventional form, may seem good democratic procedure — one must be careful to use a lower-case D here when the Colonel is involved — but at the same time it bespeaks the lack of an overall theoretical approach to simpler spelling on McCormick's and his spelling editor's part. The *Tribune* also instructed its readers to read the chapter on spelling in a book then much in the news, H.L. Mencken's *The American Language*. So what impact did *frate* have? It came down to one local carrier informing the *Tribune* that he would use the spelling in his business-related paper and advertising. [41]

Nothing apparently happened on the *Tribune* spelling reform front for the next two to three years. An interlude occurred, though, in spring 1948, when a book-review section columnist reanimated reader interest in *Tribune* spelling by paraphrasing and quoting Mencken's account of it in *The American Language, Supplement II*. [42] Mencken might seem an odd choice, given his evident bias against any and all efforts at reforming English spelling. The *Tribune* itself in that editorial to Phyllis had directed readers away from *Supplement II*. But in face of its popularity, the columnist, one supposes, sought to make the best out of a notice, even though critical.

Astley-Cock finally delivered on his claim to organize the *Tribune*'s spelling reform effort, in July 1949. In a news article on the 3rd [43] he established three orthographic groups, leading to such forms as *sofism*, *philosofer*, and — again — *sherif* and *rifraf*. He invoked consistency within specific groups of certain simplified spellings as his principle, the exception being *rhyme* returned to *rime*. In this word and several others, Astley-Cock resurrected modified spellings formerly in use. It was all made clear to *Tribune* staffers the following month when the in-house publication, *The Trib*, said, "Here's Complete List of Simplified Spellings" and presented a list of 47 basic words. [44] The same Sunday as Astley-Cock's news article, the *Tribune* carried an editorial, [45] 'Spelling Lesson', reinforcing the new effort. Seventeenth- and eighteenth-century printers and Samuel Johnson's dictionary of 1755, it charged (as had Bernard Shaw and many another), brought on the sorry state of English orthography. "Once that is understood," the editorial concluded — once, that is, it is known "upon what shaky foundations that

supposed authority rests" — " We believe that there will be less opposition to the attempt to rationalize inconsistencies between English spelling and pronunciation."

Astley-Cock's method whereby "to rationalize inconsistencies" jump-started that next year. Formerly, under Bennett, the words spelled more simply had come in clusters, their number moving up or down, in a controlled if not always rational way. Now various "...errant simplifications [began] to creep into *Tribune* usage without sufficient monitoring. By 1950, *aging, cantaloup cigaret, enrolment, eying, glycerin, hiccup, pean, numskull and sodder* (for solder) were in use, as well as a host of -UE simplifications that had not appeared on previous lists although they stemmed analogously. from announced changes. ... [T]he system had become open-ended as Astley-Cock noted in 1950 when he listed 63 reform spellings but added that the simplifications should be carried into countless adverbial, participial, adjectival, cognate and derivative affiliates." [46] Even the 1950 style book listed 58 words under "Tribune Spelling". [47] Either way, 63 or 58, this was the largest number of simpler spellings since March 1934.

2.2 Belated phonic rationale

None of this proliferation of simpler spellings across the pages of the *Tribune* in 1950 and later seemed to have surfaced in explanatory news articles or editorials. McCormick and his spelling editor contented themselves with letting matters rest — on such as *frate, frater, and sodder*. [48] But the foundations upon which rested these matters of reformed spelling began crumbling. What helped hasten the process was a publishing event in early March 1955, the appearance of Rudolf Flesch's *Why Johnny Can't Read*, to the plaudits of the public and the scorn of (most) pedagogical experts. The *Tribune* heeded the voice of the people. [49] Shortly after Flesch's book made its splashy appearance, the *Tribune* editors obviously decided to exploit the issue of phonetic (or phonic) spelling. Whether McCormick assented or not is difficult to determine at this remove, as he lay on what would prove to be his death-bed. Yet the ensuing campaign, placed in the hands of Marcia Winn, a seasoned reporter who had long imparted advice on raising children, surely had received approval at the highest levels. The campaign itself, beginning in April 1955, some three weeks after McCormick's death, [50] ended that July, Winn having written a total of 20 articles. [51]

This extensive campaign, more emphatic and much more thoroughly presented than the spelling reform experiment itself, warrants notice here because the *Tribune* considered it an extension of that experiment — perhaps, finally, a replacement for it. For the huge success of this campaign coincided with the first major retrenchment in modified spellings following McCormick's death. An editorial that summer, "Helping Johnny to Spell", said it thus: "Ever since Miss Winn's articles ... drew attention to the deficiencies of many children in reading and spelling we have sought to do something about it. The arousing of interest in phonics was one contribution we were able to make. Another is the return to the conventional spellings" — all of ten words, including *ftate and frater* and the PH words (eg, *sofism*). [52] That the *Tribune* editors — the "we" of the editorial — and others in the world beyond their pages did not understand how simplified spelling comes to the aid of phonics rings deeply ironic. The *Tribune's* coming to the aid of all elementary school teachers in what it liked to call Chicago-land — that five-state area where the paper was delivered daily — is but the excuse for abandoning the experiment. Abandonment, however, took another 20 years.

3 The spelling reforms: From 1955 to 1975

The *Tribune's* simplified spelling experiment maintained a diminished presence over these 20 years until its abrupt end. Its trajectory across them is quickly sketched [53] In 1958 the *Tribune Style Book* listed 44 words to be spelled its way, *rime and riming* among them. [54] Four years later, a new version of the style book appeared with a similar list — minus *rime* and *riming*, but still with *drouth* — 27 of them surviving from "the original 80 simplified spellings. ..." [55] However much diminished their number, the *Tribune* way with words in the 1958 and 1962 style books presented itself alphabetically and yet with the same groupings or categories it in fact had always had.

Retrenchment began anew in 1970, with another style book. Of the 27 survivals from 1934 in 1962, 19 made it into the 1970 *Tribune Chicago Today Style Book*. The winds of change carried away "words like *frate* [again!], *tarif, sodder, etc.*", shocking to readers, who "wondered if *Tribune* editors really knew how to spell". Tradition preserved the *tho-thru group*, however, as well as "*analog* [and its group?], and that old favorite, *ameba*." The 1970 style book contained a feature unique among those I know of, directly and indirectly, a feature unintentionally revealing the preparer's attitude toward simpler spelling. Here under three words — *altho, pedagog* and *thru* — he briefly discussed the history of simplified spelling as

related to them and referred to the National Education Association list of 1898, to President Theodore Roosevelt's 300 words of 1906, and to the *Tribune's* own efforts begun "in 1935". Clearly, the author has used Mencken's *The American Language* as his source and has repeated the erroneous year found in all four of its editions and in the one-volume abridgment. The style book repetition of the error suggests "the *Style Book* author's lack of interest in ... [his own newspaper's] spelling reform campaign. ..." [56]

When an Australian, Maxwell McCrohon, became managing editor of the *Tribune* in January 1972, [57] further government cut-backs of simpler spellings may have seemed, and certainly became, inevitable. Under his direction, someone "...[began] the task of writing a new style book", it was reported late in 1973, "that will eliminate such words as 'tho,' 'thoro,' 'thru,' and 'frate trains' [a burdensome word, this] from the Trib lexicon. 'I'm trying to get back to proper English,' [McCrohon said].... 'I told the staff I want the O.E.D. ... I but I'm willing to settle for Webster.'" [58] As comedy precedes tragedy in Shakespeare, so before the coup-de-grace was delivered in autumn 1975, the *Tribune* editorialists had their spring carnival with the expression "troughing out" that, apparently, had come to substitute for "bottoming out" among economists. "Troughing out," the editorial concluded, has "that ideal quality of government English. It sounds significant but doesn't mean much. In poker, people who talk like this are known as bloughers." [59] Three months later, *thru* was through, and so was *tho*. McCrohon had completed his handiwork. Yet he reportedly "best characterized the purpose of *Trib* [sic] orthography as 'a serious attempt to revise the English language.'" [60] The editorial explained "the *Tribune's* past experiments with simplified spelling and the changes. that are made in today's issue." [61] Some words in common use — *archeology*, *cigaret*, and those like dialog — they intended to keep. But *tho*, *thru* and the like had "not made the grade in spelling class." [62]

The schoolteachers had prevailed over what had been "perhaps the most enduring of ... [McCormick's] sometimes eccentric campaigns..." [63] Ever since 1955, when the *Tribune* editorialists used the Marcia Winn articles to sacrifice simplified spelling in the name of phonics, in ironic unawareness that that spelling assists English sounds, the newspaper had maintained silence. It continued its attenuated experiment without any notice whatever — this in the face of an increasingly puzzled readership that, as we shall see, came to conclude those editors could not spell. Thus in 1975, with the experiment finally given over, these readers could say that the *Tribune* writers now had been properly schooled.

Notes & references

- [1] Pt.1, p.17, c.5.
- [2] *Chicago Sunday Tribune*, Jan.28, 1934, Pt.1, p.16, c.3. Future references to the *Sunday Tribune* will be given as *CST*, those to the *Daily Tribune*, as *CDT*, and those to the more recent *Tribune*, as *CT*.
- [3] *News-Week*, Feb.3, 1934, III:5, p.34, c.2; *The Literary Digest*, Feb. 10, 1934, p.38. The *New York Times* did not, in fact, have an exclusive: *The Washington Post*, Sunday, Jan.28,1934, p.1, c.4, ran a brief AP news item, also dated January 27, to much the same effect, with the name wrong in the headline "McCormik", but right in the text, "M'Cormik"; though the *Times* had more accurate information, the AP dispatch ended more interestingly: "The managing editor of the *Tribune*, asked if the publisher of the paper had decided to change the spelling of his name, made the terse comment, 'Look on the editorial page.'"
- [4] See *CST*, Feb. 11, 1934, Pt. 1, p.16, c.3, and Feb. 18, 1934, Pt. 1, p.14, c.3; "Getting Personal", *Advertising Age*, Feb. 10, 1934, p. 18, c.4. According to Eric Zorn, "McCormick's wife [Amy, his first wife] reportedly put the kibosh on the Colonel's attempt to change the spelling of the family name to 'Micormak.'" Zorn, 'Errant Spelling / Moves for simplification turn English into another langwaj', *CT*, Sun., June 8, 1997, Sect. 3A, p.14, c.3. This information appeared in a letter, dated Oct.9, 1973, from Thomas Furlong, then executive Director, the Robert McCormick Charitable Trust, to James Vicini; Furlong, relying on his memory, added that office gossip ascribed the veto to her and that "it is my opinion he only used it in the first place to stir up his family and friends". See Vicini, 'Under the Spell of the *Chicago Tribune*, Senior Thesis, MacMurray College, Jacksonville, Illinois, Dec.1973, p.31. The original is in the McCormick Research Center. When published as a pamphlet later that year, *The Prospect for America* bore the name McCormick.
- [5] "24 WORDS ARE PRUNED // BY CHICAGO TRIBUNE // ... McCormick // Denies Rumors He Will Simplify His Name", *Editor & Publisher*, LXVI:38, Sat., Feb.3, 1934, p.22, c.1.
- [6] Bennett art., *CST*, Mar. 18, 1934, Pt.1, p.9, c.1: "Some readers assert that this newspaper is 'launching a reformed spelling campaign'. It is not. It is trying to arouse and renew interest in the

trend toward simpler spelling which has been in leisurely motion — far too leisurely, we think — for centuries"; edit., "Not Yet the Hemloc", *CST*, Mar.26, 1939, Pt.1, p.16, c.1: "We showed, as, indeed, Mr. Bennett had done, that spelling has undergone vast changes over the centuries and that our innovations were therefore not without their sound precedent"; edit., "To Phyllis Who Might Have Spelled It Phreight", *CST*, Wed., Aug.7, 1946, Pt.1, p.16, c.2: "... [E]ver since there has been an English language, spelling has been changing and most of the changes have been simplifications. All we are trying to do is carry along the work"; and John Astley-Cock art., *CST*, July 3, 1949, Pt.1, p.3, c.1: "Innovations adopted by THE TRIBUNE have been regarded as steps in the evolution of the written language"

- [7] "24 WORDS ARE PRUNED // BY CHICAGO TRIBUNE // Simplified Forms Adopted As Regular // Style By Newspaper *Editor & Publisher*, LXVI:38, Sat., Feb.3, 1934, p.22, c.1; the news story, dated Chicago, Jan.29, was "*Special to EDITOR & PUBLISHER*". McCormick also "stated his newspaper would continue its efforts in this direction". Slightly more than the first half of the story briefly summarized the news article by Bennett appearing on Jan.28, listed the 24 words, and quoted three paragraphs from it. I should add here that this is the only source I know of that quoted and summarized McCormick's own words on simpler spelling. Bennett (c. 1870–1940) gave his library of 7,000 volumes to the *Tribune*; the books are now in the Newberry Library, Chicago.
- [8] See Philip Kinsley, *The Chicago Tribune: Its First Hundred Years* (Chicago: The Tribune Co.), II (1945), 310, 336, and 339, and III (1946), xii, 51, and 121; Lloyd Wendt, *Chicago Tribune: The Rise of a Great American Newspaper* (Chicago et al: Rand McNally & Co. 1979), pp.213, 268–9; and article by Alex Small, *CDT*, Sat., June 18, 1955, pp.1 and 8.
- [9] *Bulletin of the Spelling Reform Association*, No. 16, 1880, pp.2–3; see also pp.4–5. See also *Bulletin of the Spelling Reform Association*, No.14, Sept.1879, p.13; No. 22, Sept.1886, pp.54 and 62–3; and (Francis Andrew March), *The Spelling Reform. Circulars of Information of the Bureau of Education. No.7*, — 1880. Washington, D.C.: Government Printing Office, 1881, pp.1 ff., esp., pp.21 and 24; and *Circular of Information No.8*, 1893, rev., enlrg. ed., Washington, D.C., 1893, p. 52.
- [10] *CT*, Wed., Sept.3, 1879, p.4, c.6, for "hight of folly..." The broadside, in the library of the Chicago Historical Society, lists 23 words, plus several others simply set down as categories (eg, all words ending in "log" and "gog"). The broadside, with discussion of its date, is printed in Delos Avery, "Bookman's Holiday", *CST*, May 2, 1948, PL 4, P. 2, though omitting some words on the original list and substituting others for them from the categories (eg, *carelessness*, *cigaret*, *demagog*).
- [11] Letter from a Charles P.G. Scott, *CT*, Sat., May 19, 1883, P. 12, c.3, with the names of 19 distinguished Americans and nine Englishmen appended.
- [12] John J. McPhaul, *Deadlines and Monkeyshines: The Fabled World of Chicago Journalism* (Englewood Cliffs, N.J.: Prentice-Hall Inc. [1962]), p.74n.
- [13] See Tebbel, *An American Dynasty: The Story of the McCormicks, Medills and Pattersons*, Garden City, NY: Doubleday & Co., Inc. 1947, p.6; and Gwen Morgan and Arthur Vesey, *Poor Little Rich Boy (and how he made good)*, Carpentersville, IL: Crossroads Communications 1985, p.28.
- [14] Zorn, *op.cit.* (see fn.4 above), P.14, c.2.
- [15] Zorn, *op.cit.* (see fn.4 above).
- [16] The Dizzy Rise (and Ensuing Bust) of Simplified Spelling", *The New Yorker*, Mar.7, 1936, p.37, c.1. *The American Language*, 4th ed., was first published 1936. For a brief survey of the efforts at simplified spelling before the *Tribune* commenced its experiment, see Frederick S. Wingfield 'Among the Spelling Reformers', *American Speech*, 7:1 (October 1931), 54–7. A later survey is in Kenneth H. Ives, *Written Dialects n Spelling Reforms: history n alternatives*, Chicago: Progressiv Publishr, 1979. The *Tribune* experiment is summarized on pp50–51.
- [17] *CST*, Pt.1, p.1, c.1.
- [18] According to Vicini (1973), pp.8–9, the earliest extant *Tribune* style books are from 1921 and 1923, with the following from 1921: *controller (for comptroller)*, *calk*, *drouth*, *tonsilitis*; and from 1923: *canceled*, *worshipped*, *kidnaped*. The 1932 style book added *councilor*, *bazar*. John H. Vivian, 'Through With Thru at the Chicago Tribune: 'The McCormick Spelling Experiment'', *JournalismHistory* (Autumn 1979), VI:3, 84, also gave this information. Vicini (1973), p.9, noted that the 1932 expanded list produced the following lead: "'Because of a gasoline drouth, the controler [*sic*] of the buses canceled the weekend routes to the cotilion and the bazar.'" Vicini (1973), p.17, noted that "*Tribune* readers had already objected to *bazar*, ... instituted in 1932 ..." before its appearance on the Feb.25, 1934, list. For *ameba*, also introduced in 1921, see Dorothy Collin, 'Up

the soviets, says Tribune bureaucrat', *Chicago Journalism Review*, Sept.1970, p.7, c.1. I thank Kenneth H. Ives for bringing this article to my attention. As for *clew* I haven't a clue as to when it was first used.

- [19] *CST*, Jan.28, 1934, Pt.1, p.1, c.1.
- [20] See editorial, 'Simpler Spelling', *CDT*, Fri., Feb.2, 1934, p.14, c.2; and news art., *CST*, Mar.4, 1934, Pt.1, P.1, cs.3–4.
- [21] News art., *CST*, Pt.1, pp.1, c.1; 10, cs.4–7.
- [22] See Virginia Gardner, news art., *CST*, Mar.11, 1934, Pt.1, *aille* was the change that most angered readers. Thus far, I have only a photocopy of this item; it appeared in an edition of that day's paper unavailable to me. The original is in the McCormick Research Center.
- [23] News art., *CST*, Feb.25, 1934, Pt.1, pp.1, c.3;12, cs.1–4.
- [24] News art., *CST*, Mar.18, 1934, Pt. 1, p.9, cs.1–2.
- [25] "Thomas Furlong, presently [sic] executive director of the Robert McCormick Charitable Trust, recalls that *iland* was so startling to everybody that it created a minor sensation in the newsroom." Letter, Oct.9, 1973, from Furlong to Vicini. Vicini (1973), pp.26–27.
- [26] *CST*, May 20, 1934, Pt.1, p.16, c.2. Next month, the *Tribune* returned to the theme, without political overtones, in an editorial entitled 'Gnus and Islands', which stated, "A gnu is a promontory, a body of land in the water up to its neck. It is, if an isle is a body of land completely surrounded by water." *CDT*, Thurs., June 21, 1934, p.14, c.2.
- [27] Editorial, "Not Yet the Hemloc," *CST*, Pt.1, p.16, c.1.
- [28] *CDT*, Thurs., July 12, 1934, p.12, c.2. See Follick *The Influence of English*, London: Williams & Norgate Ltd (1934), pp. 131 and 169, for the source of quotations in the editorial; the earlier quotation (not so stated in the editorial) is a line from Wilde's *The Picture of Dorian Gray*, ch. xii. Follick, M.P. (Lab.) for Loughborough 1945–55, had introduced a Spelling Reform Bill into the House in 1945 and was to do so again in February 1953. On Follick, see *George Bernard Shaw on Language*, Abraham Tauber, ed., New York: Philosophical Library (1963) pp98 and 137–39; and Follick, *The Case for Spelling Reform*, London: Sir Isaac Pitman & Sons Ltd (1965), pp.249–324, on his campaigns in the Commons for spelling reform, and especially pp.256–79, for his bill that had its second reading on Friday, Mar. 11, 1949.
- [29] The *CDT*, Fri., Mar.11, 1949, ran the following Associated Press dispatch from London:
The House of Commons rejected a bill [87 noes to 84 ayes] which would have Englishmen spel English laik this.
Education Minister George Tomlinson asked the house to kill the Mint [sic] Follick's spelling reform bill which, among other things, would have made its sponsor's name come out 'Folik'.
"Very few people", said Tomlinson, "have the opportunity to ride a hobby horse for 40 years and then bring it to the House of Commons."
My source for this news item is Vicini (1973), pp.43–44. Someone at the *Tribune* must have had a long memory, given the 15 years between the editorial and this item.
- [30] See *CDT*, Sat., Dec.28, 1935, p.8, c.1, and *CDT*, Thurs., Mar.26, 1936, p.12, cs.1–2.
- [31] Abraham Tauber, 'Spelling Reform in the United States', Ph.D., diss., Columbia University, 1958, pp.244–5, cited a letter to him, dated July 25, 1949, from Astley-Cock in which he apparently so stated. I thank Cornell Kimball for bringing this material to my attention. Bennett did not retire, however, until Jan. 30, 1939 — see *The Trib*, Feb., 1939, XX: 8, p.4, c.1.
- [32] Vivian, *op.cit.* (see fn.18 above), p.85. Vivian's source is Vicini (1973), p.32, who quoted an inter-department memo, dated Aug.13, 1973, from Harold Hutchings, then executive editor. Vicini (1973), pp 32–33, discussed these editorials. Mencken, *The American language, Supplement II* (1948), p.294, quoted extensively from the earlier editorial, 'Lacky, Pass the Hemloc', and noted the later "shift of mind in the *Tribune* office"
- [33] *CST*, Mar.26,1939, Pt.1, p.16, c.2.
- [34] This memo, dated Mar.30, 1939, listing the 38 words, as well as those to retain *Tribune* spelling, is in the McCormick Research Center.
- [35] Most of this information comes from Mencken, *Supplement II*, pp.294–95, and Vicini (1973), pp.33–34, who dated the managing editor's memos, Mar.30 and Apr.1, 1939; Mencken briefly quoted from and he and Vicini discussed the editorial of Apr.9, 1939, which appeared in an edition

unavailable to me. See also Vivian, *op.cit.* (see fn.18 above), p.85; he dated the second memo "April 1939".

- [36] See *CDT*, Tues., Aug. 1, 1939, p.12, c.1.
- [37] The 1943 style book lists 42 words.
- [38] 'After the Colonel', *Time*, Aug.29, 1955, p.51, c.1. See also 'The Colonel's Century', *Time*, June 6, 1947, p.66. In 'Our Far-Flung Correspondents: Return of a Non-Native', *The New Yorker*, Apr.6, 1946, p.95, Stanley Walker wrote: "What seems really to annoy his readers (it annoys me a little, too) is his ruling, in effect since last fall, that *Tribune* reporters and copyreaders must use 'frate' for 'freight'. People saw some sense in his earlier decree ordering the use of 'tho' and 'thru', but 'frate' is hard to take. It may well be that this time the Colonel has gone a bit too far" — as against, no doubt, his thumping Mid-Westernism, his anti-liberalism, and on and on.
- [39] *CDT*, Wed., Aug.7, 1946, Pt.1, p.16, c.2; reprinted, *A Century of Tribune Editorials*, (Chicago:) Chicago Tribune (1947), pp. 146–147, with this headnote: "THE TRIBUNE for many years has been doing its part for spelling reform. Here purposes and result of the campaign are outlined."
- [40] Vicini (1973), p.37, stated that Astley-Cock's grounds for spelling change, "modern usage and accepted custom", differed from Bennett's, "etymological, historical precedent, and phonetic standard", but this editorial did not seem to support the distinction. Vicini also attributed the editorial to Astley-Cock without independent authority. The change the editorial offhandedly noted of PH to F (as in *telegraf*) was formalized the following spring in two inter-department memos (unavailable to me) from the then managing editor, dated Mar.29 and Apr.3, 1946, but excepting *graph*, *graphic*, and *graphite*. Vicini mistakenly linked these memos with Astley-Cock's article of July 3, 1949 (see fn.43 below), though the changes had been made by spring/summer 1946.
- [41] News item, *CDT*, Sat., Sept.7, 1946, Pt.2, p.21, c.3. Vicini (1973), p.38, noted that at the Hubbard Street exit of Tribune Tower is a "Frate Elevator Only. No Passengers." "Today, ..." Eric Zorn wrote in 1997, "virtually the only remnant in Tribune Tower of the Colonel's grand experiment are elevators labeled 'Frate.'" Zorn, *op.cit.* (see fn.4 above), p.14, c.3. In a column, 'A little-known legacy from the Colonel', *CT*, Mon., May 5, 1997, Sect.1, p.15, c.1, John McCarron said, "For some he'll always be the publisher ... who wanted everyone to spell it 'frate' instead of freight". The spelling still lingers in memory.
- [42] Delos Avery, 'Bookman's Holiday', *CST*, Apr.4, 1948, Pt.4, p.2. *Supplement II* was published in 1948. A follow-up column, already discussed, concerning Medill appeared in *CST*, May 2, 1948, Pt.4,p.2.
- [43] *CST*, July 3, 1949, Pt.1, p.3, c.1.
- [44] August 1949, XXXI: 2, p.5, cs.1–2. The managing editor is given as the voice of authority.
- [45] July 3, 1949, Pt.1, p.6, c.2.
- [46] This paragraph is based on Vivian, , *op.cit.* (see fn. 18 above), p87 — citing an Astley-Cock memo to the managing editor, May 29, 1950, not available to me. Vicini (1973), pp.37, 39 and 45, had discussed this memo.
- [47] See *Rules of Composition for the Use of Operators, Editors, Copyreaders, and Proofreaders*, *Chicago Tribune*, 1950, p.T54.
- [48] Vicini, (1973), p.46, said that the only related items he could find in the *Tribune* from 1950 to 1955 are these: an article on Bernard Shaw's will, on Nov.3, 1950; an article on the results of a national study on misspelling, on May 31, 1954; and an article on the National Geographic Society and English spelling, on June 15, 1954. None of these articles shows up in the *Tribune* editions available to me.
- [49] See the review by LaTourette Stockwell, *CST*, Mar.13, 1955, Pt.4, p.4, c.5; and Henry Hansen, 'Why Johnny Can't Read ...', *CST*, Apr.17, 1955, Pt.4, p.10, cs.1–4. A news item in the *Tribune* reporting on the National Educational Association convention in Chicago that July tried to give special emphasis to the "sizable proportion of educators..." backing Flesch; see *CDT*, Thurs., July 7, 1955, Pt.1, p.15, c.2. But see F. Duane Lamkin, 'An Analysis of Propaganda Techniques Used in *Why Johnny Can't Read — Flesch*', *The Reading Teacher* (Dec.1955), 9:2, 107–117; Maria E. Schantz and Joseph F. Brunner, *Reading in American Schools: A Guide to Information Sources*, Detroit, MI: Gale Research Co. (1980), p. 11, item 51; and D.W. Cummings, *American English Spelling*, Baltimore and London: Johns Hopkins University Press (1988), pp. 12–24 on phonetic spelling vs. others — Flesch's book does not make its bibliography.
- [50] See art., *CDT*, Mon., Apr.25, 1955, Pt.3, pp.9, cs.1–2; 10, cs.7–8.

- [51] The last, *CDT*, Tues., July 19, 1955, Pt.2, p.1, cs.5–7. Along the way, letters, editorials, and news items concerning the series were printed, including a news item on July 20th. Apparently, the *Tribune* received hundreds of letters on the topic from across the country.
- [52] *CST*, Aug.21, 1955, Pt.1, p.20, cs.1–2. Various commentators have picked up on the surprise registered in the editorial that no reader had written or called to remark the changes effected the previous Monday. But with the possible exception of *fratelfreighter*, it would have taken a sharp-eyed reader to spot *advertisement*, *cotillion*, *paean*, *bailiff*, *tariff*, *sheriff*, *solder* (for *sodder*, and the PH words scattered about the pages of the daily issues. A follow-up editorial on the Winn articles, 'Spelling and Allied Subjicks [*sic*]', appeared, *CST*, Aug.28, 1955, Pt.1, p.20, cs.1–2. *The Trib*, Sept., 1955, XXXVII:3, p.7, c.3, under the headline, 'It's Good-by to 'Frate', 9 Other Simplified Spellings', indicated these words "were dropped from the simplified spelling list Aug. 15. They should be deleted from page 32 under 'Tribune spelling' in the 1953 Style Manual."
- [53] From autumn 1955 — spring 1957, all Vicini (1973), pp.48–49, turned up were what he termed "personal letters" to the *Tribune*: an eighth-grade teacher writing about a supposed misspelling (of *sherifs*), on Oct. 19, 1955 (apparently misdated 1953); a superintendent of public schools in a Michigan town, on May 12, 1956; a housewife from Moline, Illinois, on Feb. 12, 1957; and from a Detroit, Michigan, high school student, preparing a report on Bernard Shaw, on Mar.12, 1957. These letters do not appear in 'The Voice of the People' in the editions available to me.
- [54] The Chicago Tribune 1958 Style Book..., p.65.
- [55] The list is given in Mencken, *The American Language, One-Volume Abridged Edition*, 4th ed., Raven I. McDavid, Jr., and David W. Maurer, eds., New York: Alfred A. Knopf, 1986, pp.490–91, fn.5; the abridgment was first published 1963. I have not seen a copy of this style book. The number of survivals comes from M[orris]. M. Murphy, 'A Few Afterthoughts About a Campaign That Failed', *Grass Roots*, Spring 1971, p.194. Murphy, Associate Professor of English, Amundsen-Mayfair College, a Chicago city college, published the literary magazine, *Grass Roots*, with and for his students. The original, along with the student paper preceding it, Corinne Wayne's 'Trying to Clear Up the Mess', is in the McCormick Research Center.
- [56] My sources for this paragraph are CoUin, *Chicago Journalism Review* (Sept.1970), III :9, p.7, c.1; Murphy, *Grass Roots*, Spring 1971, pp.194–96; and Vicini (1973), pp.51–53. Mencken's 1936 *New Yorker* article gave the correct date of 1934. Vicini (1973), p.67, interviewed Dr. Albert Sutton, Professor of Journalism, Northwestern University, Sept.28, 1973, who said that *Tribune* spelling "had an effect upon readers. They thought the *Tribune* frequently misspelled words."
- [57] Wendt, (1979), p.763.
- [58] Marshall Rosenthal, 'The Media: And Now the Local News...', *The Chicagoan*, (Oct.1973), 1:1, 114. According to Vicini, who interviewed her, Jackie Wells, chief copyreader, wrote the 1973 and 1974 style books: See Vicini (1973), pp.3 and 68.
- [59] Edit., 'Sounding ough', *CT*, Wed., June 25, 1975, Sect.2, p.2, c.2.
- [60] Interview, Sept.29, 1973, noted in Vicini (1973), p.58.
- [61] See box, *CT*, Mon., Sept.29, 1975, p.1, c.1.
- [62] Edit., "Thru is through and so is tho," *CT*, Mon., Sept. 29, 1975, Sect.2, p.2, cs.1–2. Zorn, *op.cit.*, p.14, c.3, wrote that these simplifications have "gradually disappeared from Tribune pages."
- [63] Tim Jones, 'May 13, 1914 / Colonel puts personal stamp on Tribune', *CT*, Sun., Apr.27, 1997, Sect.4, p.2; reprinted, Stevenson Swanson, ed., *Chicago Days: 150 Defining Moments in the Life of a Great City*, Lincolnwood, Illinois: Contemporary Publishing Co., (1997), p. 102.

3. The Spelling Standards of Undergraduates, 1997–98

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Abstract

The spelling standards of first and final year undergraduates in 1997–98 were assessed. Error frequencies of 14 monitored words ranged from 5 to 82%, being 78% or more for five of them. Overseas students were significantly less bad than British students. The wide range of quoted mistakes includes putting one word as two words, or two words as one, many single/double letter errors, wrong plurals, confusing plurals with possessives, and wrong Latinate endings. The effects of the errors on the effectiveness of the scientific writing and ways of reducing the errors are considered.

1 Introduction

Spelling is important. Bad spelling gives the impression that the writer is ignorant, careless and unintelligent. It can mislead, confuse and frustrate the reader, and delay or prevent comprehension. For example, a non-dyslexic British undergraduate wrote: "Next, as a whole animal normally produced a large amount of sperm with an ejucaation..." Interpreting *ejucaation* as *education* does not make sense, so presumably *ejaculation* was intended, but the reader should not have to guess.

The present work is part of a semi-quantitative study of students' English started in the 1970's. This particular study was made of the spelling standards of current undergraduates, to see what kinds of errors were made, how often, what effect they had on the effectiveness of the written work, and how such errors might be prevented or reduced in future. These errors were in writing for assessed tasks in genetics, not in special spelling tests. They are from the serious practical use of English when the students can — if they choose — use dictionaries, textbooks or other aids to correctness.

My national survey of the standards of UK undergraduates' English (Lamb, 1992a) showed that these studies of undergraduate biologists at one institute gave similar results to those of students of a wide range of arts, science, engineering and medical subjects in the 17 universities surveyed in England, Scotland, Wales and Northern Ireland. Most UK students have been through the same kinds of primary and secondary education, usually with the same kinds of English syllabus and exams, especially GCSE English, so the present findings should be of more than parochial interest.

All students had a lecture from me in first year on writing scientific English, with advice on correct spelling and its importance, and they had been recommended to read a book (Pechenik and Lamb, 1994) on how to write about biology. They had all had previous work back from me, with corrections of spelling and grammar, and knew that I took such matters seriously. For their practical books, they usually had schedules which gave the names of organisms and chemicals, as well as methods. In lectures and practicals, I spelled new terms on the board, often giving etymologies and spelling tips, especially for words frequently spelled wrongly, including ones with unusual plurals. I expect traditional British spelling.

Spelling has here been interpreted broadly: some errors are in regions of overlap between spelling, word confusions, mistakes in parts of speech, and grammatical faults. When the lists of errors are examined, I recommend considering which mistakes could mislead or delay the reader, especially ones completely changing the meaning. The lists are provided to illustrate particular points and as future research material, as not all aspects can be considered here. A few words of context are sometimes given. As the work was marked primarily for its genetics, under considerable time pressure, some errors were undoubtedly missed. Those recorded here represent about two thirds of the observed errors, with those not recorded largely being variants on those given, e.g. a noun spelled wrongly in the plural as well as in the singular. Although errors are usually shown in italics, Latin names of organisms are by convention

also shown in *italics* even when correct: they should always have an initial capital letter for the genus and a lower case letter for the species.

Judged by nationality, as in the passport, about one quarter of the students were from overseas: including them in this survey was expected to increase the average spelling standards. My previous comparison of overseas and UK students (Lamb, 1992b) showed that overseas students were significantly better at spelling ordinary English words, but were little better at scientific words. I have excluded results from dyslexic students and obvious 'foreignisms' such as *cleate* (create), *flavourable* (favourable), *flavour* (favour), *fries* (flies, entirely consistent) and *roaster* (rooster); some 'foreignisms' were made by British students of overseas ancestry. I have excluded some words which were probably 'slips of the pen', such as *strerile*, unless the mistake was made consistently.

2 Materials and methods

These data were collected in academic year 1997–98, on 78 first-year students on a Cell Biology and Genetics course, and on 21 final-year students on an Applied Genetics course. Our biology undergraduates have a minimum of grades BCC at A-level and grade C at GCSE English, or equivalent overseas qualifications.

The materials analysed were mainly genetics practical books, about 50 pages long for the first-year course, and about 70 pages for the final-year course, plus about 15 pages of tutorial essays. All the writing was done in the students' own time, so they could consult dictionaries, text books or lecture notes whilst writing. About one third of the writing was word-processed, when spell-checkers could have been used — but usually were not, to judge by the errors. Before recording say hand-written *soup* as an error for *soap*, I checked the writing of letters u and a in other words.

For essays and the final-year students' practical books, errors were recorded when they were noticed. For the first-year students' practical books, a chart of 14 important words was used, recording whether each of these was used correctly or wrongly for each student. Other errors were noted. Recording errors as they occur gives only minimal estimates of error levels, as not all students use each word. Thus if 20 out of 99 students got a particular word wrong, the actual error rate could be 100% if only those 20 used it and all got it wrong, or 20% if all 99 students used that word, mainly correctly. The error frequencies are therefore accurate for the 14 chart words but are usually considerable underestimates for other words.

It can be assumed that only one student out of 99 (1%) made each error unless a percentage value or 'several' or 'many' is quoted. If a student sometimes got a word right and sometimes got it wrong, then he or she did not know how to spell it and is counted as having got it wrong. Where handwriting was ambiguous, no error was recorded. If an error was made consistently, then 'consistent' is recorded, to show that it is not a 'slip of the pen'. Where words include more than one type of error, they are only listed under one type; e.g., *innorder to* is listed under one word/two word errors, but not under single/double letter errors, and *loosing* (for 'losing') is listed under word confusions, not single/double letter errors.

3 Results

3.1 One word / two word errors

What constitutes a single word is fundamental. One word/two word errors often change the intended meaning, or produce nonsense.

One word written instead of two words: *afew* (2%), *alright* (2%), *alot* (7%), *aswell* (2%; consistent for one student), *breakdown*, *eventhough*, *inexactly* the same way, *infact* (6%), *innorder to* (2%, consistent), *inorder to*, *ontop*, *sorboseminimal* (sorbose minimal medium).

Two words written instead of one: *asco spores* (ascospores), *an other*, *a specially* (especially), *counter balance*, *dis advantage*, *a free martin* (freemartin), *further more*, *in tact*, *off spring* (3%), *over lap*, *over laps* (these last two were from different students), *tog ether*, *where as*, *which ever*, *with in*.

There were also cases of two separate words which should have been joined by a hyphen, or written as one word: *cross subject* reviews, *extra nuclear* genes (that means additional genes in the nucleus, while genes outside the nucleus was the intended meaning), a *hand out* sheet, *non desirable*.

3.2 Single letters for doubled letters

(sometimes with doubled letters for single letters, too)

Some of these errors change the meaning but others do not.

abarant (aberrant), *abberations* (3%), *abberent* (3%), *aberation* (aberration), *Abott* (several)/*Abbot* (8%) (Abbott, surname), *abbreviated*, *abbreviation*, *accomodate*, *alotted*, *aparent*, *aparantly*, *apears*, *asexually*, *Aspergillus*, *assymetric*, *bar body* (Barr, man's surname), *begining* (4%), *controled* (2%), *coton* (2%), *counseling*, *crasa* (species name, *crassa*, 3%), *dafodil*, *disect* (4%), *disecting* (9%), *disimilar* (2%), *disolve*, *distiled*, *especialy*, *floculent*, *imposible*, *inteligence* (3%), *inteligent*, *interupting*, *labeled*, *labeling*, *mamalian*, *mamals* (21%), *mellenia* (millennia), *millenium*, *occasionally* (3%), *occurance* (3%), *occured* (9%), *occurence* (9%), *occurring* (6%), *oposite*, *parafin*, *posses* (3%)/*poses* (possess), *posseses* (3%), *procede*, *program* (for *programme*; in science, we distinguish between a computer *program* and a *programme* of work), *Punett* (3%)/*punit*/*punnet*/*punnit* (surname, Punnett), *realy*, *Sacharomyces*, *Salmonela*, *spilage*, *Staphylococcus*, *succesful* (4%)/ *succesfull*, *succesfully* (2%), *to* (for too, e.g. *to* hot, *to* close to) (7%), *totaly*, *transfered*, *unecessary*.

3.3 Double letters for single letters

(sometimes with single letters for doubled letters, too)

abberration (3%), *accross* (3%), *ammend*, *annoculation* (inoculation), *anomaly*, *appliccable*, *arrising*, *assexually*, *bananna*, *begginig*, *collonies*, *connidia*, *conserrve*, *defficient* (2%), *defficiency*, *derrived*, *devellopment* (3%), *developp* (3%), *developped* (2%), *dillution*, *dissadvantage*, *dissappeared* (2%), *dissappointing*, *dissorder*, *Drosophilla* (4%), *extreemly*, *fillaments*, *gellatine*, *haemophilliac* (7%), *Hollandric* (holandric), *innaccuracies*, *innaccurate/innacurate*, *innacuracy* (2%), *innoculate* (7%), *innoculated* (8%), *innoculating* (6%)/*inoculating* (3%), *inoculation*, *loccii*, *loop*, *miss-aligned*, *misscarriage*, *mollar*, *mycellium*, *neccessarily*, *neccessary* (4%), *occassionally* (2), *occurrs*, *opperate* (2%), *overidding*, *pilli* (17%), *pippette*, *possition*, *preffer*, *pressence* (2%), *proccessing*, *prooved* (3%), *reccesive/recessive* (2%)/*ressessive* (recessive), *reccombination*, *ressembling* (2%), *thallasaemia*, *too* (for *to*, e.g., *is too* inherit) (3%), *tripple* (4%), *untill*, *whoose*.

3.4 Word confusions

Some are confusions between completely different words, with different meanings, while some are different parts of speech for the same root word.

abhorrent (aberrant), *adopted* (adapted, consistent, 2%), *to advice* (advise, 3%), *are advice* (advised), this *affect* (effect, many; see Table 1), *aga* (agar), *analogous* (analogues, noun), *analogous* (anomalous), *analyse* (analysis, 2%), *asceptic* (aseptic), how the doctors *asses* that they are learning (assess), *assumed* (deduced, many), *autonomous* (autosomal, 3%), *autosomal* (autonomous).

baring (bearing), *be* (by), *beech* (beach), *bellow* (below), *born* (borne, 3%), *braked* (broken), *braking* dormancy (breaking), *brow penis* (brown).

castrated (spayed), *central* (ventral), *cheeper* (cheaper), *check/chick* (cheek), *chronic* (3%)/*cronic* (chorionic), *colonies* (colonise), maize *comb* (cob), a *compliment* of (complement), they *compliment* (complement), *complimentation* (complementation), a *concreted* conclusion (concrete), sex *cones* (combs, many), *contaminates* (contaminants), *councilling* (5%)/*counciling* (counselling), *cure* (treat; this is a very important difference).

detects (defects), *different* (difference), *discreet* line of yeast colonies (discrete, consistent), *divise* (divide).

more *easier* (easily), *effect* (effective), having an *effected* child (affected, 6%), this *effects* (affects, several), *experience* (experiment), *extend* (extent).

father (further), *favoured* against (selected), who will *fertile* (fertilise), *fir* (for), *formally* (formerly), *to found* (find, 2%), *fungi/fungus* (fungal, 5%).

grew (grow, consistent).

he (it, of a fungus), a *heal* (heel), *holiday/Holiday* pools (Holliday, man's name), *holts* (halts). *idealistic* figures (idealised), *illicit* a response (elicit, 10%), *inables* (disables), *incubate* (incubator), *incur* (confer), *infected* (affected, several), *infected* (inoculated), *infers* (implies), *its* (it is). *lager* (larger), were *laying* (lying), *lead* (led, several), *lease* (least), to *leech* out (leach), *less* dead cells (fewer)/less red colonies (fewer)/less double crossovers (fewer), the *liming* of the cheek (lining), *loosing* (losing, 4%), *low* (law, consistent).

mail and *femail* flies (male, female), a heat-proof *mat* (mat), after *matting* (mating), *melamine* (a plastic, for melanin, a skin pigment), *melatonin* (melanin), *mineral* (minimal, 2%), *mongrel* (Mongol), a *mounting* needle (mounted, 6%), *multiply* (multiple), *mutagenic* (mutated).

normal (normally).

would *of* (have, 2%), *original* (originally), *ova* (ovary, consistent), *ovens* (incubators), an *overlap* (overlay).

patents (patients), *peace* (piece), *penicillin* (*Penicillium*, mistaking the antibiotic for the fungus producing it; 14%), *permeations* (permutations), *phenylketonuria* (phenylalanine, 7%), *physiological* (physical), *plastid* (plasmid, with a totally different meaning, 2%), *point* density (buoyant), *polydactyl* (polydactyly, 11%), more *popular* classes (frequent), we used a *potter* to separate... (a Potter homogeniser), a *poxy* resin (epoxy), *practise* (noun, practice, several), *preformed* (performed), *presented* (present), *prime* (primer), *principals* of (principles, several), *proprieties* of different mutants (properties, consistent). *rage* (range), has *raised* (risen), *ransom* mating (random), *ration* (ratio, several), *reaper* (reappear), *reel* (real), *refrigeration* (incubation), *revel* (reveal), *ribulose* (riboflavine, mistaking a sugar for a vitamin, several).

scrapped (scraped), *sole* (role), roughly *seeking* (speaking), *seize* (size), *sense* (sensitive), *solution* (suspension, many), *sorbase* (confusing the enzyme with the sugar it works on, sorbose), washing one's hands with *soup* (soap), *specie* (species), short *statue* (stature, consistent, 4%), *strips* (stripes), *suffers* (sufferers, consistent, 3%), *sun* (son, consistent), *synthesis* (synthesise, 2%).

tacking (taking, consistent), *tale* (tail), a *televise* screen (television), *than* (then), *their* (there, several, including one consistent), is *though* to be (thought), *thoughts* (those), to have *to* causes/*tow* (two, 2%), *too* (two), *transistor* (transmitter), *tree* (three), *triploidy* (trisomy), *trypsin* (tryptophan, several; this is a bad error, confusing an enzyme with an amino acid).

Normal *verses* dumpy wing (versus), *very* (every).

were (where, many, e.g. "Although the colonies *where* smaller, there *where* more present."), *who* (which, of a bacterium, and of a plant, 2%), *wild life* (wild-type).

3.5 Error frequencies in the chart of selected words

The data come from 78 practical books from first-year students.

The results in Table 1 show error frequencies for different words ranging from 5% to 82% for British students, with five out of 14 words being wrong 78% of the time, or more. The error frequencies for different words ranged from 0% to 75% for overseas students, with none in the 78% or more category. Many errors were made in scientific words or names, as well as in ordinary words, even though the scientific words were usually in the schedules from which the students wrote up these practicals.

Table 1. The frequency of spelling errors and word confusions in selected words, analysed separately for British and overseas students.

Students→	British		Overseas	
Word ↓	% Wrong	Sample size	% Wrong	Sample size
Ordinary words				
complementary	27	45	0	11
effect	82	11	67	3
independent	39	31	50	8
its (possessive pronoun) *	78	9	25	4
miniature	43	53	29	14
occurrence	79	28	75	4
occurred	81	37	55	11
separate *	53	36	0	6
Scientific words or names				
<i>Drosophila</i>	17	53	8	13
<i>melanogaster</i>	9	33	14	7
Hardy-Weinberg	32	53	13	15
lysine	31	17	50	2
Mendel's **	79	42	17	6
<i>Saccharomyces</i>	5	55	14	14
Total over all words				
**	40	503	24	147
* 2 x 2 χ^2 test difference between British and overseas students significant at the 5% level, or ** significant at the 1% level.				

For *complementary* and *effect*, the errors were word confusions with *complimentary* and *affect*, confusions about which the students had been specifically warned more than once as they completely change the meaning. For some other words, the mistakes were single/double letter errors as shown in sections 3.2 and 3.3, e.g. *occured* for *occurred*, sometimes with other errors too, as in *occurance*. For the names *Hardy-Weinberg* (they wrote about the Hardy-Weinberg equilibrium), the error was often in the omitting of the hyphen, or in putting *Weinburg*. The many different errors made for *Mendel's* and for *Drosophila* (the fruit fly) can be seen in section 3.6.

Table 1 shows that the overseas students were significantly better than British students at spelling *its*, *separate* and *Mendel's*, and had an overall error level of 24%, which was significantly less than the 40% error level for British students, confirming my earlier findings (Lamb, 1992b). It is useful to know whether most of the errors in sections 3.1 to 3.8 were made by just a few very bad spellers, or whether mistakes were widespread amongst the students. This was tested on the Table 1 data and was found to be the latter case: on the 14 selected words, of the 78 British students, 12% made no errors, 65% made 1 to 3 errors, 18% made 4 to 6 errors, and 4% made 7 to 9 errors. Of 19 overseas students, 42% made no errors, 37% made 1 to 3 errors, 7% made 4 to 5 errors, and none made more than 5 errors.

3.6 Bad spellings

Some of these ignore simple spelling rules, e.g., *recieve*, or show a poor understanding of the words' origins, pronunciation or meanings, e.g. *outway* (outweigh). It must be stressed that the error frequencies are minimum values, with real values usually being much higher, as not all words were used by all students; some were used by only one person.

absence (several)/*absense* (several), *abscent*, *accure* (occurred), *acheived* (many)/*achived* (4%), *acros pore* (ascospore), *addative*, *aeborne/airborn/air-borne/air-bourne/airbone/airbourne* (7%) (airborne), *affacted*, *affectional* (affectionate), *albanism* (albinism, 9%), *alcohol*, *allel* (allele), *ambiguous*, *amniocytensis /amniocience/ amnioscience/ amneocentesis /amnioscentesis* (amniocentesis), *analine* (aniline, several), *analaris/analisis*, *analyzation* (analysis), *annoculation* (inoculation), *anomyous*, *anormal* (abnormal), *anthanoic/anthrallic* (anthranillic), *anthropods* (arthopods), *apparant* (3%)/*apperant*, *applies*, to *apose* (oppose), as *apose* to (as opposed to), *arbitrary* (2%), *arisal*, *ascomycote* (ascomycete), *ascors pore /ascopore* (ascospore), *ascot* (asco), *Asparagillus /aspargillus / Asbergillus* (consistent) / *aspodillus* (*Aspergillus*), *asterix* (asterisk), *attatched* (several), *aureous/orius* (aureus).

baliure (failure), *behavior* (2%)/*behavoir*, *belifs* (beliefs), *beleive* (3%), *benefitial*, it must be *bloked* last (blocked), *burgandy* (Burgundy).

caffin (caffeine), *caliculated* (calculated), *calonised* (colonised), *canidia* (8%, usually consistent)/*conidea* /*conidia*/*candidia* (conidia), *carcus* (carcase), *cebreal* (cerebral), *center* (3%), *charchoal*, *chlorin* (chorion), *chromasems* (consistent)/*chromasomes* (several) (chromosomes), *cinnebar* (several) / *cinnibar* (several)/*cininabar* (consistent)/*cinubar* (cinnabar), *cockeral* (2%)/*choceral*, *coinedence*, *color*, *compitence*, *compleatly*/complitely, *comprable*, *concding*, *concievable*, *concieving*, *condence* (condensed), *condusive* (2%), *confermed*, *contaminent*, *continuos*, *contridicts*, *convertes*, *conversion*, *convinient*, *corrispond*, *corrosponding*, *coverspip* (coverslip), was *critised* (criticised), *critisms* (criticisms, consistent), *cyctine* (cystein), *cymine* (thymine).

definate (5%), *degredation* (4%), *delation*/deleation (deletion), *deliterious* (several), *delt*, *dendancy* (tendency), *depature*, *desease* (3%), *desinged* (designed), *detramental*, *develope* (several), *developement* (3%), *devestating*, *devided*, *devision*, *diatype* (ditype), *dicide*, *didgets* (digits), *dieat* (diet), *dieing*, *diffence*/differance (difference), *disasterous*, *discarted* (discarded), *discribed*, blood *donar*/doner (donor), *down's* syndrome (Down's), *Drasophila* (consistent)/*drosophilla*/*Drophila*/*Drosophia* /*Drosophial* (3%)/*Drosophilia* (many)/*Drosophyla* /*Drosophilla*/*Drosiphila*/*Drosphila* (consistent) (*Drosophila*, see Table 1), *dumby* (dumpy).

edastasis/edostasis (epistasis), *ejucation* (ejaculation), *enitirely*/entirly (entirely), *enoculation* (inoculation, consistent), *environement*/enviroment (several), *enviromental* (several), *envolves* (4%), *epidermis* (*epidermidis*, species name; many), *equaliberium* (consistent)/*equilibruim*, *excreats* (excretes), *exept* (except), *existant*, *experements*, *explanation* (several), *extreame*, *extreemly*.

fangal (fungal), *farely* (fairly), *fertalise*, *fibers* (fibres), *flouresce* (fluoresce, several), *flutuations* (consistent).

garunteed (guaranteed), *genatalia*/genetalia/*gentalia*, *genitle* (genital), *geneotype* (genotype), *gyrandromorph* /*gynomorph* (gynandromorph).

Hallondric (holandric), *haemoglobulin* (haemoglobin), *haemophelia* (haemophilia), *haemophyliac* /*haemophilic* /*haemophaeliac* (haemophilic), *haermophrodite* /*hermaphrodyte* (hermaphrodite), *Harleem* (Haarlem), *heigh* (high), *hereditability* (heritability), *hurds* (herds, consistent).

identicle (several, consistent), *inaffective* (ineffective), *incubater*, *independant* (many, see Table 1)/*indepentant*, *independantly*/indipendently, *infinately* (2%), *intelegence* (intelligence), *intelligent*, *intereference*/interferance (interference, several), *intergrated* (2%), *interpretate*, *intresting*, *irrelavent* (several).

kernal (kernel), *Klifener*/Keiffer/*Kleinfelter's* (several) (Klinefelter's syndrome).

laballed, *larvea*, *leathal*, *lossed* (lost, consistent), *lycine* (several)/*lysene* (2%)/*lycin* (3%)/*lyciene*/*lysin* (several, consistent) (lysine, see Table 1).

maiting, *malten* agar (malt), *mannar* (manner), *mantained*, *mays* (maize, several), *Medel's*/ *Mendal's*/*Mendals*/*Mendles*/*Mendels* (many) (Mendel's, see Table 1), *Medelian* (several)/*Mendilian* (Mendelian), *Melangoster* (*melanogaster*, see Table 1), *meoise* (meiosis), *merizygote* (merozygote), *metabalites* (metabolites), *methodes*, *mieoisis* (meiosis), *mieotic* (meiotic), *minature* (many)/*minituare*/*minture*/*miniture* (many) (miniature), *mold* (mould), *molercular*, *monitering*, *mouvements*, *mutagenices* (mutagenesis), *mutent*, *mytated* (mutated).

necesserally (3%), *negitive*, *negligable* (7%), *neittheir*, *nessecary* (3%), *neucleotides* (nucleotides, 2%), *Neurospa*/ *Neurospora*/ *Neuraspora*/ *Neurospra*/ *neurospora* (many) (*Neurospora*), *neutrition*, *nevertheless*, *non* (none), *noticable*/noticible.

occaisons, *occaasionally*/occaionally, *occoured*, *occurance* (many, see Table 1)/*occurrence* (several), *occure* (occur, 2%), *occures*, *octrads* (octads), *omochrans* (ommochromes), *opaic* (opaque), *opposit*, *origine*, *origionally*, *outway* (outweigh).

parachene (pachytene), *paracicum/paramecium* (mistaking a Protozoan animal for a fungal reproductive structure)/*parathecium* (consistent, 3%)/*parathesium/ perathecium* (many)/*perethecium/perethecum/perimecium/ perithesium* (2%) (perithecium), *parantal* (parental, consistent), *parentaly*, *pathy* (pathway), *pedominantly*, *penisilium* (2%)/*Penecillium/penicilin* (consistent) (*Penicillium*), *percular* (consistent), *perental* (parental), *perl* (pearl), *perminimal* (minimal), *petry* (3%)/*petra* (Petri dish), *phenylketoneuria* (phenylketonuria), *phsychological*, *piments* (pigments), *pocess*, *pocesses* (possesses, 2%), *poliploid/polypliody/ployploid* (polyploid or polyploidy), *polydactylity/polydactylyty/ polyldactly/polidactily/polydactily* (4%) (polydactyly), *poored off* (poured), *pores* (spores), *porpouse* (purpose), *possses* (possess), *practicle* (several), in *practise* (practice, noun), *practicals* (consistent), *precedure* (procedure), *precence/prescence* (several)/*presense* (presence), *precotion* (precaution), *predominanently*, *pregent* (pregnant), *preperation*, *presant* (2%), *preveously*, *probarbility*, *proccede* (proceed), *prodgeny*, *prospice* (propitious), *protocole*, *purpel* (purple).

randomn, *recepient* (2%)/*recipiant* (2%), *recessif/ ressecive/ressessive* (recessive), *recieve* (several), *reciprical* (reciprocal, several), *recombinate* (recombine), *recommised* (recognised), *relitively*, *remidied* (remedied), *repetative*, *reproducable*, *retardise* (retardation), *Rodatorula/Phodotorula/Rhotodula/Rhodoturula* (several) (*Rhodotorula*), *rist* (wrist), *rubia* (rubra), *rudementary/ rudamentary* (rudimentary).

Saccaromyces (*Saccharomyces*, see Table 1), *safter* (safety), *sam* (same), *Samonella* (*Salmonella*, several), *satalight* (satellite), *segragate* (several), *sence*, *sensitif/sensitive*, *sentenic* (several)/*synthetic/synthenic* (3%)/*syntinic* (syntenic), *seperate* (many, see Table 1), *seringe* (syringe), *severn* (seven), *shaper* (sharper), *showes*, *silivary* (salivary), *similated* (simulated, consistent), *sinous* (sinuous), *som* (sum, consistent), *spontenous* (spontaneous), *stabalise*, *starchie*, *Straphylococcus* (3%) /*Staphilococcus* (3%) /*Staphllococcus* /*Stephlococcus* (consistent) (*Staphylococcus*), *sterelising* (2%)/*steralizing*, *steralise* (3%) (sterilise), *summerise* (summarise), *suppliment* (several), *surbose* (sorbose, 5%, consistent), *surposed/surporsed* (supposed), *syndrom* (3%), *synthetitze*.

temparature, *tendancy* (several), *theorically* (theoretically), *theses* (these), *threated* (treated, consistent), *thouroughly*, *thyamine* (this could be an error for thymine in DNA or for the vitamin thiamine), *thytosine* (cytosine), *transfere/transphere* (transfer), *transforme*, *transmiss* (transmit), *tretening* (threatening), *trphimurium* (*typhimurium*, species name; several), *tryptophan* / *tryptohain* / *tryplophane* / *triptophan* (consistent) / *tryptomain* / *tryptomine* / *trypsine*/ *tryptothane* (tryptophan).

unables (enables), *undergoe*, *uretus* (uterus).

variaty, *vegatative* (vegetative), *veiw*, *venteral* (ventral), *vigaress* (vigorous), *vigina* (vagina), *vice virsa*, *visable* (several).

wales (Wales), *Weenberg/Weimberg* (2%)/*Weinburg* (many) (name, Weinberg, see Table 1), *wheather/wether/weather* (whether), *wheras*, *whithout*, *wilde* (wild).

yeild (many).

3.7 Latinate endings

Where words likely to be new to the students have unusual plurals, I always mention it in lectures or practicals, writing them on the board, e.g. *ascus*, *asci*; *conidium*, *conidia*; *fungus*, *fungi*; *locus*, *loci*; *perithecium*, *perithecia*; *pilus*, *pili*. Some of these errors occur frequently in newspapers, e.g., *a bacteria*.

asca (*asci*, consistent), *an asci*, *each asci*, *ascii*, the *ascus* were; *a bacteria* (many), *bacteria* growths (bacterial), the *bacteria* was (many), *bacterias* (several); *chimerases* (chimeras); *conidea*, *a conidia* (several), the *conidia* was (several); *a criteria* (several); *fungae*, *fungeal*, *a fungi* (several), *fungi* colonies (fungal, several), *fungii*, *fungis*, the *fungus* are; the *genitalia* was (several); the *larvae* was (several); *locii*, *locii*, *a loci*, *locis*, *loci's* (non-possessive plural, several); *a media* was (several), *mediums* (many); the plural of *medium*, as in a growth *medium*, is *media*, while the plural in the spiritualist sense is *mediums*, on all the *medium's* and..., *per mitochondria*; *nucleuses* (nuclei); *a perithecia* was (several), *peritheciums*; *a phenomena*, this *phenomena* has; one sex *pili*; *a women*.

3.8 Apostrophes and plurals

Omissions of the possessive apostrophe were many and are not given here. The possessive pronoun *its* was often written as *it's* (many) or *its'* (several). Apostrophes were wrongly put in some singular non-possessive nouns: *genetic's*, *genetics'* and *Zea may's*. They were also put in non-possessive plurals: *albino's* (several), *embryo's* (several), *mosquito's* (several), *plateau's*, *ratio's* (several), *sufferer's* of (several). Apostrophes have sometimes been put in adjectives, adverbs and verbs, e.g., "It *add's* a preset amount..." A plural was sometimes given instead of the singular possessive, e.g., "a *companies* products" (company's); a *viruses* (virus's).

There were various words in which the plural ending was not given, or was given wrongly: two *ovary*; *copys* (several), *flys* (5%), *ovarys*; *cattles*, *medias* (several), *offsprings* (several), *sexs*, *sheeps*.

3.9 Unclear handwriting

What counts as unclear handwriting is subjective, so has not been assessed quantitatively. Consistently difficult writing was a feature of less than 10% of the students, with many others having some unclear words. In several cases, I misinterpreted a word initially, before the context drove me to reinterpret it, e.g., the *apposite* sex (opposite), *wine* (urine) and *unclear* (nuclear).

4 Discussion

4.1 Standards

With such high error frequencies, e.g. 78–82% in the accurate selected word data (Table 1), and such a wide range of mistakes in sections 3.1 to 3.8, it is clear that even good undergraduates at a prestigious college have generally poor standards of spelling. They have had English lessons in primary and secondary schools, and have produced many items of returned written work in many subjects, including English. All teachers, if they are doing their job properly, should correct spelling errors in general and technical words, but many students tell me that their errors have generally not been corrected, so that they do not realise that they are errors. Many students also say that they have not been taught grammar, including punctuation, so do not understand apostrophes. If that is true, then important aspects of the National Curriculum in English are being ignored.

The one word / two word errors were almost never made by our undergraduates until 1992, when one student consistently wrote *alot*. Now several students a year make that particular mistake, and new errors occur each year. An emphasis on television rather than reading is a possible reason.

English language education in Britain must generally be poor because the overseas students, whose first language is often not English, were so much better at spelling than the equally intelligent British native-speakers of English. The overseas students have generally had more grammar teaching, more correction of errors, and more emphasis on correctness than have the British students, which suggests easy ways of improving British standards.

Some of the errors by overseas students consisted of using their own language spellings, such as *color* by Americans. The data are not extensive enough to analyse by nationality, but the worst spellers' nationalities (with the number of different errors by that student in brackets) were in first year: UK (31 errors by that student), UK (24), Israel (24), Japan (21), UK (19) and Yugoslavia (17). In third year, the worst spellers were from UK (28 errors), Sri Lanka (27), Singapore (19), UK (15) and Yugoslavia (14). Even some of the strangest errors were made by students of British nationality and ancestry.

Section 3.6 shows the appalling mess that many students made of scientific names such as *Aspergillus*, *Drosophila melanogaster*, Mendel's, *Neurospora*, *Rhodotorula* and *Staphylococcus*, of scientific terms such as amniocentesis, conidia, perithecium (10 different wrong ways of spelling it), and of chemicals such as lysine and tryptophan, as well as of many ordinary words. Such a range and frequency of errors show ignorance, carelessness, a poor attitude to accuracy, and a lack of effort to consult dictionaries, text books or lab schedules to get important words right.

Staff are also often poor at spelling, sometimes setting students a bad example with handouts containing a range of errors. I have to make a lot of corrections to staff submissions for departmental publications.

4.2 How errors can be reduced

A large improvement is possible if students have their attitude to accuracy changed by showing them the great effects that these errors can have on their perceived intelligence, on the effectiveness of their writing, and on their marks. This can persuade them to make greater use of dictionaries and other aids for checking scientific and ordinary words.

The teaching in schools of rules of spelling and of the need for accuracy, and the application by students of a few simple rules of spelling, can greatly improve standards. I used to be poor at spelling, but severe criticism by a Sri Lankan research student made me learn some rules and use a dictionary more, resulting in a very useful improvement. A fuller account of helpful rules, using prefixes and suffixes and learning word origins, is given by Pechenik and Lamb, 1994. Some rules need not be memorised exactly if students can regenerate them from known examples.

The rule "'i before e except after c if it rhymes with *bee*'" takes care of common errors such as *acheive*, *beleive*, *recieve* and *yeild*. The few exceptions include *protein*.

Using the pronunciation of related words helps with unstressed vowels which may not be pronounced clearly. For example, doubts about *definite/definate* are easily resolved by pronouncing the related word *definition*, where the third vowel is a clear *i*, not *a*.

Simply breaking a word into prefix + stem or stem + suffix helps with many single or double consonant errors, e.g., *disappeared* is *dis* + *appeared*, so cannot be *dissappeared*, while *misspell* is *mis* + *spell*.

In words like *advice*, *licence* and *practice*, where the nouns have *c* and the verbs have *s*, the difference is easily memorised from the clearly different pronunciations in "'the *advice*'" and "'to *advise*'".

Adverbs are usually formed from an adjective + *ly*, hence *normal* + *ly* gives *normally*, not *normaly*; *anomaly* is not an adverb, and has a single *l*.

Words of one syllable and a single final consonant after a single vowel have the final consonant doubled when adding a suffix beginning with a vowel: *hop*, *hopped* (not *hoped*); *plan*, *planning* (not *planing*). In words of one syllable ending in two consonants or having a doubled vowel before the final consonant, you do not double the final consonant when adding suffixes: *harp*, *harping*; *cool*, *cooled*.

For dealing with many of the students' single/double consonant errors, there is a very useful but little-taught rule. In words of two or more syllables ending in a single consonant preceded by a short vowel, you do not double the final consonant when adding a vowel suffix if the final syllable is unstressed, but you double it if the final syllable is stressed. Hence *al-ter*, *altered*; *of-fer*, *offered*; but *be-gin*, *beginning*; *oc-cur*, *occurred*; *re-fer*, *referred*. If the stress pattern changes on adding the suffix, go by the stress pattern in the final word, e.g., *re-fer* but *reference*. A final *l* does not usually follow these patterns, usually being doubled in Britain but not in the USA: *tra-vel*, *travelled* (UK), *traveled* (USA); *x* is never doubled.

Learning common word origins is an enormous help with spelling and meaning, even if the students know no Greek or Latin. Most of the dreadful misspellings in section 3.6 of *perithecium*, a fungal fruit body of spores surrounded by a flask-like case or wall, could have been avoided if the students had taken note of the origin which I gave them, from *peri* (around) + *theke* (a case or enclosing wall). The prefix *peri* is very common in ordinary and scientific words, e.g. *perimeter*, *periscope*, *periderm*, so learning one word's origin helps with the spelling and meaning of many other words.

4.3 How the mistakes affect the effectiveness of the written work

The many errors which change the meaning, such as most of the word confusions, greatly reduce the efficient communication of the intended sense. A biologist who does not know the difference between *matting* and *mating*, or *ovary* and *ovum*, or *patents* and *patients*, is not a good biologist; neither is one who writes *thyamine*, which could be an error for either *thymine* or *thiamine*, two very different biochemical compounds. Failing to distinguish between parts of speech, such as *analyse* and *analysis* shows a basic ignorance of language and meaning, as does making *alot* from two separate words.

Of British students writing up a practical on the fruit fly *Drosophila*, 17% did not copy the name correctly from the schedule into their practical books, coming up instead with *Drasophila* (consistent) /*drosophilla*/*Drophila*/*Drosophia*/*Drosophial* (3%) /*Drosophilia* (many) /*Drosophyla* /*Drosophilla*

/Drosiphila/Drosphila (consistent). This shows a very low regard for accuracy. In science, accuracy is often vital, as writing the wrong organism or the wrong chemical or drug could have literally lethal practical consequences. It is particularly disappointing that the students were so poor even on words I had several times told them about, such as *effect/affect* (error rate, 82%, Table 1) and *complimentary/complementary*, where the errors seriously affect the meaning, as in "Poor diet *effects* a woman's pregnancy."

When marking genetics, I penalise errors which affect the science or understandability, such as word confusions and wrong scientific terms or names, but *occured* would be disapproved of and corrected without loss of marks.

4.4 Would simplified spelling help?

A change to a simplified spelling system (sss) would induce its own chaos during the change, and people brought up with the existing spelling system would tend to go on using that, or use a mixture of new and old spellings. An undergraduate brought up on an sss would have to consult older articles and books using traditional spellings, and might misinterpret some of the old spellings, getting the meanings wrong.

Even the Simplified Spelling Society has not agreed on an ideal sss, as any proposal has faults as well as merits. For example, reducing doubled consonants to single ones produces undesirable homographs, e.g., changing *polled* to *poled* or *pold* causes confusion with the existing word *poled*. One would really need a way to distinguish long from short vowels if single versus doubled consonants were not available to fulfil that function, if spelling is to be a guide to pronunciation. Reducing *read* (past tense) to *red* gives a homograph to the colour *red*. An sss would also remove the benefits of etymology as a guide to spelling and meaning. I believe that simplified spelling could help with certain difficulties, but without a change in attitude by the students and in the time devoted to teaching spelling rules, I would not expect them to cope with simplified spelling much better than they cope with traditional spelling.

5 Conclusions

The very high error frequencies on all kinds of words — names of humans and of organisms, chemicals, special biological terms and ordinary English words — show poor standards of teaching spelling in schools, and a woeful lack of correction of errors in primary and secondary schools. If a student has never been told that a particular spelling is wrong and that it gives a bad impression or the wrong meaning, one cannot expect the student ever to get it right. Many of the errors affect the meaning and understandability of the work.

I therefore strongly advocate the teaching of spelling rules, prefixes and suffixes, and of word origins, in schools, and the consistent correction of errors by all teachers of all subjects. That would really bring home to students that errors are noticed and do matter. Once the students start finding and correcting their errors, it greatly reduces the time taken for teachers to make corrections. Many teachers of English in schools support these views, although some are prevented from implementing them by subject heads, head teachers and inspectors (see Lamb, 1997).

Although the overseas students did not have very high standards of spelling, their much better performance than that of the British students shows that better standards are achievable from better teaching, more correction, and by taking more care.

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4. Overcomng Orthografic Frontirs, Part I

Christopher Upward

The second part of this article is planned for publication in [JSSS 25-1999/1](#). Both parts are written in Cut Spelling.

0 Abstract

As the European Union expands, so do its problems of language management. Many see a solution in English as a natural lingua franca, but its chaotic orthography is a major obstacle. This paper suggests that communication between European languages is made unnecessarily difficult because their written forms have not been co-ordinated since Roman times. English, notably, represents an unregulated mishmash of orthographic traditions, which, if co-ordinated, could make it a more effective lingua franca.

This article then analyzes Cut Spelling (CS) for its compatibility with other languages. CS, which simplifies traditional orthography (TO) chiefly by omitting redundant letters, has three cutting rules, each addressing a particular spelling problem: Rule 1 omits letters irrelevant to pronunciation, Rule 2 omits vowel letters from suffixes, and Rule 3 simplifies double consonants. Rule 1 is shown to assimilate numerous individual words (and some general spelling patterns) to cognate forms in all the main West European languages. Part I ends here.

In Part II (to appear in the next issue of JSSS), Rule 2 will be shown mainly to bridge some important differences between French and German, while Rule 3 introduces a major advantage of Iberian orthography to English. CS also substitutes F for PH, so aligning English with Danish, Dutch, Italian, Norwegian, Portuguese, Spanish, Swedish, and, for certain words only, French and German.

Finally, the paper considers the implications of the above concept for intralingual spelling co-ordination and speculates on possibilities for its realization.

1 The Babel syndrome

Mostly we take it for granted that the human race communicates via numerous mutually incomprehensible languages, and that communication between people of different mother tongues is difficult, requiring years to be spent learning foreign languages and much effort and patience in using them. Unless we are advocates of an artificial universal language, it does not normally occur to us to think that this division between languages might be undesirable, or that it might even be possible to overcome it. On the contrary, linguistic/cultural diversity is commonly seen in positive terms, and one may indeed wonder whether, if the whole world were restricted to a single language, humanity's collective potential for creative, innovative thinking might not suffer. Lexical borrowing between languages testifies to a need to expand our inventory of concepts by means of terms lacking in our mother tongue, and, so one might argue, if the human race only had one mother tongue, we could not so readily expand our conceptual universe.

Nevertheless, the mutual incomprehension and at worst even violent conflict that result from the multiplicity of the world's languages are also self-evidently serious problems, and a variety of approaches to overcoming the barriers they represent has been seen throughout history. An early expression of the idea of a single language uniting the human race is seen in the biblical Babel story (Genesis, Chapters 10 & 11). It tells (11:1) how "the whole earth was of one language and of one speech", but people's ambition to build (11:4) in Babel (=Babylon) "a city and a tower, whose top may reach unto heaven" offended the Lord of that exalted domain. He determined to thwart what he regarded as the overweening ambition of the "children of men", and went down to (11:7) "confound their language, that they may not understand one another's speech". And so a paradise of linguistic unanimity was lost. This vision of an erstwhile single language, however, relates to a mythical past, and does not suggest the possibility that there could again be such a single language in the future.

Though a literal meaning for biblical accounts of the origin and development of humanity is now generally discounted, believers sometimes try to explain them as embodying a symbolic or metaphorical truth. And indeed there is at least a parallel between the Babel story and the finding by Joseph Greenberg (Stanford) of common lexical elements in geographically widely dispersed aboriginal languages through Africa and America, which imply primeval linguistic 'superfamilies' [1] (Darwin anticipated the idea of a diversification of languages in Chapter 13 of *The Origin of Species*). [2] Certainly, if the theory of a single African ancestor for all human races is valid (the 'out of Africa' or 'African Eve' theory), there must logically also be the possibility of a single source for all human languages. Alternatively, discrete languages may have arisen in different communities after the first diaspora from Africa. But the 'out of Africa' theory is itself not uncontested either. [3]

As long as human communities were sparsely scattered around the globe, the problem of communicating between speakers of different languages was a local affair. But when writing was developed in South West Asia (centred on modern Iraq) over 5,000 years ago, and expansionist empires with different languages and writing systems clashed in the region, local interpretation between languages no longer sufficed: the need arose for formal written translation, for instance to record treaties between such powers. One solution to the problem of mutually incomprehensible languages is thus by the endless, painstaking, time-consuming, labor-intensive and treacherous ('traddutore traditore') task of translation.

Another solution is through the use of a common language, in other words via a lingua franca. The past 2,000 years in Europe have seen periods of dominance of a lingua franca facilitating international communication, but interspersed with a resurgence of vernaculars. From Roman times until the last few centuries the problem of multiple languages was mitigated through the predominance of Latin, which enabled the Roman Church in particular to operate as a supra-national organization through a common language. In the political sphere there was sometimes a greater need for communication between individual national languages, an early instance being the Strasbourg Oaths of 842 between the eastern (proto-German) and the western (proto-French) part of Charlemagne's former empire, with the text translated into both early French and early German. In the more recent centuries of French dominance of continental Europe (from around the 16th to the late 19th century) French could serve as a lingua franca for many purposes, such as diplomacy, and it was for instance spoken at certain periods at both the Prussian and Russian courts.

The rise of nationalism in the 19th century and the emergence most notably in eastern Europe after 1918 of new nation states proud of their own languages tended to undermine the dominance of any one lingua franca, though German was widely understood in central and eastern Europe. The supra-national organizations of the second half of the 20th century, such as the United Nations and the European Community (today European Union), allow for a range of official languages to be used, partly to prevent domination by any one linguistic culture. Indeed it is today a widely acknowledged democratic principle that all people should have the right to express themselves in their mother tongue, and democratic societies may show respect for minority languages by subsidizing their use. On the other hand, the worldwide British Empire from the late 19th to the mid-20th century, and then the rise of the United States as a superpower, have combined to give English the status of a de facto lingua franca in many parts of the world, although some countries have tried to resist its spread (ostensibly to protect their native language from an influx of Anglo-American vocabulary and hence cultural norms; however, so the present author would argue, a more serious reason for resisting the spread of English would be to prevent the undermining of native orthographies by the execrable spelling practices of English). Meanwhile, throughout the centuries, and above all in the 20th century, there has been a steady extension of international communication in many different spheres, commercial, technical/scientific, military, political and cultural, and with it an ever-increasing need to facilitate dialog, written and spoken, between speakers and writers of different languages.

In general, one may characterize the above responses to the Babel syndrome as either non-interventionist (eg, allowing *linguae francae* to emerge as they will) or ad hoc (eg, translating and interpreting where necessary), although, as we already noted, objections can be made to both procedures. Various means have been proposed to reduce the barriers which the Babel of different languages presents and which impede intralingual dialog. One approach has been the creation of artificial languages. Early experiments in the 17th century essentially involved redesignating concepts independently of native languages and thereby, it was intended, giving them some kind of universal, objective status; the prime aim of those systems was thus typically to aid clear thinking rather than intralingual communication. It was from the late 19th century that the devising of artificial languages for the latter purpose came into its own, with a number of systems quite well known today. For example *Esperanto*, *Glossa* and *Interlingua* recently all made presentations to the EU to try and demonstrate their potential in a multilingual organization, the complexity of those translation and interpreting services threatens to become unmanageable as new nations with their own languages join the EU in years to come. The European Commission's Berlaymont building in Brussels has, not surprisingly, before now been likened to the tower of Babel. [\[4\]](#)

2 The orthographic aspect

The Babel syndrome has many dimensions, of which we have so far only considered the most general: the difficulty of communication between different languages. Other, more specific dimensions concern speaking and writing, learning as well as mature use, co-ordinating terminology between languages, and using dictionaries. This article aims to discuss the orthographic dimension of the problem, which, although limited in itself, touches on all the above dimensions. How words are written also has implications for how they are pronounced — and, if not spelt by the alphabetic principle of predictable sound-symbol correspondence, may trap the unwary into mispronunciation. How languages are written can help or hinder the learning process, and make it easy or difficult to produce their written forms accurately. Technical terms may vary their spellings in subtly unpredictable ways from one language to another.

Dictionris may need to giv mor, or less, infrmation about pronunciation and about spelng variations between words, for instnce wen listng inflections.

Th overal aim of this articl is to examn how th presnt difrneces between languajs myt be reduced by adoptng comn stratejis to harmnize ther rithn forms. In odr to take stok of ther presnt disharmny, we need first to considr how ther diverjneces arose. By definition, we can only take acount of those languajs that use th roman alfabet (thus japnese, chinese, th languajs of th indian subcontnnt, arabic, hebrew, greek, and th cyrilic-script languajs ar excluded), and among them we shal larjly confine ourselvs to european languajs that draw widely for ther vocablry (even if thru loanwords) upon a shared fund of greco-latin roots. A furthr limitation to this excrcise is that it is rithn chiefly from an english perspectiv. This may, howevr, be justifd first by th extreme confusion of english spelng vis-à-vis cognate forms in othr languajs (th intrnational frustration caused by th confusion of english spelng is indeed th ultmat motivation for th ideas presentd here), and secnd by th fact that th vast lexicl overlap between english on th one hand, and jermanic languajs, romance languajs, and ancient greek on th othr, provides a useful vantaj point from wich to survey th brod orthografic situation across th ranje of such languajs. It is hoped that th english bias of th presnt paper may encuraj readrs to considr th issus rased from th perspectiv of othr languajs too, and that its messaj may seem to hav som relevnce for languaj planng in th futur in jenrl.

Most letrs of th roman alfabet as we no it today (a, B, C, D, E, F, G, H, I/J, [K], L, M, N, O, P, Q, R, S, T, U/V, X, [Y], [Z]) orijnated with th romans, ho took almost al ther letrs from etruscn and/or greek; th only letr they inventd themselvs was G. Th only modrn letr entirely absnt from ther alfabet is W, but som othr letrs wer restrictd in ther use in latin: K rarely ocurd, th modrn letr-pairs I/J, U/V wer not orthograficly distinguishd, and Y, Z wer first adoptd from greek in th classicl period, wen they wer needd to transliterate th many greek loans. Th latin alfabet mor or less suficed to represent al th fonemes of classicl latin without recorse to digrafs or diacritics, and it ofrd, by and larj, an admrbly clear, simpl and straitforwrd riting systm, wich is no dout wy its use has now spred around th gretr part of th world. Nevrthless, it did contain, or else aquired, a few complications: among th consnnts, it had inheritd C and Q (not to mention K) with rufly th same sound-valu; as regards th vowels, ther long and short valus wer not regulrly distinguishd in riting, and AE, OE developd in th corse of time from difthongs into digrafs; and th three greek letrs *theta*, *chi*, *phi* wer transliterated by th digrafs TH, CH, PH. Al of these groups of complications ar implicated in importnt disparitis between th spelng systms of modrn european languajs.

Th simplicity of th orijnl latin alfabet servd classicl latin wel, partly because it was desynd to do so, and partly because of th simpl fonolojy of th languaj. In post-roman times two kinds of problms arose with it, howevr. One was that th pronunciation of latin itself chanjed, eventuly givng rise, via vulgr latin, to numerus succesr-languajs, with french, italian, portugese, romanian, spanish today th national languajs of corespondng european states. For these languajs th orijnl latin orthografy was adaptd in varius ways (for instnce by introducing digrafs and diacritics) to represent fonemes inadequatly caterd for by th orijnl latin alfabet, but ther was no atemt at co-ordnation between these languajs. Th secnd kind of problm was that othr european languajs, notebly celtic, jermanic and slavonic, over th centuris began aplyng th latin alfabet to represent ther fonolojis as wel, to wich, since they wer not desendd from latin, th orijnl invntry of letrs was even less wel suitd. Wile they ofn, like th latin-desendd languajs, adoptd digrafs and diacritics to help out, they also somtimes introduced new letrs of ther own, as th anglo-saxns did for Old English, wich then pasd them on to varius scandnavian languajs (old norse, icelandic, norwejan, danish) befor shedng them itself. Again, ther was no question of co-ordnation between al these difrnt languajs as they developd ther riting systms. In these varius ways, then, wat had orijnated as a simpl, purpos-desynd, homojeneus riting-systm for latin spawnd a plethra of difrnt, conflictng subsystems, ofn using th same letrs for difrnt functions and representng th same sounds with difrnt letrs.

Sevrl questions now arise. First, wud ther be any significant advantaj to be gaind from planng to harmnize som of these disparitis? Secnd, wud it be orgnizationly or politicly posbl to do so? And third, if so, to wich precise chanjes myt priority be givn? In ansr to th first question, a few advantajs that wud flo from such orthografic harmnization wil next be sujetd. One or two obsrvations wil then be made in ansr to th secnd question, wile in ansr to th third question som exampls of posbl prioritis wil be givn in th final section of this articl.

Wat advantajs myt flo if steps wer taken towards th harmnization of th orthografis of european languajs? In th most jenrl terms, harmnization wud be in keepng with th presnt trend towards european unification. (Of corse, euroskeptics and othr nationalists wud no dout find orthografic harmnization objectionbl for that very reasn.) Rathr less jenrl is th point that th lejbility of texts in any one european languaj wud be

increased (thru th gretr familiarity of word-forms) for speakrs litrat in othr languajs: italian, portugese and spanish cud be closer, so cud danish, norwejan and swedish, and so cud duch and jermn; but most notably, english cud be closer to al of those othr languajs. Most specifcly of al, a numbr of curent languaj lernng problms wud be reduced or removed. For instnce, at presnt th simlr but not identicl spelng of comn roots in difrnt languajs confuses foren languaj lernrs, ho, by a process of two-way intrference, ar then prone to mispel not only words in th foren languaj they ar lernng by intrference from ther mothr tong, but cognate forms in ther own languaj by intrference from th foren languaj too (eg, english *negotiate* spelt with c by intrference from french *négociier*). And likewise, tendncis to mispronounce in othr languajs cud be reduced if comn spelngs stood for comn pronunciations, and difrnt pronunciations wer mor consistntly representd by difrnt spelngs. Lastly, ther cud be intrnational typograficl advantajs if languajs agreed to restrict ther ritn forms to th same invntry of symbls, so for instnce reducing th presnt exessiv, typograficly awkwrd variety of diacritics.

As for th feasbility of orthografic harmnization, a complex task of politicl and linguistic co-ordnation wud obviously be involvd, wich in th case of sevrl languajs (english, french, portugese, spanish) wud extend beyond th boundris of Europ. Howevr, th same motivations cud somtimes aply outside Europe as within it: english in th United States has a perhaps even mor vital an intrface with spanish than british english has with othr european languajs; and one thinks of duch, english, french, spanish coexistng in th caribbean rejon, or english, duch-based afrikaans and portugese in suthrn Africa.

Ar ther any precednts for orthografic harmnization? Certnly ther ar cases of th reverse, as wen norwejan accentuated its difrncces from danish, and danish and duch ther difrncces from jermn. [5] Both objections to and argumnts in favor of th recent partial asimilation of portugese to spanish and italian hav been voiced. [6] But a cuapl of cases of succesful, pland harmnization can also be cited: in th Nethrlands and Beljm a joint languaj comission in th 1950s acheved som harmnization of th previusly rather difrnt northrn and suthrn ritn varietis of duch, work wich th *Nederlandse Taalunie* has since been pursuing furthr; [7] and in southeast Asia, th respectivly english-based and duch-based spelng systms of th comn languaj of Malaysia and Indonesia wer harmnized in 1972 (only 6 years aftr th two cuntris had been at war with each othr!). [8]

3 Harmnization thru Cut Spelng

Th Cut Spelng proposal for th simplification of traditionl english orthografy (=TO) was not initialy desynd for th purpos of harmnizing english spelng with that of othr languajs. Its basic notion of removing redundnt lettrs from TO was first conceved purely to facilitate readng by th streamlining of text. [9] Howevr, as th details of th systm wer workd out during th 1980s, it became clear that it had a numbr of othr qualitis beside gretr brevity, th most importnt being th improved regularity of sound-symbll and symbll-sound corespondnce wich resultd for instnce, most strikingly, from th removal of lettrs like th grotesq silent gh. But it was also noticed, incidently, that a good numbr of th resultng forms brot english spelngs closer to ther equivlnts in varius othr languajs (as wel as ofn alyngng british and american variants). It was this obsrvation that promtd th ideas wich ar systmatically set out in th presnt paper for th first time (they wer givn a prelimnry, skechy airng at a confrnce in 1991, [10] and wer obliquely anticipated in a paper in 1992 [11]). A detaild description of th Cut Spelling systm, with excrcises and a dictionry, can be found in th *Cut Spelng Handbook* [12] (a leaflet outlining th systm and a computerized spelng convertr ar availbl [13]). Ther ar thre main patrn of spelng chanje by omission of redundnt lettrs that CS makes to TO (defined undr Rules 1, 2, 3 respectivly), as wel as a few subsidiry rules.

RULE 1 OMISSIONS

Listd in this section ar typicl omission patrn of redundnt lettrs acordng to CS Rule 1 (that is, lettrs irelevnt to pronunciation) wich bring ritn english closer to equivlnt spelngs in varius othr european languajs (as wel as somtimes alyngng british and american forms). It wil be noticed that, with th omission of certn lettrs, ther is a tendncy for english spelng to alyn itself mor closely with particulr languajs, thus th omission of silent h alyns english predomntly with italian, portugese, spanish, and th scandnavian languajs, wile th omission of silent u mainly introduces jermn spelng patrn. By and larj, th harmnization affects singl words, but ther ar som mor jenrl spelng patrn ocurng in sizeabl groups of words wich ar therby also harmnized, as wen greco-latn CH is cut to C (eg *chaos* > *caos*), so establishng widespred similaritis with italian, portugese and spanish; likewise, wen WH is cut to W (eg *what* > *wat*), similaritis arise with duch, jermn and to a lesr extent swedish. Exampls ar now givn for al th main spelng patrn concernd, and for som individul words.

A

anaemia (british) > *anemia* (american):
fr. *anémie*, it./port./sp. *anemia*
break > *bræk* : duch *breken*, jer. *brechen*
cease > *cese* : fr. *cesser*, it. *cessare*, port.
cessar, sp. *cesar*
earnest > *ernest* : jer. *ernst*
earth > *erth* : jer. *Erde*
endeavour > *endeivr* : fr. *devoir*
feather > *fethr* : jer. *Feder*
hearse > *herse* : fr. *herse* (=engl. *harro*)
learn > *lern* : jer. *lernen*
leather > *lethr* : duch *leder*, jer. *Leder*
leaven > *levn* : fr. *levain*
measure > *mesur* : fr. *mesure*, jer. *Mess-*
pear > *per* : it./sp. *pera*, port. *pêra*
pearl > *perl* : fr. *perle*, jer. *Perle*, t./sp. *perla*,
port. *pérola*
pleasure > *plesur* : welsh *pleser*
steak > *stek* : fr. *bifteck*
tea > *te* : fr. *thé*, welsh *te*
tread > *tred* : duch *treden*, jer. *treten*
treasure > *tresur* : fr. *trésor*, it./sp. *tesoro*, port.
tesouro
weather > *wethr* : jer. *Wetter*

B

crumb > *crum* : duch *kruim*, jer. *Krümel*
debt > *det* : fr. *dette*
doubt > *dout* : fr. *doute*
dumb > *dum* : jer. *dumm/stumm* (cf engl.
dummy)
lamb > *lam* : jer. *Lamm*
plumb > *plum* : welsh *plwm*
thumb > *thum* : duch *duim*, jer. *Daumen*

C

scent > *sent* : fr. *senteur*
defence (british) > *defense* (american):
fr. *défense*, it. *difesa*, port. *defesa*, sp. *defensa*
dock > *dok* : turk. *dok*

D

adjourn > *ajurn* : fr. *ajourner*
adjust > *ajust* : fr. *ajuster*

E

caviare > *caviar* : jer. *Kaviar*
certificate > *certificat* : fr. *certificat*, jer. *Zertifikat*
climate > *climat* : fr. *climat*
delicate > *delicat* : fr. *délicat*
discipline > *disiplin* : da./sw. *disciplin*,
jer. *Disziplin*, norw. *disiplin*
doctorate > *doctrat* : fr. *doctorat*, jer. *Doktorat*
doctrine > *doctrin* : jer. *Doktrin*, sw. *doktrin*
glue > *glu* : fr. *glu*
Greece > *Grece* : fr. *Grèce*

grotesque > *grotesq* : du., jer., norw., sw.
grotesk
heart > *hart* : duch *hart*
hearth > *harth* : duch *haard*
immediate > *imediatt* : fr. *immédiat*
interest > *intrest* : sw. *intresse*
jasmine > *jasmin* : fr. *jasmin*
masculine > *masculin* : fr. *masculin*, jer.
maskulin
medicine > *medcin* : jer. *Medizin*
module > *modul* : jer. *Modul*
nature > *natur* : jer. *Natur*, scand. *natur*
private > *privat* : jer./scand. *privat*
procedure > *procedur* : jer. *Prozedur*, sw.
procedur
revenue > *revnu* : fr. *revenu*
rheumatism > *rumatism* : fr. *rhumatisme*
see > *se* : sw. *se*
syndicate > *syndicat* : fr. *syndicat*
tissue > *tissu* : fr. *tissu*
type > *typ* : jer. *Typ*, sw. *typ*
urine > *urin* : jer. *Urin*
virtue > *virtu* : fr. *vertu*

G

diaphragm > *diafram* : it. *diaframma*
gnaw > *naw* : jer. *nagen*
haughty > *hauty* : fr. *haut*
phlegm > *flem* : it. *flemma*, port. *fleuma*, sp.
flema
sovereign > *sovren* : fr. *souverain*, jer. *souverän*,
it. *sovrano*, port./sp. *soberano*

H

catarrh > *catar* : it./port./sp. *catarro*
chaos > *caos* : it./port./sp. *caos*
character > *caractr* : fr. *caractère*,
it. *carattere*, port. *caráter*, sp. *carácter*
chorus > *corus* : it./port./sp. *coro*
chrysalis > *crysalis* : it. *crisalide*, sp. *crisálida*
exhort > *exort* : it. *esortare*
gherkin > *gerkn* : jer. *Gurke*
ghetto > *geto* : jer. *Getto*
ghost > *gost* : duch *geest*, jer. *Geist*
heir > *er* : it. *erede*
honest > *onest* : it. *onesto*
honour > *onr* : it. *onore*
hour > *our* : it. *ora*, welsh *awr*
khaki > *kaki* : fr./sw. *kaki*, it. *cachi*, port. *cáqui*,
sp. *caqui*
monarch > *monrc* : it./port./sp. *monarca*
myrrh > *myr* : sp. *mirra*
ochre > *ocre* : it. *ocra*, fr./port./sp. *ocre*
psychology > *sycology* : it./port. *psicologia*,
sp. *sicología*, scand. *psykologi*
rhapsody > *rapsody* : it./sp. *rapsodia*,
port. *rapsódia*, scand. *rapsodi*

rhetorical > *retorici* : it. *retorico*, port./sp. *retórico*, sw. *retorisk*
rheumatism > *rumatism* , it./port./sp. *reumatismo*, dan. *reumatisme*, nor. *revmatisme*, sw. *reumatism*
rhododendron > *rododendron*, it./port./sp. *rododendro*
rhubarb > *rubarb* : it. *rabarbaro*, port./sp. *ruibarbo*, sw. *rabarber*
rhyme > *rym* : fr. *rime*, it./port./sp. *rima*, jerm. *Reim*, sw. *rim*
rhythm > *rythm* : it./port./sp. *ritmo*, sw. *rytm*
scholar > *scolr* : sp. *escolar*
school > *scool* : it. *scuola*, sw. *skola*
stomach > *stomac* : it. *stomaco*
technical > *tecnicl* : it. *tecnico*, port./sp. *técnico*, sw. *teknisk*
Thames > *Tams* : fr. *Tamise*, it. *Tamigi*, port. *Tamisa*, sp. *Támesis*
thyme > *tym* : it. *timo*
what > *wat* : duch *wat*, jer. *was*, sw. *vad*
wheat : *weat* : jer. *Weizen*, sw. *vete*
wheel > *weel* : duch *wiel*
while > *wile* : duch *wijl*, jer. *weil* (=because)
whine > *wine* : jer. *weinen*
white > *wite* : duch *wit*, sw. *vit*

I
achieve > *acheve* : fr. *achever*
business > *busness* : welsh *busnes*
juice > *juce* : fr. *jus*
lieutenant > *leutennt* : jer. *Leutnant*
migraine > *migrane* : jer. *Migräne*
moraine > *morane* : jer. *Moräne*
parliament > *parlamnt* : jer. *Parlament*
receive > *receve* : fr. *recevoir*

J
hallelujah > *aleluia* : it *alleluia*, sp. *aleluya*

L
almond > *amnd* : fr. *amande*
salmon > *samn* : fr. *saumon*

O
brooch > *broch* : fr. *broche*
foetus (british) > *fetus* (americn),:it./port./sp. *feto*
oesophagus > *esofagus* : it. *esofago*, sp. *esófago*
taboo > *tabu* : jer./port./sp. *tabu*, it. *tabù*
you > *u* : duch *U*

P
pneumatic > *numatic* : sp. *neumático*
psalm > *salm* : it./port./sp. *salmo*
pseudo > *sudo* : sp. *seudo*
psychology > *sycology* : sp. *sicología*
receipt > *receit* : fr. *recette*
sapphire > *safire* : fr. *saphir*, it./sp. *zafiro*, port. *safira*, sw. *safir*
tempt > *temt* : fr. *tenter*, welsh *temtio*

S
isle > *ile* : fr. *île/île* [\[14\]](#)

T
butcher > *buchr* : fr. *boucher*
hatchet > *hachet* : fr. *hachette*
kitchen > *kichn* : jer. *Küche*
Mitchell > *Michl* : fr. *Michel*
pitch > *pich* : jer. *Pech*
pitcher > *pichr* : fr. *pichet*
satchel > *sachl* : fr. *sachet*
stitch > *stich* : jer. *Stich*
thatch > *thach* : jer. *Dach*
watch > *wach* : jer. *wachen*

U
build > *bild* : jer. *bilden*
dialogue > (americn) *dialog*,:da./sw. *dialog*, jer. *Dialog*
fugue > *fuge* : jer. *Fuge*
guarantee > *garantee* : fr. *garantie*, jer. *Garantie*, sw. *garanti*
guard > *gard* : fr. *garde*
guess > *gess* : sw. *gissa*
guest > *gest* : jer. *Gast*
guild > *gild* : jer. *Gilde*
gitar > *gitar* : jer. *Gitarre*
intrigue > *intrige* : da. *intrige*, jer. *Intrige*
plague > *plage* : da. *plage*, jer. *Plage*
Prague > *Prag* : jer. *Prag*
vague > *vage* : jer. *vage*

W
whole > *hole* : jer. *heil*, sw. *hel*
whore > *hor* : jer. *Hure*, norw. *hore*
wring > *ring* : jer. *ringen*
write > *rite* : jer. *reißen*

Y
Reynard > *Renrd* : fr. *renard*
you > *u* : duch *U*

Exampels of spelng harmnization arising from Cutng Rules 2 & 3, and from th CS substitution rules, as wel as th jenrl conclusion, follo in Part II of this articl, to appear in [JSSS 25-1999/1](#).

NOTES

[1] Luigi Luca CAVALLI-SFORZA (1991) 'Genes, Peoples and Languages' in *Scientific American*, November 1991, pp72–78.

[2] Charles DARWIN (1859) *On the Origin of Species by means of natural selection or the preservation of favoured races the struggle for life*, London: John Murray (page reference to London: Unit Library, 1902, pp388–389): "If we possessed a perfect pedigree of mankind, a genealogical arrangement of the races of man would afford the best classification of the various languages now spoken throughout the world."

[3] Chris STRINGER (1990) 'The Asian Connection' in *New Scientist*, 17 November 1990, pp33–37.

[4] cf also 'Building Babel in Brussels' in *The Economist*, 6 august 1994, p34.

[5] R G BAKER (1985) 'Spelling Reform and Politics: the Case of Norwegian' in *Simplified Spelling Society Newsletter*, Autumn 1985, p8.

[6] Robert MAYHEW (1975) 'The Historic Portuguese Spelling Reform' in ed Newell W Tune *Spelling Reform, a comprehensive survey of the advantages, educational benefits, and obstacles to adoption*, North Hollywood, California: Spelling Progress Bulletin (2nd edition 1982), pp75–76.

[7] A H D SIMONSZ (1986) 'From around the World-Netherlands' in *Simplified Spelling Society Newsletter*, Summer 1986, p15; also

Jean-Marc TROUILLE (1987) 'Changes in the Spelling of Dutch' in *Journal of the Simplified Spelling Society*, 1987/2, pp14–16.

[8] Asmah Haji OMAR (1989) 'The Malay Spelling Reform' in *Journal of the Simplified Spelling Society*. 1989/2, pp9–13.

[9] Valerie YULE (1982) 'Shorter words mean faster reading', in *New Scientist* 9 December 1982, pp656–657.

[10] The basic concept contained in the present article was given a preliminary airing under the title *Literacy without Frontiers: the Problem of Spelling* at the 7th European & 28th United Kingdom Reading Association Annual Conference, held at Heriot Watt University, Edinburgh, 29 July–1 August 1992.

[11] Christopher UPWARD (1992) 'English Spelling and its Reform' in *terminologie & traduction*, Luxemburg: Commission of the European Communities, 1992/1, pp61–80, see especially §6.2.

[12] Christopher UPWARD (2nd edition 1996) *Cut Spelling: a handbook to the simplification of written English by omission of redundant letters*, Birmingham: Simplified Spelling Society.

[13] Christopher UPWARD (1998) leaflet: *Introducing Cut Spelling: written English simplified by cutting redundant letters*, Birmingham: Simplified Spelling Society, obtainable from 61 Valentine Road, Birmingham B14 7AJ, England, and accessible on WWW at <http://www.les.aston.ac.uk/sss/cutspelng>.

[14] For *île* without the circumflex accent, see 'Les Rectifications de l'Orthographe-texte officiel' in *Le Français dans le monde* No.239, §3.3, feb.–mar. 1991.

5. Predictive Models of Spelling Behaviour in 7- & 11-year-olds

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0 Abstract

A predictive model for spelling is suggested, based on the results of spelling tests taken by 2,684 seven- and eleven-year-olds, in 1996. The tests were part of a national scheme of testing for the School Curriculum & Assessment Authority (SCAA). The factors identified as influencing the number of children correctly spelling a word are: word length (number of letters), frequency of a word, and a measure of the word's phoneticity. A measure of the most infrequent form of representation of the phonemes in a word (the 'trickiest' phoneme) is a strong factor with 7-year-olds, whereas a measure of the average phoneticity of a word is a better indicator of word difficulty for 11-year-olds, who are susceptible to the mitigating effects of high word frequency on irregular spellings.

1 Learning for mastery

Carroll's model of school learning (1963) suggests that most pupils are capable of reaching levels of performance more usually associated with the top 10–20% of the school population. He proposed that a number of variables could be manipulated to increase levels of performance, such as the quality of teaching materials and the amount of time available for learning. Some variables associated with the pupil, such as perseverance, may be difficult to manipulate.

Carroll's model has been applied to teaching by Bloom and his associates, in the methodology known as Learning for Mastery, which places great emphasis on formative testing in order to determine deficiencies in either learning or teaching. An essential within this system is the requirement that high levels of performance are demanded at the early stages of learning, which ultimately result in higher overall levels of performance. Required criterion levels are as high as 100%, although more usually they range between 80–90%.

2 Case-study in remedial literacy

This approach has recently been applied to the teaching of reading (Spencer, 1996), using computer-based learning techniques. In the case of one pupil, who had reached the age of 10.5 years without being able to read the most common word in the English language, decisions had to be made concerning the teaching of the most common 100 words: should a phonics approach be adopted, or a method based on gradually increasing the demands in a simple spelling exercise. Many of the most common words fail to obey even the most rudimentary rules and so the simple spelling approach, with increasing mastery demands, was adopted. Practising for 10–15 minutes per day the pupil mastered 80% of the words over a period of 12 weeks.

It was clear from the performance of this pupil that much of his problem was associated with the vagaries of English spelling — he simply gave up when he applied rules to common English words and was told that he was wrong: the rules didn't work, and what should have been a simple task proved impossible. With the continuing concern of parents, teachers and politicians about the levels of literacy in the UK, the question arises: are we disadvantaging our children by making a simple task incomprehensible?

3 Searching for models

Of particular interest to researchers investigating the application of computer-based literacy systems is the search for a predictive model of spelling performance. Knowledge of such a model would indicate the factors that make words difficult to spell; determine if they are the same for all ages; and may indicate how strategies change with age, to make spelling more accurate. This, in turn, has implications for reading. Frith's (1985) six-step model of literacy development suggests that there is an initial period when children use a logographic strategy to read and a phonological strategy to spell, ie, they read and spell in different ways. According to this model, the emergence of phonemic representations in spelling leads to advances in later reading. Rego (1991) demonstrated that the ability to spell non-words is strongly related to progress in reading, and this has been confirmed by Lazo et al. (1997), who show that

early attempts to read words are strongly related to the progress made in spelling, as early attempts to spell words influence later reading.

The following analysis, which identifies several models for learning to spell, is based on data from national tests carried out by SCAA in 1996. SCAA's activities have recently been incorporated into the Qualifications and Curriculum Authority (QCA) whose statutory functions were set out in the Education Act, 1997. Principally, by its forthcoming review of the school curriculum, QCA hopes to define the structure and content of teaching and learning that will enable all pupils to develop and demonstrate their knowledge, skills and understanding. QCA's functions and responsibilities include: developing learning goals for the under-fives; accrediting assessment schemes for children entering primary school; monitoring and reviewing the National Curriculum and its assessment; continuing with the development of national assessment at the ages of 7, 11 and 14.

4 Factors that may be relevant

When attempting to build a predictive model of behaviour the researcher usually has in mind factors that may be relevant. In the case of spelling-accuracy, the present approach looked at the following factors:

- number of letters in the word
- phoneticity of the word
- frequency of the word

4.1 Length of the word

This is a simple measure and was included because in the initial stages of spelling (and reading) 7-year-olds are still developing short term memory strategies, and any lapses in memory are likely to manifest themselves with longer words. Longer words also give more opportunities for errors.

4.2 Phoneticity of the word

This is seen as a major factor, but one that can be defined in a variety of ways. There is no standardized way of measuring this factor and a number of approaches were adopted and refined.

1. Phonic Ratio

The first approach is to look at the individual letters of the word and measure the degree to which they correspond to a simple alphabetic representation (as in the word *hat*). This is expressed as a ratio of the number of letters pronounced as in the simple alphabet, divided by the total number of letters. The word *hat* has a simple phonic ratio value of 1; *boat* has a value of 0.5; and *shout* a value of 0.2 (see Table 1). This is a crude method, only accounting for sounds represented by single letters, so it will be less powerful at predicting than other measures. The astonishing thing is that, for 7-year-olds, it is a predictor at all.

2. Phoneme frequency measures

It was recognized that simple phoneticity might be a factor with younger children. A more sophisticated measure was also developed which could be applied to both 7- and 11-year-old age groups. Children learn at an early age that a variety of representations can be used for the same sound and, as SCAA recognized, the difficulty is less knowing the patterns than knowing which pattern to use in each individual word. In order to establish the range of representations of the phonemes that make up the English language, and the frequency of each representation, the 3,500 most common words from the LOB Corpus (Hofland and Johansson, 1982) were analysed.

The phonetic representation of each of the 3,500 words was determined from the *Oxford English Dictionary* (Second Edition, CD-ROM version) enabling the standard alphabetic representation of each phoneme to be determined for each word. With each phoneme coded, tables showing the various forms of representation for each phoneme were extracted. The average number of representations per phoneme was 5.95 (a total of 262 for the 44 English phonemes used in the O.E.D.). Of course, some phonemes have relatively few forms of representation, while others have many more. As for frequency, the common phoneme /ɪ/ (as in hill /hɪl/) represents 9.64% of the sample phonemes (total = 20,197); and the infrequent /ɜ/ (as in visual /vɪʒvəɪl/) represents only 0.13%.

Knowing the different representations of each phoneme allows two measures of the frequency for each form of representation. The first is the proportion of the particular representation for that phoneme (PhR); the second is the frequency of the particular representation in relation to the total number of phonemes in the LOB corpus (PhT), thus showing how often it occurs in running text.

2.i Representation as a proportion of all representations of the phoneme (PhR)

This measure considers a particular representation of a phoneme only in relation to other representations of that phoneme. Percentage values for all representations of the phoneme total 100%.

Table 3 shows the values for the /e/ phoneme (as in den /den/). This phoneme represents 3.36% of all the phonemes in the sample. The most common alphabetic representation is E, and this is found in 90% of cases (PhR value of E representation for /e/ phoneme). The rare form AI has a PhR value of 0.6%.

2.ii Representation as a proportion of all phonemes in the LOB sample (PhT)

This measure is necessary because phonemes occur at different frequencies, and the difference between the most common phonemes (/ʌ/ at 10%) and least common (/z/ at 0.1%) is considerable. In terms of the total number of phonemes in the sample, an infrequent form of a common phoneme may be encountered more often than the usual representation of a less common phoneme. The percentage values for PhT for a particular phoneme will add up to the frequency of that phoneme in the total sample. Table 3 illustrates this: the total for PhT is 3.36%, which represents the frequency of the /e/ phoneme in the total sample.

Knowing the frequency of each form of representation for each phoneme allows an average phonetic value to be calculated for each word. This value can be calculated for both PhR and PhT (see Tables 1 & 2).

In addition, particularly unusual phonemic representations can be identified. In the case of the data for 7-year-olds, the most infrequent form of representation was determined within each word, giving a value for the 'tricky' phonemes, in terms of PhR values, eg, /v/ as represented by AU only occurs in 0.32% of cases and is the trickiest phoneme representation in the word because, since all the other representations have a higher value than this.

4.3 Frequency of the word

The frequency of word occurrence also seems likely to influence the spelling and reading of words: the more common a word, the more likely it is that the form will be internalized by the learner. The LOB corpus provides an ordered list of the most common 7,000 words. The total number of occurrences of a word within the entire corpus (1,000,000 words) is also given; this absolute frequency was used as a factor in the analysis.

4.4 Spelling scores and probabilities

The spelling test for 7-year-olds (Key Stage 1) was taken by 1,184 children working at level 2 from SCAA's Schools Sampling Project, a national representative sample of schools taking part in a longitudinal monitoring survey. The test for 11-year-olds (Key Stage 2) was taken by 1,500 pupils from the University of Bath's sample for the 1996 Standard Assessment Tasks (SATs). The data available from SCAA were in the form of percentage correct scores for each word. This score was converted to a probability value for use in the regression analysis. The following formula was used:
 $\text{Log}_{10} (\text{probability right} / \text{probability wrong})$.

5 Analysis of data

The analysis of the data was undertaken with the multiple regression module in the Statistical Package for the Social Sciences (SPSS, version 6.1.1 for Macintosh computers). Regression methods utilize the presence of an association between two variables to predict the values of one from those of another. The regression analysis attempts to predict the spelling behaviour of the two age groups from characteristics (frequency, length, phoneticity) of the words.

5.1 Results of the Multiple Regression Analysis for 7-year-olds

Initial consideration was given to the more obvious factors that are likely to affect the spelling performance of 7-year-olds: the number of letters in word (LETTERS) and the simple phonic ratio (PHONIC), as given in Table 1. The results are given in Table 4, which shows highly significant correlations between the standardized spelling score (LOGPROB) and the two factors. The regression analysis shows that the more powerful predictor is the number of letters in the word. When the absolute frequency of words was included in the analysis no significant correlations were found for that factor; for 7-year-olds, frequency of the selected words does not appear to influence spelling-accuracy.

A second analysis, using more detailed information about the phonetic structure of the words (Table 1: Average PhR; Average PhT; and Tricky phonemes), was conducted. Significant correlations were not

found for either PhR or PhT, but the so-called "tricky" phonemes factor was highly correlated (0.77) with the standardized spelling score (Table 4). The analysis demonstrated that the 'tricky' phoneme factor was a more powerful predictor than the simple phonic ratio used in the initial analysis. Both factors contribute in an equal but opposite way in the prediction of spelling scores. The words selected for the 7-year-old tests are not as complex as those for the 11-year-olds; and the 'tricky' phonemes measure identifies those words with particularly unusual spelling features. This factor is exemplified in the contrast between the word *hat*, in which the greatest uncertainty is in the T representation (T=95.90%; TT=3.6%; ED=0.5%), and *friends*, in which the IE is a unique representation (E=90.6%; EA=7%; A=1.2%; IE=0.6%; AI=0.6%). The greater the uncertainty in the representation of the phoneme, the lower the spelling score. The results of the test for 7-year-olds show that the predictive model has 2 factors: number of letters in the word and degree of difficulty of representation (as measured by relative frequency of occurrence) of key phonemes.

5.2 Results of the Multiple Regression Analysis for 11-year-olds

The words used in the 11-year-old test (Table 2) are more complex than those in the 7-year-old test: they have, on average, 2 additional letters; and some words have several phonemes with rare forms of representation. Table 4 shows those factors which have significant correlations with the standardized spelling scores (LOGPROB) for 11-year-olds: absolute frequency of occurrence (FREQABS) in the LOB corpus; number of letters (LETTERS); and the average frequency of phonetic representations as a function of the total number of phonemes (PhT). The predictive value is almost identical to that obtained with the model for the 7-year-olds. The regression equation shows all factors contributing to spelling behaviour in a similar manner, but with number of letters acting in the opposite direction. This model suggests that the spelling behaviour of older pupils, when responding to more complex words, will deteriorate for less common words that are longer and use unusual forms of phonemic representations.

6 Discussion

Working from data collected by SCAA for more than 2,500 children in 1996, factors have been identified which predict the percentage of pupils likely to correctly spell the given words at ages 7 and 11. The factors identified are those which are arrived at by any common sense view of the level of difficulty that words present to pupils: number of letters, frequency of usage, and the presence of unusual forms of phonemic representation.

There is often criticism of poor spelling in schools and even at University level. This study has clearly indicated that a major factor in poor spelling, which will also be reflected in poor reading, is the failure of English spelling to conform to specific rules for the representation of phonemes. For 7-year-olds, words with unusual written forms are much more difficult, and the more unusual the written form, the more difficult they are to spell. For 11-year-olds, the words tested were longer, less frequently used, and more likely to have several unusual forms of representation. In this case, because 11-year-olds have acquired much greater experience with words, unusual representations may be mitigated by more frequent use. Even bizarre representations are learned by 11-year-olds if they are frequently encountered.

The analyses of data presented here clearly indicate that a major cause of poor spelling is to be found in the form of representation of the words, and not solely in the students. The main problem is that for many words the form has to be known and remembered, because the imperfect patterns which govern English cannot always be applied to give the correct result. Instead of using coherent patterns that always give correct answers, written English has developed as a system which requires a great deal of rote learning. This takes time and energy that could be better employed in other educational activities.

By the age of 11 years, most students are able to deal successfully with all but the most unusual written forms for word sounds. By regularizing such highly irregular forms (eg, *friends*, *stretched*), spelling, reading and the self-confidence of these students would be greatly enhanced.

If we do not develop a rational system of English spelling, we must accept the consequences: to eradicate poor spelling and reading at a national level, much more time must be devoted to learning the idiosyncratic written forms. The extra time needed will be at the expense of other subjects such as maths, science and technology.

Table 1: Word values for 7-year-old test

Word	Phonetic rendering	No. of letters	Phonic ratio	Absolute frequency	% Score	Logprob score	Average PhR	Average PhT	Tricky phonemes
because	bĒkÅz	7	0.29	777	35	-0.27	42.84	1.55	0.32
boat	bo:t	4	0.5	72	55	0.09	66.94	3.03	5.48
bucket	bUkĒt	6	0.67	6	23	-0.52	58.6	2.51	5.2
family	fĕm'li	6	0.83	281	29	-0.39	72.8	2.15	3.4
fish	fĒS	4	0.5	121	84	0.72	60.06	2.97	25.08
flag	flĕg	4	1	8	83	0.69	91.87	2.45	84.44
friends	frendz	7	0.71	177	25	-0.48	73.05	3.14	0.6
hand	hĕnd	4	1	460	85	0.75	97.17	3.52	91.68
hat	hĕt	3	1	56	97	1.51	98.63	3.29	95.9
holiday	hÅl'deĒ	7	0.57	74	40	-0.18	64.4	1.94	3.4
house	haĒs	5	0.4	571	62	0.21	59.32	0.42	4.41
morning	mO:(r)nĒN	7	0.71	233	41	-0.16	72.87	3.65	48.53
net	net	3	1	53	91	1	94.43	5.97	90.4
pictures	pĒktS'(r)z	8	0.38	83	13	-0.83	57.14	2.47	2.8
road	ro:d	4	0.5	205	54	0.07	64.15	2.9	5.48
shout	SaĒt	5	0.2	10	39	-0.19	64.85	2.67	25.08
smile	smaĒl	5	0.4	76	32	-0.33	70.24	3.23	32.89
sock	sÅk	4	0.75	1	61	0.19	53.92	1.96	5.2
spade	speĒd	5	0.6	2	39	-0.19	74.1	3.07	48.22
wait	weĒt	4	0.5	82	27	-0.43	58.18	2.75	14.97

Table 2: Word values for 11-year-old test

Word	Phonetic rendering	No. of letters	Absolute frequency	% Score	Logprob score	Average PhR	Average PhT
beautiful	bju:tĒf1	9	85	48	-0.03	60.83	2.94
crept	krept	5	5	71	0.39	88.92	4.34
disturbed	dĒst%:bd	9	26	63	0.23	63.93	3.48
echoed	eko:d	6	12	55	0.09	38.21	1.76
heard	h%:d	5	239	74	0.45	67.05	1.55
honest	onĒst	6	33	89	0.91	56.21	5.18
notice	no:tĒs	6	103	83	0.69	66.06	4.63
piece	pi:s	6	63	64	0.25	36.14	1.38
remained	rĒmeĒnd	8	103	64	0.25	55.67	3.05
replace	rĒpleĒs	7	20	84	0.72	47.65	2.9
shook	SĒk	5	53	54	0.07	20.96	0.37
silence	saĒl'ns	7	92	68	0.33	50.68	3.25
slipped	slĒpt	7	32	65	0.27	46.2	3.3
sneeze	sni:z	6	1	67	0.31	43.63	2.99
sprawling	sprO:lĒN	9	4	39	-0.19	67.31	3.51
still	stĒl	5	823	97	1.51	60.05	4.72
stretched	stretSt	9	23	34	-0.29	58.91	3.22
tallest	tO:lest	7	1	85	0.75	60.37	3.75
uncoiled	UnkOĒld	8	1	57	0.12	65.19	2.91
visitors	vĒzĒt'z	8	37	71	0.39	63.8	3.44

Table 3: Representation for /e/ phoneme

/e/ phoneme = 3.36% of total phonemes in sample

Word	Phonetic Rendering	Spelling phoneme	% of /e/ phonemes (PhR)	% of total phonemes (PhT)
dental	dentl	e	90.60	3.04
heather	heD'(r)	ea	7.00	0.24
anybody	enĒbÅdi	a	1.20	0.04
friendship	frendSĒp	ie	0.60	0.02
against	'genst	ai	0.60	0.02
			100.00	3.36

Table 4: Correlation values for 7- & 11-year-old tests

Correlation, 2-tailed significance, 7-year-olds:

	LETTERS	PHONIC	TRICKY
LOGPROB	-0.76*	0.16*	0.77*
LETTERS		-0.402	-0.56*
PHONIC			0.70*

* p<0.01

Correlation, 2-tailed significance, 11-year-olds:

	LETTERS	PHONIC	TRICKY
LOGPROB	-0.55*	0.66*	0.51*
LETTERS		-0.37	0.13
FREQABS			0.22

* p<0.01

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[Chris Jolly: see [Bulletins](#), [Journals](#), [Newsletters](#), [Media](#), [Books](#).]

6. The 'Framework for Teaching' from The National Literacy Strategy. Christopher Jolly

Chris Jolly is Chairman of the Simplified Spelling Society and publisher of the *Jolly Phonics* initial literacy materials. He here discusses the British Government's guidelines for a new programme of literacy teaching, which started in English schools in September 1998.

1 The National Literacy Strategy

The *Framework for Teaching* comes as a ringbinder and sets out the National Literacy Strategy for teachers. It is described as a practical tool and is separate from the detailed guidance (which came as a box containing a number of binders and videos).

The importance and sense of purpose behind the National Literacy Strategy is huge. As a policy subject it is well chosen by the Labour government and it has a clear objective: that 80% of 11 year olds will achieve the standard of literacy expected for their age by the year 2002, a rise from 57% in 1996.

The sums being spent are relatively modest considering the urgent need, with £50m pa allocated, compared to the much larger sums in the education budget, and the estimated cost of illiteracy in the country. Nonetheless the amount of activity produced by this policy is probably about right. It includes a mushrooming of local literacy consultants to add to the existing advisers and inspectors.

The Framework sets out the teaching objectives for the Primary school years (the 7 years from Reception to Year 6). It applies only to England. Wales is considering a bilingual adaptation, while Scotland has its own Early Intervention initiative.

The Literacy Task Force (associated with the National Literacy Project) claims that there has been "widespread support for the Project's approach to teaching literacy and its success in raising standards". Certainly there has been a widespread support for this overall policy and the importance that has been given to it. However, there have also been some fundamental concerns raised about the approach to literacy, such as from Ruth Miskin, a head teacher and a strong phonics advocate who is herself part of the Literacy Task Force (*Times Educational Supplement*, 29 June 1998). As for the success of the policy

in raising standards, no results have been published despite the claims that it has been tested. It is to be hoped that trial results will be published by the Standards and Effectiveness Unit of the Department for Education and Employment.

2 The 'Searchlights'

The *Framework* introduces the new term 'searchlights'. These are described as the different strategies which, it is explained, "teachers know that pupils use to become successful readers". They are given as:

- phonics (sound and spelling)
- grammatical knowledge
- word recognition and graphic knowledge
- knowledge of context

It would have been better if the Literacy Task Force had built its 'searchlights' on established research rather than on their view of what teachers know. Teaching grammatical knowledge has not been shown to improve literacy (Harris 1962, Tomlinson 1994, and there is a good summary of the research in *The grammar papers*, QCA, 1998). The 'searchlights' of 'Word recognition and graphic knowledge' and 'Knowledge of context' are open to interpretation, but compilations of research into reading do not identify them as key predictors in learning to read (Adams 1990, Macmillan 1997). By contrast the research into the importance of phonic knowledge shows it to be of overwhelming importance (Adams 1990, Macmillan 1997 again). If it was necessary for the *Framework* to give a range of 'searchlight' strategies then it would have been helpful to show their relative importance, and to base the recommendations more on published research and the strategies known to improve the teaching of reading.

3 Phonics policy, as outlined

Elsewhere the *Framework* does draw on published research, and in a valid and useful way. For instance, early on (§4), the Framework identifies that "research evidence shows that pupils do not learn to distinguish between the different sounds in words simply by being exposed to books. They need to be taught to do this." This is followed by an excellent description of the need for phonics, stating that pupils should be taught to:

- discriminate between the separate sounds in words.
- learn the letters and letter combinations most commonly used to spell those sounds.
- read words by sounding out and blending their separate parts.
- write words by combining the spelling patterns of their sounds.

This description is as good as could be found anywhere. Unfortunately however, this insight is not followed through in the Planning sections later in the Framework where teaching gives way to analogy, and 'separate sounds' gives way to 'onset and rime'.

4 Teaching strategies, in practice

The emphasis on explicit teaching of phonics is lost at a later stage in the Framework (§8) where a list of 10 strategies is given. Only two of these could really be described as skills based. One of them (No.2) covers handwriting, punctuation and use of a dictionary, while the other (No.7) is:

initiating and guiding exploration: e.g. to develop phonological awareness in the early stages, to explore relationships between grammar, meaning and spelling with older pupils.

Learning letter sounds and blending is not mentioned. The other 8 strategies given are likely to lead teachers into unproductive use of their time when seen in the context of achieving 80% of 11 year olds reading at their age level. Examples are 'discussing the features of written texts through shared reading of books' and to 'understand, expand and generalize about themes and structures in fiction and non-

fiction'. This kind of emphasis is taking the teaching back into the unstructured realms of 'real books'. It is adding a raft of unnecessary and unproductive 'baggage' to what should be a much more straightforward task. As with the work of the Literacy Task Force, established while the Labour Party was in opposition, the Framework give the impression of a good policy that has been diverted in its execution. While the teaching of the sounds in words is given emphasis in the introduction (§4) it is absent in these detailed strategies (§8).

5 'Strands' of work

A new term in the Framework is the 'strands' of work. Throughout the teaching there are these three strands:

- word level — covering phonics, sight vocabulary, handwriting, spelling and vocabulary extension
- sentence level — covering grammar and punctuation
- text level — covering reading comprehension and writing composition

The division of the teaching into these different strands will no doubt be helpful. However, considering how much is included in the word level, it would have been better if a separate 'letter-sound level' had been added at the beginning. This would have taken account of the fact that knowledge of letter sounds is the best predictor of a child's future reading ability (Bond and Dykstra 1967; Chall 1967; Tizard 1988). The effect of putting so much in the word level is that the emphasis on learning letter sounds is not central enough.

6 The Literacy Hour

The Framework describes the Literacy Hour, which is expected to be an hour in the morning, devoted to teaching. This is an excellent concept, and will do much to enhance the teaching and avoid the unproductive 'cross-curricular' and 'topic based' teaching of the past.

The Literacy Hour is divided into:

15 minutes — Whole Class — Shared reading and writing

15 minutes — Whole Class — Word Level work

20 minutes — Guided Group and independent work

10 minutes — Plenary session with whole class

At first such advice seems to be very prescriptive, and has been commented on as such by teachers, but nonetheless it is likely to be helpful. A significant shortcoming however is that each 'strand' of teaching is given equal emphasis in each term. In practice the first year will need to be focussed more on word level work, particularly learning the letter sounds, with the text work being needed more in later years.

7 Whole class teaching

The Framework places an emphasis on whole class teaching which is wholly to the good. It explains what this means and the need, for instance, for high quality oral work (meaning more open class questions). In time we may yet return to desks all facing the front in place of the inward facing groups of desks today.

8 The Termly Plans

Much of the Framework is given over to the termly plans. The Reception year has just one of these plans (because children can enter in different terms) but later plans are separate for each term up to Year 6 Term 3. Sadly, it is in these plans that much of the good intentions at the start of the Framework get misdirected. Specifically there are several aspects where the teaching recommended will lower the standards that could be achieved. These are:

8.1. It was mentioned earlier that knowledge of letter sounds is a good predictor of future reading ability. We also know that teaching all the letter sounds early on, in the first term of teaching, leads to much higher reading ability (Johnston and Watson, 1997) and the Framework should have encouraged this.

However instead it recommends a much slower pace with new letter sounds slowly added, so that not all the letter sounds are known until Year 2, Term 2 (the third year at school):

Reception Year A–Z, CH, SH, TH

Year 1, Term 2 NG

Year 1, Term 3 AI, EE, IE, OA, long OO

Year 2, Term 1 short OO, AR, OY, AW

Year 2, Term 2 OR, ER

8.2. The Framework places a strong emphasis on onset and rime (where a word like *stop* is considered to have an onset *st*, and a rime *op*. The belief is that these will form easier building blocks for learning to read). The reasoning behind onset and rime has now been shown to be flawed (Seymour and Duncan, 1997; Hulme, Snowling and Taylor 1997; Savage 1997). The Framework has no suggestion that children are taught all the possible onsets and rimes to help this process, only that they will deduce them 'by analogy'. As was corrected stated early in the Framework, children learn much better by being taught, than by being expected to distinguish things 'simply by being exposed to them'.

In Reception Year and Year 1, Term 1, the termly planning starts with rhyming activities. Blending has only a minor mention in Year 1, Term 1. Yet blending ability is much more powerful than rhyming awareness, and has been shown to be a strong predictor of future reading ability (Lundberg, Olofsson and Wall, 1980; Perfetti, Beck, Bell and Hughes, 1987). The Framework should have emphasized the need to teach blending in Reception instead of rhyming.

8.3. The key reason why children do so well when they have been taught phonics is that they are able to work out new words for themselves. They can sound out the letters and blend them together to make the word. To do this, of course, they need to know all the letter sounds, including the digraphs (CH, SH, AI, EE, etc). The teaching recommended in the Framework suggests that this understanding was not appreciated. In Reception Year there are three instances where children are expected to be taught to 'read on sight' specific groups of words, but there is no mention of their ever being expected to work out the words for themselves. If we look at some of the words that are expected to be read on sight we see that they include very many words that could be worked out even from the limited number of letter sounds already taught. These include such words as: *up, and, on, at, this, am, cat, dog, big, mum, dad*, etc. By not giving this understanding, the Framework is holding back the potential achievement of teachers and their children.

9 Handwriting included

The Framework is right to include Handwriting, and from Reception (the school year for 5 year olds, *Kindergarten* in the US). It includes an emphasis on the formation of letters and on joined writing. These are important points and by and large they are well understood by teachers in the UK, though, in my experience, not by teachers in North America.

However the pace proposed is really too slow. While the Framework rightly encourages letter formation 'in a script that will be easier to join later', it should be in Reception rather than in Year 1, Term 1. Joins between letters are proposed only in Year 2 when again they should start in Reception. In the many schools where it is taught, children are readily writing joined-up in Reception, and their writing (and spelling) is much better as a result.

10 Grammar from Reception

The Framework has an emphasis on grammar which starts in Reception with expectations, for instance, for 'written text to make sense'. This is eminently sensible. Nonetheless it is a departure from The Grammar Papers, recently published by QCA (Qualifications and Curriculum Authority) where grammar is not considered until Key Stage 2.

The concept of a sentence is introduced in Year 1, Term 1, but surprisingly the first of the parts of speech to be taught, the verb, is not introduced until Year 3, Term 1, despite the fact that it is an easier concept for children to understand.

Teaching of the parts of speech usefully serves as a means of extending the child's vocabulary.

11 Sentence construction and punctuation

Making proper sentences and using correct punctuation are important skills which are rightly included in this document. They start in Year 1, Term 1 with capital letters taught for the start of a sentence and a full stop for the end. The pace is relatively slow, so that the comma is not introduced until Year 2, Term 1 and other punctuation marks later.

12 Conclusions

Overall the Framework is a disappointing document because it has missed the opportunity to apply the understandings we now have of how best to teach young children to read. Before the Framework was published I had two members of the National Literacy Project tell me that they did not believe they could incorporate these understandings because they did not believe it would be accepted by the teaching community. They felt they had gone as far as they could go. In the event the criticism now being made about the Framework is that it is not radical enough. The view is being expressed that, if the government does achieve the targets it has set, it will be because of the emphasis it has placed on improving literacy rather than by the teaching guidance in the Framework document. It is to be hoped that the Framework will be revised for future years to make it more effective.

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7. A Quarter-Century of The Queen's English Society

Christopher Upward

Chris Upward discusses *Controversial Issues in English*, the Proceedings of the Queen's English Society Silver Jubilee Conference 18 Oct. 1997, ed. Joyce M Morris, Queen's English Society, April 1998, xxxiv + 90pp, ISBN 0 99520037 3 2, £10. The article is written in Cut Spelling.

1 The Queen's English Society

Members of the Simplified Spelling Society are likely to know of the QES particularly through papers given at SSS meetings (later published in JSSS — see below for references) by Joyce Morris (1994) and Bernard Lamb (1998). The SSS has from time to time also noted with interest the publicity generated by the QES on poor spelling in English schools. Yet the SSS is at the same time conscious of how its agenda differs from the QESs: the latter worries at how often present spelling conventions are flouted in the UK, while the SSS emphasizes their inadequacy as a basis for literacy generally; and while the QESs name implies a strictly British perspective (indeed its membership is largely southern English), the SSS encompasses the world (if on a very modest scale). A further limitation of the QESs appears in the publication here under review, when it claims the QES comprises “all walks of life” (p xxiii), though it admits (p ix) that most of its members are scientists, doctors, lawyers, mathematicians, accountants, rather than directly involved with literacy as teachers, linguists, sociologists, writers or publishers.

2 The Proceedings

Yet this imbalance is amply corrected by the publication here under review. In October 1997 the QES celebrated its silver jubilee with a conference in London addressed by several distinguished speakers, including Chris Woodhead, Chief Inspector for Schools at the Office for Standards in Education (OFSTED), Prof. John Honey, author of the recent *Language is Power*, as well as Drs Morris and Lamb. The proceedings of the conference, edited by Joyce Morris, are now published as a heavy A4 pamphlet, and an interesting volume it makes, meriting its attention-seeking title *Controversial Issues in English*. Readers cannot of course expect many references in it to spelling reform.

3 Contributions

3.1 Joyce Morris

QES Patron Dr Joyce M Morris focuses the collection with a majestic introduction drawing on her lifetime's experience of the literacy-teaching scene. She delineates the changing ideas, policies and methodologies in Britain from World War II in a paper that will suit anyone wishing to understand the debates surrounding the issue in recent decades. She charts the attacks both in Britain and America from the early 1950s onward on scientifically grounded phonics (cf. her paper *Phonicsphobia*, 1994 for a more personal account) but concludes with the hope that more rational approaches may now be adopted. She finally provides an annotated list of relevant initiatives by the Conservative government 1988–97, and by its Labor successor, but warns that the battle for effective literacy teaching is not yet won, and urges the QES to keep campaigning for proven methods to be properly implemented.

3.2 Chris Woodhead

As Chief Inspector of Schools, Chris Woodhead is a key figure in setting educational standards. His paper reflects on whether present standards can be considered satisfactory. On literacy, he concedes that not all inspectors know enough about teaching reading, but he is going to ensure that they fully understand the principles of phonics. However, there is still significant opposition to phonics to be overcome. Too many pupils are handicapped by poor technical skills in writing, which include spelling. (One has to remember that Chris Woodhead was speaking in 1997, and some of his comments may since have been overtaken by events.)

3.3 Bernard Lamb

Earlier surveys conducted by Bernard Lamb showed the poor English of undergraduates (1992) and recruits to industry and commerce (1994) in the UK. He now reports on a 1995 survey of teachers' views of English standards at secondary level. (See pp11–17 above for further research by Bernard Lamb.) Although the survey is not statistically rigorous (the replies were self-selecting), the sheer number of responses (over 50% from 750) testifies to the broad validity of the views expressed. Most teachers considered standards poor by various criteria, but few wanted systematic grammar teaching, many having a shaky grasp of it themselves. Most teachers corrected basic misspellings (fewer in N Ireland). Finally, 46 teachers are quoted to reveal a deeply unhappy profession,

unsure of its subject matter, harassed by authorities (eg, inspectors) with whom it often disagrees about syllabuses and methods, overloaded with paperwork, publicly vilified, under-resourced, in short confused, demoralized and frustrated. Bernard Lamb's recommendations for remedying matters typically involve reviving traditional concepts of 'correct' language. He does not ask whether all those concepts make sense (eg, irregular spellings or the possessive apostrophe).

3.4 Keith Davidson

This speaker was introduced as a long-term opponent of the QESs' aim to promote traditional standards of 'correctness' in education, and as a representative of the National Association for the Teaching of English (NATE). He took his audience through a bewildering account of 'grammar' and related fields, including such statements as "the phoneme is not alphabetic" (so the alphabet is not phonemic?) and "*I shouldn't of* is not a 'grammatical' error, but an obvious misspelling based on 'phonics'". If this seemed confusing, he then proceeded to show how "confusion reigns" in official curriculum statements on grammar too. His recommended solution was the *NATE Position Paper*, appended on pp83–86; this, however, turns out to be couched in such vacuous terms as "it is the role of the teacher to [provide] opportunities for pupils to study...grammar in use." Keith Davidson's address, we are told, "provoked a vociferous response".

3.5 Jennifer Chew

Her paper gives a well-informed, well-argued account of the need for 'phonics' for effective initial literacy teaching. One paragraph, though, will disturb spelling reformers, when it says: English spelling is "allegedly irregular" (ie, not really), or "there may be a few more options for pronouncing...letters and spelling... sounds than...in Spanish, German or Italian" (how many hundred overall make "a few"?), or "knowledge of more advanced rules usually settles any uncertainty" (but by no means all, even for highly educated readers). Behind this dismissal of the problems of irregular spelling, however, lies a real challenge to spelling reformers: the implication that, with phonics rigorously taught from the outset, the irregularity of English spelling may no longer constitute a sufficiently serious obstacle to literacy for spelling reform to be worth undertaking. Spelling reformers, on the other hand, may predict that rigorous phonics will merely highlight the difficulties caused by spelling irregularity, whose true horror has been largely disguised during the recent anti-phonics era. And then: what about that majority of phonics-trained, non-native-English-speaking learners around the world, who are so dependent on the spelling to tell them how to pronounce English words? They would be left floundering still. Lastly, we may wonder how Jennifer Chew's experiences in leafy Surrey may play in more deprived communities.

3.6 Other papers

Three other papers, though all worth reading, call for less detailed comment here. Susan Elkin describes the linguistic and stylistic constraints felt by journalists. John Honey denounces, over four pages, the intellectual trends he spent 260 pages demolishing in his book *Language is Power*. And Hamish Norbrook reflects on the future of world English, rather in the spirit of Graddol (see review below).

4 Conference discussion

Proceedings closed with discussion, chiefly about how firmly the English language can and should be taught in schools. An implied consensus was reached that the formal structures of English should be taught more than at present.

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8. Global Visions, Spelling Blindspot

Christopher Upward

Chris Upward discusses David Graddol (1997) *The Future of English?* London: British Council, 64pp, ISBN 0-86355-356-7, £15.99 + P&P. The article is written in Cut Spelling.

1 Slim but substantial

The number of pages (64 plus inside covers) that make up this A4 brochure should not mislead: it is a very substantial work indeed, packed full of stimulating ideas and up to date information, all made readily accessible by a host of typographical devices such as bulleted outlines, subheadings, summary-points, tables, charts, graphs, boxes, etc, etc, either in the various margins or set in the main double-column text. Five chapters develop the theme as follows: 1 'English Today' looks at the history and dispersal of English round the world, its varied speakers, and relations with other languages; 2 'Forecasting' considers whether forecasting methods used in, eg, economics could be applied to language; 3 'Global Trends' discusses changes in the world's population, economy and technology that may affect the future of English; 4 'Impacts on English' describes new patterns in work, education, the media and popular culture that are driving the expansion of English; 5 'English in the Future' asks how English may change, how its development might be managed, and whether other languages may come to rival English. Each chapter is subdivided into double-page spreads covering distinct topics. Most readers will come away feeling a good deal wiser, and perhaps even inspired by the vivid account of the progress of English — though any tendency to triumphalism is restrained by warnings that its continued progress is not inevitable.

2 Non-linguistic perspectives

The Future of English? offers a global perspective focusing on the many non-linguistic forces that determine the historic rise (and fall) of languages. Until World War II it was chiefly the military and political power of the British Empire that spread the language beyond the shores of Britain, but since then it has above all been the USA that has given English the status of a world language. However, as the 20th century wanes, English appears to have a momentum of its own, with countries acknowledging it as their foreign language of choice, or as a second (or even first) language for domestic use. Between continents, for politics and trade, it has no rival, though within continents other languages may be preferred, eg, Spanish in Latin America, or Chinese in the Far East. And now the Internet and other global media are further accelerating the process. How these trends will develop through the 21st century is hard to predict, but *The Future of English?* makes an impressive attempt at doing so, aiming thereby to help policy makers form their long-term plans (though it warns against relying uncritically on available statistics).

At the same time, it makes clear that its motivation is not (only) disinterested scientific enquiry. It is sponsored by the British Council to cater for British interests. So while the world role of the USA is fully recognized, the SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) is oriented to British commercial, cultural, educational, linguistic and political concerns.

3 World standards and strategies

The emphasis of *The Future of English?* is thus overwhelmingly on socio-economic factors. There are few references to the nature of the language itself, and this reviewer only noticed the word 'spelling' three times in the whole publication, relating once to Middle English (p7), once to poor spelling as a symptom of poor science (p38), and once to Anglo-American differences (p43). A subsection on 'Futurology' (pp16–17) discusses 'How does

language change?' at some length, mentioning vocabulary and grammar, but neither pronunciation nor spelling. A paragraph on p31 discusses simplification, but again only semantic and syntactic, not orthographic.

At the same time, there are repeated references to English as a hybrid language taking many varied forms (Anglo-American spelling differences being one instance), and Chapter 5 considers the implications of this for the future. On pp56–57 the theme 'World English' is explored, emphasizing unifying forces such as publishing, broadcasting, and teaching. Yet as new centres for these activities spring up, as in India or Singapore, so new varieties of English may acquire prestige and currency. Interestingly, native British and American speakers are not necessarily found the easiest to understand. Will a world standard emerge in the coming century, or will present varieties become more and more different? The final section, 'Managing the future' (pp62–63) asks whether anything can be done to influence the future of English, in particular to promote (or defend) the British variety.

4 The spelling question

For all its awareness of business considerations, *The Future of English?* does not address the basic marketing question of the attractiveness of the product. Compared with some potential competitors identified (eg, Spanish, Malay-Indonesian), English suffers an enormous, yet quite avoidable, disadvantage: its writing system. This not only depresses literacy standards in English-speaking countries, but deters non-native speakers too. For non-native speakers trying to acquire their initial literacy skills in English, it is often an insuperable barrier (note how radically different is the spelling of *plastic*), while those who come to it already literate in another language are variously appalled, infuriated and frustrated by the unaccountable vagaries of traditional English spelling. As well as prolonging and complicating the learning process in general, English learnt as a foreign language entails a difficulty that native speakers rarely escape: uncertainty as to how the right word should be pronounced (an exasperated French student remarked, "in English they spell it 'rubber', but pronounce it 'plastic'").

The publication of *The Future of English?* was not a one-off event, but designed to generate an ongoing debate on the questions it raises. The infrastructure for such a debate already exists, in the form of The English Company [UK] Ltd, ('Engco') associated with the British Council, and a monthly internet discussion platform (GEN, 'Global English Newsletter', <foe-1@english.co.uk>). A key question asked (p62) is 'Can anything be done to influence the future of English?' Making the English writing system more user-friendly should surely be high on the agenda, to boost the attractiveness of the product by simplifying learning and increasing confidence in pronunciation. As yet the worldwide English language teaching fraternity appears only marginally interested in the problems of English spelling. Engco must now be in an ideal position to follow up *The Future of English?* with, as a first step, a survey of views on English spelling held in non-native-speaking countries.

9. Lobbying Literacy Authorities

We here publish the SSS's latest correspondence with the two leading bodies concerned with literacy standards in England. Previous correspondence was published in [JSSS 21-1997/1](#), Item 11 and [JSSS-1997/2](#), Item 12.

Professor Michael Barber

Head of Standards & Effectiveness Unit
Department for Education & Employment
Sanctuary Buildings, Great Smith Street
LONDON SW1P 3BT

26 June 1998

Dear Professor Barber

We have pleasure in sending you the latest issue (1998/1) of the *Journal of the Simplified Spelling Society*, in which you may find a number of items of interest.

We continue to follow the progress of the National Literacy Strategy and to admire its purposeful approach to the raising of basic literacy standards. There are, however, two aspects of its recent work on which we wish to comment.

- First, we have the impression that the National Literacy Strategy is not focussing sharply enough on initial phonics for its benefits to be maximized. This concern is set out in Chris Jolly's review of last August's 'Implementation' paper on pp28–29 of the enclosed journal.
- Second, we see the harmful effects of the irregular spelling of English manifested both directly and indirectly in certain recent developments.

Directly, we see the *Framework for Teaching* (p62) envisaging that in Year 5 children will be rehearsing the irregular spelling of elementary vocabulary (words like *eyes*, *friends*, *light*, *money*, and many, many more). The boredom, frustration, wasted time and sheer learning failure thereby implied require no elaboration. Yet if such spellings were simplified, the problem would evaporate.

Indirectly, we see the demands of literacy acquisition encroaching on other National Curriculum subjects. We accept the present need for priority to be given to literacy (and numeracy), but we hope that, once the targets of the National Literacy Strategy have been met, the place of those subjects will be reconsidered. We note that the National Curriculum is to be reviewed, and we see here an opportunity for addressing the balance between literacy and other subjects at primary level.

Comparison with other alphabet-based languages will be found revealing on all these matters — see, eg, Downing [\[1\]](#) and Thorstad [\[2\]](#). We therefore urge that, **as part of the evaluation of Phase 1 of the National Literacy Strategy, research be commissioned to establish how much time is spent acquiring literacy skills in English compared with other languages, and how much time is devoted to other subjects.** The EU may have an interest in co-sponsoring such an investigation.

We predict that such research will show that English learners (along with the French) are at a significant disadvantage, which we should all be concerned to reduce.

Yours sincerely

For the Committee of the Simplified Spelling Society
cc to Dr Nick Tate, Sir Claus Moser

[1] ed. John Downing (1973) *Comparative Reading*, Cross-National Studies of Behavior and Processes in Reading and Writing, New York: The Macmillan Company: comparison of literacy acquisition in 13 countries.

[2] Gwenllian Thorstad (1991) 'The effect of orthography on the acquisition of literacy skills' in *British Journal of Psychology*, 82: 527–37: comparison of literacy acquisition in English and Italian.

Dr Nicholas Tate, Chief Executive,
Qualifications and Curriculum Authority
Newcombe House, 45 Notting Hill Gate
LONDON W11 3JB
26 June 1998

Dear Dr Tate

Following our correspondence with you in 1995 and 1996, we are now writing in connection with the National Curriculum review that has been announced.

We are also writing to Professor Barber (copy enclosed) and wish to make essentially the same point to you, namely that the difficulties of English spelling are distorting the balance of the National Curriculum and are educationally damaging generally.

We hope to persuade relevant authorities such as the QCA and the National Literacy Strategy that the review of the National Curriculum and the evaluation of Phase 1 of the National Literacy Strategy together offer a unique opportunity for constructively addressing this issue.

We will here mention just two areas (from many that could be cited) that epitomize the unnecessary difficulties of English spelling. One is the ambivalence of Anglo-American variations which we analysed in the paper we sent you on 15 July 1996. The other is the arbitrary 'rule' *i before e except after c*, with its few instances and many exceptions. We urge the National Curriculum Review to consider whether it is right that our children should still have to try to assimilate, with a notoriously high failure rate, such arbitrary variations as:

1) the added difficulty in British spelling of consonant doubling before the verbal suffixes -ed, -ing, thus with irregular *ll* in *travelled, travelling*, contrasting with regular single *l* in American *traveled, traveling* and regular *ll* after the stressed syllable in *compelled, compelling*.

2) *relieve* with *ie*, but *receive* with *ei*.

We believe that the National Curriculum should prescribe a modest selection of simplified spellings to ease the path to literacy for future generations. We would be glad to know your views on this suggestion. We also have pleasure in sending you the latest issue of our journal, in which you may find a number of items of interest.

Yours sincerely

For the Committee of the Simplified Spelling Society
cc to Professor Michael Barber, Sir Claus Moser

From Dr Nicholas Tate. 17 July 1998

Thank you for your letter of 26 June and the copy of your letter to Professor Barber concerning the review of the National Curriculum.

I have passed copies of the letters to the English team here at QCA who will consider your comments in the course of their work on the review. However, I would like to draw your attention to several points concerning the suggestions you have made.

Changes to the spelling rules, of the kind that you advocate, are beyond the remit of the QCA. Our concern is with what should be taught in the curriculum and the assessment of pupils' knowledge, skills and understanding. The current English Order specifies in the Writing programmes of study that spelling patterns and word formation are taught systematically. The National Literacy Strategy, which has a different function, reinforces this message and sets out teaching objectives which detail particular patterns and rules.

So far as the review of the curriculum is concerned, you will have seen from press releases that the government is keen to maintain stability and strongly advocates therefore that there should be minimal change to the English order.

Thank you for your continuing interest...

Yours sincerely

Nick Tate. QCA website address: <http://www.open.gov.uk/qca>

10. 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.

Calculating phonemicity

There have been tables created showing the level of phonemicity of different writing systems and French and English were at the bottom. There is no indication that any particular method was used to arrive at the rankings.

I am the source of the statement that English is 40% phonemic. However, the percentage depends on how you set up the definition. Any claim that English is over 80% phonemic is based on using at least three different spelling patterns per sound.

The methodology for estimating the level of phonemicity is this. Select a representative three paragraphs of text. (this is probably a minimum sample). Choose any consistent set of spelling patterns and respell each word in the passage accordingly. Count the number of words that do not match dictionary spelling and divide by the total number of words. All phonemic systems will respell 60% +/- 3% of the words.

Anglic, a system of new spelling developed in 1930, improved on this by allowing 42 frequently used words to be spelled the traditional way.

Non-phonemic systems such as Cut Spelling respell 30% (less if there are no substitutions) of the words.

Steve Bett, Orange, Texas

Decoding unfamiliar words in CS

One thing i dont find good about Cut Spelling is the cutting of dubl consonants. Of corse, in most cases it's not a real problem for adult nativ speakers, especialy if they can spel wel. But even for them ther is a problem: i just did a litl test with the first 2 pajes of a smal portugeze dictionry, and i found that, of the first 100 words, i didnt no the sense of 4 and just new mor or less the sense of 11. And i can consider i no portugeze pretty wel. Of corse the words i dont no ar rather uncommon, but stil it wud bug me if i didnt no the pronunciation. Portugeze has an iregular spelling, but it's a regular iregularity: if u no the many rules, u can pronounse it quite wel.

That's not the case with english. So even the nativ speaker wud hav problems somtimes, with CS, even if not nearly az much az with TO. For children starting in scool and foreners it gets mor complicated, becauz thair vocabulary is not that great. And the point is: ther is no point in making a reform for peple ho *can spel english perfectly*. I didnt no quite a few of the exampls in the CS Handbook, like *salo*, *wilo*, *mino*. I wud be temtd to pronounce them /sailo:/, wailo:/, maino:/.

The fact that TO shos wen a vowl is short in jermanic words, but fails to sho it in latn words shudnt be an excuse not to sho it at al anymor. Leving dubl consonants after a short stresd syllabl shos at least in 50% of cases that that vowl is stresd and short.

Zé do Rock, Munich/Germany & São Paulo/Brazil

A level in English spelling

I thought readers would like to see the spelling question my A-level English Language students faced this year. They should have been well prepared!

From the London Examinations GCE Advanced Level English Language Module 6180 Language Topics, Question 2:

“It is claimed that Caxton fixed spelling according to how people spoke in the 1480s. Since then, pronunciation has continued to change and consequently spelling often appears illogical. This has led to the call for a reformed spelling system for the 21st century.

Write the relevant part of a script for a national radio broadcast for the Open University which includes a variety of views on spelling reform. Your final remarks should contain some conclusions about spelling reform.”

Jennifer Chew, Egham, Surrey, UK

[In fact Caxton spent most of his life in the Netherlands and was rather out of touch with rapidly-changing English. He is less known for spelling how people then spoke than for the introduction of Dutch spelling patterns like the h in *ghost*. It was rather the Chancery scribes of the generations before Caxton who were moving closer to a regularized orthography, a process which he disrupted. Caxton was no hero of English spelling reform! —Ed.]

German email-spell

I did a small survey of how Germans adapt their alphabet to the limitations of the ASCII character set for email. I didn't get as many replies as I would have liked, but here's what they amount to.

Basically, it is the general practise to follow the umlauted vowel letters by e, which is of course historically justified. So Ä, Ö, Ü are written AE, OE, UE. Less historically justified, but of course it doesn't have to be, is that most use SS for the sharfes-S (ie, ß).

When I was doing my thesis, i put the same question to the readers of the LinguistList, and all but two gave the same answer. The other 2 reckoned that some austrians use Sz for ß. and indeed sometimes one finds this in german papers on the web.

Responses included the following comments:

“If the Austrians mail us and they use an Umlaut, all we see is _. Most mail addresses in Germany/Austria avoid Umlauts anyway, you would mail Mr Müller like this: *Mueller*.”

“If I know for certain the receiver will be able to see the Umlaute, I just write as normal.”

“I always use the AE for Ä, SS for ß, etc. I just want to be sure the receiver gets my message correct.”

Gavin Ó Sé, Baile Atha Cliath, Ireland

Hesitate to respell names

In their enthusiasm to improve English orthography, many members rush in where no angels are likely to be found.

I refer to the spelling of names: names of people, places, religious festivals and services, and the like.

At Christmas 1997 some email correspondents wrote of 'Krismus,' 'Krismas,' 'Crismas,' or 'Chrismas.' Some correspondents, no doubt believing they have formulated a scheme that is the the answer to all our spelling problems, have rewritten other correspondents' names, unsolicited.

I object to this practise. And not because I think names are somehow sacred or immutable per se.

I object because they are off-limits. They belong to someone else, or are very important or possibly sacred to someone else, who is likely to believe they have proprietorial rights on them. We are treading on toes and making ourselves unpopular if we take it on ourselves to change them. It's not our prerogative.

In our campaign to upgrade English orthography we need people out there to be open to listening to us and our ideas, and not antagonized and turned off by us deliberately misspelling their names.

When I did a Dale Carnegie course, two of the things I learned were that the 'sweetest sound to a person is their name' ('say it correctly') and the 'prettiest word is [again] their name' ('spell it correctly'). This was part of the 'Making friends and influencing people' part of the course, and was aimed at the many salespeople on it.

As an educational book salesman later in life I used this, and was sometimes amazed at how people (mainly teachers) reacted with what could be described as wonderment when, maybe months after I had met them briefly the first time, I greeted them by name. (They did not know I had written it in my book immediately after that first meeting, and regurgitated it before the second.)

Tho a rose by any other name will smell as sweet, a person's name by any other spelling (or pronunciation) may not. In fact, misspelling or respelling may stink in and up their noses. There is no accounting for people's emotions, and if U want to sell them something, like spelling reform, U'd better take notice of these emotions.

We have enuf opponents already without asking for more.

There is no harm in having a database of suggested improvements to the spelling of names, available to anyone contemplating change, but that is different from unilaterally changing the spellings without authority.

Allan Campbell, Christchurch, New Zealand

Reviewing *Lango*

Dr Chris Gledhill's review (*JSSS* 23, p30) of our book *Lango: A fully democratic approach towards an international auxiliary language initially based on reformed English* contained one or two fair criticisms, but its general tone wasn't typical of other comments we have received.

SSS members who wish to form their own assessment can find LANGO via the Internet at the World Language Program site, courtesy of Professor Bruce Beach:

<http://www.beeline.ca/find/essays/LangoA.htm>

We also have a few copies of the book left (LANGO, PO Box 141, Douglas, Isle of Man, IM99 1ZQ, UK).

Robert Craig, Weston-super-Mare, UK & Antony Alexander, Douglas, IoM, UK

Personal View 6 amendments

Several correspondents, after reviewing my Personal View (PV6: *English, the nou ABC's*) have suggested that English should use the k rather than the c, retaining the c only in the ck digraph. It has also been suggested that we use the ai rather than the ae for the long vowel a, and the oa rather than the oe for the long vowel o. Another good suggestion was that we use the u for the second person pronoun. A fourth suggestion, that the a that precedes the r in *kar*, et al, is in fact the short vowel and not the aa digraph, is also well taken. I would be quite happy to accept these emendments to the English spellings.

George Lahey, Palm Desert, California

Phonetic Czech

This letter first appeared in 'The Guardian' on 18 September 1998.

The Government's plan to donate £1,000 to each school to buy books and to encourage the UK to become a nation of book readers ... assumes that lack of resources is the main barrier to children enjoying reading.

My son's experience in Prague shows it is probably the language itself. The difference between Czech and English is that Czech is (almost) phonetic. Once the sounds have been matched to the letters — which is what Czech children concentrate on in their first year at school — reading becomes a pleasure. At an early age children here are able to read and enjoy books independently, which the equivalent UK child cannot because s/he is having to concentrate so much on what exactly is written on the page.

When my eight-year-old son started school two years ago he could not read or write a word of Czech. Now he is fluent and can read books in Czech which he would have great difficulty reading in English. If the £1,000 per school were used to implement spelling reform, it would have a greater effect on book reading and literacy.

Ian Parker, Prague, Czech Republic