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Contents

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[Journal of the Simplified Spelling Society, 9, 1988/3 p.2 in the printed version]

The Society

Founded in 1908, the Simplified Spelling Society has included among its officers: Daniel Jones, Horace King, Gilbert Murray, William Temple, H G Wells, Sir James Pitman, A C Gimson and John Downing. Its aim is to "bring about a reform of the spelling of English in the interests of ease of learning and economy of writing". Its present officers are:

The journal

Journal of the Simplified Spelling Society appears three times a year.

[Chris Upward: see **Journals**, **Newsletters**, **Pamflet**, **Leaflets**, **Media**, **Book and Papers**.]

1. Editorial

Chris Upward

THIS ISSUE

In 1988 we have given priority to the papers presented at our **1987 conference**. This *Journal* completes the task.

An innovation in this issue is the cumulative index, which now catalogues the authors, articles and other items, many of them highly authoritative, that have appeared in the Society's *Journal* and its predecessor, the *Newsletter,* since 1985. In future the third issue each year will carry an index of what has appeared in the previous 12 months.

We begin however with Adam Brown's study of the spelling problems faced by non-English-speaking learners. This is a matter of extreme importance, since the whole function of English has now been extended from its role as the language of English-speaking nations, to that of the prime medium of international communication. So fundamental has this shift been that it is today estimated that most people who learn to read and write English are no longer native speakers of the language. In other words, the purpose of simplifying English spelling is no longer the merely national one of trying to reduce illiteracy in this or that country; the purpose now is to facilitate communication world-wide, whether of market traders in polyglot communities in Africa or Asia, or of diplomats whose interaction may determine the fate of mankind.

The needs of foreign learners differ from those of native speakers in several ways. Most importantly perhaps, foreign learners are especially dependent on predictable sound-symbol correspondence. Whereas the native speaker may be able to read a word because its letters bear some relationship, however erratic, to a known pronunciation, foreign learners are far more likely to have to use the spelling to construct a pronunciation — which all too often is wrong. Because of this extra difficulty, foreign learners may be especially attracted to simplification, and they will rarely suffer from the hang-ups of tradition that so often make the native speaker reject simplification out of hand.

Perhaps the interests of this new majority should be taken up by an international body, such as the United Nations or the European Community, whose burden of paperwork could be significantly lightened by a simplified, more economical, international style for written English, freed from the linguistic dictates of the native speakers.

Julius Nyikos's sumptuous sample of sibilant spellings is a just a small part of a vast catalogue of alternative sound-symbol correspondences he has been compiling for English, very much with the foreign learner's perspective in mind. A striking feature of the rich collection he presents is the extent to which loan-words from other languages constitute exceptions and peculiarities within the varied tapestry that is written English. They constitute a particular obstacle to any blanket reduction of English to a system of one-to-one sound-symbol correspondence if a word like *pizza* is respelt *peetsa,* the visual commonality with Italian is lost. But if we exclude 'foreign' words from our reform, we have to be able to define 'foreign'. Is *restaurant* a 'foreign' word? How would it be best spelt? Readers' views are invited.

Edgar Gregersen's conference paper presents some salutary warnings, based particularly on the unhappy experiences of spelling reform in Norwegian, of the dangers of ill-considered spelling changes. Not only must reformed spellings be mutually compatible, but future developments also have to be taken into account: a first stage reform must not conflict with possible subsequent stages.

STRATEGIES

These are questions of linguistic strategy, of deciding, in the face of the tangle of inconsistencies that is TO, which inconsistency to tackle first. The editor's conference paper considers how Cut Spelling has to be examined by such criteria, because not all redundant letters are equally redundant, some only becoming fully redundant after other spelling changes have been made. Which letters can be cut out at once, and which only later? To write *bitn, coin* for *bitten, cotton* is fine — but how about *natn* for *nation,* which has the same syllabic <n>, but not the same <t>?

Linguistic strategy is however not the only kind of strategy spelling reformers have to think about. No less important is the strategy to be adopted in our attempts to influence the world. Some reformers have concentrated on advocating one single reform, such as SRI (the vowel in *hen* always to be written <e>, as in *hed, trend, eny),* or solving the <gh> problem. Other reformers have gone to the other extreme, and proposed either a total revolution (e.g. *New Spelling)* or at least a fairly far-reaching one (Axel Wijk's *Regularized English* or Ed Rondthaler's *Simplified American).* Good luck to them: they all teach us something about spelling — and about the difficulty of gaining acceptance (so far); and if any of them does gain acceptance, it is a victory for us all.

This is where the second kind of strategy comes in. We have to ask: who could conceivably implement a reform? An education authority? A publisher of books? A publisher of newspapers? A dictionary? A wealthy philanthropist? A government? The United Nations? All of these are conceivable, yet all are equally hard to imagine as a realistic possibility in the present climate of orthographic ignorance And what if one or more of these parties did become enamoured of a particular reform, but others refused to accept it? The result would at best be stalemate, at worst a state of confusion that would give the cause of reform a bad name for the foreseeable future.

This is not to discourage individuals or groups from developing and promoting particular schemes. Their research and enthusiasm are the prerequisite for progress. But as a movement, as a Society, perhaps we should take a broader view, not at present committing ourselves to any one scheme exclusively, but devoting ourselves to educating the public to a more scientific, better informed, more pragmatic and less dogmatic view of the monster that is TO. We have to convince influential figures of the absurdity of saying that TO "has served us all perfectly well", linguists of the inappropriateness of describing as "optimal", educationists that TO is not in fact and the public in general of the historical and relativity of all writing systems.

'Strategy' is now an item on the Society's agenda.

[Journal of the Simplified Spelling Society, 9, 1988/3 p.3 in the printed version]

2. Correspondence

Cut Spelling query

From **Jim Johansson,** Institut Linguistik S I L, Kota Kinabalu, Sabah Malaysia:-

A couple of comments on the Cut Spelling brochure: you spell *superior* and *souvenir* with <-rir> and <-nir> (*superir, suvenir*) respectively. Since the <-nir> sound is like *near,* I should expect <-rir> to sound like *rear.* In fact it is *two* syllables, at least in American, and I suspect in British English. You spell *figure* as equivalent *to vigor :* In fact in American it is /f i g ə r/ — which brings up the problem of how to resolve British-American differences.

(Dictionaries disagree whether souvenir, superior *have the same ending; the main difference is the stress. Perhaps* figure *should keep <u> because of American pronunciation — but what about the* <e>? —Ed.)

Deaf Spellers

From **Rob Baker,** School of Education, University of Leeds:-

My current thoughts on spelling reform and deaf children:-

Most studies show that deaf children's spelling abilities are better than hearing children's, if you keep Reading Age and IQ constant. 'Phonetically plausible' errors, the most common among hearing children, are, as you might expect rare with deaf children. In a study by Barbara Dodd (in *Cognitive Processes in Spelling,* ed. U Frith, Academic Press 1980) the most common form of 'deaf error' was a categorical refusal to attempt to spell unfamiliar words.

Both the above findings fit with the face-value hypothesis that deaf children do not have ready access to spelling-sound correspondences, either to help or to confuse them (though Dodd argues that things may not be that simple).

It seems unlikely that any revision of orthography based on a regularization of spelling-sound correspondence would have any effect on deaf children-short of them having to learn a new set of visual images. In fact it seems more likely that visual distinctiveness of word images would be most useful (so that regularization could actually work *against* these children). In the case of words for which the deaf child does not have the beginnings of a visual image the only strategy seems to be 'if in doubt give it up'.

Some variety of Cut Spelling may carry benefits for two reasons:- i) fewer characters = less visual memory load, although I'm unclear about the pay-off between memory load and redundancy.
ii) fewer characters = economy in production of writing.

The latter benefit would show up particularly in situations which are of special relevance to deaf people, viz. the use of electronic mail systems and keyboard telecommunications where characters = connect-time = money! Deaf people already use ad hoc spelling abbreviations to save money in such situations. However these 'cut spellings' are not phonologically motivated, but more like 'speed-writing' techniques. The question mark with regard to the Cut Spelling system is whether the rules would make sense to deaf people.

Developments abroad

From **Ed Rondthaler, American Literacy Council**:-

A news release: The American Language Academy announces a change of name to 'American Literacy Council'. This change was undertaken because the previous title conflicted with a commercial organisation in the State of Maryland, and the likelihood of confusion in the future was an unwelcome possibility.

Officers of the Council are: Edward Rondthaler, President; H Park Beck, Vice-President; Grace T Wood, Secy-Treas.; Joseph R Little, Asst. to the President; Edward J Las, Computer Consultant.

The new headquarters of the organization are in the Columbia University area. The Organization's research facilities will remain in New York.

Mr Little is the Council's first full-time staff member. He is a graduate of the University of North Carolina at its prestigious Chapel Hill campus, having majored in Journalism and minored in Political Science and English. He looks forward to a career in what he considers basic to the social and economic wellbeing of the English speaking world, and is shouldering this assignment with enthusiasm and dedication. His first three months of preparation were spent with Dr Rondthaler acquiring a thorough grounding in the history and fundamentals of spelling reform. Following that initial period he moved to the ALC offices in New York where it is expected that he will bring to the work of the Council a youthful energy often in short supply during the 100-year history of spelling reform.

From **Better Education thru Simplified the Spelling, Inc.**, Michigan:-

BETSS completed successfully in 1987 the first phase of the 'New Era in Spelling' funding campaign. Over $10,000 was contributed. Phase II wil begin in mid-1988, reaching out throughout the United States. Several target audiences have been identified for special programs designed to raise the level of awareness relative to spelling simplification. These
programs wil put emphasis on providing a greater understanding of the nature and extent of the problem represented by our current spelling, with emphasis also on the personal and economic benefits to be derived for all persons thru spelling simplification.

The main recommendation of the High/Scope Educational Research Foundation in its Report to BETSS is that BETSS create a well-supported *Center for the Study of Spelling Reform.* It would conduct research on key aspects of spelling reform hypotheses and models, act as an international clearing house for information and research and publish and stimulate publication of information on spelling reform.

From **Prof. Dr Gerhard Augst**, University of Siegen, W Germany:-

Even such a moderate reform as we are proposing is meeting with vehement opposition. Because of the press-campaign, the education ministers who asked for our recommendations, are reluctant to accept them.

The education ministry of North-Rhine Westphalia is adopting a different tactic. They have asked me to compile a minimum list of all the rules of German spelling which are absolutely necessary. Only these would be used in primary schools.

[Journal of the Simplified Spelling Society, 9, 1988/3 pp4–10 in the printed version]
[Adam Brown: see **Journals**, **Media**, **Book**]

3. A Singaporean Corpus of Misspellings: Analysis and Implications

Adam Brown

Dr. Adam Brown has researched into many areas of phonetics, and is especially interested in pronunciation models for foreign learners. The present corpus was collected while he was at the National University of Singapore (1982–85), and analysed in the Language Studies Unit of Aston University (1985–88). He is presently in the Department of Language Education of the University of Malaya, Kuala Lumpur.

Abstract
The purpose of this paper is to present an analysis of a corpus of 1,392 misspellings by 360 fifteen-year-old Singaporeans. This is preceded by a discussion of the many analytical problems involved in such an analysis. In particular, it is noted that phonological explanations of misspelling phenomena have often been overlooked, and that non-native speakers have greater difficulties than native speakers in spelling English, owing to underdifferentiation of the phonological system. Implications for language teaching and spelling reform are discussed.

Introduction
It is a common attitude among native speakers of English that the English language belongs to us. For example, the paradigm of English language teaching has long seemed to be one of 'us' (native speakers) teaching 'our' language to 'them' (non-native speakers). In this way, English language reaching around the world has been likened to the export of any other commodity or service. We native speakers export the language as an income-earner and vehicle for Western culture.

However, in recent years, people's attitudes have changed. The English language is no longer seen as the property of native speakers, but as something which is learnt and used by large numbers of people around the world, and is thus a part of their lives just as much as of ours. It has been estimated (Strevens, 1982) that there are around 300 million native speakers of English, but that nowadays these are outnumbered by the more than 375 million non-native speakers. Such estimates must necessarily be approximate, but it is clear that non-native speakers are in the majority.

There are also significant differences in the use made of English in non-native situations. The main distinction is between situations where English is a *second language* (ESL), and those where it is a *foreign* language (EFL). In. ESL situations, English has some official status, e.g. in government, schools, by its use in the media. Fiji, Ghana, Singapore and Uganda are examples of ESL countries. In EFL situations, however, English is generally learnt only for international communication, and its use within the country is small. Most of the nations of the world fall in this category. The United Nations, for example, has 150 members, of which all but 33 are EFL (Moag, 1982). (This is a simplified picture of the situation. For example, in some situations, definition of the term *native language* becomes difficult. In Singapore, always referred to as an ESL country, there are many people who speak no language other than English.)

In short then, there are nowadays more non-native speakers of English than native. Problems of English spelling confronting non-native learners ought thus to be investigated in parallel to those of native English children learning the system.

Problems of analysis
Several problems arise in the analysis of misspellings. A distinction must first be drawn between

those misspellings which writers consistently make, and those which they only make on isolated occasions. In the first case, the writer either (i) does not know the correct spelling of the word, or (ii) is very unsure between alternative possibilities, or (iii) is convinced that the word is spelt in some way other than its correct form. In the second case, however, the writer does in fact know the correct spelling of the word, but for reasons of inattention, fatigue, pressure of time, etc., on a particular occasion fails to spell the word correctly; if we draw his attention to the misspelling, he will therefore be able to supply the correct form immediately and without doubt. The former are thus consistent errors of competence, while the latter are momentary errors of performance. The term *slips of the pen* is used for the latter kind (Hotopf, 1980), on analogy with the term *slips of the tongue* for the corresponding phenomenon in the spoken medium. There does not seem to be any established term for the former category; I shall use Wing & Baddeley's (1980) term *convention errors.*

However, it is often impossible to distinguish slips from convention errors, given the written material as the only source of data. Since I had no opportunity to check with the writers in the analysis of the corpus in this paper, I do not distinguish between slips and convention errors, but use the term *misspelling* to subsume both.

It is a well known phenomenon in studies of second language acquisition that students will avoid using items which they are not sure of. The same is true in studies of misspellings. Sterling (1983:355) points out that a student who is unsure, for example, of the number of <p>s, <n>s and <s>s in the word *happiness* may avoid the problem altogether by substituting the synonym *joy*, which is far simpler to spell. Given the written work as the sole source of data, there is no way of knowing if this has happened. The frequency of errors involving doubled consonants in a corpus where a student has employed such an avoidance strategy will therefore give a false picture of the extent of the problem.

In corpora of misspellings, certain examples may be misspelt in the same incorrect way on more than one occasion. This may be taken as a clear indication that the misspelling is a convention error rather than a slip. However, it is not clear on what principle an analyst should base his calculations. There seem to be three possibilities. He may (i) count the number of different kinds of misspellings in the data, or (ii) count the number of instances of misspellings, or (iii) somehow weight the calculation so that those misspellings which occur more than once are assigned greater importance than those which occur only once. That is, it seems sensible to distinguish between misspelling-*types* and misspelling-*tokens,* although how this may best be taken into account in a calculation of errors is not obvious. It is clear that calculations based solely on misspelling-tokens may lead to biassed statements of tendencies; Yannakoudakis & Fawthrop (1983a:91) admit that their figure for errors in 10-letter words (calculated by token) is deceptive, in that one subject misspelt *monitoring* as **monitering* 47 times in their corpus.

For reasons such as the above, too great importance should not be assigned to *quantitative* analyses of the frequency of particular kinds of error in a corpus of data, even though the quantity of such errors contributes greatly to the stigmatisation of poor spellers. *Qualitative* analyses, which concentrate instead on the nature of the errors rather than their relative frequencies, are in many ways more insightful as indications of writers' problems.

The analysis which the investigator performs on the corpus of data may be pitched at different linguistic levels. Various methods of analysis have been used in the literature, the choice of a particular analysis being determined largely by the analyst's purpose.

An analysis at the surface graphological level was used by Lecours (1966) in his study of the diary of Lee Harvey Oswald. Four categories are used:

> "I. Addition *e.g. *serveral (several),*
> II. Deletion *e.g. *eldery (elderly),*
> III. Substitution *e.g. *mignight (midnight),*
> IV. Inversion *e.g. *presenec (presence).*
>
> Nearly all of the few hundred erroneous words found in the diary, several of which contain more than one misspelling (e.g. **foriengress for foreigners),* can be classified under these headings." (Lecours, 1966:221)

Since the only conceivable examples which could not be discussed under the above four categories would be grossly incongruous misspellings (e.g. the present corpus [Siew, 19841 contains **slnight for snake),* it is not surprising that these four categories handle virtually all examples. However, to say that an analytical system is descriptively adequate (i.e. that "nearly all ... erroneous words ... *can* be classified" somehow according to this system) does not necessarily imply that it is at all explanatory (i.e. that it explains the causes of the errors, or that the errors *should* be classified this way). Two cases are sufficient to illustrate this limitation.

Firstly, Lecours (1966:224) analyses the misspelling **scolls* for *scolds* as an example of substitution: 'a letter is erroneously repeated, but ... the faulty doublet takes the place of another component of the involved sequence'. On a purely surface graphological level, this is a descriptively adequate analysis; the <d> is replaced by an <l>, and the preceding letter is also an <l>. However, it fails to capture the seemingly obvious observation that the /d/ of a final /ldz/ consonant cluster is often lost in connected speech (Temperley, 1983). That is, for many speakers the /d/ of a word like *holds* is often elided, making it homophonous with the word *holes.* Such an articulatory analysis may explain the absence of a <d> in **scolls.*

The second illustration concerns Lecours' examples **promisis (promises)* and **expensis (expenses).* These would seem to be clear examples of the same phenomenon, namely the plural suffix being spelt <-is> instead of the correct <-es>. This substitution has a natural explanation, in that this suffix is pronounced /iz/, and the vowel phoneme /ɪ/ is conceptually associated with the grapheme <i>. However, Lecours assigns them different analyses; **promisis* is called a type I error, since it creates a pair of identical letters (i.e. there is an <i> earlier in the word which is implicitly considered to be an interference factor), whereas **expensis* is a type II error, destroying a pair of identical letters (i.e. there is an <e> earlier in the word). A surface graphological analysis which ignores such obvious morphophonological explanations is thus restricted in its usefulness, but may be of importance in certain fields, notably in the devising of spelling-checking devices for word-processors (Yannakoadakis & Fawthrop, 1983b).

Other writers have used analyses at different levels. Wing & Baddeley's (1980) study of university entrance examination scripts investigated, among other factors, the importance of the position of the error within the word, and of the word within the sentence, and of the line within the script. They concluded that errors are most common word-medially, rather than -initially or -finally, and that the position of the word within the sentence and of the line within the script is not statistically significant Levels of general fatigue do not therefore seem to affect the incidence of misspellings.

Sterling's (1983) work includes an analysis of the role of various factors in the spelling of inflected words, among them morphological structure, syllable structure, and other features of phonology. In terms of phonology, he notes (1983:359) that certain errors such as **probally* and **samwiches* "are not incorrect spellings of the correct sounds but rather correct spellings of the incorrect sounds" (by "incorrect sounds" is meant that the subject relies on a colloquial or regional pronunciation rather than a more standard or deliberate articulation). This neat formulation of the cause of these errors is not without its problems, however, in that it implies that English orthography corresponds to the correct spellings of the correct sounds. This is patently not the case, as witnessed by the many-to-

one and one-to-many relationship between English graphemes and phonemes, and by the fact that English spelling does not represent any particular accent of English better than the rest.

Similar phonological considerations are appealed to by Ibrahim (1977) and G.Abbott (1979). However, there is an important difference, namely that these works deal with non-native speakers (writers) of English. When foreigners' problems are under examination, an extra category of misspelling becomes apparent, namely those errors which reflect the writer's phonology of English, which contains interference features from the writer's native language phonology. For example, Ibrahim (1977:208) points out that English has two separate phonemes /p/ and /b/ while Arabic has only one (/b/). Misspellings involving substitution of <b> for <p> (e.g. **Jaban, *bombous) as* well as hypercorrections (e.g. **compination, *distripution)* are common in his Jordanian corpus. Such misspellings, which one would not expect from native English speakers, occur in addition to those caused by the lack of a close graphemic-phonemic fit in English, which one would expect from native speakers.

Four hypotheses concerning misspellings by non-native speakers were investigated by Tesdell (1987), with groups of Arabic, Chinese, Malay and Spanish speakers attending EFL courses at Iowa State University. His conclusions are as follows. Firstly, non-native speakers make more errors than native speakers; results ranged from 1.13% word error rate for the Malay speakers to 2.55% for the Arabic speakers, compared with the 1.1% found for native speakers by Chédru & Geschwind (1972). "Second, non-native speakers at this proficiency level make more habitual errors than slips [although no indication is given how the two are distinguished]. Third, there may be no significant difference in error percentage between non-Roman [Arabic and Chinese] and Roman [Malay and Spanish] alphabet language speakers" (Tesdell, 1987:83). Finally, Wing & Baddeley's (1980) finding that native speaker misspellings occur most frequently word-medially was replicated with these non-native speaker groups.

E. Abbott (1976), following Haas (1970), uses an analytical system pitched entirely at the phonological level. Misspellings are analysed in terms of the graphemic-phonemic correspondence between the correct written form, the RP phonemic transcription of the intended word, and the incorrect written form. Misspellings are then classified according to the relationship between (i) the pronunciation of the intended word and (ii) a plausible pronunciation of the misspelling. For example, the misspellings **cot* and **throt (*for *caught* and *throat)* are analysed as follows:

Correct written form	c	augh	t	th	r	oa	t
RP phonemic transcription	/k	ɔ	t/	/θ	r	ə ʊ	t/
Misspelt form	*c	o	t	*th	r	o	t

Misspellings can thus be categorised as substitutions, omissions, insertions and transpositions of the graphemic representation of phonemes (cf. Lecours' surface graphemic system discussed above). **cot* and **throt* are therefore substitutions of representations of /ɒ/ for /ɔ/ and /ə ʊ/ respectively (assuming pronunciations of /kɒt/ and /θrɒt/).

E. Abbott (1976) stresses that the graphemic-phonemic relationships can be used as a system for *classifying* types of misspelling, but that the subsequent *explanation* of the causes of misspellings may be found at other non-phonological levels. One situation where this system leads to counter-intuitive classifications is in examples such as **striper, *liking (stripper, licking).* Since misspellings are categorised by reference to a plausible pronunciation of the misspelt form, these examples are both analysed as substitutions of an /a ɪ/ representation (/straɪpə, laɪkɪŋ/) for an /t/ representation (/strɪpə, lɪkɪŋ/). However, the error has clearly been caused solely at the graphemic level, by failure to double the <p>, and use <ck> instead of <k>, after the short /ɪ/ vowel.

The potential importance of phonological factors in explaining misspellings has been underestimated by some writers. Lecours (1966:223) found that 13% of all errors involved purely

phonological or lexical factors. However, since his analysis avoids plausible phonological explanations for certain examples (e.g. see **scolls, *promisis, *expensis* discussed above), this figure may be questioned; he calls it "a relatively small proportions, and considers phonological factors to be only "a reinforcing element" (p.237) rather than the root cause of many misspellings.

From the above discussion, it should be clear that there art many possible ways of analysing misspellings, just as there are many different reasons for wanting to analyse them. The investigator should therefore select his analytical system to match his purpose. A surface graphological analysis, although criticised above as failing to be explanatory of the causes of misspellings, nevertheless is appropriate for someone devising an automatic spelling checker. However, any analysis which purports to be explanatory should be pitched at as many levels as are necessary, since spellers' errors do not lie at only one linguistic level. Rather, misspellings "are intimately connected with a number of representations, structures and processes involved in writing and spelling" (Sterling, 1983:364).

Even so, it is not always possible to categorise with certainty the cause of a misspelling. E. Abbott (1976:126) notes that, in the preliminary analysis of her Ugandan data,
"the following had been classed as spelling errors:
*a *fructured jaw (fractured)*
**tear-gus was used (tear-gas)*
the following as grammatical (morphological) errors:
*they *drunk the water (drank)*
*they *begun buying books (began)*
and the following as lexical errors:
*the car *crushed into the wall (crashed)*
*dressed in *rugs (rags)*

In some cases the substitution of <u> for <a> has 'produced' a form which, although inappropriate in the context, is actually another English word, and in other cases the substitution has produced a 'non-word', but this might be merely fortuitous".

If a speller in the present (Siew, 1984) corpus writes **grapped* for *grabbed,* this may be analysed as a case of phoneme confusion (of the sound /p/ and its voiced counterpart /b/), or of grapheme confusion (of the letter-shapes <p> and <b>). Similarly, the example **your* for *yours* may represent a phonological omission of final /z/, or may manifest a grammatical confusion. The misspelling **principle* (for *principao* may be considered a matter of phonology or of lexis. The use of analogy with other observed errors may not always help to disambiguate the cause; further examples of all the above competing causes may be found in the corpus.

The corpus
The present corpus was collected by Siew Sook Yee (1984). It consists of 1,392 misspelling-tokens of 870 types, made by 360 fifteen-year-old Chinese Singaporeans in classwork essays. The corpus has been added to the collection of misspelling corpora compiled by Mitton (1985); it is available in computer-readable form from the Oxford University Computing Service, Text Archive No.643. If we define idiosyncrasies as features which do not clearly correlate with other features of the language-producing process, then the corpus contains much in the way of idiosyncratic data. And, as I have just pointed out above, many examples admit of more than one explanation. The following analysis therefore presents those misspelling types which occur with sufficient regularity for them to be considered as general categories; these are then of use to language teachers, spelling reformers and other language experts.

The occurrence figures given below can be taken as rough indications of the relative importance of the different misspelling categories. It should be clear, though, that misspelt words may contain more than one instance of misspelling. For instance, the example **serouding (surrounding)* in the

present corpus contains three errors: (i) wrong graphemic representation of the unstressed schwa vowel, (ii) failure to double the <r>, and (iii) omission (probably phonemic in origin) of <n>.

1. Phonemic conflations

I have elsewhere (Brown, 1986, 1988) described the phonemic system typical of Singaporean English. It is sufficient here to note that many of the phonemic vowel and consonant distinctions of RP and other native accents of English are conflated (technically known as *underdifferentiation).*

In general, consonant phonemes are represented more regularly than vowels in English spelling. For this reason, consonant conflations can be analysed in the data with greater confidence than vowels. The main consonant conflations in the corpus are as follows:

*Conflation	tokens/types	Example
/t, d/	12/11	**intented (intended)*
/p, b/	13/9	**blank (plank)*
/f, v/	12/6	**grief (grieve)*
/t, θ/	10/7	**Baltazar (Balthazar)*
/s, z/	18/4	**noice (noise)*
/l, r/	14/7	**breeze (breeze)*
/s, ʃ/	7/7	**finised (finished)*
/m, n/	7/4	**noon (moon)*

The main vowel conflations are as follows:

Conflation	tokens/types	Example
/ɛ, æ/	45/23	**demage (damage)*
/i, ɪ/	27/10	**leaving (living)*
/ɔ, ɒ	9/6	**boll (ball)*
/ʌ, ɒ/	5/4	**botton (button)*
/ɪ, ə/	4/4	**accept (except)*
/æ, ʌ/	4/4	**crashed (crushed)*
/əʊ, u/	3/3	**stoove (stove)*
/əʊ, ɔ/	3/3	**deport (depot)*

With regard to E. Abbott's (1976) Ugandan data, G. Abbott (1979:174) notes that "the indeterminacy of pronunciation ... is echoed in the results of the analysis by what the researcher calls 'pairing'. Here is one example:

/æ/ for /ʌ/		/ʌ/ for /æ/	
**stamped*	*stumped*	**truck*	*track*
**back*	*buck*	**drugs*	*drags*
**tag*	*tug*	**stump*	*stamp*
**flash*	*flush*	**flushes*	*flashes*
**shaffles*	*shuffles*	**scrumble*	*scramble*
etc. (n=60)		etc. (n=65)	

Not only do the mistakes occur 'in reverse', as it were; but the 'reverse' mistakes actually tend to balance the others numerically".

Similar 'pairing' is found in the Singaporean data.

/æ/ for /ɛ/		/ɛ/ for /æ/	
**man*	*men*	**men*	*man*
**back*	*peck*	**beg*	*pack*
**massy*	*messy*	**stepped*	*tapped*
etc. (n=28)		etc. (n=17)	

/i/ for /ɪ/		/ɪ/ for /i/	
*these	*this*	*this	*these*
*seat	*sit*	*sits	*seats*
*leaving	*living*	*linking	*leaking*
etc. (n=20)		etc. (n=7)	

So, if a Singaporean does not distinguish /i/ and /ɪ/ as in *seat* and *sit,* then these two words are in effect homophones for that speaker, and he cannot use any phonological basis for deciding on the correct spelling for the intended word. Instead, the two spellings must be learnt individually by rote on the basis of semantic and syntactic features.

2. Homophones

While on the subject of homophones, we may note that these are a problem for non-native speakers (as indeed for natives). The Singaporean corpus contains 40 occurrences of 13 types, including **strait (straight), *weather (whether), *principle (principal), *here (hear) and *soul (sole).*

3. Suffixes

It is appropriate, when discussing omission and insertion of consonant graphemes/phonemes, to treat the English suffix morphemes as a separate category. The English inflectional suffixes for past tense/past participle, and plurals/3rd person singular present tense verbs/possessives account for the majority of (although not, of course, all) cases of omission/insertion of word-final /t, d, s, z/. Morphemic and non-morphemic examples are given below:

	Omission token/types	*Examples*	Insertion token/types	*Examples*
/t/	51/19	**differen*	36/28	**felt (fell)*
		**loss*		**influenced (influence [noun])*
/d/	15/8	**fine (find)*	25/25	**childrend*
		**simile (smiled)*		**replied (reply [noun])*
/ɪd/	2/2	**crowed (crowded)*	8/6	**importanted (important)*
/s/	14/6	**strait (straits)*	8/8	**sports (spot)*
		**respon (response)*		**sicks (sick)*
/z/	48/15	**other (others)*	19/13	**others (other)*
		**alway (always)*		**expensives (expensive)*
/ɪz/	1/1	**banded (bandages)*	2/2	**difficulties (difficult)*

4. Other consonantal omissions & insertions

Of all the other consonant phonemes of English, the problems created by three (/l, r, n/) far outweigh all the others.

/l/ and /r/ were often substituted for each other, as seen in section 1 above. This confusion is a common feature of Chinese learners of low proficiency. These two phonemes were also often omitted and inserted:

Omitted Word-modially tokens/types: /l/ 10/10 /r/ 13/12
/l/**softy (softly) /r/*childen (children)*
Word-finally tokens/types: /l/ 8/6 /r/ -
/l/**cancer (cancel)*
Inserted Word-medially tokens/types: /l/ 15/12 /r/ 33/6
/l/**accordling (according) *elephrant (elephant)*
Word-finally tokens/types: /l/ 7/6 /r/ -
/l/**ful (fur)*

No examples are given for word-final /r/ since Singaporean English, Re RP, is non-rhotic, i.e.

syllable-finally /r/ is not pronounced in words like *quarter.* Altogether, there are 76 tokens of 61 types where <r> is inserted or omitted in potentially rhotic position, e.g. **surpport (support), *suprised (surprised), *merlingerer (malingerer), *Mecedes (Mercedes), *humoursexual (homosexual), *hazad (hazard).*

Instances where <l> and <r> are involved, either as phonemic /l, r/ or graphemic <l, r> (or both), and whether as part of a substitution, transposition, omission or insertion, total 90 tokens of 65 types for <l>, and 193 tokens of 130 types for *<r>.*

Misspellings involving <n> (indeed all 3 nasals /m, n, ŋ/) were also very common.

Omitted

Word-medially tokens/types: /m/ /1/1, /n/ 24/19, /ŋ/ 2/2

**remeber (remember),*covert (convert),*back (bank)*

Word-finally tokens/types: /m/ 1/1, /n/ 3/3, /ŋ/ -

**for (form) *garder (garden)*

Inserted

Word-medially tokens/types: /m/ *-,* /n/ 16/11, /ŋ/ 1/1

**throwning (throwing) *linking (leaking)*

Word-finally tokens/types: /m/ -, /n/ 3/2, /ŋ/ -

**own (owe)*

The grand total of cases involving graphemic/phonemic <m, n> in any capacity was 23 tokens of 18 types for <m>, and 129 tokens of 90 types for <n> (including 12 tokens of 9 types where <n> represented /ŋ/).

An interesting parallel is seen with a specific spelling problem of native speakers discovered in some adults attending literacy courses, some schoolchildren and three neurological patients by Marcel (1980). "It concerns liquids (/l/ and /r/) when preceded in initial consonant clusters by a stop, and liquids and nasals (/m/ and /n/) when followed by a stop or fricative in terminal consonant clusters" (Marcel, 1980:376). Omissions, insertions and transpositions involving these consonants are taken to be caused by difficulties in phonetic segmentation, since it has been argued "that the consonant further from the vowel in 2-consonant clusters is the basic one and the one nearer the vowel is the affix" (1980:395–6). That is, the /n/ of *men* is more basic (and therefore more obviously present to the speaker/listener) than that of *meant* or *mend* (similarly the /l/ *of coal* vs. *colt, cold).*

A further complication is added, in that many Singaporeans do not pronounce syllable-final /l/ as a voiced alveolar lateral (Brown, 1986, and forthcoming). Instead, one of three things may happen:

(i) The alveolar tongue contact is lost, leaving a vocalic articulation of the [ ] type.

(ii) Where this follows a back vowel such as [ɔ, o, ʊ, u] the vocalic articulation may be absorbed by the vowel, giving rise to misspellings such as **aways (always), *pour (pool)* and hypercorrections like **all (or), *scole (score),* *wool (woo).

(iii) The articulation may be dropped following other vowels, leading to omissions as in **chid (child), *weath (wealth),* and unnecessary insertions such as **oval (over), *fomel (former).*

Mention should also be made in this section of the widespread use in Singaporean English of the glottal stop as a replacement for syllable-final /p, b, t, d, k, g/ and rarely /tʃ, dʒ/. Since the glotal stop is not a phoneme of English, and therefore has no regular written representation, confusion will arise in Singaporean spelling of final stops and affricates. The glottal stop is a plausible contributory factor in many of the examples of /p, b; t, d; k, g/ conflation, e.g. **jumb (jump), *graid (great), *beg (pack),* as well as numerous others, e.g. **acept (accept), *suceed (succeed), *pinic*

*(picnic), *basis (basics), *destrution (destruction), *bombarment (bombardment), *din't (didn't), *part (park), *blandly (blankly), *breadfast (breakfast), as* well as possibly **speech (speed), *snapped (snatched).*

5. Glides
Several misspellings involved glides. Certain variation is possible in the phonological interpretation of these examples. I will treat them in 3 categories.

(i) The majority of glide misspellings involved the palatal glide transcribable as /i, ɪ, j/. In this category are included /ju/ examples such as **continised (continued), *unsual (usual), *suitation (situation), *humulate (humiliate).* There were 35 tokens of 32 types in this category. Most involved omission of the glide, e.g. **curosity (curiosity), *victorous (victorious), *testmimonal (testimonial), *strenous (strenuous), *unniversity (university),* although some involved insertion, e.g. **toliet (toilet), *disadventiage (disadvantage).*

(ii) As a sub-category of the above phenomenon, 15 tokens of 12 types involved palatalisation, i.e. the process whereby palalo-alveolar consonants /ʃ, ʒ, tʃ, dʒ/ are created, usually from historical sequences of alveolar consonants /s, z, t, d/ plus /i, ɪ, j/. For many words, the two pronunciations are alternatives, the sequence being considered perhaps more precise or archaic, e.g. *Christian* /krs ɪtjən — krɪ stʃən/. All but 2 of these examples involved deletion of the palatisation element, e.g. **christain/*christan (Christian), *efficently (efficiently), *Venetain (Venetian), *compassinate (compassionate), *solider (soldier).* The 2 examples of insertion of palatalisation were **prision (prison) and *sprange (sprang).* Some of the above examples could be analysed simply as graphemic transpositions my point is that the effect of this is to destroy the phonological palatalisation element.

(iii) The final category involves the velar glide transcribable as /u, ʊ, w/. There were only 5 tokens of 5 types, mostly involving the word *language* as the target or as the interfering factor, e.g. **langesage (language), *languges (languages), *laguage (luggage).*

6. Syllable structure
a) Stressed vowel omission
In a number of misspellings (16 tokens of 14 types), a (primarily or secondarily) stressed vowel was omitted. This was surprising, since stressed vowels are thought to play an important part in the way words are stored and retrieved from a speaker's memory. Certain of these errors can be explained in that stress is sometimes placed differently in Singaporean English from RP, e.g. **devloping (developing), *exmination (examination), *graunto (guarantor),* where, the stress is shifted or given far less prominence than in RP.

Other examples cannot be explained in this way, though: **alrm (alarm), *aplogise (apologise), *avarcious avaricious), *brigde (brigade), *reprimded (reprimanded), *scond (second), *very (every).*

b) Unstressed vowels
A larger number of examples involved misspelling of unstressed vowels. One would expect this, because the commonest unstressed vowel, schwa, may be represented by a wide variety of graphemes. Such errors are also common, therefore, among native speakers.

57 tokens of 40 types contained a substitution of the wrong vowel grapheme, e.g. **appearence, *referance, *passangers, *pleasently, *handsame, *scenary, *discribed, *inspecter, *oppurtunity, *buffolo, *envolope (noun).*

18 tokens of 14 types omitted the unstressed vowel grapheme. In many cases, this occurred where the unstressed vowel might well be lost (elided) in fluent connected speech; the misspelling thus

represented an acute observation on the actual pronunciation of the word, e.g. **beautful, *displine, *monastry, *opptunity, *restraunt, *sevral.* However, not all cases can be explained in this way, e.g. **civilzation, *everwhere, *interst, *vist (visit).*

19 tokens of 7 types contained an <l> which, as a consequence of the above omission of an unstressed vowel grapheme, might be considered to have become syllabic. For example, *buffaloes* is misspelt as **buffloes.* On analogy with *shuffling,* which may be thought of as containing 2 or 3 syllables, a 3-syllable interpretation of **buffloes* is still possible. Further examples include **accidently, *happly and *luckly.*

In total, a whole syllable (stressed or unstressed) was omitted in 56 tokens of 37 types. That is, a plausible pronunciation of the misspellings contained fewer syllables than the target word.

7. Doubled consonant graphemes
The graphemic phenomenon of doubling consonants is a well-known difficulty for native speakers. It is thus not unexpected that the present corpus from Singaporean writers also contained many such errors. In 85 tokens of 40 types, a doubled consonant was made single. Many of these involved failure to double with suffixes, e.g. **begining, *grabed, *unforgetable, *normaly,* while others involved different structures, e.g. **asuming, *atitudes, *corupt, *embarasing, *inteligent, *rabit.*

An unnecessary doubling of consonants was found in 50 tokens of 34 types. Most involved suffixation, e.g. **arrangging, *hangged, *listenning, *bidding, *writting, *morallity.* Others included **appologise, *banannal *bannana and *fillial.*

5 tokens in this category were misspellings of the word *cigarette, as *cigerrette, *ciggarette and *ciggerette.*

8. Silent <e>
A graphemic phenomenon of similar notoriety is the silent <e>. Examples in the present corpus were common. In 60 tokens of 35 types, the <e> was omitted. Most of these occurred in situations where the <e> performs an easily specifiable role, e.g. **amusment, *arrangment, *cloths (clothes), *extremly, *practic, *prepard, *reptils, *sincerly.* For others, the role of the <e> is not so clear, e.g. **advertisment, *heros, *mor, *unfortunatly.*

Hypercorrection by unnecessarily inserting an <e>, occurred in 14 tokens of 10 types. In 3 types, this constituted failure to delete the <e> in appropriate circumstances — **arguement*, **changeing, *rescueing.* Other examples included **punishement, *slowely* and **stomaches.*

Observations and proposals
Of the above 8 categories of major causes of misspellings by Singaporeans, a reasonably clear line can be drawn between those problems which are caused by anomalies inherent in the English spelling system, and those relating to features specific to Singaporean pronunciation. The former kind are therefore to be found in the spelling of native as well as non-native speakers, whereas the latter category will be unique to Singaporeans.

Problems inherent in the writing system clearly include consonant doubling and silent <e> (which are in fact often related phenomena, both dealing with the graphemic representation of long vs. short vowels). These should therefore be a major concern of any reformed spelling proposal. In the present corpus, far more mistakes are made by making double consonants single and omitting the silent <e> than by hypercorrections of these; this would therefore seem to be the preferable solution (as in *Cut Speling).*

A writing system with a perfect one-to-one correspondence between graphemes and phonemes

would contain no homophones or homographs, although it might have total homonyms (where both spelling and pronunciation were the same). The existence of homophones and homographs may be taken to indicate the extent of this lack of fit, and they are therefore a source of misspellings for native and non-native speakers alike.

The difficulties associated with /l, r, m, n, ŋ/ may originate in higher-level language processes, and relate to difficulties in phonetic segmentation. Indeed, Marcel (1980) raises doubts about the traditional view of phonemic-graphemic representation, i.e. that speech is composed of basic phonemic units, of which speakers are consciously aware, and that spelling corresponds to the graphemic representation of these phonemes. Rather, it is much more of a 'chicken and egg' situation: "although the alphabet is the most efficient way of reading and writing, [it has been suggested] that it has been invented only once in all history. This would imply that the representation of speech on which it relies (the phoneme) is rather unnatural. In whatever way the alphabet was first invented, it is possible that for each learner today, the concept of the phoneme (tacit if not explicit) comes from rather than leads to the particular alphabetic system, with which he or she is confronted" (Marcel, 1980:401–2).

The remaining four categories of misspelling are specific to Singaporean speakers. Suffixation is a widespread problem but may be thought of as a grammatical (morphological) phenomenon as much as a phonological one. In the corpus there were 46 tokens of 23 types of omission/insertion of the <-s> suffix, and 79 tokens of 54 types for <-ed>. 19 tokens of 18 types involved other affixes, all but one (*unconsiderate [inconsiderate])* being suffixes.

Nevertheless, in certain examples, similar confusion in spelling may be found among native speakers, owing to the process of elision, as when syllable-final /d/ is commonly elided in native speech where it is surrounded by other consonants, which may lead to confusion over morphology (and thus spelling) of certain phrases. For instance, should one talk about a *one-arm bandit* or a *one-armed bandit?* The comparison between native and non-native confusions cannot be drawn too far, though, since suffix-dropping is far more extensive for non-native speakers than the limited native possibilities just mentioned.

The importance of stress and other suprasegmental features (rhythm, intonation, voice quality) is increasingly being emphasised by English language teachers. The stress system of English is viewed as the basic framework of the spoken form of the language, within the bounds of which the individual segmental vowel and consonant articulations are performed; it plays a major role in the achievement of sounding like an English speaker. The surprisingly large number of misspellings relating to stressed vowels shows that stress commands far less importance in Singaporean English than it does for native accents.

At segmental level, teachers of Singaporeans should pay particular attention to the following features of Singaporean pronunciation (roughly in descending order of importance):

1. / e, æ/
2. /i, ɪ/
3. The voiced/voiceless distinction, in particular /t, d; p, b; f, v; s, z/, and the widespread use of the glottal stop
4. Glides, including palatalisation
5. All nasals
6. /l, r/
7. /t, θ)/
8. /ɔ, ɒ)/

Christopher Upward has pointed out (personal communication) that "one might conclude that no reformed English orthography can cater for interference from other languages, but that reforms

designed specifically for native speakers will also benefit foreign learners. Therefore, there is no point in taking the needs of specific foreign learners into account' [in any spelling reform].

The above proposals for Singaporeans are based on analysis of the corpus of misspellings, and therefore are directly relevant to minimising problems of spelling. They should also improve the intelligibility of spoken communication. The two media cannot, of course, be divorced for foreign learners but, whereas language teachers are usually quick to rectify misspellings, they often allow unacceptably large variation in students' pronunciation to go uncorrected. Following G. Abbott (1979:175), we might therefore conclude that "an 'adequate' pronunciation is one which facilitates accurate spelling".

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[Edgar Gregersen: see **Journals**, **Newsletter**]

4. The Strategy of Spelling Reform in Stages: Pros and Cons

Edgar Gregersen

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Advocates of reform by stages — and objections

The Simplified Spelling Society has recently proposed a series of modest reforms rather than a radical one-step overhaul of the present orthography of English. These proposals have been set forth in the Society's leaflet *Tough Though Thought.* As an alternative, some members of the Society have urged that Cut Spelling be promoted as a first step.

In a similar vein, Harry Lindgren, in his *Spelling Reform: A New Approach* (1969), specifically called for a 50-stage reform, to take at least 50 years. Actually, the time period for the full reform would probably — even under optimal conditions — be considerably longer because the very first step may take several years all by itself.

On the other hand, Edward Rondthaler, the proponent of 'Simplified American Spelling', has changed his mind and is now against stages. Originally he proposed about three, but now he feels that anything less than a total overhaul would cause a great deal of confusion, if only because many words would have multiple representations.

My own view is that an overnight total reform would be the most efficient and desirable approach in the long run. But barring enlightened despotism, a Kemal-Atatürk-style revolution, or persuading Oliver North to divert funds from the Contras to stage an orthographic coup in the USA, this is unlikely.

I am not against stages, however, if used as a tactic to arouse public interest in reform. Certainly the use of stages in private publications and in propaganda is quite justified. But getting governments in English-speaking countries to go along with a piecemeal approach is something else

Let us consider two practical situations.

Russian

The first of these is the spelling reform of Russian that occurred shortly after the Revolution. Altho initially planned by a commission under the last tsar, Nicholas II, the reform was carried out under the Communists, many of whom saw it as a first step towards their international-minded goal of romanization. In fact, the Soviets created decent roman orthographies for many non-Russian-speaking native peoples in Siberia and elsewhere. Ultimately, Russian nationalism triumphed over Communist internationalism: plans for romanization were abandoned and modified cyrillic alphabets replaced the roman ones set up just a few years before. Since the major spelling reform for Russian (in which several letters believed to be superfluous were dropped, including <i> and <θ>), only occasional and trivial changes have taken place, e.g. и д т и *(idti) for* и т т и *(itti), to go.*

Improvements of a more thorogoing kind, such as the marking of stress, have apparently not even been considered.

The basic moral from the Russian situation is that if stages of reform are indeed accepted, each stage had better be selfcontained because it may be the last one carried out.

Norwegian

The second practical situation I shall consider is that of Norwegian riksmål/bokmål. The Norwegian situation has considerably more complications than most other languages, in large part because of a powerplay involving social classes and geographic regions. A large part of the controversy that has inflamed the Norwegian reforms does not involve spelling as such, but rather what is to be regarded as the standard spoken Norwegian, which the spelling would reflect.

In the early 19th century, most Norwegians wrote following Danish conventions even tho they did not use Danish pronunciation. Let us consider the changes that occurred in the three major reforms of the 20th century, those of 1907, 1917, and 1938, by examining the following five words, given first in their older Danish spellings (a spelling reform in Denmark occurred after World War II, two of the major features of which were abandoning the use of initial capital letters for nouns and the introduction of the letter <å> from Swedish and Norwegian for older <aa>): *Blæk (ink), bleg (pale), Kagen (the cake), Gaden (the street), Gaade (riddle).*

	Blæk	bleg	Kagen	Gaden	Gaade
1907	blek	blek	kaken	gaten	gaate
1917	blekk				gåte
1938				(gata)	
	blekk	blek	kaken	gaten	gate

The reform of 1907 tried to introduce as the standard it reflected the language of educated speakers from Oslo using a relatively formal style. The spelling therefore abandoned for the most part <d, g> between vowels, to reflect the current unaffected pronunciation with <t, k>. The reform also very greatly restricted the use of the letter <æ> (unless it occurred before <r>) and generally substituted <e>. Further, the reform did not deal with vowel length consistently; hence *Blæk* with a short vowel and *bleg* with a long one both wound up as *blek.* This confusion of long and short vowels before final consonants was systematic, so that except for the earlier capitalization distinction, men *(Men) (damage)* and *men (but)* have traditionally been written the same til this day. (But note *menn [men],* former *Mænd*, with a short vowel, pronounced the same as *men [but].)*

This systematic confusion was a major defect of the writing system. In 1917 it was resolved by usually doubling a final consonant after a short vowel (as had been done within a word, e.g., 1907 *blek [ink]* but *blekken (the ink],* 1917 *blekk [ink], blekken [the ink]).* The 1907 orthographic peculiarity was memorialized in the phrase:

> "Hvad trenger du med pen [penn] og blek [blekk], du som er saa pen og blek?"
> (Why do you need pen and ink, you who are so beautiful and pale?)

The 1938 reform introduced few new spelling rules, but tried to change the standard used from upper middle class dialects to urban working class dialects (e.g. *gata).* Altho such forms are official they have met considerable resistance.

The result of all these changes is that people in different age groups may continue to write using

spellings that are no longer official. Until quite recently (and possibly still), some older people even used the 19th century Danish conventions. For the most part, people take all this in their stride. Dictionary makers usually just ignore older variants. Even if they didn't, the result would be only slightly fatter dictionaries and considerably more cross-referencing than commonly found.

The moral for us is that reform in stages is not an impossible option, altho it is a messy one. The Norwegian situation got more complicated than need be by juggling nationalism with linguistic requirements (e.g. dropping <w> to become more Norwegian-looking — or at least less Danish-looking — vs. marking length of vowels).

The Simplified Spelling Society
Let us now consider various reforms in stages as proposed for English.

The Simplified Spelling Society in its ***Tough Though, Thought* leaflet** suggested a reform it labeled 'SR:ough'. In line with this reform, the following changes were to be made:

drought	→drout	plough	→plou
thorough	→thurra	though	→tho
dough	→doh	cough	→cof
bought	→baut		

Everyone agrees that traditional spellings with <-ough> are horrible, but an enormous number of problems confront us in solving them.

The least objectionable change is from *drought* to *drout,* since all that is involved is dropping the totally superfluous letters <gh>. With *plough,* one might argue that the same thing applies. But note that another spelling already exists: *plow.* British and Commonwealth speakers of English may brand this as an Americanism — and certainly cultural feelings of this sort must be taken into account. But are we to reject all reasonable forms because they are American? Furthermore, *plou* has a decidedly unenglish look to it because <-ou> normally doesn't occur finally, only <-ow> *(how, now, cow,* etc).

The form *thurra for thorough* is not Nue Speling (where it is written as *thurro).* And the suggested spelling of the final vowel opens a whole new kettle of fish that I'm afraid is more unfortunate than one might think. Altho the RP pronunciation of the word ends on the same vowel as *China,* the normal US and Canadian pronunciation of the word has the final syllable the same as in *follow, sorrow.* To spell this word (and also *borough)* with final <-a> rather than a compromise <-o> would tend to split the English-speaking world. I think it unwise to introduce such complications into the earliest stages of reform and probably into any stage of spelling, which it seems to me should be as internationally acceptable as possible.

The spelling *tho* is fine (tho I myself prefer *dho).* But *doh* for *dough* is just out of the blue and certainly goes nowhere. The Nue Speling form *doe* would have made sense, but no spelling system for English I know advocates <oh> for the vowel sound in *go.*

The spellings *cof* and *baut for cough* and *bought* again introduce dialect differences. In the speech of older RP speakers the vowels of both words are often pronounced the same, and this is also true probably for most Americans. To use different vowels in the spelling without any further clarification is therefore quite unfortunate. (By the way, words such as *bought, ought, fought, frought, wrought* could perhaps better be spelt as *boht, oht, foht, froht, roht* in a first stage:

dropping the <ug> should appeal to proponents of Cut Spelling and it more nearly approaches an international value for vowel representations.)

To sum up this rather tortuous discussion: 'SR:ough' is simply too complicated to be a desirable early stage of reform. A considerable number of decisions of unequal value have to be made at once. Sometimes the changes made do not suggest the general direction reform is going (as most obviously with doh *for dough).* In short, 'SR:ough' should be abandoned.

Harry Lindgren

The suggestions made by Harry Lindgren have much that is admirable to my mind. For example, he maintains that each and every step must be unambiguous and complete. He seems also to suggest that there must be a concern for the sequence of stages. I for one think it would be very unfortunate to change *hence to hens* before present *hens* had become *henz;* or to change *off* to *of* before present *of* had become *ov*. Lindgren in effect acknowledges the same sorts of problems, but without actually giving the details about specific stages, except for SR:I, which always writes stressed short /e/ as <e>.

However, his scheme does present serious problems, most notably in his insistence that the 'obscure' unstressed vowel shwa [ə] as found in *about, China,* and so on, be consistently shown (as <'>). This decision immediately confronts us with a very fundamental question: preserving the unity of the English language community. Enormous variation exists with regard to how unstressed vowels are pronounced. Consider simply the following few examples contrasting usage in RP and one variety of American English.

	RP	*General American*
baboon	bə'buwn	bæ'buwn
python	'pajθn	'pajθan
omit	ə'mit	o'mit
	ow'mit	
	o'mit (moribund?)	
cocaine	kə'kejn	ko'kejn
	ko'kejn (moribund?)	
literary	'litərəri	'litərenij
	'litrəri	
	litrri	
testimony	'testiməni	testimownij

Another drawback to showing shwa is that doing so obscures the relationship between related forms as in *phətógrəpher vs phótəgraph,* or *históricəl vs híst(ə)ry.*

Whatever the final judgment as to how such unstressed vowels should be shown, any decisions that would tend to break up the unity of the English-language community should be weighed very seriously and delayed until the very last stage of reform — if ever adopted at all.

In other words, it strikes me that the approach used at present in Russian of not showing vowel reduction could be adopted in English — or rather retained, since traditional English spelling does precisely that for the most part. (In more technical terms, I'm advocating the orthographic inviolability of the morpheme, the smallest unit with meaning — e.g. the *photo* part of *photograph[er].)*

The danger of having to reverse reforms

A third and last situation to be considered comes from a Cut-Spelling-like approach to reform. (Chris Upward assures that this particular solution is not advocated by proponents of Cut Spelling, however*). Consider the traditional English spelling *breathe.* One possible reduction within a Cut Spelling approach would certainly seem to be *brethe.* Since this is so, forms such as *sleepy, sleeping,* and *sleeper* might be cut to the shorter forms *slepy, sleping,* and *sleper,* even tho the underlying form *sleep* would have to be retained unchanged. Here we have, first of all, a problem of unnecessarily breaking up related forms (i.e. we would violate the integrity of the morpheme). But what about the final stage of reform? What if we decide that the vowel sound of *sleep* is always to be written <ee>? We would go back to the traditional spelling.

An even worse situation could occur with the two words *who* and *hoe:**

TO	*who*		*hoe*
	\		/
Intervening stage (CS)		*ho*	
	/		\
Final stage (NS)	*huu*		*hoe*

Here the intervening reform stage lumps together two words pronounced differently only to have them re-differentiated in the final stage.

To avoid such awkward situations, which could only invite scorn from people opposed to spelling reform, stages must be planned with an eye to the final comprehensive system. It has been said that the proposals of the Simplified Spelling Board of the United States (now defunct) failed precisely because it proposed no final comprehensive scheme and gave the impression of wandering in the dark with some very ad hoc solutions. (See their *Handbook of simplified spelling,* 1920). For example, for the sound of the vowel in *sleep* no clear direction was given. Words ending in <-ceed> *(proceed, succeed, exceed)* were to coalesce with the <-cede> suffix (like *precede);* hence*, procede, succede, excede.* Words with <ei> were to be rewritten with <ie> *(reciev* for *receive);* words with <ae> and <oe> were to be cut to <e> at the beginning and middle of a word but not finally: *fenix for phoenix, enciclopedia* for *encyclopaedia,* but *alumnae* unchanged. This approach is the way of madness.

Let me restate my position: any kind of piecemeal changes, even if single words, may be a justifiable strategy for jarring the public into an awareness and eventual acceptance of rational spelling. But these changes should be self-contained and most of all should not have to be undone in later stages. My own preference for a stage one reform would simply introduce new symbols that are necessary for a decent spelling of English but have no tradition behind them such as accent marks to indicate stress, or the Klasik Nue Speling forms <dh, zh, ngg, aa, uu>. To do so would in effect get the most difficult job done relatively then have the embarrassing situation where the end result painlessly.

However, once a momentum for change is achieved, spelling reformers should abandon a strategy of stages and push for a comprehensive, one-time reform.

[**Pt 2 of 'Conflicting Eficiency Criteria in Cut Speling' in Journal 1989/1 J10, will discuss how CS could treat these long vowels and potential ambiguities such as* who:hoe. — Ed.]

[Journal of the Simplified Spelling Society, 9, 1988/3 pp13–16 in the printed version]

5. A Sibilant Extravaganza, or How on Earth could Johnny Read?

Julius Nyikos

Prof. Nyikos had the benefit of education in the phonographic Hungarian orthography, and soon mastered the writing of Latin, German and Finnish. He resumed learning English orthography on emigrating to the USA in 1949, and hopes to be comfortable with it by 2030. He is Prof. of German and Gen. Linguistics at Washington & Jefferson College, Washington, Pennsylvania, and founder-president of the New English Orthography Institute. He is now engaged on a major study*, Complete Overview of the Enigmatic English Spelling System: the First Definitive Survey of the English Phonemes in Search of all their Graphemes,* from which comes the following paper (given at the Society's **5th International Conference, July 1987**). "Johnny" refers to Rudolf Flesch's critique of look-and-say teaching methods*, Why Johnny Can't Read: And What You Can Do about It,* Harper and Row, 1985.

Still-spreading and never-ceasing functional illiteracy can be eliminated only if a substantially simplified**,** circumspectly systematized and succinctly standardized spelling system is introduced.

The scientific term for spelling system is 'orthography'. A new orthography's assignment must be to sustain the suitable, simple and/or consistent, systematic written symbols of our speech sounds and its task to dismiss the thousands of exceedingly stupid and unnecessary idiosyncrasies of the existing obsolete nonsystem to axe them mercilessly. This disastrously mixed-up nonsystem should be supplanted not in months but through years, step by step, so as to facilitate a sensibly slow and smooth switchover, absolutely devoid of any hustle and bustle. Nothing less makes sense and nothing else but sweet persuasion seems necessary, since such a new orthography's simplicity and conduciveness to learning are decidedly susceptible to enthusiastic acceptance. Good will ambassadorship, circumspect negotiations and expert craftsmanship can smooth its successful implementation, without any exhortations. No swords need be drawn: no danger of anyone going berserk in overheated debates.

We can certainly count on the students' massive support; in fact, a radically simplified system will be the answer to the sincere requests and SOS signals of countless hapless youngsters, all the way from Leicester and Worcester, Massachusetts and the Chesapeake Bay through Charleston, South Carolina, and Robinsonville, Mississippi, to Tucson, Arizona, and Crescent City, California. A truly systematic system will be a dream come true to foreign students of English from the isthmus of Panama to Szechwan Province and the Yangtze River of China.

The existence of the present spelling mess has been extended for centuries by arch-conservatives who sentimentally reminisced and considered all stuff inherited from deceased ancestors sacrosanct. Behind the façade of mostly pseudoscientific historicism, they obstinately refused to assess how unnecessarily immense Johnny's task was. With instinctive finesse and a selfish exclusive-club-philosophy, these phalanx-like forces persistently refused to exscind all that had obsolesced over time. The docile grass roots masses listened to them as meekly as serfs to the czar (also spelled: tzar and tsar).

Eventually the principle crystallized with icy clarity: whoever has the audacity to mess with English spelling is an iconoclast. This is how our spelling became an orthodoxy, nursed and pampered with the TLC usually reserved for a nice old granddad with Alzheimer's disease.

Most of us have acquiesced in this mess, largely, I suppose, because we have been persuaded by the school establishment — who likewise had been convinced by their teachers and the professors — that, since historic developments had forced this spelling complexity on our language, it is an unavoidable necessity … We have been swallowing this doctrine like hungry sixth graders gulping down pizza or french fries smothered in catchup, like Oktoberfest beer guzzlers downing schnitzel or knockwurst.

Linguists whose speciality is the study of the essence of spelling systems, say this is grievously false and indefensible. English, as a *language,* has no weakness: certainly none which could prevent specialists from transforming the existing spelling chaos into an ABC system whose simplicity will make it easy to learn to read and write correctly. A simple — or complex — orthography can be devised and revised for any language. English is no exception. The magnificence and exquisite beauty of our richest language will only be enhanced by a streamlined, rule-governed orthography.

Let's face it: the disturbing schism that has been gaping betwixt English speech and English spelling is now at an impasse, brought about by the sudden and swift advance and expansion — one might say: blitz — of the deluxe TV and the fancy computer. This schizophrenia is concisely demonstrated by this treatise. Notice, please: these sentences, which have been purposely worded in what might boastfully be termed Nyikos' (spelled also: Nyikos's) self-illustrating style, effervesce with the constant emergence of the hissing *s* speech sound, but they are also cursed with 58 ways of spelling this simple sibilating consonant. Of these, some are easily recognizable; others are less obvious but readily substantiated. (For complete listings and explanation see pages 3–5.)

Surprised?... — Linguists' and lexicographers' surprise is almost as great. Only recently has all-encompassing refined research been able to approximate a comprehensive classification of nigh all letters and letter combinations English uses to represent its 40 speech sounds. The count to date is somewhere between 900 and 1,000. No wonder it took you and me twelve of our best years to master an incredible average of 23–24 unpredictable diverse ways of spelling each of our speech sounds. Fifty-eight ways of writing the sound *s* is just one gross example exhibited here to give substance to our question, "How on earth could Johnny read?!..."

Had the psychological warfare unit of the Nazis tried to devise something to cause a standstill in our ranks, they could scarcely have come up with a spelling non-system worse than the one in use. It's sad that blue ribbon commissions, which excellently assessed miscellaneous causes for much incompetence in our schools, missed assigning the greatest importance to substituting a sensible spelling system for the existing monstrosity. Not only was it not their principal concern, it totally escaped their probing X-ray vision. The density of the forest of problems hopelessly obscured the root cause…

Yet that is the crux of saving our schools from the menace of the ever-rising incidence of functional illiteracy and a subtly progressing bankruptcy of the learning process. A basic, simplifying restructuring of English spelling is our greatest chance for a stupendous reversal of the sadly

sagging standards of America's schools. Its importance and urgency transcend all else.

It might serve as a postscript to say: Some oh-so-sensitive souls might suspect that a systematizing simplification of our spelling would make English script exsanguine, depriving it of its "rich Greek and Latin elements and its Shakespearean etcetera heritage". — All those in favor of keeping our spelling a collection of museum pieces should be consistent enough to exchange their state-of-the-art automobiles for chintzy chariots and their word processors for clay tablets and styluses. Only then should they venture to pontificate, about what Johnny's part should be in the preservation of exsiccated orthographical mummies of past centuries. Respect is due historical artifacts, but they should be on exhibition in our museums and archives and certainly not in our youth's spelling lessons.

You do not feel any remorse when discarding wastepaper into a wastebasket. But it should be felt as a grievous loss to keep wasting billions and trillions of man-hours of strenuous effort on rote memorization of thousands of whimsical, illogical and contradictory sequences of letters and letter combinations.

Curiosity for learning ought to serve higher purposes: incomparably higher ones. Our children should not have to go to such unnatural lengths to learn to read the words that they so effortlessly and joyously learned to speak. Nor should native speakers of all other tongues of the world have to endure such exorbitant exertions in order to learn to read and write our beloved English.

[Journal of the Simplified Spelling Society, 9, 1988/3 pp13–16 in the printed version]

Statistics of the 58 Letters/Letter Combinations representing the Speech Sound /s/ as used in this Article

5 whole letters

1) <s> The single letter <s> has occurred 245 times, representing the sound /s/ in altogether 216 words, counting prefixed, suffixed and compound versions as separate words. (Of these words, 14 were repeated once, 4 three times, one four times, 3 six times and one — the word *spelling* — 17 times.)

2) <c> *never-ceasing, illiteracy, circumspectly, succinctly, unnecessary, mercilessly, facilitate, necessary, simplicity, conduciveness, decidedly, acceptance, circumspect, successful, certainly, sincere, city, centuries, deceased, sequences, ancestors, historicism, unnecessarily, forces, docile, principle, audacity, necessity, certainly, magnificence, fancy, concisely sentences, recently, principal, concern, incidence, process, urgency, etcetera, pieces, processors*

3) <t> *negotiations:* in the use of countless speakers of English who pronounce it 'negosiashunz' (rather than 'negoshiashunz')

4) <z> *czar, tzar, pizza, schnitzel, blitz, chintzy:* In *schnitzel* and in *blitz* the letter <z> and in *pizza* the second letter <z> clearly represents the sound /s/ *schnitsel (*or *snitsel)* and *blits* being their only recorded ways of pronounciation. The letter <z> represents the sound /s/ also in the words *czar, tzar* and *chintzy* in the use of most speakers of English who pronounce them *tsahr* and *chintsee* respectively.

5) <x> *phalan<u>x</u>:* in the use of countless speakers of English who pronounce it *falan<u>s</u>* (rather than *falan<u>ks</u>*)

2 apostrophized versions of a letter and one letter with a diacritic mark

6) <s'> *student<u>s'</u>, linguist<u>s'</u>, Nyikos<u>'</u>*
7) <'s> *let<u>'s</u>, it<u>'s</u>, youth<u>'s</u>*
8) <ç> *façade*

The first halves of 2 letters and the second halves of 3 letters

9)  Since the *name* of the *letter* <c> is pronounced *see,* it represents two *sounds,* namely /s/ and <ee>. Hence, the *sound* /s/ is symbolized only by the first half of the letter <c> in TLC and ABC.

10)  In the use of many speakers of English who pronounce *Nyikos<u>'s</u> Nikosiz* (as they pronounce *'Venus<u>'s</u>* flytrap' *'Veenusiz* flytrap'), only the first half of the first, apostrophized letter <s>, represents the *sound* /s/ because the second half of this letter <s> and the last letter <s> together symbolize the sound sequence *iz* in *Nikosiz*.

11)  Since the *name* of the *letter* <s> is pronounced *es*, it represents two *sounds.* Hence the *sound* /s/ is symbolized only by the second half of the letter <s> in *SOS.*

12)  Since the letter <x> represents two sounds, namely /ks/, in the following words, the sound /s/ is symbolized in them only by the second half of the letter <x>: *mi<u>x</u>ed-up, e<u>x</u>pert, e<u>x</u>tended, e<u>x</u>clusive, orthodo<u>x</u>y, comple<u>x</u>ity, comple<u>x</u>, e<u>x</u>quisite, betwi<u>x</u>t, e<u>x</u>pansion, le<u>x</u>icographers, cru<u>x</u>, e<u>x</u>change,*

13)  Since the letter <z> represents two *sounds,* namely /ts/, in the words *Al<u>z</u>heimer's* disease, *schi<u>z</u>ophrenia, Na<u>z</u>is,* the *sound* /s/ is symbolized in these words only by the second half of the letter <z>.

The last third of one letter and the first third of an apostrophized letter

14)  Since the name of the *letter* <x> is pronounced /eks/, this letters *name* represents three sounds. Hence the *sound* /s/ is actually symbolized by only the last third of this letter in <u>X</u>-ray.

15)  The *sound /s/* is represented by only the first third of the apostrophized letter <s> in the use of many speakers who pronounce *Nyikos'* as *Nyikosiz* (as they pronounce Saint *Agnes'* Eve as Saint *Agnesiz* Eev, e.g. in John Keats' poem) because the other two thirds of this letter <s> symbolize the sound sequence /iz/.

17 two-letter combinations, based on letter <s>

16) <ss> *a<u>ss</u>ignment, dismi<u>ss</u>, unnece<u>ss</u>ary, mercile<u>ss</u>ly, le<u>ss</u>, nece<u>ss</u>ary, conducivene<u>ss</u>, amba<u>ss</u>adorship, succe<u>ss</u>ful, ma<u>ss</u>ive, countle<u>ss</u>, haple<u>ss</u>, Ma<u>ss</u>achusetts, me<u>ss</u>, a<u>ss</u>e<u>ss</u>, gra<u>ss</u>, ma<u>ss</u>es, profe<u>ss</u>ors, e<u>ss</u>ence, weakne<u>ss</u>, hi<u>ss</u>ing, all-encompa<u>ss</u>ing, cla<u>ss</u>ification, gro<u>ss</u>,*

assessed, missed, *assigning, hopelessly, progressing, process, lessons, effortlessly, loss*

17) <se> *sense, else, deceased, immense, nursed, false, concisely, treatise, purposely, please, cursed, diverse, worse, use, remorse*
18) <sc> *scientific, susceptible, Crescent City, pseudoscientific, unsusceptible, miscellaneous, transcend*

19) <s's> The apostrophized *letter* <s> plus the following *letter* <s> in *Nyikos's* represent the *sound /s/* together, whenever pronounced *Nikos*, the preferred choice of most speakers of English when using the possessives of many names ending in <s>, for instance, *Venus's* flytrap, when pronounced *Veenus* flytrap.
20) <st> *hustle, bustle, listened, postscript*
21) <sw> *swords, answer*
22) <sz> *Szechwan*
23) <ps> *pseudoscientific, psychological*
24) <es> *Charleston, Shakespearean*

No speakers of standard English pronounce certain letters which immediately follow or immediately precede the letter <s> in particular words. These so-called silent letters are silent now, but they were used to represent actual sounds which, through the centuries, became slurred over by increasing numbers of speakers. We just listed several such two-letter combinations based on the letter <s>: <sc, st, sw, ps, es> Countless speakers of today's standard English do not pronounce eight other similarly situated letters either, that is to say, they slur over eight other sounds in the same way that their forebears skipped over the /w/ sound in *sword*, the /t/ sound in *listen* and the /p/ sound in *psychology.* Most of these speakers are absolutely not aware of their slurring, (nor are their listeners), but precise recordings by lexicographers and linguists confirm not only the existence but also the extent of such habits. They are so widespread as to be considered within the limits of acceptability. This is why these variants are included in this survey. (Exclusively such variants have been quoted whose acceptability is unquestionably attested by the authoritative *Webster's Ninth New Collegiate Dictionary, 1984.)*

25) <si> *density, curiosity:* pronounced by many *denstee* and *kyooriostee* respectively
26) <ts> *craftsmanship, tsar:* pronounced by many *krafsmanship* and *sahr* respectively
27) <sa> *Chesapeake Bay:* pronounced by many *Chespeek Bay*
28) <so> *philosophy:* pronounced by many *filosfee*
29) <su> *suppose:* pronounced by many *spohz*
30) <ns> *Robinsonville:* pronounced by many *Robisunvil*
31) <rs> *berserk, knockwurst:* pronounced by many *beserk* and *nokwoost* respectively
32) <t's> *let's*: pronounced by many in rapid speech as *les*

9 three-letter combinations and 2 four-letter combinations, all based on the letter <s>
33) <sce> *reminisced*, *obsolesced, acquiesced, effervesce*
34) <sse> *finesse, impasse*
35) <ssa> *ambassadorship, Massachusetts:* pronounced by many, especially in rapid speech, as *ambasdorship and Masschoosets,* respectively
36) <ssi> *necessity, classification:* pronounced by many, especially in rapid speech, as *nesestee* and *klasfikaishun* respectively
37) <sch> *schnitzel* and *schism:* pronounced by many *snitsl* and *sizm* respectively

38) <sth> *isthmus*
39) <sts> *postscript:* pronounced by many *pohscript*
40) <ste> *wastepaper, wastebasket:* pronounced by many *wasepaper — wasebasket*
41) <ths> *months*, *lengths* pronounced by many *mons* and *lengs* respectively
42) <ssis> *Mississippi:* pronounced by many, especially in rapid speech, as *Missipee*
43) <rces> *Worcester: Wooster* — its only recorded pronunciation

7 two-letter combinations and one three-letter combination, based on the letter <c>

44) <ce> *introduced, since, acceptance, existence, nice, convinced, forced, essence, magnificence, enhanced, face, advance, notice, emergence, substance, scarcely, incompetence, menace, incidence, chance, importance*
45) <ci> *simplicity, principle, principal:* pronounced by many, especially in rapid speech, as *simplistee and prinspl* respectively
46) <cc> *succinct:* pronounced by many *susinkt*
47) **<**ch**>** *catchup:* pronounced by many *katsup*
48) <cs> *Tucson: Tooson,* its only recorded pronunciation
49) <cz> *czar* pronounced by many *sahr*
50) <tc> *bankruptcy:* pronounced by many *bankrupsee*
51) <ces> *Leicester: Lester,* its only recorded pronunciation

4 combinations with one-and-a-half-letters, 2 with two-and-a-half, all based on the letter <x>

Since the *letter* <x> represents the *sound combination /ks/,* only the second half of this letter symbolizes a component of the *sound* /s/, the other component of the /s/ *sound* being symbolized by the *letter* (or by two *letters)* following th letter <x> in each of these combinations:

52) XC *exceedingly, exception, excellently*
53) XE *axe, deluxe*
54) XH *exhortations, exhibition*
55) XS *exsiccated, exsertions*
56) XSC *exscind*
57) XTH *sixth*: pronounced by many *siks*

One two-letter combination, based on letter <z>

58) <tz> Yangtze River: the only English pronunciation being *Yangsee* River, and *tzar* and *chintzy:* pronounced by many *sahr* and *chinsee* respectively.

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6. Conflicting Eficiency Criteria in Cut Spelling —1

Christopher Upward

Most of this paper was presentd at th Societys **Fifth Intrnationl Confrnce** in july 1987; furthr aspects of th question wil be examnd in a sequel in th 1989/1 isu of th *Jurnl.* Th Cut Speling used here is fairly radicl, and readrs wil find many of its mor problmatic forms discussd in th articl belo (or in th sequel).

0 ABSTRACT

With its 3 rules for removing redundnt letrs, th Cut Speling tecniqe for reforming english speling substantialy improves th eficiency of th ritn languaj in respect of econmy, simplicity and fonografic regularity, wile ensuring th new orthografy and th old ar mutuly compatbl. Howevr these criteria of econmy, simplicity, regularity and compatbility conflict with each othr in certn wel-defined orthografic environmnts, and decisions then hav to be made as to wich criteria shud take precednce. Thus: exessiv econmy benefits th riter at th expense of th readr; th visul disturbnce of removing silent initial letrs (as in *naw, nee, rong)* reduces compatbility between old and new forms; and mecanicl aplication of th 3 cuting rules somtimes blurs crucial distinctions (as between long and short vowls). Sub-rules ar therfor required, to alow exeptions to th main rules. This articl discusss th main circmstnces in wich such conflicts arise and makes som tentativ sujestions as to how they may best be resolvd.

1. INTRODUCTION

1.1 Th rationale of Cut Speling (CS)

Th CS aproach to english speling reform, as orijnly conceved by Valerie Yule and subsequently systmatised by th presnt authr, primarily involvs th omission of redundnt letrs, rathr than any holesale respeling of words or sounds. This.aproach has sevrl importnt featurs to comend it.

- Historically: As shown in th articl *Cut Spelling — a Linguistic Universl?,* **[1]** th riting systms of many languajs (including english) hav evolvd particulrly by omiting symbls that hav outlivd ther usefulness; omission is thus a comn manifestation of orthografic progress.
- Sycolojicly: Omiting redundnt letrs preservs th familir apearance of words (gestalt) betr than dos substituting letrs; as a result, readrs skild in Traditionl Orthografy (TO) can read CS without instruction, and children educated in CS cud stil read TO.
- Educationly: Omiting redundnt letrs elimnates many of th most dificlt featurs of TO wich ar especialy err-prone, as demnstrated in th articl *Can Cut Speling Cut Mispeling?* **[2]**
- Intrnationly: Omiting redundnt letrs not only restors many mor fonografic spelings used in elizabethan or chaucerian times, but it also brings many english words closer to th speling of related words in othr european languajs, so helping english speakrs lern foren languajs and non-nativ speakrs lern english.
- Foneticly: Omiting redundnt letrs rarely encountrs problms with conflicting accents, since it starts by asking wat is rong with TO rathr than how words ar pronounced.
- Economicly: CS makes th hole riting systm of english less cumbrsm, al riting tasks (wethr handriting, typing, printing, etc) can be performd 10%+ fastr, and corespondingly less space and fewr materials ar needd; in an eficiency- and econrny-concius world, that is an importnt benefit.

1.2 Th rules of CS

To establish wich letrs ar redundnt, th definition used is: 'letrs ofring no sycolojicl asistnce to th human readr or riter'. They nearly al fal into one of 3 categris:

1. Som, like <b> in *debt,* ar totaly irelevnt to pronunciation. Rule I of CS therfor produces th form *det*.
2. Many, like th alternativ spelings for th 'obscure' vowl shwa wen it precedes final <1, m, n, r> ar hyly unpredictbl; similrly th insertion of <e> in many inflexions givs rise to frequent speling uncertnty. TO itself somtimes omits these vowl-letrs anyway (as in *apple, spasm, isn't, centre, hated,* rathr than *appele, spasem, isen't, centere, hateed),* but CS dos so regulrly. Rule 2 of CS thus produces th forms *apl: chapl, spasm: fathm, isnt: presnt, centr: entr, hated: hatd, puts: pushs, volubl: valubl.*

3. TO dubls consnnts frequently but inconsistntly and usuly unecesrly. Rule 3 of CS says that consnnts ar not normly dubld, so regulrising numerus spelings that difr by singl or dubld consnnts in TO, as *copr: propr, rabit: habit, ad: bad, abreviate: abrij, afraid: afray, inoculate: inocuus.*

With a litl practice these rules ar soon mastrd, and once lernt can be aplyd straitforwrdly across th languaj. Howevr ther ar circmstnces wher such cuts ar fonograficly misleading, or hav disadvantajs that may outwei th advantajs, and this study wil try and catalog them. Readrs ho hav not atemtd to use CS may form th impression that th hole systm is ridld with problms; but this is not in fact so, th systrn is jenrly clear-cut and simpl to oprate, and it must be remembrd that no speling systm has yet been devised for english that avoids al problms. CS has to be jujd not by th legacy of problms it inherits from TO, but by how much it improves on TO. Th problms ar points of detail, and ar not centrl to CS as a systm; but they do need furthr discussion and reserch. Nevrthless, despite som remaining uncertntis in th detail, th CS systm as a hole has been refined and basicly proved itself thru years of practicl experience, as readrs wil apreciate if they hav folod its developmnt in th pajes of th SSS *Newsletter and Journal* since 1985.

In adition to th 3 rules for cuting letrs, th authr curently aplys 3 limitd letr-chanjing rules wich also remove serius inconsistncis in TO and at th same time shortn th speling of many words. These letr-chanjing rules ar:

- Wen TO spels /f/ as <gh> or <ph>, CS substitutes *<f>: tuf, fotograf.*
- Wen TO represents th vowl in *high, sign* by <ig>, CS substitutes <y>: *hy, syn.*
- Th sound of <j> is always ritn <j>, nevr *<g, dg>: juj, jinir.*

These letr-chanjing rules ar not an esential part of CS, but ar curently included because th coresponding TO spelings create considrbl uncertnty and dificlty, and, unlike most othr letr-chanjing rules, these thre ar simpl and self-containd, and do not giv rise to a chain of complications elsewher in th systm.

2. BREVITY vs READBILITY

2.1 Brevity as eficiency

Brevity itself can mean eficiency, altho it dos not necesrly do so. We can se this if we compare th 3 alternativ ritn forms of th names of years: arabic numerals (e.g. *1957),* roman numerals (e.g. *MDCCCXLVII),* and alfabetic letrs (e.g. *nineteen-hundred-and-forty-seven*). Th arabic numerals take up least space, ar red and ritn fast and acuratly, and do not require a nolej of english. Relativly short and also intrnationly undrstood, but awkwrd both to en- and decode, ar th roman numerals: most readrs wil probbly not imediatly recognise wethr or not th abov exampl represents th same year as th arabic numerals or th alfabetic rendring. Th alfabetic form by contrast requires a nolej of english and is cumbrsm both for readrs, ho require at least two y- fixations, and for riters, ho need nearly 8 times as long to rite it as th arabic numerals. In these exampls, th most economicl form is th most eficient for both readrs and riters.

2.2 Exessiv brevity
Howevr, a conflict of eficiency criteria can arise from th difrnt needs of riters and readrs. For th riter th shortst posbl representation of words may be th most eficient; but, as with shorthand, exessiv brevity can impede reading.

Th potential problms of exessiv brevity ar seen in Ayb Citrons *SPD SPLG,* [3] wich acheves much gretr econmy than CS, but at th cost of ful sound-symbl corespondnce. *SPD SPLG* uses 100 wordsyns (singl letrs, digrafs, trigrafs and som longr forms, each representing a hole word hose TO form is much longr), but th script is hard, if not imposbl, to decifer, unless one lerns th code. Considr th sentnce

D u hav t x tu fays t cmty n c u d t job?

wich shud be red as *"Do u hav th experience to face th comitee and can u do th job?"*

As wel as needing to memrize th 100 word-syns, th readr may face sevrl perceptul dificltis with this script:

- a string of singl-letr words like *n c u d t* is not esy to distinguish from a singl word with widely spaced letrs.
- a 1-letr misprint may disrupt th meaning of a hole sentnce, insted of slytly distorting th apearance of a singl word, wich is usul th worst efect of misprints in TO (se Knowles on Information Theory [4]).
- a succession of short words of equal length may be hardr to read fluently than words of mor varid length — tho th sycolojy of reading in chinese and japnese, hose caractrs normly ocupy a square blok of similr size, may hav mor to tel us about that.

2.3 How myt CS afect reading speed?
Wat efect CS myt hav on reading speeds is a complex question. John Kerr gave a sycolojists vew: [5] "Most of the time spent during reading is taken up by the processes involved in understanding the text rather than simply decoding the symbols … readers of a system like CS may not read faster, for the same reasons." Valerie Yules experimnts [6] at least demnstrated that adult readrs quikly overcom th setbak caused by th initial unfamiliarity of CS. Th presnt riter has no experimentl evidnce, but he needs furthr persuading that no time at al can be saved if fewr y-fixations ar required (th fastr reading of arabic numerals in year-names shos that brevity can help at least somtimes).

Ther is howevr a rathr difrnt reasn wy th gretr brevity of CS may not produce corespondingly fastr reading. Wen word-length is reduced, it autmaticly folos that th *variety* of word-length is reduced too; but length is in itself one of th distinctiv featurs of words in ther ritn form, so that th words *their written form* (5, 7, 4 letrs respectiviy) ar in that respect mor obviusly distinct than ar *ther ritn form* (4 letrs each). Therfor it is posbl that with mor uniform word-length, a givn line-length may hav to be red mor sloly and with gretr concentration, altho, even if 100 lines of text take longer, this dos not mean that 100 words canot stil be red fastr in CS. Only sycolojists can resolv such questions; th experimnts cud be conductd in TO to establish wethr readrs scan texts mor sloly wen word-length is mor uniform.

Th foloing sentnees hylyt by exajration certn efects on th apearance of text that can arise wen word-length is cut.

1 CS: *Confrnces ar pland anuly in Lestr.* (28 letrs)
TO: *Conferences are planned annually in Leicester.* (40 letrs)
2 CS: *He ot to go to th in if lo clouds threin.*

(30 letrs, 9 consecutiv 2-letr words)

TO: *He ought to go to the inn if low clouds threaten.*
(38 letrs, maximm 3 consecutiv 2-letr words)

3 TO: *The two men had now put the big box in the hut.*
(11/12 words of 3 letrs)

Sentnce 1 is over 40% shortr in CS than in TO, and readrs, wil observ how much fastr th y scans th CS version. Sentnce 2 shos how, by shortning spelings jenrly, CS reduces words to a mor uniform length; in this extreme case th long string of 2-letr words makes them visuly less distinctiv and therfor perhaps requires mor concentrated reading (with th add dificlty here of frequent repetition of <o, t> in a very short space); but th 27% longr TO version may stil take longr to read. TO itself can of corse also contain a succession of words of equal length, as in Sentnce 3; th readr may like to considr wethr it apears hardr to read than mor varid text myt. If experimnts proved that strings of 2-letr words, as in CS sentnce 2, do impede reading, th dificlty cud be reduced by leving th definit articl and som othr comn short words uncut.

It is thus clear that th brevity of CS benefits th riter, but it is not yet clear how far, if at al, such brevity helps th skild readr. But even if th skild readr is scarcely helpd, th lernr wil benefit from th much gretr regularity of CS and its relativ lak of dificlt spelings compared with TO.

2.4 Letrs redundnt in som accents only

A very difrnt kind of conflict between brevity and readbility in CS arises from discrepncis in pronunciation between accents. One of th advantajs of CS is that it dos not usuly favor a particulr accent by implying one exclusiv pronunciation for a word — most redundnt letrs ar redundnt in al accents. Thus no accent pronounces <b> in *debt* or <e> in *apple,* nor dos any accent require dubld consnnts in *accommodate.* Likewise few problms arise in CS, as they do in many reform proposals, over how th vowls ar pronounced (and hence how they shud be spelt) in sets of words like *but, put, truth, suit, hue,* or in *blood, good, room, food, new.*

Howevr ther ar a few patrns wher a letr pronounced in one accent is silent in anothr. Shud CS then encuraj som speakrs to cut letrs out wich othr speakrs wud want to keep? In jenrl alternativ spelings must be undesirebl, as they wud undrmine th world-wide unity of ritn english as a comunication standrd; and foren lernrs wud presumably then hav to lern alternativ spelings (as to som extent they do now).

One exampl of a patrnwher perceptions of redundncy vary between accents is found in words like *secretary, monastery, raspberry, territory, armoury, jewellery.* Many british peple find th speling of th penultimat vowl-grafeme in such words unpredictbl, since they eithr totaly elide th vowl, or at least reduce it to shwa. For these speakrs it wud be very helpful if th letrs concernd wer cut, giving th CS forms *secretry, monastry, rasbry, teritry, armry* (cf. CS *armr), jewlry;* a modl for this cut is perhaps seen in *wintry,* wich has entirely suplantd th oldr alternativ *wintery*. Howevr americns oftn giv these vowls a clear valu and myt find th cut unreasnbl, tho paradoxicly they alredy rite *jewelry.*

A reverse anglo-americn exampl is that of th <-ile> words such as *fertile, hostile, missile, volatile,* hose final sylabl americns tend to reduce to sylabic <l>, so making homofones of *hostel:hostile, missal:missile.* Th cut forms *fertl, hostl, missl, volatl* shud therfor be apropriat for americns, if not for th british. It is howevr worth noting that formr speling of *fossil* as *fossile.*

Th <wh> words ar similrly contentius. Th distinction between <w> and <wh>, not much made in England, may be insistd upon by americn and scotish teachrs. Shud one therfor rite *wat, wen, wich,* wy for th sake of those ho do not distinguish th voiced/unvoiced valus of <w, wh>, or shud

one keep th <h> in those words to preserv a distinction that for many english is a major speling-trap? (Th authr always hesitates between *weather:whether, and* much prefers *wethr* for both.) An argumnt for merjing both spelings as <w> is that al users wud benefit from th econmy and certnty of these forms, wich no mor need to be disfinguishd than do th voiced and unvoiced valus of <th>.

Alredy in TO ther ar ocasionl difrnces of speling between Britn and America wich reflect th absnce of a vowl-foneme in americn english that is presnt in british english:

> british *aeroplane, aluminium*
> americn *airplane, aluminum.*

If worldwide uniformity was not regardd as paramount, such speling distinctions cud provide a modl for difrnt CS forms
too: if th british now rite *aluminium* with one more <i> than th americns, they cud do th same with *fertile*.

Yet mor dificlt to resolv is th question of redundncy in th word *your.* Al speakrs agree that TO *your* shud not apear to rym with *our;* but ther is no agreemnt as to wethr th form *yor* or *yur* best reflects th pronunciation. In jenrl CS trys to cut <ou> wen it dos not represent th vowl in *out, as* shown by th foloing words:

> TO *sour, source, scour, course, our, journey*
> CS *sour, sorce, scour, corse, our, jurny*

For *your* CS curently proposes th compromise wordsyn yr, alredy farnilir as an abreviation.

These exampls concern variations between th domnnt pronunciations of english, RP and jenrl americn. Not surprisingly, discrepncis can also arise between these major accents on th one hand and local accents used by only a few milion peple on th othr; such is th distinction made by som welsh speakrs between th last sylabl of *principal* and of *principle,* or th scots pronunciation of *plaid* as ryming with *made* rathr than with *bad.* No global speling systin can atemt to reflect al local variations, and CS here rites *principl, plad;* but it is not always obvius wher th line shud be drawn. Shud we for instnce, as Robert Craig and Edgar Gregersen hav haf — seriusly sujestd, no longr rite th aspirated <h> because many english peple do not pronounce it (e.g *ouse* for *house)?* Such a cut wud doutless be stigmatised by 'educated' speakrs of th major accents, but systemicly it is no difrnt from droping th <h> from th <wh> grafeme. Ultimatly it seems inevitbl that ther shud be a ranje of pronunciations of words that ar aproved as having to be representd by th speling, wile othr pronunciations fal outside orthografic bounds (a point acceptd, from a scotish point of vew, by David Stark).

Howevr, wile speling reforms that start by defining pronunciation constntly fal foul of this probim, CS dos so rathr rarely, th abov patrns being th most widespred.

2.5 Conclusion: CS brevity no obstacl
Pending furthr evidnce, wethr from sycolojicl experimnts or from major accents of english, ther wud seem to be no grounds for fearing that CS has been systemicly too drastic jenrly in its treatmnt of TO. One reasn for this optimism is that CS (unlike som forms of speedriting) sets out to respect that fundament principl of alfabetic script: that it shud spel out th ful fonemic structur of words, so giving gidance to riters as to speling, and to readrs as to pronunciation.

Readrs may howevr question wethr this princípt is observd in a CS form like *opration,* wher th pronounced <e> is cut out from TO *operation.* Later sections of this articl and its sequel wil discuss

this patrn and othrs wher cuts may indeed at first syt apear exessiv.

3. ACTIV TRANSFER EFICIENCY

3.1 Ho needs to lern th cuting rules?

An importnt eficiency-criterion for CS, as for any reform that claims to be suitbl for imediat implantation, is th simplicity of its rules for th lernr. We may cal this Activ Transfer Eficiency: how esily th systm can be lernt by adults skild in TO ho wish to use th new systm. Here we must undrstand that th numbr of peple needing to lern th cuting rules wud be very smal. Scoolchildrcn wud lern CS straitaway as th norm, and nevr need to cut TO: TO for them wud just be a mor complicated systm stil used by adults. Th vast majority of adults wud only need to read th new spelings, and wud nevr be oblijed to rite them. Th only peple ho wud need to mastr th cuting rules as such wud be th relativly few adults ho for professionl reasns had to lern to rite th new systm themselvs; they wud necesrly include teachrs, and in du corse perhaps jurnlists, typ-setrs, secretris, and som othr categris. We myt howevr anticipate that many othr adults wud find th simplicity and brevity of CS an incentiv for lerning it voluntrly.

3.2 Simpl transfr from TO

For adult lernrs a ke eficiency criterion wud be th simplicity of th rules: th fact that just 3 main rules ar suficient for converting most english words from TO to CS. These rules ar far simplr for instnce than th rules for lerning a ful fonemic orthografy, wich requires 40+ grafemes to be lernt for an agreed set of fonemes, as wel as a standrd pronunciation — for al of wich a major reeducation exrcise wud be necesry. It is esy to se how much closer CS is to TO than a fuly fonemic orthografy, if we compare a short text ritn in th two systms. Th Simplified Spelling Societys *New Spelling* (NS), th fuly fonemic proposal publishd in 1948 [7], included th foloing sentnce:

NS Agaen let us not forget huu form dhe graet majorrity ov dhoez dhat lurn to reed and riet.
CS Again, let us not forget ho form th gret majority of those that lern to read and rite.

In NS, th speling of 11/18 words has been chanjed, 2 of them shortnd and l lengthnd. In CS, a new speling is needd in only 5 words, and is acheved in evry case merely by omiting a letr from TO. In th fonemic systm adult lernrs hav conciusly to create th speling of each word, wile in CS they only hav to monitr and cut th familir TO form.

3.3 Total mastry unecesry for adults

Adults lerning to aply th CS rules start by monitring th letrs in words as they rite them, omiting those that ar redundnt. But especialy if first atemts ar chekd and errs corectd, th systm is quikly lernt and confidnce gaind, indeed th relief at dispensing with many uncertntis of TO soon becoms a positiv incentiv to using th systm. Befor long th CS forms becom automatic, indeed one user even abandnd CS because he was afraid he myt be unable to return to TO. No dout adult professionls lik teachrs ho had to mastr CS wud need training, but it wud be less elabrat than th training teachrs receved for i.t.a. For one thing total mastry of CS wud be unecesry — only th words needd in th classroom wud hav to be practiced.

In jenrl, an importnt practicl advantaj of CS over a comprehensiv or fonemic reform is that even if not al redundnt letrs ar omitd, words ar stil imediatly recognisebl. Thus if we compare TO *accommodate, CS acomodate* with th two posbl intrmediat forms *accomodate, acommodate,* we se that al four forms ar equaly readbl. Here th moto "if in dout, dont leve out" is a useful safegard, in that it ensures that th speling used wil lie somwher on th continuum between TO and CS, and wil not be randmly mangld.

3.4 Ar ther any othr redundnt letrs?

Ar al redundnt letrs covrd by th 3 rules? Brodly speaking they ar, but a few patrns of redundncy

may not be entirely self-evidnt and so may require special lerning — or even be too controversial to be, acceptbl:

- th definit articl is cut to th, partly for th sake of econmy, but partly also to avoid th apearance of ryming with words like *be, me, se, ke.*
- *you* is cut to just u, because th TO form has th apearance of ryming with *thou,* wile its sound is merely that of th first sylabl of, say, *unit (u* also creates an intrnationl link, as it has th same meaning in duch).
- th TO forms of th trio *break, great, steak* ar hyly misleading, and by cuting out <a> CS at least produces th valu of <e> found in such words as *alegro, elite,* and *brek* machs its fuly fonografic countrpart in *brekfast;* these CS forms ar ofrd as an improvemnt on TO, altho they ar stil not perfect.
- similrly *broad* misleadingly resembls *road,* wile th CS form *brod* indicates not quite th short valu as in *rod,* but not too disimilr valu of <o> found in *or,* in *off* in som accents, and *ot* (th CS form of *ought).*
- in th same way, *group, soup* apear to contain th vowl *of south,* and by cuting them to *grup, sup* they aquire th valu of <u> found in *gruel, super;* howevr, it may be objectd of these forms that th valu of u is too reminisnt of its valu in *up*, and it myt therfor be wiser not to cut *group, soup* at al.

Th abov forms ar inevitbly among th most controversial proposed by CS. Esentialy th justification for forms like *u, brek, brod, grup* is that th TO digrafs <ou, ea, oa> ar seriusly misleading here, and altho th CS vowl-letrs may not represent th sound unambiguusly or precisely, they ar closer to it and so at least constitute an improvemnt over TO. It wud howevr be esy for CS not to make these cuts, if ther wer a consensus against them.

3.5 Eficiency for beginrs: consnnt strings

It must also be askd wethr any particulr lerning dificlis can be forseen for childrn or forenrs in CS, wich ar not alredy presnt in TO. Th advantajs of CS over TO (econmy, regularity) for th lernr ar evidnt, but som teachrs fear problms with consnnt-strings. Because CS cuts out mor vowl- than consnnt-letrs, consnnt strings tend to be longr and mor frequent than in TO, and since children find consnnt-strings dificlt in TO, teachrs wondr wethr th problm myt be agravated in CS. TO contains som complex 5-letr consnnt-strings, as in *eighths, strengths,* but they ar fairly rare. In CS, on th othr hand, strings ocur quite regulrly with up to 7 consnnt-letrs, as in *govrnmnts, circmstnce, aftrwrds, complmnts.* Ther ar howevr sevrl reasns for beleving that, watevr trubl consnnt-strings in jenrl may cause, in CS they make th speling esir rathr than hardr to handl:

- th new CS strings corespond to foneme-strings (evry letr in *complmnts* is predictbly pronounced) and so can be soundd out; but in TO th pronunciation is litl gide to th speling of th consnnt-string in *eighths.*
- th cut vowl-letrs in th CS consnnt-strings do not reflect pronunciation, and ar therfor ofn mispelt in TO; ther is for instnce no obvius reasn for th difrnt final vowl-letr in *adamant, government;* this problm disapears in CS *admnt, govrnmnt.*
- th long strings ar made up of identifybl morfemes wich can be taut. So *aftrwrds* consists of th familr *aftr* folod by th comn sufix *-wrds;* and *govrnmnts* ends in th norml plural inflexion -s, preceded by th comn sufix *-(m)nt,* wich is atachd to th root, th verb *to govrn,* wich teachrs can pronounce roticly to sho that it dos not rym with *ovn.*
- as wel as creating new consnnt-strings, CS also reduces strings that cause particuir trubl in TO, as wen *caught, ,fetch, scene* becom *caut, ,fech, sene.*
- ther ar significntly fewr letrs in CS altogethr, so that th overal lerning load is reduced.

3.6 Conclusion: inherent simplicity

This section has tryd to sho that th CS rules ar inherently simpl to lern and to oprate. Howevr, ther ar cases wher this
criterion of Activ Transfer Eficiency conflicts with othr criteria, and wher rathr sutlr discriminations hav to be made than th 3 basic rules themselvs cater for.

4 PASSIV YRANSFER EFICIENCY

4.1 Compatbility

Next to be considrd is th criterion of compatbility between old and new orthografis. CS is based on th premiss that a Staje 1 reform that wud radicly chanje th apearance of ritn english is politicly unrealistic and sycolojicly unwise. Th old and new orthografis must be compatbl with each othr in both directions: adults must be able to read th new systm esily (forwrds compatbility), and children must be able to read th old systm esily (bakwrds compatbility), without extensiv re-education. This two-way compatbility between new and old, wich we may cal Passiv Transfer Eficiency, means that words must remain esily recognisebl. CS acheves this by its tecniqe of mainly just omiting sycolojicly and fonograficly redundnt letrg, wheras a reform that chanjes many letrs, especialy stressd vowls, is visuly or disturbing and hence less compatbl, as wil now be shown.

4.2 Forwrds compatbility

Th sentnce *"To the learner interested in the history of the language the old spelling would be easily accessible" is* now givn in 3 reformd orthografis, 1 as quoted from th 1948 *New Spelling,* 2 in Simplified American Spelling, **[8]** and 3 in CS, togethr with statistics indicating th degree of chanje from TO:

1 *To dhe lurner interested in dhe history ov dhe langgwej dhe oeld speling wood be eezily aksesibl.*
15/80 chanjed letrs, length = TO -5%
2 *To th lurner interested in th history of th langgwej th oeld speling wuud be eezily acsesibl.*
10/76 chanjed letrs, length = TO -10%
3 *To th lernr intrestd in th histry of th languaj th old speling wud be esily accessbl.*
1 chanjed letr out of 68, length = TO -20%

First reactions to th thre difrnt spelings wil be impressionistic, but almost certnly th readr wil hav found th first version hardst to read, th secnd version esir, and th CS version esiest th <j> in *languaj* being th only unfamilir letr. Th implication is clearly that th mor chanjed letrs an orthografy contains, th hardr it is to read unprepared. CS indeed positivly lends itself to imediat fluent reading: th esentials of th TO gestalt of most words ar preservd, and th fastr one reads, th less one notices that letrs ar missing. Th eficiency observd here, then, is a matr of how fluently th uninstructd readr scans text in th reformd orthografy. But altho this forwrds compatbility is a gret strength of CS, it may somtimes conflict with th first eficiency criterion, that of Activ Transfer Eficiency for adults, in othr words with th regularity of th 3 cuting rules.

4.3 Degrees of forwrds compatbility in CS

Ocasionly th regulr aplication of th 3 CS rules results in considrbl disturbnce to th familir apearance of words in TO. Th foloing grups of words sho a progressivly increasing degree, of visul disturbnce, from th very slyt to th seriusly disruptiv. In th first grup, th cut is not very conspicuus:

unconstitutionl
receit (cf *deceit* — also *etymolojicl eficiency*)
leve, sleve, receve, beleve (cf *eve, but receit, belief*)

In th next grup of words th cut is visuly mor disturbing because th initial letr (i.e. th most promnnt letr) is dropd from th TO form:

nat, neel, nemonic, syche, rong

As wel as undrgoing a 50% cut and losing both its first and last letrs, th foloing speling introduces an aditionl elemnt of disturbnce by merjing th homofones *know, no:*

know → CS no

Perhaps th most severely cut words of al (if th norml CS rules ar mecanicly aplyd) ar th foloing, th first indeed losing 66% of its letrs:

eye → y, eyesight → CS ysyt
honour → CS onr, honourable → CS onrbl.

Th absnce of a letr from th midl of a word of medium length or longr may not even be noticed in fluent reading (any mor than we notice many misprints), because most of th time we read wat we expect to read. Th conflict of criteria we observ in th mor disturbing of th abov exampls is between compatbility with TO, wich is rathr lo, and regularity both of th cuting-rules and of sound-symbl corespondnce, wich is hy; and we hav to ask wich criterion shud hav priority. Shud we say that for instnce th word *y* shud keep its first fonograficly redundnt <e>, and *onr* keep its redundnt initial <h> *(ey, honrbl,* in ordr to remain esily recognisebl, or shud *eye* be spelt regulrly, as *my* without th <m>, and *honour* like *on* with a sylabografic <r> add? Speling reformrs may prefer regularity in these circmstnces, but th public, wich must be persuaded to accept th forms, is likely to atach hyr priority to familiarity, in othr words to forwrds compatbility.

4.4 Repeatd consonnts

At first syt disturbing in CS ar th repeatd consonnts with repeatd pronunciation, as in *probbl, needd, maximm, linn, terr.* This fonografic device dos not ocur at al in TO, and is therfor a complete novlty for th readr encountring it for th first time. Such repeatd consnnts must be clearly distinguishd from th dubld consnnt letrs that ar such a comn but iregulr and trublsm featur of TO; but they do hav som afinity with th repeatd <c> with difrnt pronunciations in words like *accent, success.*

Th visul disturbnce of repeatd consnnts in CS is a direct conseqence of th regularity of th systm. Th speling of th last sylabl of words like *hooligan, beaten, cotton, important, different* is regulrised by reduction to sylabografic <n> *(hoolign, beatn, cotn, importnt, difrnt).* Regularity then requires th same reduction even if, as in *linen, cannon* etc, th preceding letr is also <n>: *linn, cann.* Th dilema we face is wethr to complicate th cuting rules and introduce systemic iregularitis by making exeptions in these cases for th short term benefit of readrs transfering from TO, or wethr th visul disturbnce for these readrs is a price worth paying for th long term regularity of th systm. Readrs do aftr al soon becom acustmd to new forms.

Two aditionl peculiaritis shud be mentiond in this context. Th first arises if, as apears necesry, final <ss> is not simplifyd in CS, as in words like *class, miss.* In that case, forming inflexions by th adition of just <s>, as is th norml CS patrn, rathr than with <es> as in TO *(classes, misses),* results in endings with 3 consecutiv <s>s: *classs, misss.* Like th othr repeatd consnnts, this patrn is not in itself a problm, and th readr soon becoms acustmd to it; but at first syt it undoutdly apears stranje. Mor awkwrd on transfer from TO is th past tense inflexion of th verb *to ad,* wich by th regulr CS rule becoms add (cf. *needd*). If this word is taken out of context, ambiguity dos apear to constitute a real problm of both forwrds and bakwrds compatbility between TO and CS. Howevr, th context usuly makes th meaning clear, as in th sentnce: *to form th past tense, in CS, th letr <d> is simply add to th root,* but a sentnce like *we add <d> to th root* myt at first be misundrstood as th presnt rathr than th past tense.

4.5 Bakwrds compatbility

Now let us considr bakwrds cornpatbility. How esy wud it be for children ho had lernt CS to read

TO? They wud aftr al need to be able to do so for many years, since ther parents wud mostly stil use it, as wud al erlir printd material. We can esily juj forwrds compatbility just by considring how hard we ourselvs find it to read text in th new speling; but asessing bakwrds compatbility is mor dificit, as we hav to imajn ourseivs having lern to read and rite in a mor fonografic orthografy than TO, and then looking at TO with difrnt ys from our own.

John Downing pointd to th kind of problm that can arise, wen he described **[9]** how on transfer from i.t.a. children tend to misread TO *shoe* as *show,* since *show* is spelt <shoe> in i.t.a. TO *one* can also be such a trap if its speling is reformd to represent its pronunciation: if th lernr is familir with 'majic' <e> aftr a consonnt as a way of indicating a preceding long vowl (as in *bone),* th form <one> must apear to be pronounced as *own* (just as in TO beginrs ofn pronounce the word *once* as tho it wer spelt *onki).* Anothr problm wud arise with miniml pairs if childrn wer taut <s> for th unvoiced siblnt and <z> for th <s> inflexion in TO: a child ho lerns *hence* with th speling *hens* is bound to be confused on encountring TO <hens>. Similrly th TO forms *come, comb, comma, coma* contain th seeds of multipl confusion if a reformd orthografy atemtd to spel them fonemicly. Even CS wud merj *coma, comma* if Rule 2 for simplifying dubld consnnts wer aplyd rijidly (it is here asumed that in such cases th dubld consonnt has to be kept, and in jenrl that CS shud not cut letrs if hetrofones wud result). Th abov exampls sho th dificltis of bakwrds compatbility that wud arise particulrly from a speling reform that actuly chanjed th letrs in words.

4.6 Bakwrds compatbility of CS

By not changing many letrs, CS larjly avoids this problm. One way to visulise how TO myt apear to those ho had been taut CS is to look at elizabethan speling, wich difrs from TO much as TO difrs from CS: mainly by extra letrs. Th foloing sentnce has been selectd from th 1588 *Bishops Bible* for its particulrly markd deviation from TO, with th TO and CS versions aftr it for comparisn:

> *BB Beholde the fowles of the ayre: for they sowe not, neyther doo they reape, nor carrie into barnes.* (77 letrs),
> *TO Behold the fowls of the air: for they sow not, neither do they reap, nor carry into barns.* (69 letrs)
> *CS Behold th fowls of th air: for they so not, neithr do they reap, nor cary into barns.* (64 letrs)

Th 1588 version is not dificlt to read today, and it contains a similr proportion (about 11%) of letrs that ar cut in TO as TO jenrly contains letrs that ar cut in CS. From this comparisn we can convincingly imajn how TO wud apear to a readr educated in CS: not hard to undrstand, but arcaicly grotesq in th irationality of its forms.

A slyt dificlty myt be th gretr variety of letrs CS cuts from TO, including special hazrds like <gh>; but it is probbly no mor serius than our momentry puzlmnt wen confrontd with th Elizabethan habit of using <i, j> and <u, v> intrchanjebly in forms like *ivdge, lesvs* for *judge, Jesus.* Th foloing sentnce has been composed to exajrate th dificlty that cud arise if a TO text containd an exeptionl density of unprodictbl extra letrs:

CS: Tho thot tuf, english speling ot to be taut ryt enuf. (41 letrs = TO -30%)
TO: Though thought tough, English spelling ought to be taught right enough. (59 letrs = CS + 44%)

This exampl incidently demnstrates poor compatbility both bakwrds and forwrds. Th econmy of th CS version is striking, but it is particulrly th many non-fonolojicly motivated extra letrs in th TO version wich reduce bakwrds compatbility (i.e. make reading hardr for CS-educated readrs). Obviusly, howevr, such an absurdly artificial exampl dos not imply that CS-educated readrs wud normly hav dificlty in decoding TO in a real reading situation; and presumably in th erly years of reform they wud be warnd of th <gh> anomly in TO, altho they wud not hav to lern it.

4.7 Conclusion

We hav here examnd conflicts between Activ Transfer Eficiency (mecanicly aplying th 3 cuting rules) and Passiv Transfer Eficiency (bakwrds and forwrds compatbility, making CS as esy as posbl for adults, and TO as esy as posbl for children). We hav found that ther is a dilema: if we try to minmise difrnces in apearance between TO and CS, we need exeptions to th main cuting rules of CS; but if we want to make CS as simpl, regulr, fonografic and predictbl as posbl, then we shud giv priority to th 3 main CS rules, howevr stranje th resulting speling may look. We wud then hav a betr speling-systm for futur jenrations — but probbly at th expense of imediat public acceptbility.

ENDING PART 1, INTRODUCING PART 2

Part 1 of Conflicting Eficiency Criteria in CS ends by stating the dilema that now arises for th furthr developmnt and promotion of CS. In fact it is a dilema wich faces al speling reform scemes: wethr to giv priority to a systm that is linguisticly and sycolojicly sound in itself, or to make concessions at th outset to expectd public dislike of th weirdr-looking forms proposed. This paper has atemtd to catalog som of th detaild choices that wil hav to be made, along with th considrations that need to be born in mind in making those choices. Th secnd part of th study, to apear in isu 1989/1 of th *Jurnl,* wil then deal with furthr importnt choices that th CS systrn presents; th most importnt hav to do with th distinction between short and long vowls and with th hierarchy of ambiguitis in TO and CS (homofones, homografs, etc).

Meanwile, readrs ar urjd to considr th points alredy made, and send in ther observations.

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[See Part 2 in **Journal 10** Item 7]

[Journal of the Simplified Spelling Society, 9, 1988/3 pp.23–26 in the printed version]

7. Submission to the National Curriculum English Working Group from the Simplified Spelling Society July 1988

Chris Upward

1. This submission.

In May 1987 the Simplified Spelling Society submitted a paper on English spelling to the Committee of Inquiry into the Teaching of English Language, and followed it with some comments on the Committee's Report early in June 1988. Now that these comments have been passed on for consideration by the English Working Group, the Society feels that they require to be further developed if they are to be positively useful. Essentially, our comments on the Kingman Report pointed out that it offered an inadequate view of English spelling; but we did not then back up our criticisms with any constructive suggestions. This we now think it incumbent on us to do.

This submission has been compiled by the Editor of the Society's *Journal,* in consultation with its Chairman and other committee members...

2. The Kingman Report on learning to spell English.

Despite our criticisms of the Report, we are in full agreement with the basic approach to the learning of spelling it puts forward. This approach is founded upon a correct understanding of the way in which alphabetic writing systems operate, and it is epitomised in the following phrases from the Report:

p.7 "the alphabet, how it relates to the pronunciation of consonants and vowels"
"the spelling-patterns of English
and how much regularity there is in English spelling"
"the way in which regular plurals and past tenses
are formed in Standard English"
"regular patterns of spelling"
p.52 "the relationships between sounds and spelling patterns"
p.53 "all languages are rule-governed systems"
p.54 "spell correctly"
"understand main correspondences between letters and speech-sounds"
"understand that spelling obeys rules"

The experience of many other languages and of the Initial Teaching Alphabet and similar regular spelling systems for English shows that when spelling is taught by these principles, literacy skills are acquired quickly, reliably and with high motivation. It should be the aim for standard English spelling to be taught by methods which embody these principles too.

3. The irregularity of English spelling.

However, as our comments on the Report made clear, whatever rules and regularities the English spelling system may contain, it is the irregularities that are its most significant feature. In fact the Report's own examples of spelling patterns illustrate this very point most appositely, in that they are mutually contradictory and conflict with the "main correspondences between letters and speech-sounds". Besides recommending principles for teaching spelling, the Report should have

considered why it has always proved impossible to apply them effectively to English spelling as we now know it. (The endless sterile debate between the advocates of phonic versus whole-word teaching methods is merely another facet of the same problem.) The present system of spelling is a major obstacle to the acquisition of literacy-skills in English worldwide, and any practical policy for improving proficiency in written English must address this problem.

4. Spelling rules: the example of <-ed>.

Although the Report lists several spelling patterns and repeatedly refers to rules, it does not actually give any examples of rules. It must be understood that not only are the present patterns of English spelling contradictory (which means that learners cannot be sure which pattern to follow), but its present rules are not suitable for teaching. We will now demonstrate this in respect of one of the Report's own recommendations, namely that pupils should understand "the way regular … past-tenses are formed in Standard English." The following is a quotation from the Oxford University Press's *Hart's Rules,* which is perhaps the most authoritative source for the writing conventions of British English, and it deals with one aspect of "regular" past-tense formation, namely the doubling of consonants:

> *Words of one syllable*
>
> Those ending with one consonant preceded by one vowel (not counting the u in *qu*) double that consonant on adding *-ed* unless it is *h, w, x* or *y*. [1] Monosyllabic words not ending with one consonant preceded by one vowel generally do not double the final consonant.
> [1] But note bused (in the sense 'transported by bus').
>
> *Words of more than one syllable*
>
> Those that end with one consonant preceded by one vowel double the consonant on adding -ed, if the last syllable is stressed (but not if the last consonant is *w, x*, or *y*). But words of this class not stressed on the last syllable *do not double the last consonant* on adding -ed, unless the consonant is *l*.
>
> In words ending in *l* the last consonant [2] is generally doubled whether stressed on the last syllable or not. Exceptions: *appealed, paralleled, travailed*.
> [2] Exceptions are *worshipped* and words ending in *l*.

There are a several important observations to be made about this rule:

1. It deals with only one aspect of regular past-tense formation in written English; there are further complications, for instance when the base-form of verbs ends in <e> or <y>.

2. Much (but not all) of this rule applies also to the addition of some other suffixes — but not of all suffixes.

3. Little that children can be taught about the alphabet and sound-symbol correspondences will help them in mastering this rule, whose quite unnecessary complexity should have no place in modern education or in a modem writing system. In fact nearly all regular past tenses in English can be far better represented in writing if simple morphophonemic rules or rules of sound-symbol correspondence are applied, indeed the addition of <-d> to the base form of the verb could in practice be sufficient in nearly all cases. But such regularity cannot be achieved without some simplification of the spellings themselves.

4. Hardly any users have a confident mastery of this rule as it stands. *Hart's Rules* is itself guilty of inconsistency in describing *appealed, travailed as* exceptions — they are almost certainly not (or if they are exceptions, then other words like *revealed, prevailed* are so too), though the wording of the rule is unclear on this point. Similarly the Kingman Report fails to observe the rule in its use of the *form focussing:* by and large <-ing> endings follow the same rule as <-ed> endings, and *focusing* would therefore seem to be the required form.

5. 'American' spelling uses a slightly simplified version of the rule that also accords rather better with sound-symbol correspondence. Whereas according to the rule as stated above *travelled, compelled* have the appearance of rhyming, the American forms *traveled, compelled* reflect the different pronunciations.

5. English spelling: an evaluation.

Enough has been said, we believe, to show why trying to teach the present spelling rules in schools has always been such a stultifying and frustrating task. We must next ask why English has these rules and whether they are necessary. Sometimes the reason for them is that scholars in past centuries believed that the etymology of words required a particular spelling (these scholars were not infrequently misinformed about the derivation of words, however); and sometimes the rules are systemically interconnected, so the one arbitrary rule is required to prevent confusion with another; but however they may be explained, the present rules do not constitute a global, rational scheme for the written representation of English. (As the Kingman Report implies, such a scheme can only be based on the basic alphabetic principle of consistent sound-symbol correspondence.) More than anything else the present rules are the haphazard product of an unplanned consensus of printers which emerged in the 17th century and which in many cases preferred an esoteric, irregular form to a previously existing simple, regular one (as when *debt* was preferred to *det* or *ache* to *ake).*

In practice the resulting spellings naturally have an extremely harmful effect on education wherever the English language is taught, and widespread functional illiteracy is the inevitable consequence. Not merely that, but all learners waste incalculable time and effort in attempting to master English spelling, their success is in the vast majority of cases less than it should be, and educational motivation suffers severely. The adverse effects are of course not confined to 'English' as a school subject, but hinder efficient performance in almost all school subjects. In science they obstruct pupils' grasp of specialist terminology; and in foreign languages two-way confusion occurs when pupils encounter randomly different (but often more rational) spellings for the 'same' words in foreign languages: compare English *abbreviation,* French *abréviation;* English *independent,* French *indépendent;* English *accommodation,* Spanish *acomodación;* English *build,* German *bilden;* English *when*, German *wenn*. Nor are the adverse effects limited to education: the whole process of producing text in English, a key economic and social activity, is a far more cumbersome, erratic, time-consuming and hence expensive task gm it need be.

6. A concept for improvement.

The Kingman Report stressed that pupils should learn how language changes in the course of time. While changes in pronunciation and grammar of language occur spontaneously and are scarcely susceptible to social decision, the writing of languages changes by deliberate, planned intervention. However, unlike almost all other languages, English has neglected to modernise its written forms to any significant degree for some 300 years; the biggest change in that period has

been the replacement of <1> by <s> nearly 200 years ago (on the initiative of publishers) while almost all other changes, such as *shew* becoming *show,* have only affected isolated words.

The Simplified Spelling Society has developed a fund of ideas on planned spelling change which are ripe for public discussion. The Society does not believe there can be anything like a panacea for the whole problem, and it is conscious of severe practical constraints on the steps that can be taken. Nevertheless, it does appear that within these constraints very substantial improvements can quite straightforwardly be made to the written form of English, to the immediate benefit of British education and the longer-term benefit of alphabetic communication in English worldwide.

The basic concept is very simple. As time passes, the ideas, information and systems taught to children in schools have to be updated to keep pace with the developing state of knowledge and the needs of society. We no longer oblige children to calculate in many of the old imperial weights and measures, nor in the pre-decimal currency (certainly not in rods, roods, poles, perches, chains, furlongs, nor in farthings, shillings and guineas, and scarcely in pints, quarts, gallons, or inches, feet, yards, or ounces, pounds, stones, tons); the educational, practical and economic benefits of teaching children to operate in the rational, predictable metric and decimal systems are self-evidently enormous. Our writing system is just another system of notation like these, only inherently far more complex, and because it has been allowed to become so antiquated, it is also far more difficult to master and use. Our present understanding of the English language, writing systems in general, and the psychology of literacy-skills, has advanced centuries beyond the time when the Present English spelling system took shape. We do not teach children human biology in terms of the four humours, or chemistry in terms of the philosopher's stone; but we still teach English spelling in terms no less antiquated. It is a matter of educational responsibility and priority to stop teaching ancient rules and patterns which have no logical or linguistic justification, and which we know work to the psychological and educational detriment of our children.

7. A range of options.

This paper is not the place to present detailed proposals, but at least some concrete possibilities must be outlined to show the kind of spelling improvements that can be considered. Underlying them all are the principles recommended in the Kingman Report, namely that English spelling should be taught (as it cannot effectively be today) by means of manageable rules, regularities, patterns and sound-symbol correspondences. Our proposed options are not intended as rigid categories with a fixed content to each, but are merely suggestive of some general approaches. They are listed roughly in order of disturbance to the familiar system and of benefit to be expected, i.e. the first option is the least disturbing and the least beneficial, and the last option is the most disturbing and yet (so some would argue) the most beneficial. It will be apparent that the options listed overlap at many points.

1. *Adopt most American spellings.* Where these differ from the present British forms, they are mostly more regular, more economical, and reflect sound-symbol correspondences better. One example: children should no longer be taught to write words like *favour* as though they rhymed with *devour,* but in the American style *as favor, so* that they parallel words like *terror* (which in 1755 Dr Johnson still wrote as *terrour).* Such a reform would also overcome a major present inconvenience in world English, which requires different spellings to be learnt according to geography.

2. *Simplify the most common irregular spellings.* Beginners are particularly confused by the aberrant spelling of many very common words. Thus *are* is spelt as though it rhymes with *bare* and

not with *bar, were* is spelt as though it rhymes with *here* rather than with *her,* and *have* is spelt as though it rhymes with *cave* rather than with *lav*. The spelling of about 60 of the 200 most common words in the language could easily be simplified, along the lines of *ar, wer, hav,* to parallel regularly spelt words containing the same sounds.

3. *Regularise the spelling patterns that cause most difficulty.* A study of spelling mistakes shows that a very large number of errors are caused by letters that are redundant in terms of sound-symbol correspondence (in fact more than 10% of all letters used). These letters fall into three main categories: 1) many are silent letters like the <s> in *island;* 2) many are vowel letters with final <1, m, n, r>, as in *principle, principal, petrel, petrol; madam, tandem, random, carborundum; rotten, cotton, assistant, consistent; centre, enter, doctor, harbour, murmur, injure, martyr;* 3) many are doubled consonants, as in *accommodate.* Removing these redundant letters does not greatly alter the appearance of words, but it improves the regularity, sound-symbol correspondence, speed of writing and general economy of the system. This approach can incidentally also reduce the present complex rule for past-tense formation to one of the utmost simplicity.

4. *Regularise the spelling of selected sounds.* Although the spelling of vowels in English is generally much more problematic than that of consonants, changing their letters is often difficult: firstly because there may be no agreement as to the sound that should be represented (thus there is no agreement as to whether *your* is a homophone of *ewer* or of *yore);* and secondly because changing vowel-letters often changes the appearance of words quite radically, even making them unrecognisable (if children were taught *wunce,* for example, they would be unable to read *once). A* few of the most troublesome consonant spellings on the other hand can be regularised with much less difficulty: for instance, the sound of <f> could regularly be written <f> instead of <gh, ph> *(cof, tuf, fotograf);* the sound of <j> could regularly be written <j> instead of <g, dg, dj> *(jem, brij, ajust);* the sound of <k> could regularly be written <k> instead of <c, ch, ck, cq, q, qu> *(kat, kemist, lok, akuire, kuestion, rnoskito).*

These four options are listed merely to illustrate some possibilities; selections and combinations from amongst them will suggest further alternatives; and of course radically different spelling changes are also conceivable, though in our view far less easy to implement.

8. Psychological, practical and political factors.

To the public at large the suggestion of any kind of spelling reform will appear a novel and daring suggestion, though to judge from a preliminary survey by the Society's Chairman (… published … in the 1988/2 issue of the Society's *Journal* it would be well received by many people. Nevertheless, a spelling reform would need to be accompanied by various reassurances, for instance that

- few literate adults would have to learn new ways of writing
- reading the new spellings would present no difficulty
- the reform would not suddenly make all past English literature inaccessible. The advantages for future generations, for all professional producers of script, for the publishing industry, and not least for the functionally illiterate and semi-literate would also have to be stressed. Some teachers would undoubtedly be sceptical at first, but the enthusiasm generated by the Initial Teaching Alphabet among teachers who have used it shows that the promise of easier and more effective teaching can be a great attraction.

The reform would need to be designed so that adult users (above all, teachers and certain text-producers) could be cheaply, quickly and effectively trained in its use. It would be important to ensure compatibility between the old and new spellings, so that no problems arose from their concurrent use. The international dimension would also have to be taken into account: under no circumstances could Britain embark on spelling changes that would not be self-evidently beneficial to the rest of the world too, so providing an incentive for international adoption of the reform.

The political dimension is probably the most sensitive. Normally, spelling reforms have the official support of ministries of education, but when this has been called for in Britain in the past (e.g. 1923, 1933, 1953), it has not been forthcoming. (And perhaps wisely so, as the kind of spelling reform proposed earlier this century for English now appears unrealistically radical and lacking in a practical sense of how it would be implemented.) Since then the experience of the Initial Teaching Alphabet has shown that government support is not necessarily a prerequisite for spelling developments; furthermore the pedagogic success of the i.t.a., the substantial research it gave rise to, and the lessons of its recent decline all provide a much sounder foundation for future reform proposals.

The situation today is in many pertinent respects very different from that of the first half of this century. English is a world language, the level of relevant linguistic and psychological understanding is of an altogether higher order, literacy in English is more important than ever before, and educational demands are constantly rising. Furthermore criteria of economic efficiency today have new pre-eminence, value for money is as important in education as in business, the present spelling system of English is demonstrably wasteful of human and non-human resources, and the present British government has shown itself capable of radical initiatives embodying these criteria in education as elsewhere.

The time for reform is perhaps riper today than it has ever been in this country. The opportunity should be pursued.

9. A recommendation.

We urge the English Working Group for the National Curriculum seriously to consider the ideas contained in this submission and in the Simplified Spelling Society's two previous submissions. The plan for a National Curriculum is giving a positive and original thrust to education policy in this country and offers a rare opportunity for radical ideas to be considered. While we fully realise that in the time allowed for the Working Group to report it cannot do justice to such far-reaching proposals as we are making, we nevertheless hope that their importance will be recognised, and a recommendation made for them to be further explored in a more substantial manner than we as a Society can attempt solely from our own resources. (We note, incidentally, the recommendation in the Kingman Report Ep.66, §151 that a National Language Project be set up; perhaps our ideas might be suitable for consideration in this context.)

The Working Group has a historic opportunity to help written English to take a step, however small, towards its centuries-overdue modernisation, and we hope it will at least show a positive interest in the possibility. We very much look forward to receiving its response, and would be glad to provide further information in writing or attend in person for discussion of the Society's ideas.

[Journal of the Simplified Spelling Society, 9, 1988/3 pp27–29 in the printed version]
[Doug Everingham: see **Bulletins**, **Journals**, **Newsletters**]

8. The Case for SR1 and Nothing Else.

Doug. N. Everingham.

Dr Everingham writes that he at one time favored Reg Deans's BRITIC *(*see *Journal of ihe SSS* 1987/2, pp.25–27) as the most economic use of the Latin alphabet for English, but wanted some changes. After seeing W Gassner's proposal, Doug put out a more complete scheme, *Braud Inglish Speling* (1966), to provide 66 spellings for 40 English phonemes so as to allow preservation of existing spelling-distinctions among homophones. This was acclaimed by Frank Laubach of the Laubach Institute, USA, who had devised a similar system with the added aim of preserving word length for greater sight-familiarity by doubling consonants etc where possible. In 1967 Doug entered the Australian federal parliament. On seeing Lindgren's *Spelling Reform: A Now Approach* (Sydney: Alpha Books, 1969), he accepted it as incomparably better and abandoned his own proposal. He suggested to Lindgren (a resident of the federal capital, Canberra) that a 'Spelling Action Society' be formed on SeptembeR 1, 1971, 'SRI Day'. As Australian Minister for Helth 1972–75, Doug produced the first official publication to use Lindgren's SRI (Spelling Reform Step One), including the form *helth.* He tried without success to set up a parliamentary committee on spelling reform. He currently edits 'Spelling Action', quarterly newsletter of the Spelling Action Society.

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Following this article, Chris Upward discusses the points numbered [**#**]

Attacking outrageous 'gargoyles' of spelling like *hiccough lough ought plough thorough though through tough trough* (see Bill Herbert, *Journal* 1987 No.1, p. 3) appeals in part because such reform has had partial success with *hiccup loch plow thoro tho thru.* The last four words were reformed chiefly by the example of the *Chicago Tribune* which has now largely abandoned the effort. But <-ough> words occur on average less often in print than words eligible for Lindgren's Spelling Reform Step One (SRI): the use of <e> for the clear short vowel sound of *trend ses gests sed hemorrhaging lepard beried meny ded hefers.* **[1]**

Apart from the *Tribune's* group of four, these <-ough> reforms came about from causes as little connected with each other as the reforms of *eschallotte gaol manoeuvre racquet shew sulphur* to *shallot jail maneuver racket show sulfur.*

Also, such isolated attacks on gargoyles, however successful, distract attention from, and may delay, the more positive aim of spelling reform: to follow *consistent rules* for encoding distinct *sound* elements (phonemes) of a language, irrespective of

- differing sounds (phones) given to eny of those elements in different dialectal divisions of the language community **[2]** and
- different spelling customs based on earlier sounds, root words as spelt in other languages, or the whims of dictionary makers and printers. **[3]**

The above 'successful' reforms do not achieve this consistency for eny of the phonemes re-written <u, p, ch, ow, o, o, u> respectively from <-ough> or re-written <sh, t, j, ai, eu, er, ck, ow, f> from <esch, tte, g, ao, oe of of of u, re, cqu, ew, ph>. The reforms affect only a single word and its derivatives in each case. Thousands of one-word reforms of this type (some of them re-reforming earlier such reforms) would be needed to bring consistency to English spellings.

Part 1 of Chris Upward's 'Cut Speling — a Linguistic Universl?' *(**Journal of the SSS, 1987/2***, Item 8) contains some 500 words with nearly 600 phoneme-coding irregularities (if <th> for /dh/ sound is deemed irregular). CS removes some 180+ redundant letters, occurring more than once in some words, so in about one word in three of print. A few more irregularities of traditional spelling are removed using <j, f, y> for <g, ph, gh, ig> which is now declared part of the CS 'system' along with

deletion exception rules like

- keep post-accentual schwa spelling after palatalized <c, s, t, x> (eg: <special, nation>) and in <-ual>
- keep letters to avoid forming heterophones. (This rule increases inconsistencies **[4]**, defeating the object of the exercise: to produce uniformity and reliability of sound-encoding rules for beginners. If spelling is finally to be regularized these exceptions will have to be reversed.)
- keep intervocalic <-rr->, final <-ss, -se>. [No mention of <-sm, -sse>; this rule might be simplified to 'don't put <s> for the /s/ sound where it might be red as /z/', because that is the point of this exception. Lindgren's approach avoids such exceptions by care in the choice of the order of SRs, eg the spelling of /z/ would be corrected long before that of /s/.]

By contrast, each of Lindgren's proposed forty or so spelling reform steps (SRI, SR2, ... SR40) should achieve total consistency for one of the forty phonemes of English for every word. Forty such steps would totally regularize English spelling. Attacking gargoyles first achieves regularity for no phoneme and requires rules with exceptions. SR1 amends only two gargoyles in the passage referred to (producing <insted, meny> and in general affects only one per 80 words of print as Ivor F has shown in his million-word count. *(See 'Spelling Action', Jul–Sep 1986, page 4.)* This unobtrusive change, so easy for high pressure professional writers to adopt, is resisted by Chris in his article. He writes <insted> (CS) but <many>!

Yet SR1

- is adopted as one of the 'systems' of SSS
- has no exceptions for recording one phoneme everywhere **[5]**, and
- is compatible with CS.

If SR1 is widely recognized it will have established the positive principle of the rule of phonemic logic, not the negative principle of piecemeal patchup of past botchups. This SR1 principle will be worth more than all the complicated rules of Cut Spelling, rules which, if supplemented eventually by similar rules to regularize the rest of traditional spelling, will, including their multiple exceptions and provisos, far exceed the number of SR steps (40) required on the Lindgren principle to transform spelling from a word fossil field and museum to a reasoned written code for speech. **[6]**

Lindgren's book has a cartoon showing two mountaineers arguing and pointing at distant mountains. One ses: "You want us to climb the left peak and I the right. Let's go towards them while we argue about it." Every spelling reform movement wants total regularity eventually. Every one of them has a preferred first step, although SAS seems to be the only one that has never varied it. Every one of them agrees on SR1 as part of their aim. Yet they do not use it while debating much more complex proposals which have never been used throughout journals and literary works as SRI has been repeatedly!

SR1 of is one of the few possible phonemic reforms that does not significantly mislead readers using otherwise current spellings. It does not require exceptions. It does not close off options for further phonemic reforms. It sets an example which could lead to restoring to traditional English spelling some of the interlingual compatibility it had before the great vowel shifts, such as <ei au ai ou> as in <veil sauerkraut aisle soul>, by

- first making saner the spelling of the phoneme too often less aptly shown by each digraph
- choosing the digraphs in the right order with a few years' interval between steps in the SRI, SR2 ... series.

Thus /i:/ as in <kiwi> will be reformed before <ei>, which in turn will have its international function promoted before <ai> does; /o:/ as in <awe, oar, all> before <au> which will precede <ou> reform.

Those who would reform <gh, ph> spellings of /f/ ignore the exceptions of

- <gh> silent or sounded as in <l of ough, hiccough>

- <ph> in <sapphire> <pph>=/f/ and <nephew> (<ph=/v/)
- <ff> in <off, riffle> which argue for reform of the spelling of /v/ and the <i> of <rifle> before reforms of non- <f> spellings for /f/-, and reform of the <a> in <navy> before halving <vv> in <navvy, revving>, to avoid further exceptions concerning doubling of consonants etc.

Lindgren has made all of the above clear in his book for those prepared to define and seek its logical aim. This should be preferred to a quick but patchy fix (which will lead to further patches over patches) chosen to give an easy ride to gargoyle-based reform for those hooked on traditional spellings.

The table below shows the absurdity of the common <gh, ph> reform proposals compared with the order and logic of SRI and its sequels: the logic of starting from a phoneme in the top row and going down the column, and the craziness of starting with a gargoyle in the left column and going across the row.

Articles by Chris and others in past issues of the Newsletter have shown incomplete adherence to SR1 at times, among more sweeping reforms. This suggests that reform of the ing more than one word in 80 or so for a start is likely to lead to poor consistency for professional writers who work regularly to tight dedlines. **[7]** They and the public have to be convinced before the momentum of change can begin towards eventual spelling sanity. If we cannot persuade pedagogues, publishers, politicians and the populace that the logic and simplicity of SR1 is worth putting into practice, our philosophical meanderings and debates among the converted will be worse than useless — they will convince the uncommitted that we are confused or the problem is too hard, and so will delay our success. If we want action, not words, we must choose to promote one reform on which all reform groups can agree. So far that is ONLY SR1. **[8]**
(See phoneme chart below)

Chris Upward coments on points numbrd abov:

[1] or all Err-analysis shos th <gh> 'gargoyl' is a real bugbear, and it is very comn. Th 250 most comn english words, in desending ordr of frequency, include *any, many, might, through, again, though, thought, right, against, head, enough, high, night.* Chanjing letters causes problms (e.g. bakwrds compatbility, pronunciation), and if *eny, agen* etc ar excluded, <gh> seems to hav a strongr claim than SRI.

[2] Conflicting pronunciations ar a serius obstacl to reform by fonemes. SR1s letr-chanjing trips over these: americns and scots rym ate with *late,* not with *bet;* in Ireland *any* has th sound of *Annie;* many english speakrs rym *says* with *pays; if* americns oftn rym *bury* with *furry,* not *very; again, against* ar oftn spoken with th vowl of *gain* and th SR1 forms *agen, agenst* confusingly sujest soft <g> as in *agent.*

[3] . We shud not despise th spelings of othr languajs. A major purpose of speling reform is to help forenrs lern english. Cut Speling removes discrepncis between languajs, as in *abreviation (french abrévation), wen (j* ermn wenn.).

[4] Hetrofones must be avoidd! CS needs few exeptions.

[5] Not only conflicting accents prevent consistnt speling by fonemes. As David Brazil showd (SSS *Jurnl* 87/1), our pronunciation varis as we speak, and linguists even disagree about how many fonemes ther ar in english, som even douting wethr they realy exist. Speling is not only a systm for recording sound, it represents morfemic structur too, wich is anothr reasn wy *ses* is a dubius speling for *says.*

[6] Certnly th 3 rules of CS ar mor complex than th 1 rule for SR1, but wheras SR1 only improves ritn english marjnly, CS targets th most serius practice dificltis of th systm: silent letrs, post-accentul shwa, dubld consnnts; and it streamlines th hole riting process. SR1 has th advantaj that it is simper to describe, but CS acheves mor. Our overiding comn airn must be to get any

improvemnt, larj or smal, simpl or complex, acceptd. Th public needs educating about th ranje of posbilitis, with al ther pros and cons, and not about one sceme "and nothing else".

[7] CS requires training and practice, but once lernt, it is a boon for riters with tyt dedlines: script is produced fastr both because it is shortr, and because ther is less uncertnty and likelihood of err: e.g. *harass, embarass* at last mach!

[8] Th quote from Harry Lindgrens book is good: "U want us to climb th left peak and I th ryt. Let's go towards them wile we argu about it". By al means — but let us also accept that th peaks ar shroudd in mist, and ther ar sevrl paths!

Doug Everingham's Table ot Phonemes vs. Gargoyles

SOUND→ ***NOW SPELT*↓**	**au**	**u:**	**ou**	**o:**	**o**	**aʌ**	**a:**	**æ**	**ər**	**e**	**ei**	**ai**	**i:**	**i**
<u>		tutu				up			onus	bury				busy
<ue>		rue							vaguer	guest	applique		marquee	
<ou/ow>	out	caribou	soul own	four		country			honour					
<ough>	plough	through	though	thou-ght	cough lough (loch)	rough <f?ff> hic-cough <p>			thorough					
<oe>		shoe	toe	o'er*					oedema	foetid			foetus	
<o>		do	so	or	on	won			apron					women
<au>	sau-erkraut		bu-reau	taut	Aussie		aunt		austere					
<augh>				aught			laugh							
<a>				all	was	mama	aft*	ax	sofa	any	aping			adage*
<ae>									aes-thetic	haem-orrh-ate*	sun-dae	aery*	aeon	
<a -e>							are	have	senate		hate			
<ai>								plait	boat-swain	said	aid	aisle		
<ay>									moray	says	say	ay(e)	quay	
<aig>											campaign			
<aigh>											straight			
<eh>											eh			
<e>			shewing						open	led	cafe		be	
<ee>										three-pence*	nee		fee	
<ey>											hey	eye	key	
<eo>									surgeon	leopard			people	
<ei>									villein	heifer	rein	eider	seize	
<eig>									sovereign		reign			
<eigh>											sleigh	sleight	Leigh	
<igh>												light		
<ig>												sign		
<i>									office			hi		
<ie>										friend		hie	siege	

* Concise Oxford Dictionary 1964 pronunciations. Lindgren leaves open what words may be written in more than one way to suit main speech communities, e.g *le(i)sure, alumin(i)um.*

In summary:	Rules	Sounds	Spellings	Words	World Usage	Consensus	Homophone Creation
SR1	1 logical	1 (all occurrences)	1 from 12 (1 in 80 of text)	>500	+	All reform bodies	3
Omit redundant letters <gh-ph>	4	40	Hundreds	10 000x (1 in 3 of text)	No change sought	Under constant review	Dozens
reforms	60	12	17 from 8	Few hundred (1 in >100 of text)	Not sought	Varies	Few: <doh> etc.

[Journal of the Simplified Spelling Society, 9, 1988/3 pp.30–33 in the printed version]
[Edward Rondthaler: see **Bulletins**, **Anthology**, **Journals**, **Newsletters**, **Personal View 8**]

9. Updating Edward Rondthaler's *Simplified American Spelling*

Many readers will already know Ed Rondthaler's major work, the *Dictionary of Simplified American Spelling,* with its associated computer program for converting TO automatically into the new orthography. Ed Rondthaler has always been open to discussion and suggestion (see references under his name in the *Index* to SSS *Newsletters* and *Journals*, and has been steadily refining the system; we here present the 1988 update. It is a mark of his generosity towards the Simplified Spelling Society that he has made copies of his *Dictionary* available free of charge, and we have now received further copies of the 1986 edition. We follow the *Update* below with a review of the *Dictionary* from Valerie Yule.

1988 changes in 'American' spelling
The December 1986 'scholars' edition' of the American Spelling Dictionary was issued with a call for suggestions to improve compatibility between traditional spelling and American spelling, to clarify the rules and, where possible, to provide better phoneme-grapheme correspondence.

***Change* 1: Terminal <-s> replaces terminal <-z> in plurals, possessives, and 3rd person present singulars**
A weakness of American spelling is the use of the suffix <-z> (and <-ez>) for most plurals *(roomz, wishez),* for possessives *(carz),* and for third person singular present tense *(he cheerz, she singz, it runz; he pleezez, she loozez, it cauzez).* This frequent use of suffix-<-z> is uncomfortable to present readers.

Suffix <-z> easily changes to suffix-<-s> (and <-es>) when it is understood that in plurals, possessives, and third person singular the suffix <-s> is normally given a <z>- sound *(rooms, wishes, cheers, sings, runs, has, mobs, beds, car's, gums, sisters; pleezes, loozes, cauzes)* — unless it is audibly impossible to do *so (its, lips, baks, reefs, fifths, tonics).* This takes advantage of a 'predictable generality' in our traditional orthography. In speech we normally give suffix <-s> a <z>-sound after voiced phonemes when the resulting inflection is plural, possessive, or third person singular present tense. Predictable generalities in traditional English spelling are often cited as an explanation for our illogical spelling. Most generalities in English spelling, however, have unpredictable exceptions, and are 'predictable' only to those who have already learned the exceptions. The use of suffix <s> pronounced as /z/ for plurals, possessives, and present tense third person singulars has no exception in American spelling.

Replacing suffix <-z> with suffix <-s> in these circumstances affects 67% or 6107:53335 of the plurals and present third person singulars. (The remaining 33% are already written with suffix <-s>: <cs, fs, ks, ps, ts>, and voiceless <ths>.) This change makes many more words — about 4.4% on an average page — identical with or significantly closer to traditional spelling. It also removes 3 important words *(is, his, has)* from the 'sight word' list.

TO	rooms	wishes	car's	cheers	movies
1986	roomz	wishez	carz	cheerz	moovyz
1988	rooms	wishes	car's	cheers	moovys
TO	runs	lips	its	fifths	backs
1986	runz	lips	its	fifths	baks
1988	runs	lips	its	fifths	baks

***Change 2:* Terminal <-s> in other uses**
The above change leaves about 1,000 root words — words without suffixes — ending with an <s>-sound:

English	class	condense	dance	atlas	service
American	clas	condens	dans	atlas	servis

Very few <s>-ending roots have a <z>-sounding 'twin'. Fortunately <s>-enders are largely one-of-a-kind. There are, for example, no such words as:

claz condenz danz atlaz serviz

Thus a single <s> serves the reader as sufficient signal for the terminal <s>-sound:

clas condens dans atlas servis

In the occasional case where an <s>-ending root does indeed have a <z>-sounding twin, context will make the meaning clear, precisely as it does in speech:

Thair ar six tens in sixty .
It was a tens meeting.

She goes at a fast paes and paes her dets promptly.

It should be pointed out, of course, that endings in <z>- sound that are neither plural, nor possessive, nor third person present tense will continue to be written with terminal <z>.

TO	jazz	glaze	fuse	rise	close
1986	jaz	glaez	fuez	riez	cloez
1988	jaz	glaez	faez	riez	cloez

But:

TO	closes	rises	flies	bees
1986	cloezez	riezez	fliez	beez
1988	cloezes	riezes	flies	bees

Change 3: **<ur> becomes <er>**
The distinction between <er> (unstressed) and <ur> (stressed) as shown in the 1986 dictionary, is dropped in favor of <er> in all cases. This eliminates the first two sentences of Rule 5 p.15 in the 1986 *Dictionary.*

The change affects 2.3189%, or about 12 words on a page. (2006:23189)

TO	third	urgent	adversity	early	lurks
1986	thurd	urjent	advursity	urly	lurks
1988	therd	erjent	adversity	erly	lerks
TO	learn	turned	perverter	fern	
1986	lurn	turnd	pervurter	furn	
1988	lern	ternd	perverter	fern	

Change 4: **<uur> changes to <ur>**
The above change frees the digraph <w-> for other uses. It replaces <uur>, thus reducing the frequency of the unfamiliar <uu> digraph by 26%. This limits <uu> to about half the frequency of <oo> — to once in every 83 words rather than once in every 60.

Changing <uur> to <ur> would affect 0.4493%, or 2 words per page. (213:4493)

TO	jury	sure	plural	your	neuritic	touring	pleurisy
1986	jury	shuur	pluural	your	nuuritic	tuuring	pleurisy
1988	jury	shur	plural	yur	nuritic	turing	plurisy

Note: <ur> preceded by <c> retains the cr> pronunciation: *curb, ocur, curent*

Change 5: **Unstressed <ue> becomes <eu>**

TO accumulate
1986 acuemuclaet

In normal speech we have three variations of pronunciation for long <u>:

1) Stressed as in *unit*
2) Unstressed as in *unite*
3) Diluted as in the second <u> of *accumulate.*

This third variation is best described as a diphthong consisting of 'half long <cc> plus schwa' (i.e. schwi + schwa). The American 1986 <ue> spelling for schwi + schwa is unsatisfactory. It does not represent the sound. A new American digraph — <eu> — diluted and always used medially, is a better representation. See Rule 14, page v.

This change would affect 0.2426% or about 1 word per page. (386:2426)

TO	accumulate	communist	ambulance
1986	acuemuelaet	comuenist	ambuelans
1988	acuemoulaet	comeunist	ambeulans
TO	monument	muscular	soluble
1986	monuement	muscuelar	insoluebl
1988	moneument	musceular	insoleubl
TO	attribution	argue	ridicule
1986	atribueshun	argue	ridicuel
1988	atribueshun	argue	ridicuel
1988	atribeuting	argeument	ridiceulus

Such <ue/eu> change in a derivative is rare.

Change 6: **<y> as a consonant. <e, i, y> as half-ee (schwi) vowels.**
Eliminating **<**lly**>** affects 0.0610%, or one word on every 4th page. (68:610)

TO	million	millionaire	brilliant
1986	millyon	millyonair	brillyant
1988	milyon	milyonair	brilyant
TO	bilious	cognac	familiar
1986	billyus	connyak	familyar
1988	bilyus	conyak	familyar
			familiarrity (6 syllable)

Eliminating <nny> affects 0.1076% or 1 word on every 2 pages. (85:1076)

TO	onion	union	convenience
1986	unnyon	uennyon	conveennyens
1988	unyun	uenyun	conveenyuns
TO	communion	senior	saviour
1986	comuennyon	seennyor	saevuer
1988	comuenyun	seenyur	saevyur

Wording of the vowel-<y> Rule 3, page v, will be:
"The vowel known as 'schwi' (1/2-ee) is heard in the first <e> *of between,* the second <i> of *trivial,* and the final <y> *of yearly.* It has a tonal quality midway between long-ee and short-i. It always ends a syllable. It is never stressed. In the first syllable of a word it is written <e> *(evict, befor, reality).* Medially it is written <i> preceding <ly> or any vowel except <e, i> (*historian, abreeviaet, champion, patio, patioes, auditorium, hapily*). Elsewhere it is written <y> (*hapyest, chilyer, bountyful, carrying, victory, victorys*)."

***Change 7:* <nn> becomes <n>**
It has been suggested that the awkward <nn> Rule 6, p.15 of the 1986 ASD could be eliminated by stating that the prefixes <en-, in-, un-, con-> deactivate the digraph <ng> (*engulf, ingres, unglamorus, conglomeret*) unless the <ng> digraph is followed by <g> (*conggres*).

This change would affect 0.0191%, or 1 word in every 10 pages. (46:191)

TO	engulf	ingress	unglamorous	conglomerate	congress
1986	engulf	inngres	unnglamorus	conglomeret	congress
1988	engulf	ingres	unglamorus	conglomeret	conggres

***Change* 8: off, oss, ong**
A more accurate wording for Rule 7 on p.15 of the 1986 *Dictionary:*

> "Short <o> followed by <ff, ss, *ng> (offer, cross, long) is* frequently pronounced <au> as *auto,* or midway between short <o> and <au>."

***Change 9:* due, tue, nue**
Rule 13, page v, eliminates the need for two-thirds of p.293 in the 1986 *ASD.*

> "When the long vowel <ue> is preceded by <d, t, n> *(duty/duety, tune/tuen, numeral/nuemeral* it is frequently pronounced <oo> or midway between <ue> and <oo>."

***Change* 10: Improving awkward combinations**
The most unfamiliar combinations of letters in the 1986 American spelling are unstressed<choo, zhoo, joo>:

TO	casual	infatuate	actual	individual
1986	cazhooal	infachooaet	akchooal	indivijooal
TO	usual	situation	intellectual	graduate
1986	uezhooal	sichooaeshun	intelekchooal	grajooaet
T0	eventually	virtuoso	throughout	
1986	evenchooaly	verchoooeso	throoout	

This unfamiliarity has been reduced in 1988 American by taking advantage of the 'generality' that frequently employs <u> to represent the "unstressed co-sound followed by a vowel" in traditional spelling (*casual, infatuate, virtuoso*)

This leads to Rule 12, page v:
"When the unstressed co-sound follows <j, ch, zh> it is written <a>."

T0	casual	infatuate	actual	individual
1986	cazhooal	infachooaet	akchooal	indivijooal
1988	cazhual	infachuaet	akchual	indivijual
TO	usual	situation	intellectual	graduate
1986	uezhooal	sichooaeshun	intelekchooal	grajooaet
1988	uezhual	sichuaeshun	intelekchual	grajuaet
TO	eventually	virtuoso	throughout	
1986	evenchooaly	verchoooeso	throoout	
1988	evenchualy	verchuoeso	thruout	

[Journal of the Simplified Spelling Society, 9, 1988/3 p32 in the printed version]
[Valerie Yule: see **Bulletins**, **Anthology**, **Quarterly**, **Journals**, **Newsletters**, **Personal Views** 10 & 16, **Media**, **Books**.]

10. Edward Rondthaler Dictionary of *Simplified American Spelling*
Review by Valerie Yule

Edward Rondthaler & Edward Lias *Dictionary of Simplified American Spelling: an alternative spelling for English,* New York: the American Language Academy, 312pp., US$12.00 (US$13.50 overseas).

Valerie Yule is now based at the Faculty of Education, Monash University, Clayton, Vic. 3168, Australia, but was previously Honorary Research Fellow, Department of Psychology, University of Aberdeen. This review was written before the announcement of the 1988 changes to *Simplified American,* as listed in the previous item in this *Journal.*

Authors and background
One of the last frontiers for the application of science, curiously enough, is improvement of the writing system for the English language. In the eyes of many it remains an impossible dream — a realm for armchair argument and eccentrics. There are straws in the wind that this situation may be changing, although this dictionary can hardly be called a straw.

It is the work of two men who have been pioneering spirits in other fields**.** Dr Edward Rondthaler was one of the founders of modern photolettering and typesetting techniques, and is still active as President of Photolettering Inc., and Chairman Emeritus of the International Typeface Corporation, the firm responsible for 90% of contemporary typefaces. Dr Edward Lias, the author of *Future Mind,* is an international consultant specialising in emerging technology and the study of the future, a Director of Worldwide Educational Information Systems, Unisys, Inc., made up of both Sperry and Burroughs. It is understandable that such a combination of inventive minds in two fields of visible communication should turn to the biggest communication problem still facing the English-speaking world — its spelling.

The computerised dictionary of 44,000 words they have produced is actually an historical landmark. Firstly, it demonstrates how the technological problem of printing and transliteration in an improved English spelling which once appeared the greatest problem, is now soluble, and indeed relatively simple, with computerisation. Their computer program can automatically produce any orthographic or language version programmed in by it for any of its 45,000-word databank in English spelling. It is like a Spelling Checker — but works as a Spelling Improver. Secondly, there are the aims of the authors themselves.

The goal is to provide alternative spellings for English that are compatible with present spelling (unlike traditional spelling reforms), and so can co-exist with it, but which nevertheless represent American speech so clearly and consistently that the English language could be "written as it sounds and pronounced as it is written". Unacceptably high rates of illiteracy and semi-literacy in English have persisted despite exceptionally high investment in education in English-speaking countries for over a century. The authors' belief is that there could be a substantial reduction in this problem if learners did not have to learn two languages, the spoken and the written, which were so different and so inconsistently related to each other. Many others have been of like mind — men of action like Andrew Carnegie or Theodore Roosevelt, of linguistic scholarship, such as Skeat, Godfrey Dewey or Gimson, or of brilliant and inventive genius, from Benjamin Franklin, Mark

Twain, Charles Dickens and Bernard Shaw to Isaac Asimov, the doyen of science fiction writers, and John Atasanoff, the co-inventor of the electronic digital computer.

The publishers, the American Language Academy, include among their trustees John Henry Martin, the educator responsible for the *Writing to Read* literacy program sponsored by IBM, in which children begin to read and write in a simplified version of present spelling, to facilitate immediate transition to reading and writing conventionally, and thus avoid the drawbacks of the Initial Teaching Alphabet. Evaluation of this project has not yet, but must, at some stage, sort out the value of such an introductory spelling from the value of the particular pedagogy used and the IBM hardware and software that is also employed, but final outcomes will surely illuminate the question of how much advantage may be gained by closer links of written with spoken English.

The Importance of Research

Whether learning to read and reading itself could both in fact be made more efficient by modifying the task is a question that cannot be resolved by continuating century-old armchair arguments about spelling reform. What is required, surely, before the year 2000, is empirical research, both scholarly and action-oriented. Rondthaler and Lias' work provides a useful handbook to assist such research. It has great potential value as a computerised resource, because it makes possible the retrieval and sorting of information about any phonological or orthographic feature of English, at the touch of a button — for example lists of words that include a particular spelling, such as <-ious>, or words that include a particular pronunciation, such as /zhun/. It becomes a simple matter to check empirically any anecdotal evidence about the nature of English spelling, for example to test the Chomskys' **[1]** **[2]** claims that English spelling represents the "deep structure" of the language. The supplementary detail included provides a useful reference, giving for example frequency figures for each word listed, detail how the 44 or so English phonemes are currently represented by more than 400 graphemes, information on alternative spellings already in current use (including advertising), and notes on questions such as homophones, dialects, diacritics and how to represent plurals that are sometimes pronounced as /s/ and sometimes as z/.

Rondthaler and Lias also face and illuminate some of the problems that are built into our present spelling that make any consistent improvements difficult — for example, how to represent final /s/ and /z/ sounds where they are common as tense and plural inflexions as well as terminal sounds of singular nouns. Is there value for fluent reading for meaning in the current custom of using final <-s> as a grammatical marker, regardless of pronunciation (which is an artefact of articulation anyway?) If so, what should happen to the spelling of singular nouns such as *dense, fence, grass, oasis, coalesce* or *impasse?* Again, what happens to 'Chomsky' words in a simple speech-representing spelling, when suffixes result in changed pronunciation of vowels, as in *nation: national, recede: recession?* Would a completely phonemic spelling, such as *naeshun: nashunal* or *reseed: reseshun* make it harder for learners to identify new vocabulary or skilled readers to read fluently for meaning? Testing, not hunches, is required.

Ideal vs. optimum orthographies

Rondthaler leaves some of the most common words, such *as is, was* unchanged, which is in line with concessions to practical use made by the world's more consistent orthographies, both recently reformed or custom-made for formerly illiterate societies. Indeed, it is quite possible that a spelling 'ideal' in theory might not be the 'optimum' spelling in practice, which might involve systematic modifications where these would facilitate learning or reading. 'American Spelling' itself gives some examples of how theoretical perfection might be in practice a deterrent. Although overall it is more economical than present spelling by cutting out 'surplus' elaboration — as in *litl* rather than *little* — a proportion of polysyllables is in fact lengthened. Spellings such as *depreeshyaeshun* appear repelling as well as pedantically representing speech. It would be quite terrible to spell, and indeed, would probably be more difficult to read than *depreciation* itself The lessons from the 'natural'

spelling of child beginners, and from English pidgin orthographies seem to be that single letters for vowels are easiest to learn and use, and that pronunciation patterns are usually picked up quickly as long as they are systematic. As I see it, it is a problem that 'American Spelling' may reproduce slurred informal speech further than may be useful for readers.

The reason for this is that the authors perceive potential application of the system as the standard pronunciation notation for dictionaries. Many if not most of the re-spellings provided could in this way also enter the orthography as acceptable alternatives, joining hundreds of alternative spellings that are already listed in modem dictionaries. Its principles of spelling are so simple that they are listed in a small box on every page of the dictionary listings and could be understood by children. In view of the difficulties of providing notation that children can understand, most current children's dictionaries and wordbooks do not give pronunciations, although it is these young learners who need the most help.

Slurred spelling for slurred speech?

However, the result of this lexicographic ambition is that American Spelling has to follow speech rather too closely in some instances. Although most of us may say *pikcher, akehooairial* and *abolishun* and only a few of us enunciate *picture* and *actuarial* as clearly as they are written, there may be semantic advantages in retaining the visible link of *picture* and *depict,* and of retaining act *in actuarial,* and in keeping the internationally recognisable terminal grapheme <-ion>. The more formal spelling could assume a more slurred articulation. A more 'morphemic' spelling, that is, representing units of meaning more closely, might also help those whose speech has already slurred into *pichi* and *achairial* to have a clearer 'form of the word' to speak as well as to say. The editors recognise this problem.

Research is beginning to investigate how adult readers respond to different types of spelling change, and is finding that some forms require no special adjustment or retraining (Yule and Greentree) **[3]** and do not affect 'backwards compatibility' — that is, maintaining access to everything at present in print. Modern computer technology also solves the previous seemingly intractable problem of change-over and transliteration.

However, for any change in English spelling to be the best possible, we need to reanalyse our existing research on human abilities and needs in the whole field of literacy according to this practical question, as well as carrying out more direct investigations (Yule). **[4]** An international English spelling that made universal literacy in English more possible would rank not far behind our electronic achievements as one of the greatest benefits to communication of this century. And everywhere that research for this will be carried on, the Dictionary of Rondthaler and Lias will be invaluable.

It need hardly be added that in a work by the co-pioneer of photolettering, the typeface is beautiful and the layout excellent.

References

[1] Chomsky, C (1970) 'Reading, writing and phonology' in *Harvard Educational Review,* 40, pp.287–309.
[2] Chomsky, N & Halle, M (1968) *The sound pattern of English,* New York: Harper and Row.
[3] Yule, V and Greentree, S (1986) 'Readers' adaption to spelling change' in *Human Learning,* 5, pp.229–241.
[4] Yule, V (1986) 'The design of spelling to match human abilities' in *Harvard Educational Review,* 56, pp.278–297.

11. Media: 'Spelling it out' on BBC 1

Between 16 October and 18 December 1988 BBC television is broadcasting eight 10-minute programmes on English spelling. They are being shown on Sunday evenings at 1815 and repeated the following Sunday morning at 1010. Though lighthearted in tone (with cartoons as mnemonics), the programmes have a serious educational purpose, with an accompanying book and produced in association with ALBSU and the Open College. Each instalment includes some factual information about the history, structure, social status etc of English spelling, and the producer, Charles Pascoe, took advice from the Simplified Spelling Society for programme 5 (November 20/27), which deals with spelling reform and shows Edward Rondthaler's *Simplified American Spelling,* as well as explaining the work and aims of the Society.

12. Publications and Conferences

Publications Available [at the time of publication only]

The following publications are available for cost of postage and packing only (please add £1 for dispatch outside the UK

1. Free publicity leaflets: members are encouraged to distribute copies to interested individuals and organisations. For orders over 50 copies, please send £1 p & p.

—**Introducing the Simplified Spelling Society**.
—**Introducing the Cut Spelling Streamlined Writing System for English**
—*AIROE Pour une simplification de Porthographe* (information on the French equivalent of SSS)

2. The CLIE (Committee for Linguistics in Education of LAGB & BAAL) produces a series of working papers, of which Nos. 10 & 11 concern English spelling. SSS members may request a free copy of **No. 11, English Spelling and Educational Progress** by Christopher Upward (28pp). A catalogue of all CLIE working papers, including No. 10 (Michael Stubbs *The Synchronic Organization of English Spelling,* reviewed by Edward Rondthaler in **JSSS 88/2**) may be obtained from series editor Thomas Bloor, Modern Languages Department, Aston University, Birmingham B4 7ET.
3. The text of the Society's classic 1948 spelling reform proposal **New Spelling** (Ripman & Archer, revised by Daniel Jones and Harold Orton) is now available again to members in photocopied form; send £1 p & p.
4. The *Dictionary of Simplified American Spelling* (1986) edited by Edward Rondthaler and Edward J Lias. The system is developed from *New Spelling* and i.t.a., for use in conjunction with J H Martin's *Writing to Read* scheme. It is highly recommended as a reference work and for its analysis of spelling problems, and for further research into the representation of pronunciation in dictionaries and the possibilities of a radical reformed spelling system. £2 p & p.
5. Newell Tune's **Spelling Reform: a Comprehensive Survey**, some 140 articles republished from *Spelling Progress* **Bulletin** and compiled with the assistance of SSS members Harvie Barnard and Valerie Yule. 298 pp. £2p&p.
6. Arnold Rupert's pamphlet *School with less pain,* describing an interesting reformed orthography based on an expanded alphabet that exploits the character-definition capabilities of modern word-processors.
7. Nina Catach's standard paperback on French spelling *L'Orthographe,* 3rd edition 1988. £1 p & p.
8. We hope soon to offer Harry Lindgren's provocative and entertaining *Spelling Reform: A New Approach. £1 p &* p.

Received

Publications and papers recently received include:
Adult Literacy and Basic Skills Unit (ALBSU) *Newsletter* No.29 Spring 88, No.30 Summer 88, No.31 Autumn 88
—, Information Release *Adult Literacy practitioners to visit USA*
— *English Today Vol.IV* No 3 July 1988, Vol.IV No.4 October 1988
Th R Hofmann 10 *Voyages in the Realms of Meaning, Tokyo:* Kuroshio Press, 1986
UK i.t.a. Federation Newsletter, Summer 1988, Autumn 1988
Institut für deutsche Sprache, Mannheim *Sprachreport* 3/88 Spelling Action Society (Australia) *Spelling Action*
United Kingdom Reading Association (UKRA) *Journal of Research in Reading,* Vol. I 1 No.2 September 1988 Denis Vincent & Jenny Claydon *Diagnostic Spelling Test,* NFER-Nelson, 1982
Members wishing to consult any of these titles should contact the Editor of the *JSSS.*

Conferences

International Association of Teachers of English as a Foreign Language (IATEFL)
will be holding its 26th Annual Course and Conference at the University of Warwick from 31 March to 3 April 1989,
including papers, demonstrations, workshops, colloquia, poster sessions, publisher's sessions, book exhibition, social programme.

United Kingdom Reading Association
will be holding its 23rd international conference at Edge Hill College, Ormskirk in July 1989.

The UK i.t.a. Federation
held its 1988 Course Conference in Leamington Spa from 28–30 October 1988, and will be holding its 1989 Course Conference in Warwick