Chapter 1
CUT SPELLING: AIM & CONTEXT

1 Definition, origin and evolution of Cut Spelling

1.1 A new approach to English spelling

English is the prime international language today, and is in many ways well suited to that role. The grammar of its word forms is simple; it is powerfully yet subtly expressive; it is available to all nations and has affinities with other major languages; and the world's greatest fund of knowledge is published in it.

Yet the difficulties of its spelling have for centuries been notorious. They impede literacy for English speakers worldwide and are a particular obstacle to non-native speakers. Over the past 400 years, there have been numerous (one list names over 70) proposals for resolving the problem, yet only one has left a distinctive mark (Noah Webster's in America). Most proposals have regarded the traditional spelling of English as irredeemable and therefore suggested re-spelling the language from first principles, as it is pronounced. Yet they have rarely considered the practicalities of making radical changes to a writing system used, like English, around the world.

This volume proposes a different approach, which has important practical advantages over such earlier schemes.

1.2 Definition of CS and purposes of the Handbook

This new approach is known as Cut Spelling (CS), which is a system of streamlining written English by cutting out unnecessary (ie, redundant) letters. It makes writing faster, uses less space, and is easier to learn and use accurately than Traditional Orthography (TO). Redundant letters are an exceptionally troublesome feature of TO, accounting for much of its irregularity and for many of the problems people currently experience in trying to master the system. Yet the removal of redundant letters changes the appearance of most affected words only slightly and the majority of words not at all. CS is therefore proposed as a technique for improving the way the English language is written which gives the best possible combination of maximum benefits and minimum disruption.

This Handbook shows which letters used in TO may be considered redundant, and how their omission by the rules of CS simplifies and regularizes written English. Whether or not readers are inclined to accept CS

as a signpost to the way English might be written in the future, it is hoped that the analysis provided will lead to greater awareness of the deficiencies of TO, a greater understanding of the qualities that a good writing system should have, and a greater willingness to consider how TO might be modernized and improved.

1.3 Historic tendency to economy in writing

In language as in other aspects of life people are naturally inclined to economize on the effort required by any task. If one examines the development of writing systems in different languages, one often observes a process of change whereby more complex and cumbersome forms are replaced by simpler and more economical ones over a period of time. This process occurs initially in the spoken language, and, in most languages, later results in a corresponding paring down of the written form of words. It was already noted over 400 years ago that English used more letters than necessary to spell many of its words, and during the 17th century numerous redundant letters were removed, the emergent standard spellings tending to prefer one of the shorter forms among the alternatives previously in use.

For instance, in the 16th century the word *bit* was sometimes spelt *bytte*, which now appears a grotesquely archaic and clumsy way of writing such a simple word. Its standard form now uses just the minimum three letters required to represent its pronunciation. Many words were reduced like *bytte* by the loss of a silent final -E, the replacement of Y by I, and the simplification of doubled consonants. But many other words which would equally have benefited from such treatment have kept unnecessary letters, for instance the B in *debt* or the E in *have*. Modern forms such as *though, through* are objectively as grotesque as *bytte*, although their familiar appearance may prevent us appreciating the fact.

After the 17th century this process of simplification of English spelling slowed almost to a halt, thanks to the standardizing influence of printing, the spread of dictionaries and the lack of any authority with the power and will to promote further rationalization, although a few changes have nevertheless occurred in more recent centuries. The American lexicographer Noah Webster took the process of simplification a step further in the early 19th century, and Americans today use some distinctive spellings of the type his dictionary recommended, such as *ax, traveling, harbor*, which the British continue to write with additional redundant letters, as in *axe, travelling, harbour*. Some shorter American spellings have been generally adopted, such as the form *music* in place of the older British *musick*, and American

program in computing. Other 20th century changes include replacement of *shew* by *show* and *phantasy* by *fantasy*, while the AE in *encyclopaedia, mediaeval* has today largely yielded to E, giving *encyclopedia, medieval*.

Some kind of simplification will no doubt continue into the future, whatever happens. However, such are the educational, social and economic problems caused by the present irregularities of TO that it would be much better if simpler spellings could be introduced systematically across the language, by clear, principled decision and agreement, rather than being left to the hazards of history (which is what gave rise to the orthographic confusion of TO in the first place). Thus a less common word such as *yoghourt* may well gradually shrink to *yogurt* without any conscious plan, as if by attrition; but probably only a deliberate decision could standardize on such obvious, yet initially strange-seeming, improved forms as *ar, wer, hav, liv* for some of the most common words in the language.

1.4 Origins of CS

The need for economy in the use of language in recent centuries has however also taken other forms. There has been a tendency to abbreviate, for example by removing whole syllables from words in both speech and writing, as in *bus* for *omnibus*, *phone* for *telephone*, and *pram* from *perambulator*, or by replacing words with initials, such as *USA* for *United States of America*, or by creating acronyms, such as *laser*, spelt from the   first letters of the words **l**ight **a**mplification by **s**timulated **e**mission of **r**adiation. In the 20th century an early need for information technology to compress alphabetic text for a while imposed abbreviated spellings (eg, for cable transmission or Telex, or in computing), but that did not produce any formal simplification for general use. This technologically induced pressure for shorter written forms has since subsided, as the storage and transmission capacity of the technologies concerned has grown; but the economic and practical advantages of such gains in efficiency will always be an incentive to brevity in writing.

In the late 20th century there is a fresh concern with standards of education, for which the highest possible levels of literacy are the most fundamental prerequisite. This need has generated intense interest on the part of psychologists and educationists in how literacy skills are acquired by learners, since it is perceived that the process is anything but straightforward — at least in English. (Comparison with many other languages, which typically do not use redundant letters to anything like the same extent as English, has demonstrated that the acquisition of literacy skills in English is particularly problematic.)

It was in this context that the idea of Cut Spelling was conceived in the 1970s by the Australian psychologist Valerie Yule, who saw benefits for readers in cutting redundant letters from TO. Her insight was then taken up in the early 1980s by the British linguist Christopher Upward, who proceeded to investigate the systemic implications of the concept of redundancy as applied to TO, and soon established three main categories of redundant letter, which have ever since remained the cornerstones of CS cutting procedures.

Following repeated calls during the 1980s for a full account of CS to be published, in 1988 the Simplified Spelling Society set up a Working Group, chaired by Christopher Upward, and consisting also of Paul Fletcher, Jean Hutchins and Chris Jolly, initially just to prepare a learner's guide. **Part I** of this Handbook was however the first outcome, providing the analytical groundwork on which **Part II** (patterns, exercises and parallel texts) and **Part III** (the dictionary) could subsequently be based.

1.5 Development and consolidation of CS

Research and discussion in the 1980s steadily confirmed the general validity of the three categories of redundant letter first proposed for CS, although various additions, exceptions, refinements and variations were introduced to their specification. In the further experience gained from 1992 to 1996 these categories have proved a solid foundation for a first-stage simplification of TO. They are, in outline, as follows:

- The first consists of letters quite unconnected with pronunciation, such as B in *debt* or S in *island*.
- The second consisted originally just of certain unstressed vowels, like the last vowel in *principal/principle* or *adapter/adaptor*, but was later extended to the vowels in suffixes such as -ED, -ES, -ING, -ABLE/-IBLE as well.
- The third category comprises most doubled consonants, such as the CC, MM in *accommodate*, which can be helpfully simplified.

As explained in detail in Chapter 3, these categories of redundant letter are removed by CS Rules 1, 2 and 3 respectively (giving CS *det, iland, principl, adaptr, washd, washs, washng, washbl, acomodate*). These cutting rules are supplemented by three rules for limited letter substitution (F for GH, PH when these are pronounced /f/; J for soft G or DG; and Y for IG when pronounced as in *fly/flight*, so producing spellings like *fotograf*; *jenial, brij*; and *sy, syt, syn*).

The next sentence illustrates the general appearance of written English after these rules have been applied. (For more extensive text in CS, see Chapters **5**–**6** of Part I below, **Part II [Introduction** and **Section 3**] and **Part III [Introduction**].)

Wen readrs first se CS, as in this sentnce, they ofn hesitate slytly, but then quikly becom acustmd to th shortnd words and soon find text in CS as esy to read as TO; but it is th riter ho realy apreciates th advantajs of CS, as many of th most trublsm uncertntis of TO hav been elimnated.

(289 keystrokes for letters, punctuation marks and spaces.) The following equivalent in TO shows the difference in length:

When readers first see CS, as in this sentence, they often hesitate slightly, but then quickly become accustomed to the shortened words and soon find text in CS as easy to read as TO; but it is the writer who really appreciates the advantages of CS, as many of the most troublesome uncertainties of TO have been eliminated.

(324 keystrokes = 12.11% longer than the CS version, which is 10.80% shorter.)

Wide experience has been gained in the use of CS, with texts totalling over half a million words on various subjects written in it, and its rules tested systematically against a corpus of some 60,000 word-types. Educationists, psychologists, linguists, lexicographers, editors, writers, publishers, printers and others, in Britain, the USA, Australia, Canada, India, France, Germany, Japan and elsewhere have commented on CS, and their observations have helped the system to achieve its present form.

Background research has included a number of broader aspects of spelling: linguistic (comparing the spelling of different languages and of English at different times in its history); phonetic and phonological (analysis of pronunciation); typographical (how shorter word forms affect the layout of text); psychological (how the brain perceives, decodes writing and encodes speech); educational (the psychology and organization of the learning process); and reference to these fields is made at appropriate points in the Handbook. Central to an account of CS however is an explanation of the way in which the letters of the alphabet are most often used (despite the many exceptions and variations in TO) to represent the sounds of English, for CS preserves these most deeply rooted patterns of English symbol-sound correspondence. They are listed and discussed in Chapter 2 (Section 2).

The three Parts of the Handbook serve different purposes. Part I gives a detailed account of the CS system, describing its inner logic, analyzing the patterns of cuts that are made, and discussing points of uncertainty that arise; careful study of Part I would be required for any serious evaluation of CS.

Part II on the other hand is designed both to give a clear, practical overview of the system, and to enable individuals wanting to learn how to write English more easily and succinctly to master the main features of CS without having to explore the detailed reasoning behind it; from the first edition of the Handbook it has, however, appeared that learners would often prefer a much more concise exposition of the main patterns of CS, and the production of such a *User's Guide* (to include the dictionary) has been put in hand. **Part III** of the Handbook provides a straightforward look-up facility for checking the CS form of any commonly occurring English word against its TO equivalent. Finally, the Handbook closes with a select bibliography of works which have proved helpful in developing the CS concept; they are mainly concerned with writing systems in general, or the English language in general, but some served directly as sources of information.

1.6 Definitions of redundancy

At this point it is appropriate to clarify the concept of redundancy as applied by CS, since it is quite often misunderstood. Information science uses the concept of redundancy in a different sense from CS, saying for instance that, in the spelling I-T-S-E-L-F, the final L-F are redundant because no other word begins with the letters ITSE-, and that form is therefore, for the purpose of recognition by computer, unambiguous. CS on the other hand analyzes redundancy from the point of view of the human user. In the case of English this means both users who know the pronunciation of most words and those (especially non-native speakers) who may well not do so. The human reader can only confidently pronounce a written word if its letters indicate its pronunciation; ITSE for *itself* is for the human reader therefore an inadequate spelling and the final L-F are in that sense not redundant. Likewise human writers can only confidently spell a word if its letters represent the pronunciation that is stored in their memories — they have no way of knowing that, in terms of 'information', the final L-F are redundant. Put over-simply: for CS, letters performing neither function, neither showing how to pronounce a written form, nor telling the writer how to spell a word, are deemed phonographically redundant. They play no part in the system of sound-symbol correspondence, and are omitted in CS. (As will be explained in Chapter 2, this emphatically does not mean that all silent letters are redundant.)

An objection to the removal of redundant letters that has been repeatedly raised is that redundancy is needed in language, in order that, if part of a message is omitted or distorted, sufficient remains intact for the meaning to

be conveyed nevertheless. This danger is particularly evident if numerals rather than written words are used: imagine a message that "783 people are expected", and the effect that would be produced if any of the figures 7-8-3 were accidentally omitted or substituted. On the other hand, if the number were spelt out as *seven hundred and eighty three*, the risk of misunderstanding arising from omission or substitution of, say, even 20% of the letters is far less: six defects in *sevem hunbrcdand eigty thre* leave the message still comprehensible. As far as CS is concerned, it is feared that if English were written with fewer letters, the danger of misunderstanding a distorted message would grow significantly. Yet the compression of text that results from removing phonographically redundant letters is modest (in the region of 10% only), and if the same severe test is applied to the CS version of the same message (*sevn hundred and eity thre* becoming *sevm humbrcdand eity thre*), the meaning is no more seriously compromised — in fact the reduction of letters in CS reduces the likelihood of errors arising in the first place. And practical experience with CS has not revealed any problems of this kind at all: CS still contains many letters that information science could describe as redundant.

2   CS and the principles of alphabetic spelling

2.1 Historical and psychological foundations

The invention of the alphabet was a crucial intellectual achievement in the evolution of human civilization. In considering any writing system that uses it, it is necessary to grasp the fundamental operating principle which has enabled the alphabet (with adaptations) successfully to be applied to most languages in the world today, throughout Europe, America and Australasia, and in large parts of Africa and Asia too. This fundamental alphabetic principle states that a fairly small number of easily learnt symbols (letters) should be used consistently to represent the fairly small number of sounds (phonemes) that constitute the sound-system (phonology) of a language and make up the words as they are spoken and understood from speech. Insofar as a language uses the alphabet in that way, acquiring and using the skills of literacy are relatively straightforward tasks.

When any language first adopts the alphabet, that is more or less how the letters are used, and so it was with Old English (the language of the Anglo-Saxons), the ancestor of modern English, some 1400 years ago. However, the English language has since undergone enormous changes (the Norman conquest of 1066 being responsible for the most far-reaching), and over the

ensuing centuries the original alphabetic principle has been seriously obscured. The spelling of very many English words today does not follow unambiguous rules of sound-symbol correspondence, which is why so many people find the English writing system frustratingly difficult to master. English has forgotten the central psychological importance of the alphabetic principle, and the consequent educational, social and economic damage resulting from the inevitably lower standards of literacy is immense. The damage could however be reduced, and Cut Spelling is proposed as a way of doing so.

All writing systems tend to become out of date over time, as languages and the demands made on them change. They then need to be updated. Indeed the way English itself was written changed radically through the centuries preceding the advent of printing in the late 15th century. Many languages have understood the need to keep their writing systems reasonably in harmony with the alphabetic principle, and have modernized their spelling in the 20th century to improve the essential match between writing and pronunciation, so benefiting learners and users generally.

There are many possible reasons why English has not done so. One, mentioned previously, was the lack of an authority with the will and power to impose change. Another is the difficulty of aligning spoken and written English when the language has no standard pronunciation, Americans, English and Scots for instance frequently disagreeing as to the 'correct' pronunciation of words. A third is that the changes needed to create a perfect correspondence between the spoken and written language would be so great as to represent a revolutionary upheaval, and their implementation would therefore very likely create controversy and confusion worldwide.

2.2 CS and the reform of English spelling

CS offers a new way of overcoming these obstacles to the modernization of written English and the raising of literacy standards.

First, omitting redundant letters is a natural step in the direction of linguistic and communicative economy, a procedure we all naturally incline towards, whether consciously or unconsciously. Indeed this natural tendency towards CS is already seen in operation: many poor spellers omit redundant letters in their writing, and most of the distinctively American spellings standardized by Webster are in effect 'cut' variants of their British equivalents. A decree emanating from some all-powerful linguistic authority might therefore possibly be unnecessary to ensure the evolution of English spelling in the general direction of CS: all that might be needed would be

guidelines and encouragement to use the most economical forms. Many different constituencies could have an interest in promoting such a development: governments, teachers, schoolchildren, foreign learners, dictionaries, editors, publishers, employers, each in their own sphere. This Handbook is tries to establish the kind of orthographic guidelines which would be needed to ensure co-ordination of such a process.

Second, there is the problem of differing pronunciations, both in the various accents around the world and by free variation in individual speech. Most redundant letters cut by CS are redundant in all accents: the examples of CS spelling in **§1.6** above (*det, iland, principl, adaptr, washd, acomodate*) correspond better to all pronunciations than do their TO equivalents, regardless of accent or personal speech habits. There are nevertheless certain CS spellings which conflict with pronunciation in some accents: Scots might object to CS *wensday*, Americans to CS *secretry* or *ceremny*, and the British to CS *fertl*; but CS then usually recommends the most economical form that represents a widespread pronunciation. Thus the universally convenient criterion of economy takes priority over the claims   of any one accent to represent a world standard of pronunciation. Alternatively, cuts felt to be objectionable could be ignored by speakers of the affected accents, or the whole CS system could make exceptions in such cases. The same criterion of taking the simplest pronunciation as the standard for the written form is also applied when deciding between other alternative pronunciations: it is for instance presumed that the first vowel of TO *patent* is pronounced as in *hat* rather than as in *hate*, so enabling CS to cut the E and write *patnt*.

Third, a common aesthetic and practical objection to spelling reform proposals in the past has been that the new spellings would cause confusion by changing the appearance of written English out of easy recognition. One reform proposal for instance suggested that TO *mate, meat, might, moat, mute* should be re-spelt *maet, meet, miet, moet, muet*, which, at least when taken out of context, are indecipherable without a key to their sound-symbol correspondences. This problem arises particularly if words are re-spelt using different letters from their TO forms. CS largely avoids this difficulty by concentrating on the omission rather than the substitution of letters. Thus CS *acomodation* is immediately recognizable to anyone familiar with TO *accommodation*, while a more radically reformed spelling such as *akomodaeshen*, with many substituted letters, appears alien in comparison. There are nevertheless occasional CS forms at which readers may initially balk, such as CS *ho* for TO *who*, CS *onrbl* for *honourable*, CS *ysyt* for

eyesight, CS *sudonm* for *pseudonym*, CS *werr* for *wearer*. Such cases are discussed in Chapter 3.

2.3 Advantages of CS

The advantages of CS fall under three headings. Some are practical — CS is easier to learn and to use than TO. Some are advantages that CS has over other concepts for English spelling reform. And some concern the wider linguistic implications of CS.

2.3.1 Practical advantages

1) CS is more economical than TO. Using fewer letters saves time and space whenever text is created, by hand, typing, word-processing, typesetting, printing, graphic design, signwriting, on video screen, or by any other method, and written material is accordingly cheaper to produce. CS is particularly suited to the speed requirements of email correspondence, and the limited space available for video subtitling. Its greater economy makes CS environmentally friendlier, saving materials (especially paper) and energy, as well as storage and transport. The most extensive count conducted gave a loss of 11.2% characters in CS over a text of some 5,000 words, but other tests showed economies of just under 10%; to claim that CS offers savings of some 10% on average therefore seems reasonable. CS is not comparable to shorthand systems, where the speed gain for skilled users is far greater, but so are the difficulties of decipherment.

2) CS is quicker to learn and use than TO, since redundant letters lie at the heart of the cognitive confusion (eg confusing *cloud/could*) that is so characteristic of the learning process in TO. The time saved in learning to read and write could be more profitably spent on other learning activities. Spelling, and literacy generally, are not ends in themselves, but means to communication and the acquisition of knowledge in the modern world.

3) Fewer misspellings would occur, as CS removes many of the uncertainties that cause error in TO and the correct CS spelling of words   can be derived more predictably from their pronunciation. A great difficulty writers face in TO is knowing which redundant letters to insert, and where to insert them. For instance, although *many, busy* both contain a misleading vowel letter with an irregular sound value, they contain no redundant letters and are less often misspelt than, say, TO *friend, business*, which both contain redundant I. Typical misspellings are then **frend, *busness*, where the writer has omitted the redundant letter altogether, or **freind, *buisness*, where it has been misplaced. Both *friend* and *business* are thus more seriously at variance

with the alphabetic principle than are *many, busy*, and the CS forms *frend, busness* therefore represent a more useful improvement than any regularization of *many, busy* would. Other characteristic misspellings in TO are **recieve, *docter, *accomodate*, which would be prevented by CS Rules **1**, **2** and **3** respectively, producing CS *receve, doctr, acomodate*. A 1995 Basic Skills Agency survey of spelling accuracy in Britain listed 10 words as especially error-prone: *allowance, sincerely, receive, apologise, unfortunately, necessary, maintenance, immediately, occasionally, accommodation*. Of these, only *sincerely* remains unsimplified in CS (**Ch. 6** suggests *sinserely* as a post-CS improvement),. The rest appear, with their worst difficulties removed, as CS *alownce, receve, apolojize, unfortunatly, necesry, maintnnce, imediatly, ocasionly, acomodation*. Similarly, of a Royal Society of Arts listing of 794 hard-to-spell common words, CS simplifies 587 (74%). Perhaps the most telling statistical argument for CS is that, of the 675 commonest words in English, the spelling of 300 is sufficiently defective to allow simplification by CS.

4) Fewer words would be mispronounced, since CS indicates their pronunciation more directly than does TO — an advantage of particular relevance to non-native-speaking learners. If the two pronunciations of *row* were distinguished by removing the redundant W from one of them (as in CS *a violent row* but *to ro a boat*), and if *bear* lost its redundant A, then non-native speakers would no longer be heard saying such things as *"a violent *ro"*, or *"to *beer arms"*. Similarly, CS often shows the stress pattern of a word where TO does not, distinguishing TO *to present, a present* as CS *present, presnt*, for instance. Native speakers would also run less risk of mispronouncing unfamiliar words: the French loan *trait* would not be spoken with a final /t/ if it were spelt as CS *trai*; and the silent H in *chameleon* would not mislead speakers into pronouncing an initial CH-sound if the spelling were as CS *cameleon*.

2.3.2 Advantages for implementation

The fact that CS makes only slight changes to the appearance of written English gives it a number of advantages as a system realistically capable of implementation, compared with more radical reform proposals.

1) CS does not require readers already proficient in TO to be specially trained, nor to use a table of new letter values, as nearly all CS forms are immediately recognizable by their similarity to TO. CS is therefore 'forwards-compatible' with TO, in the sense that familiarity with the old system gives immediate access to the new.

2) For the same reason, material printed in TO would still be legible (perhaps with a little guidance over such difficulties as GH, which is not found in CS) to a new generation of readers who had first acquired their literacy skills in CS. Such readers would experience TO rather as readers today experience 16th century English, with its numerous redundant letters (cf *bytte*, which is still decipherable as modern *bit*). TO is therefore 'backwards-compatible' with CS.

3) Being a concept for the general improvement of written English and not a rigid system dependent on adoption of all its suggested forms, CS offers a useful degree of flexibility. Parts of CS could be accepted without others, and countries or communities as well as individuals could choose how far they wished to apply CS rules. A first step in the direction of CS could be the acceptance of the shortest existing (usually, but not always, American) spellings as standard everywhere (eg, *caviar, color*, not *caviare, colour*).

4) This flexibility and the two-way compatibility between TO and CS would enable both systems to be used side by side for what must be presumed to be a lengthy transitional period, TO being used by more conservative and CS by more advanced writers, publishers, etc. Adults must have a free choice between new and old spellings, even when children only use the new forms. The introduction of metric weights and measures in many English-speaking countries shows that such generation gaps do not cause unacceptable confusion.

5) It is often stated that spelling reform is impractical because it would result in unacceptable confusion, as one could imagine if, say, *warm* began to be written as *worm*. Leaving aside the fact that TO causes enormous confusion already, the flexibility of CS would minimize the harmful consequences of any new confusion arising in a period of transition. Not merely are CS and TO spellings, as already explained, in an important sense compatible with each other, but there could be equally acceptable intermediate forms of many words in use at the same time. So while determined traditionalists might insist on continuing to write *accommodate*, and enthusiastic reformers would make a point of writing *acomodate*, less careful or less committed writers might well write *accomodate* (as many people do in TO already) or *acommodate*. All these forms would be perfectly legible and generally acceptable for the period of transition, though the CS guidelines would firmly encourage *acomodate* as the new 'correct' spelling, 'correct' because best conforming to the alphabetic principle. (See **Ch. 2**, §1.5–1.9, for further discussion of this flexibility.)

6) The compatibility between TO and CS could enable individual countries to adopt CS entirely, or retain TO entirely, or pursue an intermediate course, without seriously damaging the effectiveness of English as a single language for international communication. The different degrees of 'cutting' that already exist between American and British spelling conventions show how such co-existence can operate internationally.

7) The practical, economic advantages of CS offer an incentive to its adoption, such as was not offered by many other proposals for English spelling reform.

2.3.3 Wider linguistic advantages

1) CS largely avoids the problem of reconciling the different accents of English, since most redundant letters are redundant in any accent (see §2.2 above for more detail and some exceptions).

2) CS shows the history of certain words better than TO does, since a number of the more eccentric TO forms contain letters which were inserted on grounds of mistaken etymology. So CS removes the spurious C from *scissors, scythe*, which was inserted because these words were wrongly thought to derive from Latin *scindere*. Similarly, CS *det, dout* show the French derivation (cf modern French *dette, doute*), while the redundant B was inserted in *debt, doubt* to suggest the more remote connection with Latin which we see in *debit, indubitable*. A third instance is the B in TO *crumb, numb, thumb* (CS *crum, num, thum*), which was probably inserted merely by analogy with *dumb*, whose B had earlier been pronounced. Likewise the L in *could* was inserted by analogy with etymological L in *should, would*. CS removes all these misleading inserted letters. Elsewhere CS reverts to simpler forms common in Chaucer's day (14th century), writing *ther, al, wel* for TO *there, all, well*; using the old forms *fil, ful* removes the present confusion between TO *fill, full*, which both use LL, and *fulfil* which (in British spelling) does not double either L; similarly   alignment of *eve, leave, sleeve, receive, achieve* to CS *eve, leve, sleve, receve, acheve* was also common in the 14th century.

3) CS usefully improves the alignment between the many TO spellings and their equivalents in other languages where there are now unnecessary and confusing discrepancies; as knowledge of other European languages grows in Britain, this is coming to be an increasing problem. **CS Rule 1** deals with such discrepancies as U in TO *guard, guarantee* (French *garde, garantie*), B in TO *dumb, lamb* (German *dumm, Lamm*), and H in   TO *chaos, honest* (Italian *caos, onesto*). **CS Rule 2** deals with the discrepancies of the -ANT, -

ENT endings in TO *assistant, consistent, persistent, resistant*, compared with -ANT in French *assistant, consistant, persistant, résistant* and -ENT in German *Assistent, konsistent, persistent, resistent*. And CS Rule 3 deals with the discrepancies of Spanish *acomodar*, Italian *accomodare*, French *abréviation, exagération*, German *Komitee*, compared with English TO *accommodate, abbreviate, exaggerate,   committee* and CS *acomodate, abreviate, exajrate, comitee*.

4) It is worth reflecting on the long term consequences a phonographically less ambiguous system of spelling English words might have for pronunciation standards around the world. The pronunciation of English can often vary precisely because TO does not specify what the pronunciation of a word should be (eg, whether *schedule* should be spoken as with an initial SH- as in *schist*, or SK- as in *school*). However if the spelling unambiguously represented the most economical pronunciation, it could become, by a natural process of preferred 'spelling-pronunciation', a benchmark for 'correct' speech. Thus there may now be no standard as to whether *Wednesday* is spoken with two or three syllables, but CS *wensday* allows for only two. In this way, and by favouring the most economical pronunciation of each word rather than any one accent, CS could help a single world standard for English pronunciation to evolve. Such a standard would be useful for foreign learners and for world communication generally.

5) More remote still is the question of the long term future of English as a lingua franca. Prophets of its doom have sometimes drawn a parallel with the break-up of Latin into the various Romance languages (French, Italian, Spanish, etc), suggesting that the different varieties of English around the world may presage a similar disintegration. We can discount any such eventuality in the near future, but it is worth considering the implications of an erratic writing system such as TO for the long term effectiveness of English for world communication. It may be argued that in fact, far from disintegrating, Latin survived for the best part of 2,000   years, long after it had ceased to be used for everyday discourse, precisely because it had a good writing system that observed the alphabetic principle reasonably well and so allowed literacy skills to be acquired and practised fairly straightforwardly. By contrast, we may note that when English gives rise to 'daughter'-languages in the form of creoles and pidgins, these typically reject TO entirely, and re-spell their words in the simplest possible way with new rules of sound-symbol correspondence (eg, Tok Pisin in Papua New Guinea

reduces *place* to *ples*, *quick* to *kwik, talk* to *tok*); but their written forms can as a result barely be deciphered just from a knowledge of TO. Here, rather than in the regional varieties of native- spoken English, are perhaps the danger signals for the future of English. Any such trend could however be countered by gradually, but continuously, modernizing the writing system to improve its effectiveness as a tool of international communication. CS should also be judged for its potential in that respect.

3   Some questions of implementation

It is one thing to design and propose improvements to a spelling system, but quite another to implement them. A number of points relating to implementation were touched upon in preceding sections, but they were mostly concerned to show that CS possesses some important prerequisites for implementation, rather than to explore the mechanics of the process itself. However speculative such considerations are bound to be in present circumstances, it is nevertheless useful to present some preliminary ideas on the subject, to show what the range of possibilities (or impossibilities) might be, and to suggest where initiatives might come from.

3.1   Spreading the idea

Unlike most previous proposals for English spelling reform, CS is not to be seen as a cut-and-dried system, intended to be imposed in its entirety. Rather, it is a general concept, whose central message is that removing redundant letters from written English is a most useful and practicable way of improving TO. Precisely which letters are redundant, whether all redundant letters should be cut, and whether other changes should be made at the same time, are left as more open questions. Such flexibility is regarded as essential if any steps towards implementation are to be considered at all. At present, the very idea that English spelling could or should be modernized is generally unfamiliar in the English speaking world, and a first step must therefore be to sow the idea. A prime aim of this Handbook is therefore to sow ideas. It is not to proclaim a dogma.

3.2   Levels and machinery for implementation

Implementation of spelling reform in English could, in theory, be organized on a number of different levels.

At the highest level, one might dream of simultaneous implementation worldwide by all users of English, native speakers and non-native speakers alike, from lexicographers in the great metropolitan centres of the English-speaking world, to peasant farmers and market traders in countries that have

at best indirect contact with the English language, at the other end of the scale. Just how utopian such a scenario must be becomes apparent as soon as one asks how the knowledge and skill to use new spellings is to be communicated to and acquired by all these users of written English around the globe.

If one does take a world view, the best one might hope for is perhaps that the relevant authorities should agree on the new spellings to be adopted, and that these might in the course of time filter down through publishing and education to the billion or so users who would be the ultimate target. Such a gradual filtering process itself of course necessarily implies new spellings in use in some places while old spellings were still in use elsewhere, and that would set a premium on two-way compatibility between old and new, such as is designed into CS.

But this gradualist scenario itself depends on some high-level agreement between unspecified 'relevant authorities'. Who might they be? Worldwide implementation requires authorities above individual governments, which might mean an international body such as the United Nations (one thinks of UNESCO's educational remit), or it might mean a gathering of representatives from interested countries (ie, not only English speaking countries — the rest of the world has at least an equal, perhaps an even greater interest, in the simplification of written English). While such international co-ordination is in the late 20th century no longer confined to the realms of science fiction, to visualize it applied to English spelling reform still requires a considerable effort of the imagination. Alternatively, though, a supra-national body, such as the UN, which has its own internal interest in the efficient handling of English, might wish to adopt simpler spellings for its own internal use, and leave them to 'trickle down' or 'filter' more widely of their own accord. If spelling reform is to take on such a momentum of its own, it must have some built-in attraction, an incentive   for its adoption. The economy, as well as the simplicity, of CS might provide such an incentive.

The next level down is regional, but still supra-national. Perhaps the United States and Canada, or the British Commonwealth, or Australia and New Zealand, or Britain and the European Community, might co-ordinate a policy on spelling reform for their own purposes, while not forgetting the needs of English as a world language.

The level of individual governments may be thought the least promising: even if they wished to innovate, the forces of inertia, domestic controversy and electoral inhibition would be likely to impose a heavy brake. Only

perhaps if questions of educational standard were high on the political agenda might any progress be expected — and that might open the way for reformers in individual countries to become active as pressure groups.

Below the level of governments and states, the possibility of progress might depend on the willingness and ability of education authorities, academics, publishers, or other commercial bodies to innovate. This they might be unlikely to do without the sanction of some higher authority, whether a prestigious research body (could reform flow from a single, dramatically successful research project?) or a generous sponsor. (Advertising makes great use of innovative spellings, but by definition such forms are not intended for general use.) The role of dictionaries might be critical: a dictionary that included new, simplified spellings as acceptable alternatives among its entries could be taken to give the essential permission for publishers, teachers or individuals to use such forms. The creation of a climate where simplified spellings were debated and used, even if experimentally, could be an aim for campaigning groups.

A model for organizing this kind of development that has been suggested are the Australian Style Councils, which for their particular geographical area recommend preferred forms of written language (including spellings) to anyone seeking advice. The participants in the Councils include such interested parties as editors, journalists, lexicographers, linguists, publishers, teachers, and they meet approximately annually. Why should not a similar range of constituencies assemble representatives from the whole English-using world, and promote improved spellings as part of a wider brief for world English?

Lastly, we may ask whether individuals might of their own initiative deliberately adopt simplified spellings for their private or even professional use. The economy and simplicity of CS should again act as an incentive for them to do so: faster notetaking, less hesitation over difficult spellings, less danger of misspelling, less need to check words in dictionaries, and the reduced space required could all prove qualities to attract individuals to CS. Some individuals, such as office managers, might consider introducing simplified spellings at the workplace for economic or commercial reasons.

Highly speculative though the scenarios sketched above are, they all depend on the availability of a convincing concept for reform, such as it is hoped this Handbook may help provide. What is certain is that, without a straightforward concept and without clear guidelines, no useful or coherent reform of any scope can take place. Such a concept is a precondition for the

first step of spreading the idea. The need for reform, the nature of the proposed reform, and the benefits that would flow from it, must be understood by anyone considering such a change to an important facet of their lives.

3.3 The social psychology of implementation

The previous section discussed implementation at a strategic level: who, or what body, might decide to introduce reformed spellings? No less important however is the question of how implementation would affect individuals faced with reformed spelling without having consciously wished it upon themselves. How could reform be 'sold' to — or imposed upon — the public?

To begin with, a simple leaflet outlining the changes would need to be distributed. It would explain the alphabetic principle as the underlying criterion for the changes and as the prerequisite for improved standards of literacy, so that it was understood why the changes were being made. It would make clear that adults were under no compulsion to change the spelling habits they had grown up with (unless required to for professional reasons). However, they should increasingly expect to encounter the simpler forms in their reading: they would see them used by their children, and they might like to consider adopting some of them for convenience in their own writing. Adults receiving remedial literacy tuition on the other hand could benefit directly from learning to write the new simplified forms immediately. Adults who were professionally involved in producing printed material for public consumption, or in teaching basic literacy skills, would need some training in CS if they were confidently to apply it in their work.

In schools, implementation would require a period of preparation, to organize trials, to produce beginners' books using the simpler spellings, and to train the teachers. That might last two or more years, but after its completion the next intake of children into the school system could be taught to read and write simplified spellings for the basic vocabulary they used in their early reading and writing. They would be motivated by being told that what they were learning was more modern, more sensible and above all easier than what their parents had to learn in their day. As these children rose up the school year by year, so the range of re-spelt vocabulary they learnt to use would increase, until by the end of their schooling they would have mastered a wide range, perhaps as listed in the dictionary in **Part III** of this Handbook. An important part of their alphabetic education would be understanding the relationship between the TO forms they would continue to

encounter for many years and the CS equivalents they had learnt in school. On leaving school, they would continue to use the simpler forms for the rest of their lives. Older children, who had acquired their first literacy skills in TO, might or might not   convert to the simpler spellings, but if they unwittingly used CS forms (as poor spellers often do today), these would not be corrected or penalized.

A pedagogically still largely untried system such as CS should probably not be introduced to schoolchildren with the intention of it immediately and permanently supplanting TO. To avoid the danger of unforeseen pitfalls in the system and to develop teaching methods and materials, there would probably need to be a trial period, so that the effects of CS on initial learners could be assessed. Spellings could then be adjusted in the light of those findings, and the most appropriate teaching techniques and materials developed. It would for instance be necessary (especially to help children master the new consonant strings of CS) to exploit phonic methods much more systematically than is currently done (indeed, more systematically than *can* be done) in TO. During such a trial period, CS might be used, as the i.t.a. (initial teaching alphabet) was used in many schools between 1960 and 1980, in a 'bridging' mode, with children transferring to TO once they had acquired fluency in reading and writing in the simplified spelling. Only after such a trial period would children cease to transfer back to TO and continue to use CS permanently. Alternatively, a pilot study could be conducted with children experiencing learning difficulties, or with adults receiving remedial literacy tuition. Having, in a sense, little to lose, such students would probably have fewer objections (indeed, reactions to date suggest they could be positively enthusiastic) than would the parents of average children, who might hesitate to risk letting their offspring be used   as 'guinea-pigs'.

As is seen in other languages, a spelling reform is typically a gradual, process that may take a generation to become fully established. But so massive are the problems and the backlog of reforms needed by TO that for English one should perhaps envisage a rolling programme. Maybe 10 or 20 years after one set of simplifications had been introduced and consolidated, a second set could follow, without waiting for the first wave of reforms to be fully adopted by the whole adult population. Such an accelerated rolling programme would have the advantage that all users would come to appreciate that ensuring an optimal alignment of the writing system with the alphabetic principle is a neverending task: even after the immediate backlog is dealt with, future changes in pronunciation will eventually generate new

discrepancies between the spoken and written forms of the language, which would in turn demand reform. But however the reform was scheduled, it is clear that there could be no question of introducing at once all the changes needed in TO: not merely would they be too many and too massive, but it is hard to be sure what reforms might seem most useful after the initial, obvious and straightforward removal of redundant letters by CS (although Chapter 6 discusses a number of the more obvious possibilities).

4   Future development

This Handbook is the product of research and analysis carried out over more than a decade. Its central concern has been to establish a practical system for simplifying English spelling by omission of redundant letters. The publication of the first edition in 1992 showed CS arousing wide (international), if modest, interest, which took the form sometimes of controversy and sometimes of acclaim. There has so far been little by way of critical evaluation from bodies who might have it in their power to adopt any of the ideas developed in the Handbook. Since 1992 that level of interest has been maintained, but pressure of other projects has not allowed CS to be vigorously promoted. This second edition represents an intellectual consolidation of the first, its main aim being to keep the system available for public scrutiny, rather than to serve as a vehicle for campaigning or popularization.

For the benefit of readers wanting to evaluate CS, it should be stressed that it is designed as a coherent system, and that immediate reactions of distaste at particular spellings that may appear unduly 'mutilated' should be checked against the structure of the system as a whole. For instance, although CS *sudonm* may at first appear unacceptable as a simplified form of TO *pseudonym*, before it is rejected it needs to be related to all the parallel forms in which the same cuts are made: the loss of initial silent P from other PS-words such as TO *psychology* (CS *sycolojy*), the reduction of EU to U in such words as TO *rheumatism, sleuth* (CS *rumatism, sluth*), the general cutting of the prefix *pseudo-* to CS *sudo-*, and the loss of the unstressed vowel in final syllables between N-M, as when TO *platinum, synonym* become CS *platnm, synnm*. If some of these cuts were not made in *pseudonym*, the question must be asked whether all similar cuts in parallel forms should be excluded too. Exceptions for individual words are by definition a defect in any spelling system, and CS seeks to avoid them unless there are compelling reasons.

Now that the CS Handbook, in its new strengthened form, is again available for evaluation, several other developments of CS are being called for, but although plans for some of these are in hand, their implementation is unlikely to be rapid. First, there is demand on the part of potential users of CS for a simple *User's Guide to Cut Spelling*, which would consist primarily of the **TO–CS dictionary**, accompanied by a greatly simplified listing of the main letter-cutting patterns, but without the lengthy explanations or comprehensive exercises that make up so much of the present Handbook. Second, since the prime beneficiaries of any spelling reform are expected to be learners in their first years of schooling, it is   clear that suitable teaching and learning materials are needed to promote literacy skills in CS; similar materials would be needed for adult remedial tuition and for non-native speakers of English, indeed adult literacy   materials might be most appropriate for initial practical trials of CS. Third, there is demand for a computerized conversion program, allowing text in TO to be (semi-)automatically converted into CS, and vice versa; it has been suggested that, for a trial period, such a conversion service might be made available over the Internet rather than by direct distribution of the conversion program on disk.

Automatic orthographic conversion of text will be an indispensable facility required for any spelling reform in the future. The simplest program would only be semi-automatic inasmuch as (unless it had a parsing capability) the user would occasionally need to make choices; thus, in translating from TO to CS users would have to decide whether, for instance, TO *leaves* should become CS *leavs* (plural of *leaf*) or CS *leves* (from the verb *to leve*); and in translating from CS to TO users would have to decide whether CS *ther* should become TO *their* or *there* (see **Chapter 6**, §2.4.6 [1], for fuller discussion of such cases).

A further program to help learners mastr CS might subsequently also be called for. The established techniques of computer-assisted language learning would lend themselves to this task, with self-correcting exercises structured perhaps as in **Part II of the Handbook**, taking learners step by step through the rules of CS until automaticity was achieved.

If it were accepted that TO contained too many letters, and CS (or elements of it) began to enter into general use, the time would eventually come when more advanced reforms, making more radical changes than CS to the appearance of TO, would be called for. Some possibilities for this are explored in **Chapter 6**, §1. The significance of a longer-term view of this kind now is that it provides the perspective of a writing system continually

evolving to meet people's needs and abilities. If we have any care for the future potential of literacy in English, we need to accept that, like a garden, a writing system cannot be left neglected for centuries — as TO has been.