# Recent developments which affect spelling

## VALERIE YULE

On the possibility of removing the unnecessary difficulties in English spelling while leaving the basic appearance of English print intact

## Introduction

Recent developments in English language include the rise of many Englishes throughout the world and home dialects appearing in broadcasting, which are increasing in salience rather than diminishing with globalisation; huge increases in the international vocabulary held in common by modern languages, particularly technical and scientific words; and the increases in alternatives in communication. Two restricted English vocabularies as a way to increase the accessibility of English language have received publicity; both are called Globish, one by a Frenchman, Jean-Paul Nerrière, of 1500 words (2009), and one by an Indian of 4000 words with an accompanying Indianised spelling (Gogate, 2002).

English is now even more the common language of the world. Four hundred million people speak English as their first language. But how many of these can read it? And how many spell it? One estimate is that two billion people use English as a second language. How many of these can read it? How much does the English writing system handicap spoken English as a lingua franca? Lexicographers trawl through the Internet, on Facebook, Twitter and the like, for new vocabulary. However, the standard dictionaries still rely as previously on the printed word for changes in spelling. Now however they are unlikely to find changes, as they have in previous centuries, because no matter what spelling writers originally use, their printed words are kept in line by spellcheckers.

The gradual dropping of surplus letters until now has been a feature of English spelling since Johnson. For example, his daemon, oeconomy,

errour, aether, exotick, horrour and musick have been replaced in the printed word by demon, economy, error, ether, exotic, horror, music, and his omelette, mediaeval and programme have been replaced in the USA by omelet, medieval and program. In SMS texting, advertising spelling and personal correspondence the process has continued, even to the extent of producing private codes with acronyms. 'U' is among the standard shortenings in Internet correspondence.

Meanwhile, cognitive psychologists have shown that a consistent spelling helps learners. In crosscultural research such as that by Seymour et al.



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(2003), British children lag three years in literacy behind children in countries with consistent spelling systems. Paulesu et al. (2001) show the greater handicap of English for dyslexics. I first discovered the extent to which many learners are disadvantaged by English spelling in the 1970s, when a 10-year-old boy was struggling through a reading test (Neale Diagnostic). I gave him a parallel form I had transliterated, and said, 'Try that. No spelling traps.' He began cautiously, but soon speeded up and ended at a gallop. He looked at me in surprise and said: 'But I could read that!' and I thought, 'You poor boy,' Since then I have found that people with handicaps find the unnecessary difficulties in English spelling a severe barrier.

Phonics has been shown to be essential in learning to read, except for those with exceptional memories or verbal ability, and the lack of consistency in English spelling causes others to struggle or fail. The cost of illiteracy and functional illiteracy is high in English-speaking countries, and governments report the concern. It is known that dyslexics and backward and disadvantaged learners struggle much harder to become literate in English than normally advantaged learners. It is a hard heart that demands that they must continue to struggle and often give up. Since reading raises IQ and general knowledge, literacy for all is an important desideratum. So many people are handicapped in different ways that the task should be as easy as possible. It is not 'dumbing down' to give them a better chance of literacy. It is demonstrated, not least by the Anglo phenomenon of spelling bees, that even most literate people cannot spell (Yule, 2004a).

The media are continually publishing the faults of present spelling and writers. They could overcome their reluctance to discuss what could be done about it, other than to ridicule and distort. Most people that I have asked would like English spelling to be easier but believe this to be impossible at a practical level. There are many reasons for this belief. They do not know about how other modern languages have updated their spellings, to a major or minor degree, or they think that the mix of spelling systems enshrined in our present system makes English a special case. The traditional idea of 'reform' of English spelling is still carried on by amateur reformers - complete radical phonemic changes, which are impossible to implement for our global lingua franca. Cognitive psychologists, who might be expected to follow up their analyses of present shortcomings of our spelling system with attempts at a solution, baulk at producing spelling that will meet all the needs of readers, writers, learners and overseas learners, and the visual, phonemic and morphemic qualities it must have.

Methods of teaching literacy have gone back to phonics after the unsuccessful experiment in 'Whole Language' tried to leave spelling out of reading. However, phonics still has the drawbacks that made it a disliked method in the first place. Its great handicap is that of the couple of thousand unnecessarily exceptional spellings that make all the others unpredictable. Without these, phonics could be the method of choice for beginning readers and for dictionary pronunciation guides, with morphemic elements added later.

Many teachers still deliberately neglect any systematic teaching of spelling, on the grounds that accuracy is not important, and children will absorb correct spelling by reading. This neglects the importance of spelling for reading, and also the world that the children will enter, where 'spelling counts' and is a quick test of the quality of employees. Even teachers may be among the many who regard the printed word as outmoded by advances in visual and audio communication, on the Internet and by electronic machines. When computers first came in, there were attempts to make them spell by rules, e.g. Hanna et al. at Stanford (1966 and 1971), who found that computers programmed with 120 or so rules spelled no better than high school students, because irregularities were unpredictable. Then computers were programmed with a whole dictionary, the Spellchecker, and the chance of spelling improvement for the sake of computers

Today's speech-to-writing mechanics may postpone English spelling improvement. Modern speech-to-writing programs have become far more sophisticated than the early programs I tried to use in the 1960s. These encountered difficulties in individual and dialect differences in speech, and the fact that phonemes may not correspond to the sounds the machines pick up - for example, our pronunciation changes according to a phoneme's place in a word, and place in a text. Modern teaching programs have tried to avoid facing a nub of illiteracy – the unnecessary difficulties in spelling - and it must be emphasised that many of its difficulties are unnecessary. Must English spelling improvement be the one change that is impossible in this world of drastic and large-scale changes?

If we ditched some assumptions as fallacious, we could take up that challenge. The challenge is to

update English spelling in a way that can keep it very close in appearance to present spelling and preserve our culture. Difficult? Let's see what else in science is difficult but still being achieved, and what else could not be done in the past, but could be done now.

# Official recognition of the need for spelling reform

The evidence is piling up that present spelling is a grave handicap to the English-speaking nations and to the future of English as a lingua franca for the world:

- (a) Cross-cultural studies e.g. Seymour. P. H. K., Aro, M. & Erskine, J. M. (2003). An international study of 700 primary school children in 15 European countries showed that children take much longer to establish basic reading and writing skills in English than in any other European language. Most of the other children in the study had 'mastered the basic foundations of literacy' within a year or less of starting school, but the English-speaking sample took 2.5 years. Seymour said: 'It seems likely that the main cause of the slow rate of progress in English is linguistic and derives from difficulties created by the complex syllable structure and inconsistent spelling systems' (Seymour & Duncan, 2001). See also Aro & Wimmer (2003), Paulesu, Demonet, Fazio, McCrory, et al. (2001), Ziegler & Goswami (2005) and A. Liberman (2008).
- (b) Government anxieties about literacy, which have stimulated UK, USA and Australia to institute enquiries on the many causes of poor literacy. Reports include those for the US (National Institute for Literacy, 2010), UK House of Commons Committee reports (2005 and 2009) and the Australian National Inquiry into the Teaching of Literacy (2005). Their findings are similar.
- (c) 'Whole language' is now discredited as a learning method and Phonics is in, but Phonics methods are handicapped by the unnecessary difficulties in spelling which 'Whole Language' tried to overlook. The costs of literacy include the costs of spelling. The costs of literacy difficulties in Britain are estimated in a parliamentary report as £2,459.5m (2009–2010). A conference on the multiple costs of spelling, *Spelcon08*, sponsored by the

- Spelling Society, has put its findings on disk (2009).
- (d) What psychologists and educators now know about reading, writing and learning processes can be utilised to improve spelling (Yule, 1986). For example, Goswami (2003), Stanovich (2000), and a bibliography compiled by Yule (2005a). The Australian government's Nelson Report lists dozens of references. The old 'only phonemic' reforms for spelling still have their advocates who are ignorant of this research, but it only requires psychologists to be game enough to take the next step by actually cutting out the unnecessary difficulties that their studies of spelling and its victims reveal.
- (e) What other countries do:
  - See the achievements in Finnish literacy education, e.g Linnakyla (1993) and Lyytinen, Erskine et al (2009) on comparative dyslexia, and the educational advantage of a completely consistent orthography (Wikipedia, 2010).
  - ii. Spelling reforms in other alphabetic languages with a mostly literate population. English has been too parochial to observe that these reforms have been updates. for example in Spain (Oppenheimer, 2009). Portugal. Netherlands and Germany, and not wholesale phonemic reforms as contemplated by English reformers. The reforms are implemented by academies which monitor research and authorise dictionaries, e.g. in the last year, the Académie Française (Sage, 2008), the Royal Spanish Academy, the Real Academia Española de la Lengua, and Portugal (Bennett, 2009) with La Gran Reforma del 2009 De La Ortografía Portuguesa, all of these reforms covering many countries across the world, with many dialects. The Research Institute for the Languages of Finland also develops its official spelling recommendations. English similarly needs International English Spelling Commission (Yule, 2008) sponsored possibly by UNESCO, to monitor, collate and implement research.
- (f) Spelling Bees. See for example *The Times* of London spelling bee (2010). These uniquely English-language institutions demonstrate that only a few can spell well in English. Ironically spelling bees demonstrate also that words with simple spellings are rendered

problematic by the presence of words with unpredictable spellings.

# What can be done to remove the unnecessary difficulties in English spelling?

This is such an important matter that a Nobel Prize awaits the discoverers of how to meet the different needs, of readers, writers, learners, handicapped learners and ESL, and accommodate the visual and phonic routes to using spelling, taking into account the great amount of our vocabulary nowadays shared by other languages and represented visually similar, and the need for our heritage of print to remain accessible. It is a major intellectual challenge but should not be ducked for all that (Yule, 1994). Around 80 per cent of spelling needs no change. Bell (2004) and Liberman (2009) have identified the exceptions. Most assumptions about spelling change fall down when challenged – and challenging assumptions is the first requirement for any scientific progress. Our present spelling system could be improved in the way other democratic literate nations have improved their writing systems. We do not need a radical change. It is remarkable how easily little changes could make the present system accessible for those adults and children currently kept out by unnecessary barriers. We can keep our heritage of print accessible.

Experiment can be made with five steps to reduce English spelling rules to one page, omit about 150 less familiar spelling patterns, and yet keep the appearance of print basically as it is.

One hundred words make up about half of every-day English text. Only 35 are irregular. Keep them. This is counter-intuitive – generally people imagine the most common tricky words should be the first to go. However, they make up to 12% of the familiar appearance of text. Learners, freed from learning almost the entire dictionary, can cope with up to 35 spellings presented as special 'sight-words': all, almost, always, among, come, some, could, should, would, do, does, half, know, of, off, one, only, once, other, pull, push, put, their, they, two, as, was, what, want, who, why and international word endings -ion/-tion/-sion/zion. A sing-song which helps to learn them is online (Yule, 2005a).

A second step is to cut out surplus letters in words, that serve no purpose to show meaning or pronunciation and often mislead (Yule, 2004b). This is the chief method used in txting that is useful

for general reading too, although txt msges leave out more letters than most ppl wd find helpful, and bring in too much private code and acronyms. My doctoral thesis (Yule, 1991) contains a network of experiments demonstrating the advantage for readers, spellers, learners and ESL of dropping surplus letters in words, and the little disruption it causes present readers (Yule, 2005). These experiments can be replicated. The popular SMS texting shows ordinary people's willingness to change, and the direction of change they prefer. Texting has a basic phonics component and removes surplus letters, as well as containing in-group coding and acronyms. See, for example, Michael Gerson, 'Don't Let Texting Get U' (2008).

A third step is to make a pronunciation guide in dictionaries and for learners' beginning spelling, which is close to present spelling (Yule, 2009). A modified form of the BBC Text Pronunciation Guide is recommended, that does not include the 'schwa' of indistinct vowels in casual speech, and shows irregular stress in words. Spelling is a convention, like a stick-man sketch, recognisable by all, and not a photograph of speech, like the International Phonetic Alphabet.

Reduce all the rules of spelling, morphemic, phonemic and semantic, to one page. Then make all other spellings obey those rules (Yule, 2009). Follow the example of the Académie Française in 2008 (Sage, 2008), and allow up to four variant spellings for specific words in dictionaries, within the limits of the rules. Only seven vowels and four consonants need this variability in spelling for reading without traps (recognition learning, very close to present spelling). Less variability would be possible for spelling for writing without traps (recall learning).

# Conclusion: implementation of reforms

It would be very easy to make our present writing system easier for the disadvantaged. It would be easier than our continual and largely futile attempts to change individual failing learners. It would be sufficient to change only 3% of letters in words in ordinary text, and omit 6% as surplus because they do not help with meaning or pronunciation.

The first trials of updating spelling can be experiments in parallel reading books for learners, in which the text is repeated on the opposite page in 'Spelling without Traps'. The test is whether this is successful in leading on to reading normal text, whether it leads to better spelling by learners, and

whether forms of Spelling without Traps become accepted in everyday spelling. The new French spellings are accepted in spellcheckers, which shows how English changes could also be implemented (Microsoft Office Natural Language Team, 2010). Final implementation of reform requires an International English Spelling Commission (Yule, 2008), but much can be done in the interim. The Académie Française, for example, introduced 6000 new spellings as alternatives in the premier French dictionary. Changes that are then taken up by the people themselves can accompany or replace spellings of the present standard that are found less useful.

Researchers in literacy have a proactive and preventive role in society. They can remove a great oppression from the disadvantaged, of which the literate, however humane, are insufficiently aware. It is not enough to describe problems and to provide ambulances for their consequences. The world in twenty years' time will be very different. Even the pre-eminent position gained for English for historical reasons may be challenged. It will be ironic if it goes down in large part through saving the eccentricities of its present spelling system.

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