**Spelling and Standardization in English: Historical Overview**

**Writing systems and alphabets in England**

English has an alphabetic writing system based on the Roman alphabet that was brought to Anglo-Saxon England by Christian missionaries and church officials in the 600s. An earlier Germanic writing system called runes, also alphabetic and originating ultimately from the same source as the Roman alphabet, was used for more limited purposes (largely incantations, curses, and a few poems) when the tribes were still on the continent and also after their migration to Britain, up until Christianization.

Alphabetic writing systems are based on the principle of representing spoken sound segments, specifically those at the level of consonants and vowels, by written characters, ideally one for each sound segment. Crucial elements of the sound stream of a message are thus 'captured' by a linear sequence of marks that can be "sounded out" to recapture the message by means of its sounds. The entire sound stream is not captured, but enough of it is to provide a prompt for lexical recognition. (Other kinds of writing systems are based on written representation of other linguistic units such as syllables, words, or some mix of these.)

**The Roman alphabet and Anglo-Saxon**

The Roman alphabet, being designed for a language with a very different phonological system, was never perfectly adapted for writing English even when first used to represent Anglo-Saxon. The first monks writing English using Roman letters soon added new characters to handle the extra sounds. For example, the front low vowel /æ/ of Anglo-Saxon was represented by a ligature of a and e, forming a single written character called ash. They also added a few runic characters to the alphabet to represent consonant sounds not found in Latin or its Romance descendents, such as the fricatives thorn þ, eth ð, and yogh ȝ (a voiced palatal or velar fricative, represented by a character that looks somewhat like a 3). Later on in the medieval period these runic characters were replaced with digraphs, two-letter symbols such as th, sh, and gh. The letters in these digraphs do not have their usual values, but are used as a complex to indicate single sounds.

**Writing in Anglo-Saxon: Variation and incipient standardization**

Norms for writing words consistently with an alphabetic character set are collectively called orthography. Consistency in writing was never absolute in Anglo-Saxon because the whole system was new and norms for writing words in a consistent way took time to develop. It is not easy for writers to remember a single orthographic representation, called a spelling, for a word; yet this is what is required for standardization, unless there is a perfect one-to-one correspondence between phonemes and graphemes, which is an ideal rarely reached with alphabetic systems. Writers seem to prefer to produce written forms they have seen before for specific words, even if there is not a good match between written characters and sounds.

From the reader's perspective, we might think that simply pronouncing a word based on the prompts provided by the graphemes would be enough to allow a reader to produce a spoken message matching the written form. Yet it turns out that producing the sound of an utterance by reading it off from the graphemes is no simple cognitive task. Getting a pronunciation out of alphabetic writing requires people to analyze the sound string down to the level of component sounds. Yet this type of phonemic analysis is apparently not an obvious or natural one for humans; it needs to be taught intensively before it can be done fairly automatically and that is one reason why acquisition of literacy at an early age is stressed in cultures with alphabetic writing. It takes a lot of practice to reliably decode messages from alphabetic writing. Some of those who try to learn to read alphabetic writing never master it because they can't separate the speech string into individual segments, which are clusters of vocal gestures in consonants and vowels, in this way. Syllables apparently are a more natural unit for humans to perceive and hence code (write) and decode (read) by means of marks on a page.

Reading is also apparently swifter the more familiar the form of the written words are. A word in a spelling the reader has seen before is easier and quicker to recognize than one not seen before. Also reading is apparently quicker the less variation there is in the forms of words. (But there is much individual variation on this last point.)

The manuscripts were apparently normally read aloud, rather than internally as most reading is now done. That means the process of reading was slow enough that variation in the visual forms did not seriously detract from production of the sounds as prompted by the written characters. With reading 'to oneself', the process is potentially swifter once the reader has mastered the system; but variation can then slow it down.

If there was ever consistency at the start of the use of the Roman alphabet for representing Anglo-Saxon, it began to lessen immediately. The novelty of the alphabetic system as a technology, the lack of fixed norms for written representations, and the changes over time of the language were all forces that led to greater divergence of the written forms from the spoken string. Add to that dialect variation: Some of the scribes came from outside Wessex, and even when they tried to write so as to approximate Wessex sounds, their own local pronunciations often affected the characters they wrote. Scholars observe the dialect features of individual manuscripts to gain clues about where the manuscript was composed and/or copied.

There was at that time no strong countervailing force leading toward standardization, i.e reduction of variation, such as would come later. Spellings are so variable that to lessen the difficulties modern readers may have, Old English texts are generally "normalized", or printed in accordance with what scholars think is a good representative form for each word.

Manuscripts were produced in fairly large numbers by monks copying originals using quill pens, ink, and, as the writing surface, prepared sheepskins (parchment) or the much more expensive and high quality calfskins (vellum). The physical technology of this system hardly changed for 800 years. During that time some norms arose for spelling (incipient standardized spellings, although still by our standards highly variable), but the sounds of the language were changing faster. As usual with written languages, norms for writing lagged behind those for pronunciation, thus providing another source of divergence of the written form from the spoken.

Although the royal court was in Winchester, other regional centers of government and/or learning arose or continued developing, such as York, Peterborough, Jarrow - and at the end of the Anglo-Saxon period, just before the conquest, London. The first three of these centers tended to have their own orthographic norms based on Northern pronunciations. Thus there was no single center for the development of orthographic norms, although the royal court in the south exerted a powerful force for normalization.

**The period after the conquest: Spelling during the Middle English period**

The Norman Conquest and its aftermath changed the entire social and governmental structure. It also affected spelling greatly, for various reasons. The most obvious is that the use of English in written documents was greatly reduced. English was no longer the dominant language for law and government, so the tendency toward standardization for Anglo-Saxon writing was essentially stopped in its tracks. Some English was still written, but far less than before. With no schools and monasteries teaching ways of writing Old English, any incipient norms were swept away and people hardly literate in the language just tried to spell as the words sounded, with predictably irregular results.

Second, after the conquest many scribes were French or French-trained. Their norms for representing sounds were different in many respects. The letter c, for example, was used in French to spell an /s/ sound in many loanwords of Latin origin; the letter c in the Roman writing system represented a /k/, but a sound change in Latin turned /k/ into /s/ before front non-low vowels. (Thus Latin *civitas* /kiwitas/ evolved into French *cité*, from where we get our word *city*.) From many instances like this one, the use of a single letter c to represent the radically different sounds /k/ and /s/ came into the English spelling system (and persists to this day). The /s/ variant developed by assimilation and weaking of the original /k/ in particular contents. A similar sound change when Latin was changing into the Romance languages gave rise to the use of the letter g for both a /g/ sound and a /dȝ/ sound, as in *goat* vs. *gesture*. Like the split of the early /k/ sound into /k/ and /s/, this split of Latin /g/ was induced by assimilation of the /g/ before front non-low vowels, in which the sound took on the frontness of the following vowel. And like the split of /k/, the orthographic mismatch of the letter /g/ and the sounds it stood for was imported into English via the introduction during Middle English of large numbers of French loanwords with the new /dȝ/ sound in them.

Third, the conquest brought about a change in the dialect taken as the standard. The seat of the royal court and government moved to London after the conquest. (Edward the Confessor built his beloved Westerminster Abbey in Westminster, then just down the river to the west of the Roman and Saxon settlements of London, and used buildings around the abbey as a seasonal court. The Conqueror built a whole court complex around the abbey, which thus became the center of government.) As a result the new pronunciation norms were derived from London English and not from ancestral Wessex which was in the West Country. Many manuscripts were re-copied into the newly important London dialect of the ruling classes. Older spelling norms were abandoned for new ones based on London pronunciations.

Writing had been used for governmental purposes from the beginning of the Anglo-Saxon era, but for a long time its chief use remained in the church. After the conquest it was used more and more for governmental purposes, centered in the royal court and law courts. The Court of Chancery in London became the seat of official record-keeping, and by the 1300s spelling norms were developing noticeably, in a written variety called Chancery English.

The rise of two important centers of learning outside London, Oxford and Cambridge, by the 1300s affected written norms as well. These towns had somewhat different dialects, but they were still relatively close to each other and to the court, and many of the spelling norms developed there could also be applied to writing the London dialect. The triangle of London-Oxford-Cambridge, with its revolving scholarly and clerical workforce, became a large and important center of developing orthographic norms.

**Printing and the beginnings of the information revolution**

The advent of printing in the late 1400s drastically changed the speed at which manuscripts could be produced and therefore disseminated, and the adoption of paper also helped to make written documents cheaper and more widespread. These factors encouraged the growth of record-keeping and bureaucracy and the continued growth in importance of the Court of Chancery and Chancery English. Property records, tax-collecting and other financial records, laws, and records of crime and punishment all burgeoned in the 1500s.

The rise of schools, designed to train not only religious workers but also secular clerical workers for government, made it possible to train larger numbers of people in literacy and thereby also further spread the developing norms for orthography. The growth of London and its role in public institutions ensured its importance as the center of a linguistic standard for the developing nation. Standard written norms based on London English developed and were used even where local pronunciations were hardly affected by the sounds of spoken London English. Documents moved around in far greater numbers than people and thus could influence the norms of the region more easily than the spoken dialect features of travellers.

The growth of a professionalized class of printers outside of the direct control of church and government led to the role of printers in setting norms of writing and spelling. Printers had a strong interest in standardization to reduce variation and hence make the printing process easier. The printing profession evolved into the profession of publishing, and publishers have been important ever since in the setting of written standards.

During the 1500s, a major upheaval in the pronunciation of English vowels, the Great English Vowel shift, spread through the speech community and tore the conservative written forms of the long vowels away from their changing pronunciations, leaving English with a set of letter-to-written vowel correspondences different from everywhere else in Europe, as well as internal variation that bedevils readers in pairs like *divine*, *divinity*.

At about the same time, many inflectional endings were reduced and finally eliminated, notably many final unstressed e's. These "silent e's" were continued in the spelling system but repurposed as a tool to signal the value of the long vowels changed in the Great Vowel Shift (e.g. in *mate*, *name*, *while* etc.). Other sounds were reduced then eliminated, such as the k's and g's in the old clusters kn and gn (as in *knight* and *gnat*) and some of the remnants of Old English yogh, the old velar fricative (as in *neighbor* and *bough*). The result is the numerous set of "silent letters" that learners find so maddening.

By the late 1500s, under the impetus of printing the tremendous variety of spellings in written English had shaken down into a far smaller set of variants, and a great part of the outlines of the modern orthography was in place. Changes in orthographic norms slowed considerably, and Modern English was left with a spelling system from an earlier period of its history: essentially it is a normalized Middle English system. The result is a set of letter-to-sound mismatches greater than those of elsewhere in Europe, even in some respects greater than those of French, whose spelling was codified a little later.

**The Reformation and Renaissance**

In the late 1500s England became a Protestant country. As part of the new doctrine and its administration, new documents were needed such as liturgies for the recently-established Church of England, the Book of Common Prayer, and above all, English translations and copies of the Bible.

The push for an accessible version of Scripture, which meant an English Bible, began a few centuries earlier but was thwarted until the church and government adopted the basic tenets of the Reformation. A number of versions of the scripture in English were produced in the late 1500s, but the culmination of this trend was the King James Bible of 1611. This was the most influential and most widespread religious document of the age, and the norms adopted by the translators and printers of this Bible had an immense influence on writers.

**Dictionaries and Other Linguistic Reference Materials**

With the growing use of written language, the need was felt for materials that presented aspects the language in a way that could be looked up by all who desired information about the language: first, non-native speakers and later also native speakers of the language who wanted to know about newly developed parts of the language that were not part of every native speakers' knowledge. The first dictionaries were essentially lists of "hard words", particularly the large number of new loanwords from the Classical languages and also from the new colonies overseas. By the 18th century dictionary-writing was becoming a recognized activity and scholars and other learned men were being commissioned by publishers to write such materials.

Elsewhere in Europe language academies were established to codify and normalize all aspects of language. This trend did not catch on in English-speaking lands and there has never been an officially recognized academy for standardization either in Britain or the U.S. There was however an English version of the trend towards "language purification" that swept European countries through the Renaissance and Enlightenment. (This trend never fully died out in the English speaking world, and we see its echoes in prescriptivist movements that seek to minimize foreign influences, which are viewed as threats, probably for nationalistic and ethnic-based reasons. Since languages do not degenerate but only change with the needs of their speakers, it is difficult to see how one language could actually be threatened as long as it has speakers--especially one such as English with such a numerous body of speakers. A language can be threatened or endangered only if it ceases to be used at all.) Jonathan Swift was a vocal proponent of English language purification, but as is usual with purifiers, his knowledge of the history of the language was faulty and his beliefs about the reasons for particular norms and why they had to be upheld were irrational.

The publication of Samuel Johnson's *Dictionary of the English Language* was a milestone in the development of dictionary and reference materials. It adopted a more-or-less descriptivist stance which is very modern, and at odds with the prescriptive views of earlier producers of dictionaries. Johnson's recognition of change as a normal process and his refusal to see it as degeneration was novel and important.

By the time of Johnson's dictionary, the spelling system in place was recognizably that of current Modern English, with only a few orthographic peculiarities such as the spelling of *show* as *shew* and the use of the "long S" character (easily confused with the f of that time). Probably the typefaces in use at the time give more appearance of difference with modern texts than any of the remaining spelling differences between 18th century English and contemporary British English.

The political independence of the United States in the 1770s led to a push towards identifying distinguishing cultural factors. Language was an obvious way of distinguishing Americans from Britons, since a recognizable set of American pronunciation features had already developed. However, instead of using pronunciation differences to try to develop a separate written standard, Noah Webster wrote a dictionary containing some regional, American-dialect based definitions to set it apart, and also introduced into his dictionary and other writings a set of spellings that put a distinctive stamp on American orthography without changing it too much for mutual intelligibility. In other words, most of the spelling conventions that had solidified in the British standard written form by the early 19th century were maintained by Webster, but he added a few systematic differences: Using *-ize* instead of *-ise* for verbs derived from Greek verbs in *-izein*; eliminating *u* in the suffix *-our* (thus moving it away from the French-derived spelling of Middle English to a spelling somewhat more in line with pronunciation on both sides of the Atlantic), the replacement of *-re* in French loans by *-er* (*centre/center, theatre/theater*) and a few other simplications.

Movements advocating more drastic spelling reform of English emerged in the 18th century, and there are periodic resurgences of this trend, which represents an attempt to introduce efficiency and save time for new learners.

Benjamin Franklin devised an alphabetic system largely keeping English orthography the same but introducing single symbols for the current digraphs, and additional symbols for vowel distinctions not systematically represented in the writing system. (See link under this essay.)

George Bernard Shaw was a passionate advocate of total spelling reform and left his entire estate to be devoted to this project.

Systems for extreme changes of spelling, however rational, do not seem to gain much ground in the English speaking world, probably because updating the spelling to match pronunciation would make older documents unintelligible for those learning only the new system, as well as giving trouble as to how to take account of variations in pronunciation. Another objection is that historically-oriented people (admittedly, a minority) would not like to see the history of words containing fossil traces of earlier forms (i.e. antiquated spellings) erased by updating to modern rational spellings.

The existing system has now gone on so long that it is difficult to turn the clock back too much at once, but only by doing so can the proponents gain their objective of an entirely rational correspondence between letters and sounds.

Some other European nations make small orthographic adjustments every generation or so, and thus keep their spelling gradually evolving along with (or actually a little bit behind) the pronunciation. The Scandinavian languages are well-known for this strategy. There was a spelling reform in Germany in 1989 or so, but it was not a drastic one, although portrayed as dire by some. Recently major national newspapers have declared their intention to go back to the old system, leaving language users in confusion about which standard to adopt.

**Modern trends for standardization**

Current orthography represents two major centers of standardization: British and American English. The British standard held sway throughout the world until very recently, when some other countries began to first accept and then to teach American orthography and lexical choices. (Grammatical features have been adopted with more reluctance it seems.) Pronunciation variants are spread auditorily rather than via writing, but the same changeover from British to American norms appears to be occurring.

In the English-speaking world beyond Britain and the U.S., the norms are coming into flux in some places. The spelling usages of former colonies Canada and Australia are undergoing change as the influence of the U.S. is felt more and more. These countries were tied to the mother country, Britain, longer, and have maintained largely British orthography, but proximity (in the case of Canada) and cultural influence are exerting pressure on the norms speakers choose. The use of U.S. spelling variants seems to be on the rise in the populace in these countries, despite resistance of schools and government. In other former colonies such changes are less obvious, but the same trend may be active.

The spread of electronic communication in the form of computers and phone texting have provided a large number of abbreviatory conventions. The enforcers of spelling norms, schools and publishers, have so far maintained the current orthographic standards in printed documents. But because spelling norms are hard to acquire given all the spelling-pronunciation mismatches, and writing has become so democratized through these technologies, the use of non-standard spellings (not just abbreviations) is increasingly widespread. Such changes in usage patterns are bound to have some effect on the written language ultimately, just as speaker's usage of words eventually affects what are considered conventional norms. It is still too early to tell how these effects on the written language will play out. Publishing itself as an industry feels endangered by the tidal wave of un-edited electronic publication on the internet. What happens to publishing as an industry will probably affect how quickly new orthographic norms are adopted, since publishing is one of the major conservative forces of orthographic standardization in the modern world. The others, schools, government, and church, seem less powerful in determining the form of the documents that are actually produced on paper.