

A Corpus Analysis of the Spelling Reform Movement in the Creation
of American English and Americanism
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Abstract

Synchronic variation between British English and American English ranges from pronunciation, vocabulary, and grammar to spelling. Since synchronic variation results from language change, diachronic observations of the language are necessary for a meaningful account of linguistic variation. This study traces the origin of the difference in spelling between the two varieties of English, American and British, by putting a special focus on the attempts at spelling reform that intensified in America after its independence. The attempts, also collectively called the simplified spelling movement, can be characterized as one of the pursuits of Americanism as well as American English. The movement stemmed from the connection of linguistic nationalism with linguistic demands for a correspondence of orthography with actual pronunciation. This paper aims to identify spelling reform proposals made in the latter half of the 18th century by Noah Webster, one of the most influential reformers, and by the Filology [*sic*] Committee of the Simplified Spelling Board in the early 20th century. Their attempts are described from a corpus linguistic perspective that identifies in an empirical manner failed proposals as well as successful innovations introduced in the creation of American English.

1. Divorce from British English: Movement towards Spelling Reform in America

Attempts at spelling reform in America have been made in the last several centuries. A general history of the spelling reform movement

between the 15th and the 20th centuries can be summarized as in Table 1.

Noah Webster, who was strongly influenced by Benjamin Franklin’s (1768) idea of reforming spelling, is recognized as “the real father of the simplified spelling movement” (Mencken 1963: 489). Although the unification in the English language had already started to be enhanced by the introduction of Caxton’s printing press in 1476 and by the publication of Samuel Johnson’s dictionary (1755), Webster strongly suggested that the English spelling be reformed in an American way. The fundamental motive behind his spelling reform proposals seems to be connected with his earnest desire to establish a “national” language by promoting linguistic nationalism in America, after independence was declared. About 40 years before the publication of one of his masterpieces, *An American Dictionary of the English Language* in two volumes (1828a, 1828b), Webster asserted in the appendix of *Dissertations on the English language* (1789) that spelling reform was essential for the good of the nation:

Table 1. History of the Movement for Spelling Reform in America (Summarized from Mencken 1963: Ch. VIII; Brinton & Arnovick 2011: Appendix B; Rollins 1989: xv–xvi)

1476	William Caxton sets up his printing press at Westminster.
1755	Samuel Johnson publishes <i>A Dictionary of the English Language</i> .
1768	Benjamin Franklin writes “Scheme for a New Alphabet and Reformed Mode of Spelling.”
1789	Noah Webster (NW) expresses his desire for a distinct language system in America in <i>Dissertations on the English Language</i> .
1790	NW puts his spelling reform proposals into practice in <i>A Collection of Essays and Fugitiv [sic] Writings</i> .*
1828	NW publishes <i>An American Dictionary of the English Language</i> .
1876	<ul style="list-style-type: none"> • The Committee of the American Philological Association (APA) urges the adoption of the eleven new spellings. • The Spelling Reform Association (SRA) is established and endorses APA’s eleven new spellings.
1886	APA makes recommendations affecting more than 3,500 words.
1898	The National Education Association (NEA) proposes a representative list of the twelve changes.
1906	<ul style="list-style-type: none"> • The Simplified Spelling Board (SSB) is established and issues a list of 300 spellings. • President Theodore Roosevelt orders the adoption of SSB’s proposals by the Government Printing Office.
1920	SSB publishes <i>Handbook of Simplified Spelling</i> .*
1921	NEA withdraws its endorsement of spelling reform.

Let us then seize the present moment, and establish a national language, as well as a national government. Let us remember that there is a certain respect due to the opinions of other nations. As an independent people, our reputation abroad demands that, in all things, we should be federal; be national; for if we do not respect ourselves, we may be assured that other nations will not respect us. In short, let it be impressed upon the mind of every American, that to neglect the means of commanding respect abroad, is treason against the character and dignity of a brave independent people.

(Webster 1789: 406)

He argued for the necessity of achieving linguistic economy by means of controlling the irregularities between spelling and pronunciation (e.g. the existence of the silent letter *a* in *bread*). He identified two main causes of the irregularity (Webster 1789: 391). The first cause is that pronunciation is liable to changes because of “the progress of science and civilization.” The second, he pointed out, is the influx of different languages or words “of foreign growth and ancient origin.” Of course, the Great Vowel Shift that began in the 15th century should not be ignored because it is largely responsible for the discrepancy between the sound and spelling of vowels (Crystal 1987: 214).

Webster further stated that these “faults” should be corrected, and his desire for an “American tongue” was combined with his goals for the simplified spelling movement:

The question now occurs; ought the Americans to retain these faults which produce innumerable inconveniencies in the acquisition and use of the language, or ought they at once to reform these abuses, and introduce order and regularity into the orthography of the AMERICAN TONGUE?

(Webster 1789: 393–394)

He proposed three principles to resolve the problems of irregularity and complexity of English orthography, as summarized in Table 2, i.e. Principle I: the omission of silent letters (e.g. *bred* instead of *bread*); Principle II: a substitution of a character (e.g. *meen* instead of *mean*), and Principle III: the addition of diacritical signs (e.g. the introduction of *ī* to distinguish different sounds represented by *i* so that a new character

Table 2. Principles Made by Webster (Summarized from Webster 1789: 394–396)

Principle I	“The omission of all superfluous or silent letters”	<i>bred, hed, brest, ment, relm</i> <i>bilt, frend, giv</i>
Principle II	“A substitution of a character that has a certain definite sound”	<i>meen, neer, speek, greev, zeel</i> <i>greef, kee, beleev, proov, blud</i> (< blood) <i>laf, dawter, plow, tuf, draft</i> (< draught) <i>karacter, korus, kolic, arkitecture</i> (< Greek <i>ch</i>) <i>masheen, shaze, shevaleer</i> (< French <i>ch</i>) <i>peek</i> (< <i>pique</i>), <i>obleek</i> (< French <i>que</i>), <i>toor</i> (< <i>tour</i>)
Principle III	“A trifling alteration in a character, or the addition of a point” to a letter with different sounds	<i>i > ī</i> , etc.

would not be necessary).

In 1790, a year after his nationalist statement in the appendix of *Dissertations on the English language*, Webster published *A Collection of Essays and Fugitiv [sic] Writings*, in which he experimentally adopted a considerable amount of innovative spelling, as symbolized by the use of *fugitiv* instead of *fugitive* in its title. He seems at this time in his life to have been at his most radical as a reformer, but he gradually became more moderate as seen in the dictionary published about 40 years later: *An American Dictionary of the English Language* (1828a, 1828b). Mencken (1963: 481) points out: “many of his innovations failed to take root, and in the course of time he abandoned some himself.”

Nevertheless, his attempts attracted both social interest and controversy as shown in Table 3 (the underlining is mine). What follows are from Mencken (1963: 489–490). Webster’s proposals led the American Philological Association (APA) to appoint a committee to investigate them, and the committee chose eleven innovative spellings to be adopted urgently in 1876. This move brought further support from the Spelling Reform Association (SRA). The National Education Association (NEA) proposed a representative list with twelve spelling innovations in 1898. The Simplified Spelling Board (SSB) was established in 1906 and, in the same year, presented a list of 300 innovative spellings to the public. President Theodore Roosevelt ordered the Government Printing Office to adopt these spellings within that year, but this attempt fomented opposition.

In 1920, SSB published *Handbook of Simplified Spelling*, with its representative list of the thirty words including “the five tipe-words [sic]”: *catalog, program, tho, thoro, thru* (SSB 1920: Part 3, p.49) taken from the

Table 3. Lists of Spelling Innovations Proposed by Academic Organizations
(Summarized from Mencken 1963: 489–490; SSB 1920: Part 3, p. 49)

The Eleven Spellings (APA 1876)	<i>ar, <u>catalog</u>, definit, gard, giv, hav, infinit, liv, <u>tho</u>, <u>thru</u>, wisht</i>
The Twelve Spellings (NEA 1898)	<i><u>tho</u>, <u>altho</u>, <u>thru</u>, <u>thruout</u>, <u>thoro</u> <u>thoroly</u>, <u>thorofare</u>, <u>program</u>, <u>prolog</u>, <u>catalog</u>, <u>pedagog</u>, <u>decalog</u></i>
The Thirty Spellings (SSB 1920)	<i><u>ad</u>, <u>adderst</u>, <u>anser(d)</u>, <u>ar</u>, <u>askt</u>, <u>bil(d)</u>, <u>buro</u>, <u>catalog</u>, <u>det</u>, <u>engin</u>, <u>enuf</u>, <u>fil(d)</u>, <u>fixt</u>, <u>giv</u>, <u>hav</u>, <u>insted</u>, <u>liv(d)</u>, <u>program</u>, <u>reciet</u>, <u>reciev(d)</u>, <u>shal</u>, <u>shipt</u>, <u>tel</u>, <u>telefone</u>, <u>(al)tho</u>, <u>thoro(lu, -face, etc.)</u>, <u>thru(out)</u>, <u>twelv</u>, <u>wil</u>, <u>yu</u></i>

twelve words accepted by NEA in 1898. Mencken (1963: 490), however, sardonically notes: “its brash novelties (*det, tel, twelv, wil, yu*) gave the whole movement a black eye.”

In spite of the above-mentioned governmental and organizational support, the movement had started to fade out by the first few decades of the 20th century; for example, NEA withdrew its endorsement in 1921 (Mencken 1963: 490). As a result, most of the above innovations were not successful other than a few of today’s well-known examples, e.g. *catalog* and *program*, as well as those that had been “in unquestioned American usage at that time” (Mencken 1963: 489), e.g. *color* and *center*.

Some other successful examples are those underlined in Table 3 (e.g. *tho, thru*, etc.). They are so well-established in contemporary American English that they are in at least one of the following relatively recent dictionaries of American English (either as the entry word or as a variant of the entry word):

- (i) *The American Heritage Dictionary of the English Language* (3rd ed., Soukhanov ed. 1992)
- (ii) *The New Oxford American Dictionary* (Jewell & Abate eds. 2001)
- (iii) *Random House Webster’s Unabridged Dictionary* (2nd ed., Steinmetz ed. 1998)

These spellings are also in at least one of the following British-based dictionaries for learners of contemporary English:

- (iv) *Longman Dictionary of Contemporary English* (3rd ed., Summers ed. 1995)
- (v) *Oxford Advanced Learner’s Dictionary of Current English* (4th ed., Hornby 1989)

2. Research Question & Methods: Building Corpora

The present research inquires into what kinds of spelling proposals were actually put into practice from the 18th century onward and which ones have been successful or have failed. Two of the most remarkable publications in the history of the spelling reform movement will be examined: (a) *A Collection of Essays and Fugitiv Writings* (Webster 1790), and (b) *Handbook of Simplified Spelling* (Simplified Spelling Board 1920), marked with an asterisk (*) in Table 1. These publications are unique in that they were made to include the experimental adoption of a number of simplified spellings in their main texts.

Although these spelling proposals have been briefly summarized in Mencken (1963), etc., the purpose of this paper is to make a special effort based on more empirical evidence to describe tendencies in their attempts. In order to avoid making a merely impressionistic analysis of the innovative spellings that appear in these publications, corpora are compiled by the present author. For the analysis of the resulting corpora, *AntConc* Version 3.5.8 (Anthony 2019) was employed. Specific methodologies for building an individual corpus will be described in the following.

(a) *A Collection of Essays and Fugitiv Writings* (Webster 1790)

One year after expressing his eagerness for spelling reform for the establishment of American English (Webster 1789), Webster published *A Collection of Essays and Fugitiv Writings* (1790). This book is a collection of thirty essays written between 1785 and 1790 on various topics such as ethics, history, politics, and literature. Although they are not necessarily relevant to spelling reform itself, one will immediately observe throughout the book the great effort Webster made to use reformed spellings.

The occurrence of his innovative spellings is relatively moderate in Essays I–XXII. They were written up to 1788 with the exception of Essay XV, which was written in 1787–1789. Yet, innovative spellings already appear here and there in these essays. This is not in keeping with his statement in the preface: “many of the essays hav [*sic*] been published before, in the common orthography” (Webster 1790: x) (the preface of the book was written in 1790, so *before* in this context would mean the years before 1790). In the following quotations (the underlining is mine), one will witness the dropping of the silent *e* as in *nativ*, *extensiv*, *representativ*s and the silent *d* as in *acknowledge*. Meanwhile, some British spellings, indicated

with double underlining, also remain as they were: *equalled* instead of *equaled*; *honour* instead of *honor*; the distinction between the noun *practice* and the verb *to practise* (for American practice of the verb *to practice*, see Mencken 1963: 487).

Foreigners acknowledge that the nativ beauty and understanding of the American ladies are not excelled in any country, and equalled in very few.

(Webster 1790: 92, Essay VII, 1787)

Another effect of extensiv credit, is a multitude of lawyers. Every thing which tends to create disputes, to multiply debts, weaken a regard to commercial engagements, and place the collection of debts on law, rather than on honour,

(Webster 1790: 116, Essay VII, 1787)

*The distinction between the powers of the people and of their representativs in the Legislature, is as absurd in theory, as it proves pernicious in practice. A distinction, which has already countenanced and supported one rebellion in America; has prevented many good measures; has produced many bad; has created animosities in many States, and embarrassments in all. *It has taught the people a lesson, which, if they continue to practise, will bring laws into contempt, and frequently mark our country with blood.*

(Webster 1790: 144, Essay XIII, 1787)

In contrast, Preface and Essays XXIII–XXX, almost all of which were written in the years 1789 and 1790, include a considerable number and a variety of types of radical spellings. In the following quotations (the underlining is mine), his attempt at spelling reform is not limited to the deletion of a final silent *e* (e.g. *volum* and *valu*), but rather reform is extended further to a range of content words: *reeder* (< *reader*), *reezon* (< *reason*), *nabor* (< *neighbor*), *det* (< *debt*), *haz* (< *has*), *wel* (< *well*), *erth* (< *earth*), *becumes* (< *becomes*), *heet* (< *heat*), etc., and also to several function words: *wil* (< *will*), *iz* (< *is*), *hav* (< *have*), *theze* (< *these*), *hiz* (< *his*), and *az* (< *as*). Note that some British spellings, i.e. those double underlined, still remain as they were in his experimental writing; for example, the use of *levelling* instead of *leveling*. Compare this with his use of *wel* instead of

well. As Webster himself states in the preface of the book, there is no unity in his application of radical spellings. Inconsistency in spelling is observed between essays written in different years.

The reeder wil obzerv that the orthography of the volum iz not uniform. The reezon iz, that many of the essays hav been published before, in the common orthography, and it would hav been a laborious task to copy the whole, for the sake of changing the spelling.

(Webster 1790: x, Preface, 1790)

Theze men therefore keep their money, till their distressed nabor iz forced by det to sell hiz farm; then iz the time to lay out their money; they get the farm at their own price, which iz generally less than half its valu. In most states, lands are sold at auction, where they are sacrificed; and the poor owner haz all the charges of a legal suit to pay, az wel az the det; and the land sold for a small part of its valu.

(Webster 1790: 306, XXIV, 1789)

The cause of this change iz obvious: By levelling the forests, we lay open the erth to the sun, and it becumes more impressible with heet and cold.

(Webster 1790: 370, XXVII, 1790)

The reason why *A Collection of Essays and Fugitiv Writings* (1790) has been chosen over the famous dictionary in two volumes (Webster 1828a, 1828b) for the present research is that Webster's experimental writing will more clearly demonstrate his actual use of innovative spellings; in other words, this work better shows what Webster actually put in *practice*, rather than what he ideologically expressed as *principle*. This book is valuable in this sense, even though it is not specifically on spelling reform itself.

The fully digitized and proofread text of the book (Plain Text UTF-8) was downloaded from Project Gutenberg (<http://www.gutenberg.org>). Because of the above-mentioned imbalance in the type of adopted innovative spellings between the first and the second parts of the book, two separate corpora were compiled: Corpus A, which is comprised of Essays I–XXII, and Corpus B, which is comprised of Preface and Essays XXIII–XXX. Corpus A consists of 83,096 words in token, 7,472 in type; while Corpus B consists of 58,369 words in token, 6,582 in type. Henceforth, the

term “type” is synonymous with “the number of word forms, or types of spelling”; for example, *had*, *has*, *hav*, *have*, *having*, and *haz* are counted as six separate word forms, or types of spelling. That means any two surface forms that are not identical to each other, including verbs with conjugations (e.g. *have* vs. *has*) and nouns with inflections (e.g. *baron* vs. *barons*), were considered separate types. Differences in part of speech (e.g. the noun *act* vs. the verb (*to*) *act*) and those in meaning of homonyms (e.g. the innovative spelling *meet* for ‘to meet’ vs. ‘(pounds of) meat’) were ignored as long as their surface forms were identical. The term “token” means the occurrence of a word type; if *hav* occurs 3 times and *haz* occurs 5 times then it is counted as 8 in token and 2 in type. The comparison will be made between Corpus A and Corpus B to see how radical Webster’s attitude grew from 1789 onward.

(b) *Handbook of Simplified Spelling* (Simplified Spelling Board 1920)

Handbook of Simplified Spelling was published by the Simplified Spelling Board (SSB) in 1920, approximately 130 years after the publication of Webster’s first official mention of the necessity for spelling reform in America (Webster 1789) and his own experimental writing (Webster 1790). The handbook consists of three parts: Part 1 is an overview of the history of the spelling reform movement; Part 2 summarizes the goals, purposes, and benefits of spelling reform, and then responds to some of the objections to the movement for simplified spelling; Part 3 provides the fundamental rules for simplified spelling and lists of words under the influence of the Board’s proposals. The main texts are written in their proposed innovative spellings.

To the best of my knowledge, there is no digitized text that was fully proofread as, for example, those available in Project Gutenberg. Therefore, a reduced scale corpus of the book was compiled for randomly selected pages by the present author. The population of the corpus is defined as the main body of the text excluding title page, table of contents, and the part consisting mainly of a list of rules and a dictionary list of words in reformed spelling (page 5 onward in Part 3). Out of the remaining 76 pages (Part 1: pp.1–32; Part 2: pp.1–40; Part 3: pp.1–4), 15 pages were randomly sampled using the random number generator in Excel. The selected pages are: pp. 1, 4, 9, 23, 25, 26, 31 in Part 1; pp. 14, 22, 25, 33, 37, 38, 39 in Part 2; p. 2 in Part 3. This makes a corpus of the handbook with a reduced scale of 1:5 (henceforth, Corpus C). The scanned text file was downloaded from

Internet Archive (<https://archive.org>), but the retrieved digitized text was proofread by the present author.

The resulting corpus has 3,833 words in token and 1,224 in type. The corpus size is much smaller than that of Webster’s (Corpus A or Corpus B), but it seems large enough to detect some of the most characteristic spellings in the publication. The comparisons will be made between Corpus C and Corpus A, and between Corpus C and Corpus B. It will show the extent to which Webster’s attempts gained the support of this authority more than a century after his proposals were made.

3. Corpus Linguistic Analysis of *A Collection of Essays and Fugitiv Writings* (Webster 1790)

Webster’s attempt to put spelling reform into *practice* can be observed in Corpus A and Corpus B. In this section, analysis is limited to words with their frequency per million word (PMW) being over 100 in each corpus. Whether words are written in innovative spelling or not was manually checked by the author. Unknown words, proper names, and archaic words including those of foreign origin (e.g. Latin) were not counted. Appendix A lists words in innovative spelling by frequency for Corpus A; Appendix B does the same for Corpus B.

In Corpus A, 19 words in innovative spelling have a frequency of more than 100 PMW, and they are categorized into four groups (Table 4). The table shows 3 words that drop *d* in *-dge* words (e.g. *acknowledge*), 9 words that drop *e* at the end (e.g. *representativ(s)*), 3 words that drop *ugh* in *-ough* words (e.g. *altho*), and 4 words that drop *u* in *-our* words (e.g. *favor*). The rightmost column in Table 4 shows that these innovations all fall under Principle I in Webster (1789), i.e. the deletion of silent letters (see Table 2).

Table 4. Innovative Spellings (100 PMW or Above) in Corpus A: *Essays I–XXII, Collection of Essays*, Webster 1790

Rules	Examples	Correspondence with Webster (1789)
<i>d</i> -deletion	<i>acknowledge, acknowledged, knowlege</i>	Principle I
final <i>e</i> -deletion	<i>executiv, extensiv, giv, legislativ, oppressiv, positiv, primitiv, representativ, representativs</i>	Principle I
<i>ough</i> → <i>o</i> (<i>ugh</i> -deletion)	<i>altho, tho, thro</i>	Principle I
<i>our</i> → <i>or</i> (<i>u</i> -deletion)	<i>favor, favorable, honor, labor</i>	Principle I

In Corpus B, there are 129 innovative spellings of which the PMW is more than 100. They are categorized into 18 groups (Table 5). Firstly, one would notice that the application of Principle I in Webster (1789), i.e. the

Table 5. Innovative Spellings (100 PMW or Above) in Corpus B: Preface and Essays XXIII–XXX, *Collection of Essays*, Webster 1790

Rules	Example	Correspondence with Webster (1789)
<i>bt</i> → <i>t</i>	<i>det, dets, dout</i>	Principle I
<i>c(h)</i> → <i>k</i>	<i>karacter, karacters, skool, skools</i>	Principle II
double consonant → single consonant	<i>shal, stil, til, wel, wil</i>	Principle I
final <i>e</i> -deletion	<i>abuv*, belev*, determin, du, extensiv, giv, hav, leev*, legislativ, liv, motius, positiv, primitiv, proov*, receev*, representativus, tru, twelv, valu, virtu, volum</i>	Principle I
<i>ea</i> → <i>e</i> [e]	<i>bred, deth, hed, helth, ment, relm, wether, mezure*, mezures*, plezure*</i>	Principle I
<i>ea</i> → <i>e</i> [æ]	<i>erl, erls, erly, erth, lerned, lerning</i>	Principle I
<i>ea</i> → <i>ee</i> [i:]	<i>ceese, eech, eest, eezily, eazy, heet, leest, leev*, meen, meening, meens, meet, peece, reed, seet, seets, stream, reezon*, reezoning*, reezons*, zeel</i>	Principle II
<i>ea</i> → <i>ee</i> [iə]	<i>appeer, appeers, heer, neer, neerly, yeer, yeers</i>	Principle II
<i>ei</i> → <i>a</i> [eɪ]	<i>nabor*, naborhood*, nabors*</i>	Principle II
<i>ei</i> → <i>ee</i> [i:]	<i>neether, receev*, received</i>	Principle II
<i>ie</i> → <i>e</i> [e]	<i>friend, friends</i>	Principle I
<i>ie</i> → <i>ee</i> [i:]	<i>belev*, chief</i>	Principle II
<i>o(u)</i> → <i>u</i> [ʌ]	<i>abuv*, become, becomes, discover, governed, government, governor, munth, suthern, tung*, yung</i>	Principle II
<i>ough</i> → <i>o</i> (<i>ugh</i> -deletion)	<i>altho, tho, thro</i>	Principle I
<i>our</i> → <i>or</i> (<i>u</i> -deletion)	<i>favor, favorable, harbor, honor, honorable, labor, nabor*, naborhood*, nabors*</i>	Principle I
<i>s</i> → <i>z</i>	<i>arizing, az, because, bizziness, cloze, exercise, expozed, haz, hiz, iz, mezure*, mezures*, obzervations, obzerved, plezure*, prezerve, raize, reezon*, reezoning*, reezons*, suppoze, theze, thozе, uzed, waz, whoze</i>	Principle II
<i>ue</i> -deletion	<i>antiq, tung*</i>	Principle I
Others	<i>peeple</i> (<i>eo</i> → <i>ee</i> [i:]), <i>rong</i> (<i>w</i> -deletion)	Principle I
	<i>dey</i> (<i>a</i> → <i>e</i> [e]), <i>ether</i> (<i>ei</i> → <i>e</i> [i:]), <i>heerd</i> (<i>ea</i> → <i>ee</i> [æ:]), <i>proov*</i> (<i>o</i> → <i>oo</i>)	Principle II

deletion of silent letters, is extended to many more words. Silent letters such as *b* in *debt*, *l* in *shall* (double consonant *ll*), the final *e* in *determine*, and the final *ue* in *antique* and *tongue* are deleted. The changes, from *ea* to *e* [e] as in *deth*, from *ea* to *e* [ə:] as in *erth*, from *ie* to *e* [e] as in *frend*, from *ough* to *o* as in *altho*, and from *our* to *or* as in *favor*, involve the deletion of silent letters, too.

Secondly, Corpus B is also characterized by the application of Webster's (1789) Principle II, i.e. the alternation of a character with a certain definite sound. It includes the changes from *c(h)* to *k* (e.g. *karacter*), from *ea* to *ee* [i:] (e.g. *ceese*), from *ea* to *ee* [iə] (e.g. *appeer*), from *ei* to *a* [eɪ] (e.g. *nabor*), from *ei* to *ee* [i:] (e.g. *neether*), from *ie* to *ee* [i:] (e.g. *cheef*), from *o(u)* to *u* [ʌ] (e.g. *abuv*, *becume* and *yung*), from *s* to *z* (e.g. *arizing*), etc. These observations lead simply to the conclusion that more spelling innovations are adopted in Corpus B than in Corpus A.

Some words undergo more than two changes, e.g. “*ea* → *ee*” and “*s* → *z*” as in *reezon*. Such examples are marked with an asterisk (*) and spread over more than two categories in Table 5. Among the changes in the vowels, *ea* shows the largest number of examples in Table 5. A possible reason is that the proportion of sound-spelling correspondences in *ea*, for example, is only 4% for the sound [e] (e.g. *stealth*) and 10% for the sound [i:] (e.g. *meat*), according to a US study (cited in Crystal 1987: 215). Webster's (1789) Principle III, a systematic use of diacritics, cannot be observed in Corpus B.

Table 6 displays more frequent and less frequent spellings in Corpus B in comparison with those in Corpus A as a reference corpus. *Freq.* indicates the total number of occurrences of the word in question in Corpus A and Corpus B. A word with a positive value for *Keyness* indicates that it is characteristic of Corpus B, compared with its reference corpus, i.e. Corpus A. The values in *Keyness* were calculated by the default statistical measure in *Keyword List* in AntConc (the default setting is as follows: *Statistic: Log-Likelihood (4-term); Statistic Threshold: p < 0.05 (+ Bonferroni); Effect Size Measure: Dice coefficient; Effect Size Threshold: All Values*, with “Treating all data as lowercase” ticked). Among 45 word types, 36 (e.g. *iz*, *az*, *hav*, etc.) have positive values in *Keyness* while the remainder (9 word types) have negative values.

It is immediately apparent that most of the words with positive *Keyness* (all except the asterisked 12 words: *barons*, *court*, *judges*, *baron*, *lords*, *peers*, *jurors*, *lands*, *word*, *proprietors*, *clock*, *county*) are written in

innovative spelling. Characteristic spelling innovations in Corpus B are *iz*, *az*, *hav*, *waz*, *hiz*, *wil*, *haz*, *theze*, *peeple*, *twelv*, *thoze*, etc. Conversely, the 9 words with negative *Keyness*, i.e. *is*, *as*, *was*, *have*, *people*, *his*, *will*, *has*, and *these*, are all written in standard spelling.

It is also apparent that many of those that are characteristic of Corpus B are function words, e.g. *iz*, *az*, *waz*, *hiz*, *wil*, *theze*, *thoze*, etc. As function words occur more frequently than content words, it would be natural for the former to become remarkable once spelling innovations are applied. Content words characteristic of Corpus B are: *peeple*, *twelv*, *reezon*, *valu*, *wel*, *gubernment*, *stil*, *heet*, *leest*, *meen*, *yung*, *meens*, *suthern*, and *cheef*. The two words: *hav* and *haz*, are used as an auxiliary verb (function word) and a main verb (content word).

In sum, the result of the above corpus analysis empirically endorses

Table 6. Words Characteristic of Corpus B (Compared with Corpus A)

Freq.		Keyness	Effect	Keyword	Freq.		Keyness	Effect	Keyword
946	+	876.63	0.0133	<i>iz</i>	150	+	30.14	0.0021	<i>word*</i>
432	+	399.74	0.0061	<i>az</i>	32	+	29.58	0.0005	<i>tru</i>
303	+	268.82	0.0043	<i>hav</i>	29	+	26.80	0.0004	<i>stil</i>
290	+	268.24	0.0041	<i>waz</i>	28	+	25.88	0.0004	<i>heet</i>
237	+	219.18	0.0033	<i>hiz</i>	27	+	24.96	0.0004	<i>leest</i>
183	+	169.21	0.0026	<i>wil</i>	26	+	24.03	0.0004	<i>meen</i>
156	+	144.24	0.0022	<i>haz</i>	26	+	24.03	0.0004	<i>yung</i>
141	+	130.36	0.0020	<i>theze</i>	25	+	23.11	0.0004	<i>meens</i>
100	+	83.21	0.0014	<i>peeple</i>	24	+	22.18	0.0003	<i>proprietors*</i>
76	+	70.25	0.0011	<i>twelv</i>	24	+	22.18	0.0003	<i>suthern</i>
68	+	62.86	0.0010	<i>thoze</i>	23	+	21.26	0.0003	<i>cheef</i>
106	+	52.75	0.0015	<i>barons*</i>	23	+	21.26	0.0003	<i>clock*</i>
117	+	44.51	0.0017	<i>court*</i>	44	+	21.08	0.0006	<i>county*</i>
45	+	41.59	0.0006	<i>reezon</i>	1215	-	154.00	0.0169	<i>is*</i>
45	+	41.59	0.0006	<i>valu</i>	531	-	66.95	0.0075	<i>as*</i>
122	+	41.14	0.0017	<i>judges*</i>	464	-	60.42	0.0065	<i>was*</i>
59	+	40.91	0.0008	<i>baron*</i>	392	-	53.24	0.0055	<i>have*</i>
40	+	36.97	0.0006	<i>wel</i>	364	-	50.49	0.0051	<i>people*</i>
39	+	36.05	0.0006	<i>gubernment</i>	334	-	39.84	0.0047	<i>his*</i>
58	+	35.65	0.0008	<i>lords*</i>	378	-	33.12	0.0053	<i>will*</i>
67	+	35.55	0.0009	<i>peers*</i>	207	-	27.82	0.0029	<i>has*</i>
34	+	31.43	0.0005	<i>jurors*</i>	178	-	23.16	0.0025	<i>these*</i>
93	+	30.77	0.0013	<i>lands*</i>					

the earlier impressionistic hypothesis that Webster's eagerness for spelling reform became radical from 1789 onward (in Corpus B). It happened only three years after Webster first consulted with Dr. Franklin in 1786, at a time when Webster was still resisting spelling reform (See Rollins ed. 1989: 146–147, No. 17).

4. Corpus Linguistic Analysis of *Handbook of Simplified Spelling* (SSB 1920): 130 Years after Webster (1790)

The success of Webster's (1790) attempts can be evaluated by observing his successors' work. Table 7 illustrates the fundamental rules for simplified spelling proposed by SSB (1920: Part 3, pp. 6–10) (the rules are written in innovative spelling). These rules represent their proposals *in principle*, not *in practice*, so they are beyond the scope of the present corpus analysis, but first of all a brief survey of them will be made to evaluate Webster's (1790) attempts. The underlined examples indicate that they are "given as preferred [*sic*] or alternative [*sic*] spellings by one or more of the leading American dictionaries (Century, Standard, Webster's) and not qualified as 'simplified,' 'new,' 'obsolete,' or the like" (SSB 1920: Part 3, pp. 5–6). Rules marked with an asterisk (*) show that they correspond with Webster's attempts listed in Table 4 and/or Table 5.

Comparisons between Table 7 and Table 4 or 5 suggest that the deletion of silent letters adopted by Webster (1790) such as (i) *b* in *debt*, (ii) the final *e* in *determine*, (iii) *l* in *shall* (double consonant), (iv) *ugh* in *-ough* words (e.g. *although*), (v) *u* in *our* words (e.g. *favour*), (vi) the last *ue* in *antique* and *tongue* was endorsed by SSB. These changes correspond with SSB's rules named (i) "*bt* pronounst *t*" (No. 2), (ii) "*e* final silent" (No. 7a, 7c, 7e), (iii) "double consonant final" (No. 6), (iv) "*ough* final" (No. 20), (v) "*our* final" (No. 21), and (vi) "*gue* final" (No. 16), respectively. The orthographical changes from *ea* to *e* [ə:] (e.g. *erls*) and *ea* to *e* [e] (e.g. *relm* and *friends*) are accepted by SSB's rule No. 8: "*ea* pronounst as in *head* or as in *heart*."

The change "*ch* → *k*" (e.g. *karacter*) adopted by Webster (1790) is endorsed by SSB's rule No. 4: "*ch* pronounst like *c* as in *car*," but SSB recommends the use of *c* (by dropping *h*) instead of *k*. The change "*o(u)* → *u* [Δ]" (e.g. *becume* and *yung*) is partly mentioned in *Special List*, e.g. *yung*. The changes "*s* → *z*" (e.g. *arizing*), "*ea* → *ee* [iə]" (e.g. *yeers*), and "*ei* → *a* [ei]" (e.g. *nabor*) do not obtain support from the organization. The change "*ea/ie/ei/eo* → *ee* [i:]" (e.g. *peeple* and *reezon*) is partly accepted, including SSB's

Table 7. Rules for Simplified Spelling (Adapted from SSB 1920: 6–10)

	Rules	Examples
No. 1	<i>æ, œ</i> initial or medial. SPEL <i>e</i> .	<i>medieval, fenix</i>
No. 2*	<i>bt</i> pronounst <i>t</i> . DROP silent <i>b</i> .	<i>det, dout</i>
No. 3	<i>ceed</i> final. SPEL <i>cede</i> .	<i>excede, procede</i>
No. 4*	<i>ch</i> pronounst like <i>c</i> in <i>car</i> . DROP silent <i>h</i> , EXCEPT before <i>e, i, y</i> .	<i>caracter, scolar</i>
No. 5	double consonant before <i>e</i> final silent. DROP last 2 letters.	<i>bizar, <u>program</u></i>
No. 6*	double consonant final. REDUCE double to single; BUT in <i>-ll</i> only after a short vowel, and in <i>-ss</i> only in monosyllables.	<i>ad, bil glas, les</i>
No. 7	<i>e</i> final silent. In the following cases DROP <i>e</i> .	
a)*	After a consonant preceded by a short vowel stress.	<i>giv, hav</i>
b)	In <i>ar(e), gon(e)</i> , and in <i>wer(e)</i> when not pronounst to rime with there.	--
c)*	In the unstrest final short sillables <i>ide, ile, ine, ise, ite, ive</i> , pronounst as if speld <i>id, il, in, is, it, iv</i> .	<i>activ, definit</i>
d)	After <i>lv</i> and <i>rv</i> .	<i>involv, resolv</i>
e)*	After <i>y</i> or <i>z</i> when preceded by a digraf representing a long vowel or a difthong.	<i>achiev, believ</i>
f)	In <i>oe</i> final pronounst <i>o</i> .	<i>fo, to</i>
No. 8*	<i>ea</i> pronounst as in <i>head</i> or as in <i>heart</i> . DROP the silent letter.	<i>bred, hed</i>
No. 9	<i>ed</i> final pronounst <i>d</i> . When the change wil not suggest a wrong pronounciation, DROP silent <i>e</i> .	<i>anserd, cald</i>
No. 10	<i>ed</i> final pronounst <i>t</i> . When the change wil not suggest a wrong pronounciation, DROP silent <i>e</i> .	<i>askt, fixt</i>
No. 11*	<i>ei</i> pronounst like <i>ie</i> in <i>brief</i> . SPEL <i>ie</i> .	<i>deciev, iether</i>
No. 12	<i>ey</i> final unstrest pronounst like short <i>y</i> final. DROP silent <i>e</i> .	<i>barly, chimny</i>
No. 13	<i>gh</i> pronounst <i>f</i> . SPEL <i>f</i> ; DROP the silent letter of the preceding digraf.	<i>cof, enuf</i>
No. 14	<i>gh</i> pronounst like <i>g</i> in <i>gas</i> . DROP silent <i>h</i> .	<i>agast, gost</i>
No. 15	<i>gm</i> final. DROP silent <i>g</i> .	<i>diafram, paradim</i>
No. 16*	<i>gue</i> final after a consonant, a short vowel, or a digraf representing a long vowel or a difthong. DROP silent <i>ue</i> .	<i>catalog, dialog</i>
No. 17	<i>ise</i> final pronounst as if speld <i>ize</i> . SPEL <i>ize</i> .	<i>advertize, advize</i>
No. 18	<i>mb</i> final after a short vowel. DROP silent <i>b</i> .	<i>bom, crum</i>
No. 19	<i>ou</i> before <i>l</i> , pronounst like <i>o</i> in <i>bold</i> . DROP silent <i>u</i> , EXCEPT in <i>soul</i> .	<i>bolder, sholder</i>
No. 20*	<i>ough</i> final. SPEL <i>o, u, ock</i> , or <i>up</i> , when pronounst as if so speld; SPEL plow.	<i>altho, thoro</i>
No. 21*	<i>our</i> final, with <i>ou</i> pronounst as a short (obscure) vowel. DROP <i>u</i> .	<i>color, favor</i>
No. 22	<i>ph</i> pronounst <i>f</i> . SPEL <i>f</i> .	<i>alfabet, emfasis</i>
No. 23	<i>re</i> final after any consonant except <i>c</i> . SPEL <i>er</i> .	<i>center, fiber</i>
No. 24	<i>rh</i> initial. DROP silent <i>h</i> .	<i>retoric, rime</i>
No. 25	<i>sc</i> initial pronounst as if speld <i>s</i> . DROP silent <i>c</i> .	<i>senery, sience</i>
No. 26	<i>u</i> silent before a vowel medial. DROP <i>u</i> .	<i>bild, guarantee</i>
No. 27	<i>y</i> between consonants. SPEL <i>i</i> .	<i>analisis, tipe</i>
Special List: <i>aker, anser, beleager, burlesk, buro, campain, cask (casque), catar, counterfit, delite, diarea, foren, forfit, frend, grotesk, hemorage, hernoroid, ile, ilet, mark (marque), maskerade, morgage, picturesk, reciet, siv, slight (sleight), sorgum, sovren, spritely, tisis, tisis, tuch, yoman, yu, yung, yungster, yunker</i>		

rule No. 11: “*ei* pronounst like *brief*.” The deletion of *d* as in *knowlege* as observed in Corpus A, and the change from *s* to *z* as in *az, iz, waz, thozе, haz*, etc., which is characteristic of Corpus B, do not seem to gain SSB’s endorsement.

The next investigation is made into the actual practice of SSB’s spelling reform proposals with a reduced corpus (Corpus C). Out of 1,224 word types, 137 are written in radical spelling excluding unknown words, proper nouns, archaic words, etc. Table 8 shows the 137 examples,

Table 8. Examples of Simplified Spelling in Corpus C: The Reduced Scale Corpus of *Handbook of Simplified Spelling*, SSB 1920

Rules	Examples
<i>ch</i> \rightarrow <i>c</i>	<i>caracter, characterized*, scolars, scholarship, scool, scools</i>
double consonant \rightarrow single consonant	(-ll) <i>cald*, cristalization*, fil, il(-done), shal, skil, spel, speld*, stil, wel, wil;</i> (-ss) <i>clas, classroom, dres, les</i>
<i>e</i> -deletion (final)	<i>activ, aggressiv, ar, attractiv, believ, believs, comparativ, destructiv, exclusiv, giv, hav, imagin, intensiv, involvs, irrespectiv, nativ, objectiv, perciev*, practis, premis, preserv, representativs, respectiv, successiv, themselvs, twelv, wer, favorit*</i>
<i>ea</i> \rightarrow <i>e</i>	<i>alredy, hedmaster, hedway, insted, ment, plesure, red, spred</i>
<i>ed</i> \rightarrow <i>d/t</i>	<i>accustomd, addest, arousd, brusht, cald*, claimd, conformd, considerd, convinst, deceast, determind, employd, encounterd, encumberd, enterd, exprest, faild, fixt, formd, gaind, gatherd, governd, handicapt, increast, informd, markt, obtaind, pronounst, resolvd, reveald, showd, smoothd, speld*, stampt, voist</i>
<i>ei</i> \rightarrow <i>e</i>	<i>foreners*</i>
<i>ei</i> \rightarrow <i>ie</i>	<i>iether, perciev*</i>
<i>gn</i> \rightarrow <i>n</i>	<i>campain, campains, foreners*</i>
<i>gue</i> \rightarrow <i>g(e)</i>	<i>gesses, tung*</i>
<i>o</i> \rightarrow <i>u</i>	<i>tung*</i>
<i>ough</i> \rightarrow <i>f/o/u</i>	<i>enuf, ruf, tho, thoro, thru</i>
<i>our</i> \rightarrow <i>or</i>	<i>favor, favorable, favorit*</i>
<i>ph</i> \rightarrow <i>f</i>	<i>emfasis, emfasize*, filology, fonetic, lexicografers, orthografy, pamflets, telefone, telegraf</i>
<i>sc</i> \rightarrow <i>s</i>	<i>senes, sience, sientists</i>
<i>s(e)</i> \rightarrow <i>z(e)</i>	<i>advertizing, americanization, capitalization, characterized*, civilization, comprizing, cristalization*, emfasize*, likewise, organized, recognized, revizioni</i>
<i>ui</i> \rightarrow <i>i</i>	<i>bilder, bilding, gidance</i>
<i>w</i> -deletion	<i>answers</i>
<i>y</i> \rightarrow <i>i</i>	<i>cristalization*, etimologic, etimological, etimologists, simbols, simpathy, sistem, stile, stiles, tipe</i>

arranged by type of innovation. The most frequent innovation is *hav* (19 times), then followed by *wil* (17 times), *ar* (14 times), *wer* (10 times), *scool* (5 times), *filology*, *les*, *spel* (4 times), *bilding*, *campain*, *giv*, *iether*, *pronounst*, *scolars*, *scools*, *shal*, *stil*, *tipe*, *wel* (3 times), *aggressiv*, *ansers*, *arousd*, *believs*, *cald*, *caracter*, *enuf*, *etimologic*, *faild*, *favor*, *fonetic*, *governd*, *hedmaster*, *obtaind*, *organized*, *perciev*, *practis*, *simpathy*, *sistem*, *stile*, *stiles*, *themselvs*, *tho*, *thru* (twice), and the rest (once). The examples marked with an asterisk (*) represent those to which more than two rules are applied. Note that the following analysis is only within the range of the present *reduced* corpus.

The table illustrates that the most common types of innovation are (i) the use of *d/t* for the past tense *-ed*, (ii) the final *e*-deletion (e.g. *activ*), and (iii) the reduction of double consonant (*ll/ss*). First, the use of *d* and *t* as a past tense morpheme instead of *-ed* appears to be characteristic of SSB's rules, but APA (1876) accepted the rule for *wisht* earlier than SSB (see Table 3). In SSB's list of the thirty spellings in 1920, more examples under the influence of this rule are added: *addrest*, *anser(d)*, *bil(d)*, *fil(d)*, *fixt*, *liv(d)*, *reciev(d)*, *shipt*, etc. Second, the final *e*-dropping is further extended to function words such as *are* and *were*, both of which were never adopted in Webster (1790)(see also Rule No.7b in Table7). The adoption of *ar* seems to be under the influence of APA's list of the eleven words in 1876 (see Table 3), and the adoption of *wer* seems to be due to the analogy of *ar*. Finally, it is noteworthy that the reduction of the double consonant *ll* after a short vowel as in *spel* (4 times) and *speld* (once) is also applied to the stem final *ll* (e.g. *cald* and *clasroom*). However, the rule is not applied to the words such as *spelling* (68 times), *spellings* (11 times), *spellers* (once), and *misspellings* (once), even though they are also the cases of the stem final consonant *-ll*. Webster was said to be "slow to adopt the reforms he advocated" (Mencken 1963: 480) due to his inconsistent application of his radical reform proposals. SSB, likewise, seems to have failed to be consistent in the application of their rules.

The following innovations, although less frequent than the above, are also put into practice in SSB (1920): the changes "*ch* → *c*" (e.g. *caracter*), "*ea* → *e*" (e.g. *alredy*), "*ei* → *e*" (e.g. *foreners*), "*ei* → *ie*" (e.g. *iether*), "*gn* → *n*" (e.g. *campain*), "*gue* → *g(e)*" (e.g. *gesses*), "*o* → *u*" (e.g. *tung*), "*ough* → *f/o/u*" (e.g. *enuf*), "*our* → *or*" (e.g. *favor*), "*ph* → *f*" (e.g. *emfasis*), "*sc* → *s*" (e.g. *sience*), "*s* (*e*) → *z(e)*" (e.g. *organized*), "*ui* → *i*" (e.g. *bilder*), "*w*-deletion" (e.g. *ansers*), and "*y* → *i*" (e.g. *cristalization*), most of which were already adopted in

Webster (1790). Among these, *thru*, *-our* words (*favor*, *favorable*, *favorite*), and some *-ize* words such as *capitalization*, *civilization*, *organized*, and *recognized* are well established today.

Some innovative spellings adopted by SSB (1920) are slightly different from those adopted by Webster (1790); for example, (*n*)*either* was changed into *ether* and *neether* in Webster (1790), whereas SSB (1920) adopted *iether*. The changes “*ph* → *f*” (e.g. *emfasis*), “*sc* → *s*” (e.g. *siencie*), “*y* → *i*” (e.g. *etimologic*), etc., were not found in Webster (1790), as long as it is observed within Table 4 and Table 5.

5. Discussion & Conclusion: Success and Failure of the Innovations

The two publications, within the scope of analysis of the corpora built here, have shown that a number of radical attempts have been made in practice. The attempts of Webster and his successors are partly successful, but most of them were actually doomed to failure. The *d*-deletion (e.g. *knowlege*) and the use of *z* instead of *s* (e.g. *az*), for instance, which are characteristic of Webster’s (1790) proposals, could not win popularity. The deletion of the final *e* (e.g. *hav* and *giv*), endorsed by Webster (1790) and several organizations such as APA and SSB, also failed to reach the level of public acceptance. The same holds true for the use of *d/t* for the past tense suffix *-ed* (e.g. *cald* and *wisht*), which is one of the characteristic proposals made by APA and SSB.

In contrast, a few examples survived and became widespread in contemporary American English. The establishment of *-or* instead of *-our* is unquestionable. The change in the final *ough* (e.g. *tho*) has also been successful in surviving in an informal context or where there is a need to save space (e.g. the use of the expression “valid thru” to show an expiry date on credit cards). The deletion of the final (*g*)*ue* was successful for some words (e.g. *catalog*), but failed for other words (e.g. *tung*). For words like *tho*, *catalog*, and *program* to gain widespread acceptance, it is said that the role of SSB was important (Mencken 1963: 491).

The above successful innovations might not have been brought about directly by Webster. His spelling proposals actually “were almost all variant spellings found in the eighteenth century” (Brinton & Arnovick 2011: 442). However, his eagerness to establish a national language, including his publications of dictionaries and other academic works, undoubtedly contributed to the rise of the movement. Marshall (2011) rates

Webster's attempt most highly with 7 on a scale of 1 to 10; while his preceding advocate (Dr. Franklin) and successive reformers (APA, President Roosevelt, and SSB) are rated 2 or "at best" 2.

The overall failure of their innovations might imply that the demand for the correspondence of spelling with the actual pronunciation could not surpass people's preference for tidiness of morphological analysis of the language (Marshall 2011: 123). The existence of two surface forms *-t/d* for the past tense, for example, is regarded as less sophisticated than the use of the single morpheme *-ed* representing the two sounds: [t] and [d]. One should note, however, there are also counterexamples where actual practice goes beyond morphological consistency; e.g. *went* instead of *goed*.

Another possible reason is that spelling reform could pose the risk of producing homonyms, e.g. *bear/bare* and *to/too/two*. However, we already have this problem in our spoken mode, and we know that context often helps us to interpret the meaning of the words in question. For example, the following interpretation is more than likely impossible in spoken language: "*he fought the bare with his bear hands*" (SSB 1920: Part 2, p. 27).

Finally, as Crystal (2005: 268) points out, interpersonal variation, i.e. disagreement in proposed spellings among different reformers, could possibly be a more convincing reason for the failure. Some examples of discrepancy in spelling innovation between Webster (1790) and SSB (1920) were provided in the previous section (e.g. *ether/iether* for *either*). The simplified spellings applied to the title of the current paper would also be criticized for being "idiosyncratic" by Crystal (2005: 268). Intrapersonal variation, i.e. the lack of coherence within a system proposed by a single reformer (e.g. single *l* in *speld* but double *ll* in *spelling*, SSB 1920), could also be a persuasive explanation.

In addition to these language-internal factors, language-external factors should not be ignored. Three out of the five objections to the movement for simplified spelling reform stated in Webster (1789: 398–404) apparently stem from language-external factors: (i) the burden of relearning the language; (ii) the possibility that the reform renders present books useless; (iii) the risk of injuring the language.

In one respect, these ideas could have derived from too much emphasis on the fear of losing, and thus the obsession with, the existing linguistic tradition. Such an attitude would have branched into similarly negative opinions on simplified spelling as introduced in Part 2 in SSB (1920): they make present books "unreadable" (p. 29), they are "artificial" (p.

32), they are “ugly” (p. 38), and simply “I don’t like it” (p. 38). The persistence in etymologies causes another form of conservatism; for example, Dr. Johnson’s work (1755) preferred “spelling that pointed, rightly and wrongly, to Latin or Greek sources” (SSB 1920, Part 1, p. 7; See also Miss S., 1768, cited in Webster 1789: 407). Moreover, educated people are likely to adhere to the old linguistic custom, since “correct” spellings play an important role in maintaining one’s social status (Marshall 2011: 123).

In another respect, regional variation in sound prevented the spelling reform from spreading, according to Mencken (1963: 496). In addition, sound always keeps changing, so it might be “idle” to adopt orthography according to sound, as Johnson states (cited in Webster 1789: 403).

The present study has provided empirical and detailed evidence of some of the attempts made in the movement for spelling reform that occurred in America between the 18th and the 20th centuries. Although the success of reform can be seen in a very limited range of vocabulary in current English, it has been shown that failed innovations were certainly put into practice once. The fact that only a few of the attempts have survived in today’s American English is simply interpreted as a sure proof that linguistic nationalism and/or linguistic demands for the spelling-pronunciation correspondence could not triumph in convincing people to make an effort to abandon what they already got used to and to relearn their language. A wide variety of attempts demonstrate reformers’ eagerness, but the top-down reforms brought by dictionaries or academic/governmental authorities just didn’t work. That implies that the English language is “more laissez-faire” (Crystal 2005: 268) than the reformers might have expected.

One of the important future tasks regarding the present research would be to trace the process of the diffusion of successful innovations historically. At the same time, an investigation into the decline in the use of failed innovations, if they were ever adopted by people other than the reformers themselves, also remains an important research question to be answered in the future.

Appendices

Appendix A. Innovative Spellings (100 PMW or Above) in Corpus A: Essays I–XXII, *Collection of Essays, Webster 1790*

ID	Rank*	Freq.	PMW	Word form	ID	Rank	Freq.	PMW	Word form
1	173	53	637.8	<i>representativs</i>	11	794	12	144.4	<i>executiv</i>
2	275	34	409.2	<i>knowlege</i>	12	797	12	144.4	<i>extensiv</i>
3	320	30	361.0	<i>favor</i>	13	798	12	144.4	<i>favorable</i>
4	379	26	312.9	<i>representativ</i>	14	821	12	144.4	<i>positiv</i>
5	390	25	300.9	<i>honor</i>	15	890	11	132.4	<i>oppressiv</i>
6	408	24	288.8	<i>labor</i>	16	976	10	120.3	<i>primitiv</i>
7	416	24	288.8	<i>thro</i>	17	1004	9	108.3	<i>acknowledge</i>
8	441	22	264.8	<i>giv</i>	18	1005	9	108.3	<i>acknowledged</i>
9	574	17	204.6	<i>altho</i>	19	1121	9	108.3	<i>tho</i>
10	666	15	180.5	<i>legislativ</i>					

*The table shows words with innovative spellings only. Those with standard spellings are excluded, so *Rank* numbers are discontinuous.

Appendix B. Innovative Spellings (100 PMW or Above) in Corpus B: Preface and Essays XXIII–XXX, *Collection of Essays, Webster 1790*

ID	Rank*	Freq.	PMW	Word form	ID	Rank	Freq.	PMW	Word form
1	7	946	16,207.2	<i>iz</i>	36	430	18	308.4	<i>yeers</i>
2	16	432	7,401.2	<i>az</i>	37	433	17	291.3	<i>bizziness</i>
3	24	302	5,174.0	<i>hav</i>	38	441	17	291.3	<i>karacter</i>
4	26	290	4,968.4	<i>waz</i>	39	442	17	291.3	<i>meening</i>
5	29	237	4,060.4	<i>hiz</i>	40	455	17	291.3	<i>yeer</i>
6	34	183	3,135.2	<i>wil</i>	41	458	16	274.1	<i>beleev</i>
7	39	156	2,672.7	<i>haz</i>	42	469	16	274.1	<i>erls</i>
8	42	141	2,415.7	<i>theze</i>	43	472	16	274.1	<i>honor</i>
9	69	99	1,696.1	<i>peeple</i>	44	477	16	274.1	<i>neerly</i>
10	82	76	1,302.1	<i>twelv</i>	45	487	15	257.0	<i>abuv</i>
11	93	68	1,165.0	<i>thoze</i>	46	507	15	257.0	<i>meet</i>
12	138	45	771.0	<i>reezon</i>	47	523	15	257.0	<i>thro</i>
13	139	45	771.0	<i>valu</i>	48	540	14	239.9	<i>frends</i>
14	155	40	685.3	<i>wel</i>	49	545	14	239.9	<i>nabors</i>
15	156	39	668.2	<i>gubernment</i>	50	559	14	239.9	<i>wether</i>
16	166	37	633.9	<i>giv</i>	51	562	13	222.7	<i>appeers</i>
17	212	32	548.2	<i>tru</i>	52	572	13	222.7	<i>exposed</i>
18	239	29	496.8	<i>stil</i>	53	581	13	222.7	<i>labor</i>
19	245	28	479.7	<i>heet</i>	54	583	13	222.7	<i>leev</i>
20	255	27	462.6	<i>leest</i>	55	587	13	222.7	<i>reezoning</i>
21	267	26	445.4	<i>meen</i>	56	592	13	222.7	<i>skools</i>
22	275	26	445.4	<i>yung</i>	57	609	12	205.6	<i>du</i>
23	278	25	428.3	<i>meens</i>	58	610	12	205.6	<i>ether</i>
24	291	24	411.2	<i>suthern</i>	59	615	12	205.6	<i>gubernur</i>
25	296	23	394.0	<i>cheef</i>	60	616	12	205.6	<i>helth</i>
26	310	22	376.9	<i>altho</i>	61	628	12	205.6	<i>naborhood</i>
27	315	22	376.9	<i>eech</i>	62	639	12	205.6	<i>receved</i>
28	334	21	359.8	<i>erly</i>	63	657	11	188.5	<i>eezily</i>
29	347	21	359.8	<i>tho</i>	64	658	11	188.5	<i>eezy</i>
30	349	21	359.8	<i>whoze</i>	65	675	11	188.5	<i>proof</i>
31	355	20	342.6	<i>eest</i>	66	679	11	188.5	<i>rong</i>
32	369	20	342.6	<i>primitiv</i>	67	689	11	188.5	<i>til</i>
33	374	20	342.6	<i>relm</i>	68	709	10	171.3	<i>erl</i>
34	390	19	325.5	<i>det</i>	69	710	10	171.3	<i>exercize</i>
35	412	18	308.4	<i>favor</i>	70	713	10	171.3	<i>favorable</i>

ID	Rank*	Freq.	PMW	Word form	ID	Rank	Freq.	PMW	Word form
71	717	10	171.3	<i>honorable</i>	101	946	8	137.1	<i>virtu</i>
72	724	10	171.3	<i>legislativ</i>	102	950	8	137.1	<i>zeel</i>
73	728	10	171.3	<i>ment</i>	103	960	7	119.9	<i>arizing</i>
74	730	10	171.3	<i>neer</i>	104	989	7	119.9	<i>deth</i>
75	736	10	171.3	<i>peece</i>	105	990	7	119.9	<i>dey</i>
76	737	10	171.3	<i>plezure</i>	106	994	7	119.9	<i>discover</i>
77	741	10	171.3	<i>reezons</i>	107	1006	7	119.9	<i>extensiv</i>
78	756	9	154.2	<i>becumes</i>	108	1030	7	119.9	<i>lerned</i>
79	775	9	154.2	<i>erth</i>	109	1039	7	119.9	<i>motius</i>
80	799	9	154.2	<i>nabor</i>	110	1041	7	119.9	<i>munth</i>
81	810	9	154.2	<i>reed</i>	111	1043	7	119.9	<i>neether</i>
82	814	9	154.2	<i>representativs</i>	112	1057	7	119.9	<i>prezerve</i>
83	819	9	154.2	<i>shal</i>	113	1061	7	119.9	<i>raize</i>
84	822	9	154.2	<i>skool</i>	114	1087	7	119.9	<i>tung</i>
85	842	8	137.1	<i>appeer</i>	115	1102	6	102.8	<i>antiq</i>
86	846	8	137.1	<i>becauze</i>	116	1110	6	102.8	<i>bred</i>
87	847	8	137.1	<i>becume</i>	117	1115	6	102.8	<i>cloze</i>
88	854	8	137.1	<i>ceese</i>	118	1132	6	102.8	<i>determin</i>
89	873	8	137.1	<i>dets</i>	119	1140	6	102.8	<i>dout</i>
90	887	8	137.1	<i>frend</i>	120	1167	6	102.8	<i>hed</i>
91	890	8	137.1	<i>governed</i>	121	1168	6	102.8	<i>heer</i>
92	891	8	137.1	<i>harbor</i>	122	1169	6	102.8	<i>heerd</i>
93	899	8	137.1	<i>karacters</i>	123	1186	6	102.8	<i>lerning</i>
94	901	8	137.1	<i>liv</i>	124	1194	6	102.8	<i>mezures</i>
95	906	8	137.1	<i>mezure</i>	125	1199	6	102.8	<i>obzervations</i>
96	918	8	137.1	<i>positiv</i>	126	1200	6	102.8	<i>obzerved</i>
97	925	8	137.1	<i>receev</i>	127	1245	6	102.8	<i>seets</i>
98	930	8	137.1	<i>seet</i>	128	1260	6	102.8	<i>streem</i>
99	939	8	137.1	<i>suppoze</i>	129	1277	6	102.8	<i>volum</i>
100	945	8	137.1	<i>uzed</i>					

*The table shows words with innovative spellings only. Those with standard spellings are excluded, so *Rank* numbers are discontinuous.

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