

TOWARDS REGULARISATION: MORPHOLOGICAL SPELLING IN
SEVERAL EDITIONS OF THE *KALENDER OF SHEPHERDES*

HANNA RUTKOWSKA

Adam Mickiewicz University, Poznań

ABSTRACT

This corpus-based study focuses on the graphemic realisations of several derivational suffixes in thirteen editions of the *Kalender of Shepherdes*, an early modern almanac published between 1506 and 1656. Morphological spelling, that is, the consistent representation of particular morphemes, is considered to be one of the most important criteria in research on the orthographic standardisation in English. The analysis of the graphomorphemic information available in the documents under consideration indicates that particular printing houses applied different combinations of spelling rules with regard to the variants of suffixes and were characterised by varying levels of consistency in the use of these graphemic representations. The new spelling variants of the suffixes were adopted partly as the printers' own regularisation policy, and partly under the influence of normative writings.

1. Introduction

This article discusses the language of early printers, and particularly the interrelations between graphemics and morphology in the sixteenth- and seventeenth-century editions of the *Kalender of Shepherdes*¹ (henceforth *Kalender* or *KS*), a comprehensive compendium of prose and verse texts of various lengths and on a variety of subjects, e.g. astronomy, medicine, and religion. The diversity of genres, text types, and topics covered in this almanac helps avoid the risk of bias in the research findings. The analysis focuses on the graphemic realisations of selected derivational suffixes over the 150 years which elapsed between the

¹ The title of the almanac was subject to minor orthographic modifications in the course of time. Here I adopted the version of the title found in the earliest analysed edition.

first and the last edition of the *KS*. Morphological spelling has been chosen as the basis for this study because it is considered to be one of the most important criteria in research on the orthographic standardisation in English, beside the indication of vowel length, the orthographic distinction between homophones and the establishment of etymological spelling (Salmon 1999: 21). This study makes up part of a larger post-doctoral project² which aims at tracing and examining the graphemic systems of early modern London printers in the period 1506–1656 on the basis of thirteen editions of the *KS*, which takes into consideration all the variables mentioned above.

The comparative analysis that follows is corpus-based and aims at examining the grapho-morphemic consistency and variation in the selected texts as well as evaluating the importance of extra-linguistic motivation for the changes arising from the contemporary spelling reformers, phoneticians and grammarians. A detailed graphemic analysis of the *KS* editions reveals that their printers were characterised by different degrees of both consistency and subjection to the normative influence. The analysed corpus comprises over 0.9 million words. It is an electronically searchable database which includes transcriptions of thirteen editions of the almanac, prepared by the present author on the basis of facsimiles available at *Early English Books Online*³ (henceforth *EEBO*). The Appendix presents the most important information concerning each analysed edition,⁴ including the year of publication, the sigil⁵ used in this study to identify each edition, the printer's name, the catalogue number, and the word count. The corpus comprises only those editions of the *KS* which are available in *EEBO*, thus six of nineteen English editions listed in *STC* are not included.

Each of the original documents under consideration is larger, in some cases by up to 5%. However, for the purposes of the present study, Latin passages as well as diagrams and charts (such as the perpetual calendar and the tables with the names of saints) have not been transcribed, as they are irrelevant to the

² This project is financed by the Polish Ministry of Science and Higher Education (project no. N N104 055438).

³ I am indebted to Stephen Tabor and Kevin Miller of the Henry E. Huntington Library (San Marino, CA) for the scans of the 36 pages from Notary's and de Worde's editions of *KS* (*STC* 22410 and *STC* 22411) which are not available at the *EEBO* database. *Early English Books Online* <http://www.lib.umi.com/eebo/> is a project conducted by The Early English Books Online Text Creation Partnership, a comprehensive database with facsimiles of over 125,000 books published in England, and English books printed in other countries between 1475 and 1700.

⁴ The reconstructed information (as provided in Jackson et al. 1976: 329) is enclosed in square brackets. It concerns those editions in which colophons either have not survived or do not provide all the relevant details.

⁵ The sigils *Wal* and *Adl* are not used, because the first editions by Wally and Adams, respectively, are missing from *EEBO*, and therefore not analysed here.

study of morphological spelling in English. The word count in the Appendix also excludes the content of the running head and footer (i.e. the signatures and the repeated title of the book), apart from the catchwords which are included in the corpus as elements occasionally containing a suffix whose spelling is different from that of the anticipated word on the following page. The non-abridged title of the book in the running head is not used in the *KS* editions before 1556, so this omission aims at making particular editions comparable.

2. Standardisation of English spelling: the roles of printers and language theoreticians.

The printers whose graphomorphemic usage is studied in this article lived in the sixteenth and seventeenth centuries, which were a crucial period in the process of the regularisation and standardisation of English orthography (or graphemics) and of other levels of the English language. On the basis of the extant documents examined so far, one can assume that towards the end of the seventeenth century the language had achieved orthographic standardisation (Scragg 1974: 80, Görlach 2001: 78). The standard was expressed in, among others, a consolidated graphemic system whereby the functional interrelations between particular graphemes and phonemes remained relatively stable (even if these interrelations were complex), as well as in the consistent spelling of particular morphemic exponents of grammatical categories, derivational morphemes, as well as loanwords. Nevertheless, Early Modern English (especially in the sixteenth century) still allowed numerous spelling variants of particular morphemes in both handwritten and printed documents (Scragg 1974: 64, Salmon 1999: 15, Osselton 1984).

Early printers, who often worked simultaneously as publishers and booksellers in the early days of printing, at least over the first half of the sixteenth century, took decisions about the selection of particular works for printing and re-printing as well as the dissemination of their publications (de Hamel 1983: 29).⁶ However, apart from the unique document by John Rastell published in 1530 (discussed in Salmon 1989), of which only fragments have survived, no document exists which would confirm the transmission of spelling rules among printers (Bregelman 1980: 333)⁷ until the first manual for printers by Moxon was published in 1683-1684 (Scragg 1974: 74).

⁶ For evidence concerning the role of printers in the regularisation of English spelling see, e.g., Osselton (1985), Aronoff (1989) and Salmon (1989).

⁷ Bregelman (1980: 333), claims that “[t]here is no evidence that any sort of mutual dissemination of information about spelling among printers was taking place – not even within the same printing house”.

Since little information is available on how responsibilities were divided between printers and compositors with regards to spelling policies in the early printing houses which issued the editions examined in this study, these printing houses will be treated as independent entities and referred to in each case by the name of the printer mentioned in the colophon of a given edition. This applies to the editions printed between 1506 and 1556, which are indicated here with sigils referring to their printers' names. Starting from *c.* 1570, the printers of the *KS* editions were not simultaneously their publishers. This was a reflection of a general trend towards the distinction between publishers and printers which must have been well advanced by that time. By the 1580s, numerous publishers had abandoned printing and devoted their business activities to the book trade. Whereas in the first quarter of the sixteenth century printing for another bookseller was extremely rare, in its last decade approximately half of the books were not printed by their publishers (Raven 2007: 37). Thus, the main name mentioned in the colophon started to be the publisher's name, not the printer's one. As a result, the information on the printer's name was often omitted altogether (the editions of *c.* 1580, *c.* 1585, 1611, 1618 and 1631).

Some linguists attribute the standardisation of the English orthography to the sixteenth- and seventeenth-century theoreticians, authors of treatises, handbooks on correct spelling, as well as dictionaries, claiming that the authors of such publications inspired and supported the printers, compensating for the lack of one academic authority which could impose particular spelling patterns and usages.⁸ However, before 1582 when "the first theoretical attempt at codifying and promulgating a system of rules for English orthography" (Salmon 1999: 32) was published by Richard Mulcaster, such normative (prescriptive and proscriptive) influence seems improbable. Although John Hart's *Orthographie*, which was concerned with the rules of English spelling, was published earlier (1569), its aim was not so much to regularise the existing spelling patterns in English but rather to introduce a new spelling system. Therefore, one can wonder whether theoreticians' publications had any real influence on printers' and compositors' practice in most of the sixteenth century.

Salmon (1999: 32–44) emphasises the importance of the period between 1582 and 1660 for the process of orthographic standardisation. Its beginning is marked by Mulcaster's publication, which was followed by numerous other works written by spelling reformers, orthoepists and schoolmasters. The principles proposed by Mulcaster were later presented in a more practical and thus more accessible publication by Edmund Coote in 1596, whose handbook was

⁸ By contrast to England, in other European countries, official bodies were established for the codification of national languages, for example Accademia della Crusca (founded in 1582), Académie Française (1635) and Real Academia Española (1713).

reprinted and reedited sixty-four times after Coote's death (Nelson 1997). Publications of comparable importance for the development of English orthography appeared as late as the mid-seventeenth century (Scragg 1974: 79).

Irrespective of the controversies mentioned above, it remains a fact that throughout the Early Modern English period the level of spelling variation lowered considerably, and in the second half of the seventeenth century, in printed texts, it achieved a state close in many respects to the present one, whereas handwritten documents attained this level much later (Görlach 2001: 78, Salmon 1999: 44, Tieken-Boon van Ostade 2009: 46–50).

3. Criteria, variables, and the presentation of the data in the comparative analysis

The main criterion of the comparative analysis presented below is morphological spelling, that is, the consistent spelling of morphemes. The selected morphemes comprise frequent derivational suffixes, which can be divided into native ones, {-NESS}, {-SHIP}, {-FUL} and {-LY}, and those borrowed from Latin and French, {-ANCE}, {-ITY}, {-TION}, and {-AL}. The realisation of these morphemes is confronted with the potential normative influence of theoretical treatises, handbooks, and dictionaries. The following works have been consulted: Huloet (1552), Hart (1569), Huloet – Higgings (1572), Mulcaster (1582), Clement (1587), Coote (1596 and 1640), Cawdrey (1604 and 1617), Evans (1621), Daines (1640), Hodges (1644, 1649 and 1653), Wharton (1654), and Ellis (1660).⁹

The tables present the data as numbers of tokens (occurrences of particular variants) per ten thousand words. The figures show identifiable tendencies concerning the use of variants. The overall sums of tokens representing particular suffixes in the editions subject to this comparative analysis differ for two reasons. Firstly, some fragments of the book are missing from the original documents. Considerable portions of text have not survived, especially in *Py*, *No*¹⁰ and *Wa3*. Secondly, some passages in particular editions contain editorial corrections affecting not only particular graphemes, but also vocabulary, morphology and syntax. However, thanks to the large size of the corpus, the existing differences do not distort the general proportions of the specific words and morphemes under consideration. The results concerning the three imperfect editions should nevertheless be treated with caution.

⁹ All these publications were consulted in the form of facsimiles available at the *Early English Books Online* website.

¹⁰ The copy of *No* is a composite one, where leaves M5–7 are supplied from *Po*, and N1–6 from *Wa2*, and where leaves N7–8 are faked. All these leaves have been excluded from the corpus used for the present study.

The following section discusses the graphemic realisations of the most popular derivational suffixes, both native and borrowed ones. Many of them also appear in examples of correctly spelt words in the writings of spelling reformers and grammarians, as well as in dictionaries of the sixteenth- and seventeenth centuries. Therefore, wherever relevant, their opinions will be compared with the practice of the printers covered by this study.

4. Native derivational suffixes

Tables 1–4 present the graphemic realisations of the native suffixes {-NESS}, {-SHIP}, {-FUL} and {-LY}. In Table 1, one can see the variants of the nominal suffix {-NESS}. Compared to *Wo*, in *Po* there is an important change in the trend concerning the realisation of this suffix. In the three earliest editions *-nes* is the dominant form, though in *Wo* the difference between the numbers of the occurrences of the variants *-nes* and *-nesse* is not significant. In *Po* *-nesse* starts to prevail. Interestingly, in Huloet's English-Latin dictionary, published in 1552, *-nes* is the only form representing the suffix {-NESS}. In the second edition of this dictionary, revised and expanded by Higgins, and twenty years later, both variants are recorded but *-nes* is still the dominant one.¹¹ The form *-nesse* was preferred by Mulcaster in (1582: 132, 144–146) but this does not explain the earlier clear turn in the printers' practice noticeable in *Po*, published much earlier (1556). Moreover, in *Ad4* and *Ib* one can find a realisation with double <s> and without the final <-e>. This variant was recommended by Wharton (1654: 65) and used as the only form of the suffix {-NESS} by Hodges (1653), but in the first half and even in the fifties of the seventeenth century apparently was not yet an important variant for the printers of the *KS*. Given the absence of this variant in *Ad5* and *Wr*, its single occurrence (0.1 per 10,000 words) in *Ad4*, can well be an example of a typographical error. One can note an increase in the popularity of *-ness* in the last edition, but it still accounts only for 11% of all the occurrences of {-NESS} in *Ib*, compared to 12% taken by the older variant *-nes*.

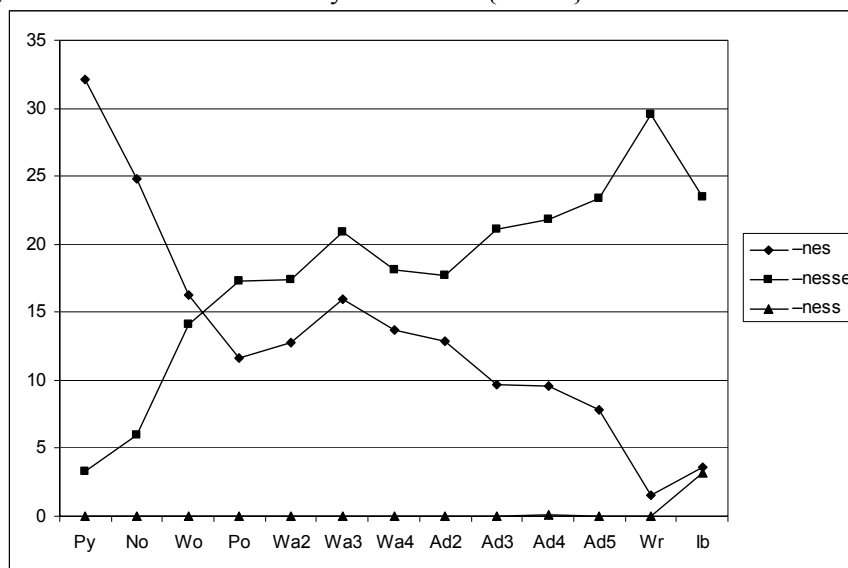
¹¹ According to my query conducted over 35% of the whole volume (in the transcription available at *EEBO*), i.e. approximately 160,000 words (entries starting with letters A–F).

Table 1. The nominal suffix {-NESS}¹²

	<i>Py</i>	<i>No</i>	<i>Wo</i>	<i>Po</i>	<i>Wa2</i>	<i>Wa3</i>	<i>Wa4</i>	<i>Ad2</i>	<i>Ad3</i>	<i>Ad4</i>	<i>Ad5</i>	<i>Wr</i>	<i>Ib</i>
<i>-nes</i>	32.1	24.8	16.3	11.6	12.8	16	13.7	12.9	9.7	9.6	7.8	1.5	3.6
<i>-nesse</i>	3.3	6	14.1	17.3	17.4	20.9	18.1	17.7	21.1	21.8	23.4	29.5	23.5
<i>-ness</i>	–	–	–	–	–	–	–	–	–	0.1	–	–	3.2

Figure 1 shows the trends in the popularity of particular variants over time. Apart from the clear change in *Po*, it is noteworthy that the printer of *Wr*, published in 1631, is the most consistent one in his preference for the *-nesse* variant. However, in the last edition of the *Kalender Ibbitson* goes against the trend followed in all the editions since *Po*. It is possible that in this case the theoreticians' views influenced the printer, motivating him to use the *-ness* form more often than his predecessors, however, even if this assumption is correct, the low percentage of the occurrences of the new variant implies that the absorption of the grammarians' ideas in the mid-seventeenth century was not immediate. Additionally, the similar levels of the tokens for *-ness* and *-nes* suggests that Ibbitson could have confused these two forms.

Figure 1. Tendencies for the key variants of {-NESS}



¹² The plural forms, such as *sick(e)nesses* (*sy(c)k(e)nesses*) and *likenesses* have been excluded from the count, because they can be interpreted as representing either *-nesse* or *-ness*, with the plural ending <-s> or <-es>, respectively.

Table 2 shows the realisations of the nominal suffix {-SHIP}. This suffix is much rarer in the *KS* than {-NESS}, but it still remains among the most frequent native suffixes represented by the different orthographic variants. In the first edition, as many as eight graphemic variants of this suffix appear, yet the table comprises only those variants which occur in more than one edition of the *KS*. The excluded four variants, *-shep*, *-shepe*, *-shipe*, and *-shype*, can all be found in *Py* only and each of them is represented by one token (i.e. 0.2 per 10,000 words). The large number of occurrences (particularly of the form *-shyp*) in this edition results from the use of different constructions and words than in the remaining editions, for instance the phrase *hathe lordshyp*, later replaced by, among others, *gouerneth*. In contrast to *Py*, *No* as well as the later editions follow Robert Copland's translation of *Compost et kalendrier des bergiers*, first published in 1516 by de Worde.¹³

Table 2. The nominal suffix {-SHIP}¹⁴

	<i>Po</i>	<i>No</i>	<i>Wo</i>	<i>Po</i>	<i>Wa2</i>	<i>Wa3</i>	<i>Wa4</i>	<i>Ad2</i>	<i>Ad3</i>	<i>Ad4</i>	<i>Ad5</i>	<i>Wr</i>	<i>Ib</i>
<i>-ship</i>	0.2	–	–	–	0.8	1.1	1.4	1.3	1.5	1.5	1.5	1.5	1.5
<i>-shippe</i>	0.2	–	–	–	0.1	–	0.1	0.1	–	–	–	–	–
<i>-shyp</i>	2.7	1	1.2	1	0.3	0.2	–	–	–	–	–	–	–
<i>-shyppe</i>	0.4	0.1	0.3	0.4	0.3	–	–	–	–	–	–	–	–

In *Wa2* there is a preference for the use of <i> word-medially (replacing <y> popular earlier). One could suppose that John Hart set the trend in his *Orthographie* published in 1569, as in this publication <i> is favoured word-medially. However, at least in some morphemes the preference for word-medial <i> seems to have started already in 1556, as will be illustrated in the section on borrowed derivational suffixes below. In Huloet (1552) *-ship* is used beside *-shyp* and *-shyppe*, whereas in Huloet – Higgins (1572) *-ship* is the dominant variant, but *-shippe* is almost as frequent.

In the case of the adjectival suffix {-FUL}, there is no clear change in the proportions of both forms. The variant *-full* definitely dominates throughout the whole period under consideration (see Table 3), including the editions of the *KS* published much before Huloet's (1552) and Huloet – Higgins's (1572) dictionaries, as well as Hart's *Orthographie* (1569), in which it is also the main representation of {-FUL}. In 1582 it is recommended by Mulcaster in his principle of

¹³ Sommer (1892: 67) mentioned 1508 as the year of the publication of Copland's translation. This information was later corrected by Jackson et al. (1976: 329). Copland was de Worde's assistant for many years and later a printer himself, and he both translated texts and wrote verses of the introductions of his books (Duff [1905] 1948: 31).

¹⁴ This table includes plural forms of {-SHIP} to avoid the ambiguity concerning the association of <e> with either the root of the word or the plural ending.

doubling the grapheme <l> word-finally, where it is described as required by “the swiftnesse of the pen” (Mulcaster 1582: 121). It is still the only acceptable representation of {-FUL} for Evans (1621), several decades later. The form *-ful* is the main variant in Hodges (1644 and 1649) and Wharton (1654) but in this case no change in the printers’ practice preceded the normative publications.

Table 3. The adjectival suffix {-FUL}

	<i>Py</i>	<i>No</i>	<i>Wo</i>	<i>Po</i>	<i>Wa2</i>	<i>Wa3</i>	<i>Wa4</i>	<i>Ad2</i>	<i>Ad3</i>	<i>Ad4</i>	<i>Ad5</i>	<i>Wr</i>	<i>Ib</i>
<i>-ful</i>	1.5	2.5	0.8	2.2	1.9	1.5	1.6	4.1	2.9	3.1	1.1	0.4	0.8
<i>-full</i>	13.8	8.7	11.1	10	11.2	12.6	11.5	9.2	10.4	10.4	12.3	13	12.5

Table 4 contains several realisations of the adjectival and adverbial suffix {-LY} but the form *-ly* is the only significant one in most editions, and it is definitely preferred by all the printers. Interestingly, de Worde is more consistent here than the printers of the seventeenth-century editions of the *KS*, using exclusively this form of the suffix {-LY}. Nevertheless, it is noteworthy that the variant *-lye* (with the final <-e>), which was recorded ten times (an absolute figure) in *Wa2*, was frequent in Huloet (1552), Huloet – Higgins (1572), as well as in Hart (1569). Perhaps these works were consulted by Thomas Este or John Wally (or both) before the publication of their editions of the *Kalender*. In *Wa4* *-lie* appeared as a new variant of the suffix. *Wa4* was published soon after Mulcaster’s (1582) treatise where *-lie* is used more frequently than *-ly*, so its printer could have been influenced by this work. Although Coote (1596) generally adopted Mulcaster’s ideas, he preferred to use *-ly* in his book. Perhaps the drop in the number of *-lie* tokens can be ascribed to Coote’s influence. It remained in use until the last edition of the *KS*, but it is particularly frequent in *Ad5*, though it still remains a minor variant, even in this edition. The unusually high number of *-lie* tokens in *Ad5* are difficult to explain otherwise than by its printer’s or publisher’s preferences. With regards to contemporary language experts, in the last edition of Cawdrey’s dictionary published in 1617, i.e. a year before *Ad5*, only *-ly* can be found.

Table 4. The adjectival and adverbial suffix {-LY}

	<i>Py</i>	<i>No</i>	<i>Wo</i>	<i>Po</i>	<i>Wa2</i>	<i>Wa3</i>	<i>Wa4</i>	<i>Ad2</i>	<i>Ad3</i>	<i>Ad4</i>	<i>Ad5</i>	<i>Wr</i>	<i>Ib</i>
<i>-ly</i>	74.2	77	77.2	74.5	72.8	83.4	73.3	72.7	72.9	73.2	64.2	73.4	72.1
<i>-lye</i>	–	–	–	–	1.4	0.9	0.5	–	–	0.1	–	–	–
<i>-ley</i>	0.4	–	–	–	0.3	0.2	0.1	–	–	–	–	–	–
<i>-li</i>	0.2	0.1	–	–	–	–	–	–	–	0.1	–	–	–
<i>-lie</i>	–	–	–	–	–	–	1.1	0.3	0.1	0.3	10.4	0.1	0.8

The research findings for the native suffixes discussed above show that the prevailing variants of {-FUL} and {-LY} remained the same throughout the period

under consideration, whereas the suffixes {-NESS} and {-SHIP} started to be predominantly represented by new or previously less significant variants between 1528 and 1570. None of these changes can be definitely attributed to the influence of the contemporary theoreticians, though the spread of word-medial <i> could have been promoted by Hart (1569), and the form *-lie*, a minor spelling of {-LY}, could have emerged in *Wa4* under the influence of Mulcaster (1582).

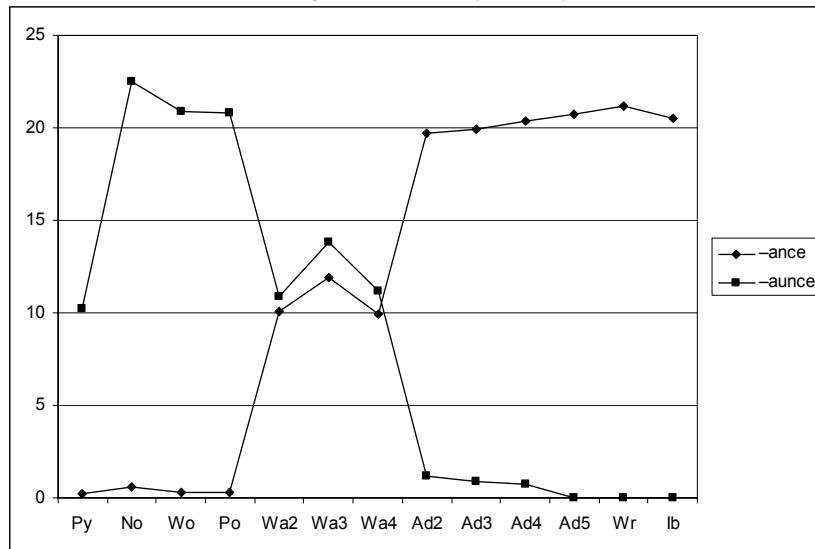
5. Borrowed derivational suffixes

Tables 5–8 present the graphemic realisations of the suffixes borrowed from Latin and French, including the nominal suffixes {-ANCE}, {-ITY}, {-TION} and the adjectival {-AL}.

Table 5. The nominal suffix {-ANCE}¹⁵

	<i>Py</i>	<i>No</i>	<i>Wo</i>	<i>Po</i>	<i>Wa2</i>	<i>Wa3</i>	<i>Wa4</i>	<i>Ad2</i>	<i>Ad3</i>	<i>Ad4</i>	<i>Ad5</i>	<i>Wr</i>	<i>Ib</i>
<i>-ans</i> ¹⁶	3.1	0.1	0.1	0.4	0.1	–	–	–	–	–	–	–	–
<i>-auns</i>	3.1	–	–	–	–	–	–	–	–	–	–	–	–
<i>-ance</i>	0.2	0.6	0.3	0.3	10.1	11.9	9.9	19.7	19.9	20.4	20.7	21.2	20.5
<i>-aunce</i>	10.2	22.5	20.9	20.8	10.9	13.8	11.2	1.2	0.9	0.7	–	–	–

Figure 2. Tendencies for the key variants of {-ANCE}



¹⁵ The abbreviated forms (with a tilde) are counted together with full forms which they represent, e.g. *-ās* as *-ans*, *-āce* as *-ance* etc.

The nominal suffix {-ANCE} (from French *-ance* < Latin *-antia*, *OED2*, s. v. “-ance, suffix”) is represented by three main variants, *-ans*, *-ance*, and *-aunce*, in the first five editions of the *KS* (1506–c. 1570), two variants, *-ance* and *-aunce*, in the five subsequent editions (c. 1580–1611), and only the form *-ance* in the remaining three editions (1618–1656). Similarly to {-SHIP}, the graphemic representation of the suffix {-ANCE} undergoes a significant change in *Wa2* where the variant *-ance* is nearly as popular as *-aunce* (see Table 5 and Figure 2). Both forms remain almost equally frequent in all the editions published by John Wally (*Wa2*, *Wa3*, and *Wa4*). The situation changes at the beginning of the seventeenth century, with the number of the *-aunce* tokens suddenly dropping in *Ad2*, and continuing to decrease in *Ad3* and *Ad4* until they disappear completely in *Ad5*.

As for the variants promoted in normative writings, in Huloet (1552) *-aunce* definitely prevails, and *-ance* is rare. In Huloet – Higgins (1572) *-aunce* still prevails, but *-ance* is more popular than in the previous edition of this dictionary. Hart (1569) used predominantly the *-ance* variant. However, the closeness of the dates of both publications (Hart and *Po*) makes it possible to suppose that Hart simply followed and thus strengthened a general trend which was already well advanced in 1569. Nevertheless, it is also worth mentioning that theoreticians were not unanimous in this respect. Although Mulcaster (1582) definitely preferred the form *-ance* (only two exceptions, in *countenaunce* and *mumchaunce*, can be found in his treatise), Clement (1587) used both *-ance* and *-aunce* without showing any clear preference for one or the other form. Coote (1596) and the later theoreticians used *-ance* almost exclusively. This tendency is reflected in the seventeenth-century editions of the *KS*.

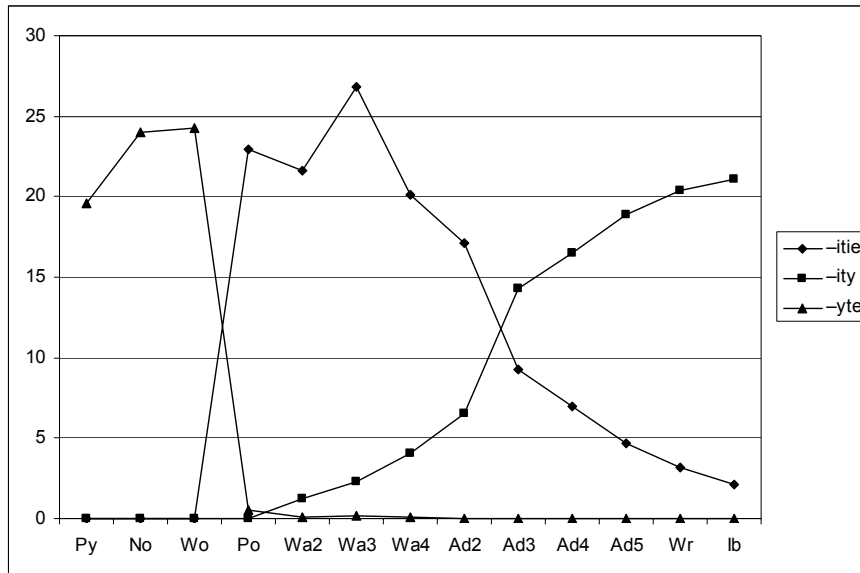
The changes in the use of the suffix {-ITY} (from the French *-ité* and Latin *-itāt-*, *-itās*, *OED2*, s. v. “-ity, suffix”) proceeded in two stages (see Table 6 and Figure 3). The first one, between 1528 and 1556, was probably part of a general tendency started in this period (a similar change can be seen in Table 7 and Figure 4) to replace <y> with <i> word-medially, which resulted in the appearance of the new variant *-itie* in *Po*. Stage two consists in replacing <-ie> with <-y> word-finally which is first recorded in *Ad3*. In the following editions the form *-ity* yields more and more tokens, whereas the tokens of *-itie* gradually decrease in number.

¹⁶ Including one instance (0.2 occurrences per 10,000 words) of *-anse* in *Py*.

Table 6. The nominal suffix {-ITY}

	<i>Py</i>	<i>No</i>	<i>Wo</i>	<i>Po</i>	<i>Wa2</i>	<i>Wa3</i>	<i>Wa4</i>	<i>Ad2</i>	<i>Ad3</i>	<i>Ad4</i>	<i>Ad5</i>	<i>Wr</i>	<i>Ib</i>
<i>-ite</i>	2.3	0.7	0.3	0.3	0.1	0.4	0.3	–	–	–	–	–	–
<i>-itie</i>	–	–	–	22.9	21.6	26.8	20.1	17.1	9.3	7	4.7	3.2	2.1
<i>-ity</i>	–	–	–	–	1.2	2.3	4.1	6.5	14.3	16.5	18.9	20.4	21.1
<i>-yte</i>	19.6	24	24.3	0.5	0.1	0.2	0.1	–	–	–	–	–	–
<i>-ytie</i>	–	–	–	1.6	0.4	0.2	–	–	–	–	–	–	–
<i>-yty</i>	–	0.3	0.1	–	0.1	–	–	–	–	–	–	–	–

Figure 3. Tendencies for the key variants of {-ITY}



However, taking into consideration that Huloet (1552), Huloet – Higgins (1572), Mulcaster (1582), Coote (1596), Cawdrey (1604 and 1617), Evans (1621), Hodges (1644, 1649, and 1653) and Wharton (1654) all prefer the form *-itie*, it is not clear what caused the radical change from *-itie* to *-ity* in *Ad3*. The form *-ity* is the only one used in Coote (1640),¹⁷ Daines (1640) and Ellis (1660), yet none of these publications explain the sharp increase in the popularity of *-ity* in *Ad3*. In view of this, one can suppose that the practice developed by the printers was later introduced as a norm into prescriptive works.

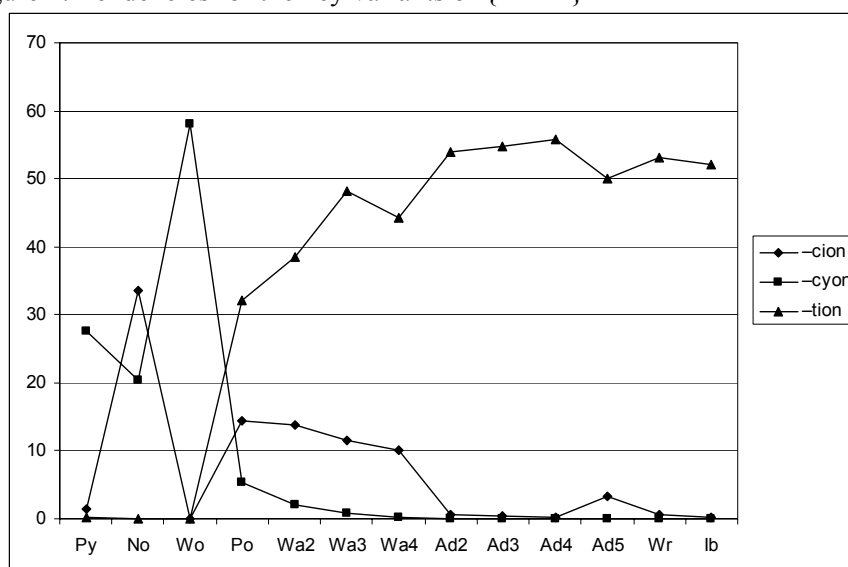
¹⁷ Printed thirty years after Coote's death for the Company of Stationers, "[p]erused and approved by publike Authority" (Coote 1640, A1r).

Table 7 presents the forms of the nominal suffix {-TION} (from the Old French *-cion*, *-tion* and Latin *-tiōnem*, *OED2*, s. v. “-tion, suffix”) in certain editions. For the sake of clarity, it comprises only the forms of the lexemes derived from the Latin *-tiōnem* (for example, DECLARATION and PETITION), and omits those derived from the Latin *-siōnem* (for example, PASSION and IMPRESSION).

Table 7. The nominal suffix {-TION}¹⁸

	Py	No	Wo	Po	Wa2	Wa3	Wa4	Ad2	Ad3	Ad4	Ad5	Wr	Ib
<i>-cion</i>	1.5	33.6	0.1	14.4	13.8	11.5	10.1	0.7	0.4	0.3	3.2	0.7	0.3
<i>-cione</i>	0.6	–	–	–	–	0.2	0.1	–	–	–	–	–	–
<i>-cyon</i>	27.5	20.4	58	5.3	2	0.9	0.3	–	–	–	–	–	–
<i>-cyone</i>	2.3	–	–	–	–	–	–	–	–	–	–	–	–
<i>-tion</i>	0.2			32.2	38.4	48.1	44.2	53.9	54.7	55.7	50.1	53.1	52.1
<i>-tyon</i>	0.8	0.9	1.1	1.7	0.5	0.8	0.5	–	–	–	–	–	–
<i>-xion</i>		2.1		3.5	3.5	4	3.6	2.3	2.5	2	4.5	4.5	4.3
<i>-xyon</i>	1.3	–	–	0.1	–	–	–	–	–	–	–	–	–
<i>-sion</i>	0.4	0.4	–	0.3	0.1	0.2	0.1	–	–	–	–	–	–
<i>-syon</i>	12.9	0.3	–	–	–	–	–	–	–	–	–	–	–

Figure 4. Tendencies for the key variants of {-TION}



¹⁸ The abbreviated forms (with a tilde) are counted together with full forms which they represent, e.g. *-ciō* as *-cion*, *-tiō* as *-tion* etc.

In the first three editions an interesting development can be discerned (Figure 4). The form *-cyon*, which prevails in *Py*, yields a lower number of occurrences in *No*, giving way to *-cion*, but then returns as the only significant variant in *Wo*. In *Po* a new variant appears (in fact it was first recorded in *Py*, but only once, so it may have been a typo), and it immediately becomes the dominant one. It is the form *-tion*, with <t> (instead of the earlier <c>) and for <i> instead of <y> in the suffix. It is the main graphemic representation of {-TION} already in Huloet (1552), although *-cion* also remains an important variant in this dictionary (accounting for approximately one third of the tokens).¹⁹ It is also possible that such recommendations existed already in Rastell's handbook of 1530, but this cannot be proved, due to the paucity of the material surviving. It seems likely that the increase in popularity of the form *-tion* may be motivated by the general classicising trend in Early Modern English, which consisted in making words look closer to their Latin etymons.

Analysing Table 7, one can also notice that de Worde's practice was more consistent than that of all the remaining printers. In his edition he employed the form *-cyon*, which was the prevailing variant already in the edition of 1518, but he eliminated most other variants. It is noteworthy that the use of the variant *-tyon* is not random either. They are found only in two lexemes, QUESTION (6 instances) and DIGESTION (2 instances).²⁰ The single occurrence of *-cion* (actually *-ciō*, in *tēptaciō*, with a tilde over <o> representing the <n> in the suffix) appears in a woodcut, where limited space may have necessitated it.

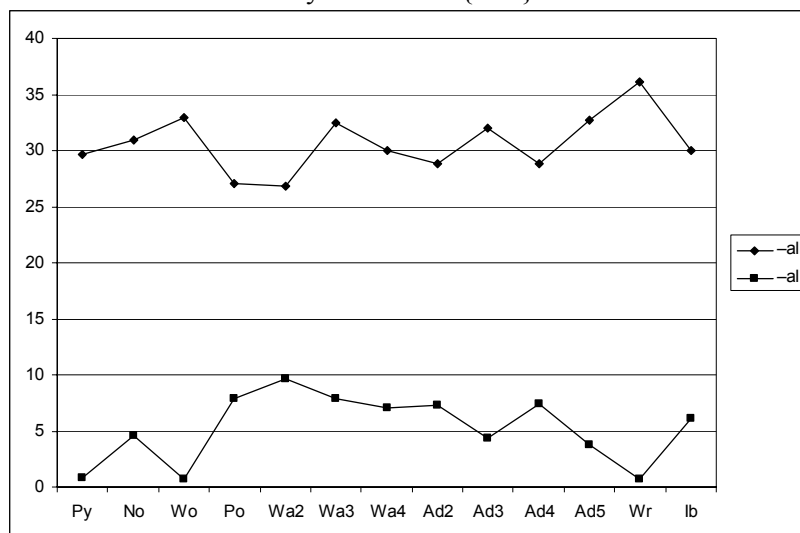
Table 8. The adjectival suffix {-AL}

	<i>Py</i>	<i>No</i>	<i>Wo</i>	<i>Po</i>	<i>Wa2</i>	<i>Wa3</i>	<i>Wa4</i>	<i>Ad2</i>	<i>Ad3</i>	<i>Ad4</i>	<i>Ad5</i>	<i>Wr</i>	<i>Ib</i>
<i>-all</i>	29.6	30.9	32.9	27.1	26.8	32.5	30	28.8	32	28.8	32.7	36.1	30
<i>-al</i>	0.8	4.6	0.7	7.9	9.7	7.9	7.1	7.3	4.3	7.4	3.8	0.7	6.1
<i>-ell</i>	0.6	1	1.3	0.3	0.1	–	–	0.1	0.1	0.3	0.1	0.1	
<i>-el</i>	–	0.7	0.1	0.1	0.3	–	0.1	0.1	0.1	–	–	–	–

¹⁹ On the basis of the entries A–C.

²⁰ The figures in the brackets are absolute ones here.

Figure 5. Tendencies for the key variants of {-AL}



As can be understood from Table 8 and Figure 5, the dominating variant of the adjectival suffix {-AL} (from the French *-el* and Latin *-ālem*, *-ālis*, *OED3*, s. v. “-al, suffix¹”) in all the editions was *-all*, but it was not used by all the printers with equal consistency. Pynson and de Worde were the most consistent early users of this variant, with its percentage share at the level of 95% and 94%, respectively. This percentage is exceeded only in *Wr* (96%) and approached in *Ad5* (89%). For all the other printers *-al* remains an important form covering from 12% of all the occurrences of {-AL} in *No* to 26% in *Wa2*. Additionally, nearly all the printers employed at least one of the minor (older) variants, *-ell* and *-el*. In de Worde’s edition, nine of the ten instances of *-ell* are forms of the adjective SPIRITUAL, including eight occurrences of the contraction *spūell*.

With regards to the early spelling reformers’ and teachers’ views, *-all* is the predominant variant in all the works published before 1644. Moreover, although Hodges recommended *-al* in 1644, and used it consistently in 1649 and 1653, Ellis employed nearly exclusively *-all* in 1660. Interestingly, most of the works which recommended the *-al* variant, i.e. Hodges (1649 and 1653) and Wharton (1654), were printed by the same printer, William Du-Gard, so it cannot be excluded that this form was chosen by the printer himself.

Summing up the research findings concerning the borrowed suffixes, only the suffix {-AL} was represented by the same prevailing form in the whole period between the first and the last edition of the *KS*. By contrast, the suffixes {-ITY} and {-TION} had undergone important graphemic changes by 1556, and the suffix {-ANCE} by c. 1570. Some new variants, including *-ance* and *-tion*

had been recommended in theoretical works and dictionaries, which have been consulted for purposes of this study, before it was recorded as the dominant forms of the suffixes {-ANCE} and {-TION}, respectively, in the *KS* editions. In the case of *-ity* the printer of *Ad3* was the first to use it as the key variant representing {-ITY}. Of course, it cannot be excluded that this variant was recommended earlier in normative writing which has not been consulted here or has not survived until our times.

6. Conclusions

The analysis of the graphomorphemic information available in the editions of the *Kalender of Shepherdes* shows that particular printing houses applied different combinations of spelling rules with regard to the variants of suffixes and were characterised by varying levels of consistency in the use of these graphemic representations. The new spelling variants of the suffixes were adopted partly as the printers' own regularisation policy, and partly under the influence of normative writings. The former is true particularly of the earliest printers who worked in the times when theoretical treatises, grammars, handbooks dealing with English spelling, as well as English dictionaries were not yet available, and could not provide models of spelling practice. Wynkyn de Worde, the printer of the edition published in 1528, merits special attention for his efforts at the regularisation of spelling. The findings on de Worde's usage discussed above also confirm those from earlier research, based on other, shorter texts published by this printer (Aronoff 1989, Rutkowska 2005). Even though the spelling rules used by de Worde differ from the present-day English ones (for example his employment of <y>, not <i>, word-medially), this printer's overall consistency deserves great respect and is a proof of his professionalism.²¹ One may wonder whether such spelling consistency lay in the interest of the printers. The systematisation of orthographic principles seems to have contributed to the increased efficiency and effectiveness of printers' work,²² which is confirmed by the fact that de Worde, who paid much attention to the regularisation of spelling, was an unquestionable leader among the contemporary printers publishing books in England. He printed between 700 and 800 books, which is several times more than his famous predecessor and mentor, William Caxton (Duff [1905] 1948: 174, Plomer [1925] 1996: 8, Plomer 1927: 175 and 181, Jennett 1958: 44).

²¹ Compare also Nevalainen – Tiekken-Boon van Ostade (2006: 289), who claimed that de Worde, as a foreigner, “could not be expected to direct a variable spelling system towards greater regularity”.

²² This point of view was earlier argued by Aronoff (1989: 92–93).

Starting from the mid-sixteenth century, printers' practice is likely to have become more and more influenced by theoreticians, such as orthoepists, grammarians and spelling reformers, thus the opinions ventured by some linguists (Bregelman 1980, Carney 1994) who claim that the differences in early printers' usage were a result of the adoption of the forms recommended by the authors of theoretical treatises and handbooks, are to some extent confirmed by the findings regarding the *KS* editions printed in the second half of the sixteenth century and in the seventeenth century, where some correlation between the opinions of contemporary linguistic authorities and printers' spelling practice can be found. However, the influence of proscriptive and prescriptive writings does not explain the adoption of all the variants of the suffixes analysed in this study. For example, it does not justify the emergence of *-nesse* as the prevailing form of {-NESS} in *Po*, and *-ity* as the main representation of {-ITY} in *Ad3*.

Summing up, although the level of variation among graphemic realisations remains high in the majority of the editions of the *Kalender*, one can see a clear tendency (particularly strong in de Worde's edition of 1528 and that by Ibbitson of 1656) to lower the number of variants and apply particular spelling rules which, in the first half of the sixteenth century, should be ascribed to the printers' invention rather than the normative influence of the contemporary linguistic authorities, though the growing importance of the latter is noticeable in the spelling of the *KS* editions published in the second half of the seventeenth century and later.

REFERENCES

PRIMARY SOURCES

The *Kalender of Shepherdes* editions (in chronological order)

- 1506 *Here begynneth the Kalender of Shepherdes*. London: Richard Pynson.
 [1518] *Here begynneth the Kalender of Sheperdes*. [London: Julian Notary]
 1528 *The kalēder of shepeherdes*. London: Wynkyn de Worde.
 1556 *Here begynneth the kalender of Sheperdes. Newly augmented and corrected*. London: William Powell.
 [c. 1570] *The Sheperdes Kalender. Here beginneth the Kalender of Sheperdes Newly Augmented and Corrected*. London: Thomas Este for John Wally.
 [c. 1580] [*The Sheperdes Kalender. Here beginneth the Kalender of Sheperdes Newly Augmented and Corrected*] London: [John Charlewood for] John Wally.

- [c. 1585] *Heere beginneth the Kalender of Sheepehards: Newly Augmented and Corrected.* London: [John Charlewood and George Robinson for] John Wally.
- [1600] [*The Shepheards Kalender*] London: [Valentine Simmes for Thomas Adams].
- 1604 *The Shepheards Kalender. Here beginneth the Kalender of Shepheards. Newly augmented and corrected.* London: George Elde for Thomas Adams.
- 1611 *The Shepheards Kalender. Here beginneth the Kalender of Shepheards. Newly augmented and corrected.* London: for Thomas Adams.
- 1618 *The Shepheards Kalender. Here beginneth the Kalender of Shepheards. Newly augmented and corrected.* London: for Thomas Adams.
- 1631 *The Shepherds Kalender. Here beginneth the Kalender of Shepherds. Newly augmented and corrected.* London: [Eliot's Court Press] for John Wright.
- 1656 *The Shepheards Kalender. Newly Augmented and Corrected.* London: Robert Ibitson.

Dictionaries, Grammars, Handbooks, and Treatises

Cawdrey, Robert

- 1604 *A Table Alphabeticall, conteyning and teaching the true vvriting, and vnderstanding of hard vsuall English wordes...* London: Edmund Weaver.
- 1617 *A Table Alphabeticall, or the English expositor, containing and teaching the true writing and vnderstanding of hard vsuall English words...* London: Edmund Weaver.

Clement, Francis

- 1587 *The Petie Schole with an English Orthographie, wherein by rules lately prescribed is taught a method to enable both a childe to reade perfectly within one moneth, & also the vnperfect to write English aright...* London: Thomas Vautrollier.

Coote, Edmund

- 1596 [*The English Schoole-maister...*] London: Widow Orwin, for Ralph Jackson and Robert Dextar.
- 1640 *The English Schoole-Master...* London: E.A. and T.F. for the Company of Stationers.

Daines, Simon

- 1640 *Orthoepia Anglicana: Or, The First Principal Part of the English Grammar: Teaching The Art of right speaking and pronouncing English, With certaine exact rules of Orthography, and rules of spelling...* London: Robert Young and Richard Badger for the Company of Stationers.

Ellis, Clement

- 1660 *The Gentile Sinner, or, England's Brave Gentleman: Characterized In a Letter to a Friend, Both As he is, and as he should be.* Oxford: Henry Hall for Edward and John Forrest.

Evans, John

- 1621 *The Palace of profitable Pleasure. Contayning and teaching with ease and delight, whatsoever is necessary to bee learned of an English Scholler...* London: W. Stansby.

Hart, John

- 1569 *An Orthographie, conteyning the due order and reason, howe to write or paint thimage of mannes voice, most like to the life or nature. Composed by I. H. Chester Heralt.* London: William Seres.

Hodges, Richard

1644a *A Special Help to Orthographie, or, The true-vvriting of English. Consisting of such Words as are alike in sound, and unlike both in their signification and Writing: As also, Of such Words which are so neer alike in sound, that they are sometimes taken one for another...* London: Richard Cotes.

1649 *The Plainest Directions for the True-Writing of English...* London: William Du-gard for Thomas Euster.

1653 *Most Plain Directions for True-Writing...* London: William Du-Gard for Richard Hodges.

Huloet, Richard

1552 *Abcedarium Anglico Latinum, pro Tyrunculis Richardo Huloeto Exscriptore.* London: William Riddel.

Huloet, Richard – John Higgins

1572 *Huloets dictionarie, newelye corrected, amended, set in order and enlarged...* London: Thomas Marsh.

Mulcaster, Richard

1582 *The First Part of the Elementarie vvhich entreateth chefelie of the right writing of our English tung...* London: Thomas Vautroullier.

Wharton, Jeremiah

1654 *The English-Grammar: Or, The Institution of Letters, Syllables, and Words in the English-Tongue...* London: William Du-Gard.

SECONDARY SOURCES

Arn, Mary-Jo – Hanneke Wirtjes – Hans Jansen (eds.)

1985 *Historical & Editorial Studies in Medieval & Early Modern English.* Groningen: Wolters-Noordhoff.

Aronoff, Mark

1989 “The orthographic system of an early English printer: Wynkyn de Worde”, *Folia Linguistica Historica* 8/1-2: 65–97.

Blake, Norman Francis – Charles Jones (eds.)

1984 *English Historical Linguistics: Studies in Development.* (CECTAL Conference Papers Series, no. 3) Sheffield: University of Sheffield, 123–37.

Breivik, Leiv Egil – Arnoldus Hille – Stig Johansson (eds.)

1989 *Essays on English Language in Honour of Bertil Sundby.* Oslo: Novus Forlag.

Bregelmann, Frederick

1980 “Orthoepists, printers and the rationalisation of English spelling”, *Journal of English and Germanic Philology* 79: 332–54.

Carney, Edward

1994 *A Survey of English Spelling.* London: Routledge.

Early English Books Online

<<http://www.lib.umi.com/eebo/>> [accessed on 5 May 2012] (*EEBO*)

Duff, Edward Gordon

[1905] 1948 *A Century of the English Book Trade.* London: The Bibliographical Society.

Görlach, Manfred

2001 *Eighteenth-century English.* Heidelberg: Universitätsverlag C. Winter.

Hamel, Christopher de

- 1983 "Reflexions on the trade in books of hours at Ghent and Bruges", in: Joseph Burney Trapp (ed.), 29–33.

Hogg, Richard – David Denison (eds.)

- 2006 *A History of the English Language*. Cambridge: University Press.

Jackson, William Alexander – Frederic Sutherland Ferguson – Katharine Pantzer (eds.)

- 1976 *A Short-title Catalogue of Books Printed in England, Scotland and Ireland and of English Books Printed Abroad, 1475-1640*. London: Bibliographical Society. (STC)

Jennett, Seán

- 1958 *Pioneers in Printing: Johann Gutenberg, William Caxton, William Caslon, John Baskerville, Alois Senefelder, Frederick Koenig, Ottmar Mergenthaler, Tolbert Lanston*. London: Routledge & Paul.

Nevalainen, Terttu – Ingrid Tiekken-Boon van Ostade

- 2006 "Standardisation", in: Richard Hogg – David Denison (eds.), 271–311.

Nelson, Brent

- 1997 "Printing history", in: Ian Lancashire (ed.) *Edmund Coote: The English Schoole-Maister (1596), an Old-Spelling Edition of STC 5711*, in the series *Renaissance Electronic Texts*, <<http://www.library.utoronto.ca/utel/ret/coote/ret2.html>> [accessed on 5 May 2012]

Osselton, Noel

- 1984 "Informal spelling systems in early Modern English: 1500–1800", in: Norman Francis Blake – Charles Jones (eds.), 123–37.
1985 "Spelling-book rules and the capitalization of nouns in the seventeenth and eighteenth centuries", in: Mary-Jo Arn et al. (eds.), 49–61.

The Oxford English Dictionary

- 1989 Second edition, *OED Online*, Oxford University Press, <<http://dictionary.oed.com/>> [accessed on 13 September 2012] (OED2)
2012 Third edition, *OED Online*, Oxford University Press, <<http://dictionary.oed.com/>> [accessed on 13 September 2012] (OED3)

Peddie, Robert Alexander (ed.)

- 1927 *Printing: A Short History of the Art*. London: Grafton & Co..

Plomer, Henry Robert

- [1925] 1996 *Wynkyn de Worde and his Contemporaries: From the Death of Caxton to 1535*. Bristol: Thoemmes Press.
1927 "Great Britain and Ireland", in: Robert Alexander Peddie (ed.), 172–200.

Raven, James

- 2007 *The Business of Books: Booksellers and the English Book Trade 1450–1850*. New Haven: Yale University Press.

Rutkowska, Hanna

- 2005 "Selected orthographic features in English editions of the *Book of good maners* (1487-1507)", *SELIM* 12: 127–142.

Salmon, Vivian

- 1989 "John Rastell and the normalization of early sixteenth-century orthography", in: Leiv Egil Breivik et. al., 289–301.
1999 "Orthography and punctuation", in: Roger Lass (ed.), *The Cambridge History of the English Language. Volume III: 1476-1776*, Cambridge: CUP, 13–55.

Scragg, Donald

1974 *A History of English Spelling*. New York: Manchester UP and Barnes & Noble Books.

Sommer, Heinrich Oskar

1892 *The Kalender of Shepherdes. Volume I: Prolegomena*. London: Kegan Paul.

Tieken-Boon van Ostade, Ingrid

2009 *An Introduction to Late Modern English*. Edinburgh: Edinburgh University Press.

Trapp, Joseph Burney (ed.)

1983 *Manuscripts in the Fifty Years after the Invention of Printing: Some Papers Read at a Colloquium at the Warburg Institute on 12–13 March 1982*. London: The Warburg Institute, University of London.

Wing, Donald Goddard

1982–1998 *Short-Title Catalogue of Books Printed in England, Scotland, Ireland, Wales and British America and of English Books Printed in Other Countries*. New York: The Modern Language Association of America. (*Wing*)

Appendix

The *Kalender of Shepherdes* editions analysed in this study

Publication year	Sigil	Publisher's and Printer's Name	Catalogue No.	Word Count (in thousands)
1506	<i>Py</i>	Richard Pynson	<i>STC 22408</i>	47.7
[1518]	<i>No</i>	[Julian Notary]	<i>STC 22410</i>	66.6
1528	<i>Wo</i>	Wynkyn de Worde	<i>STC 22411</i>	76.3
1556	<i>Po</i>	William Powell	<i>STC 22412</i>	76.5
[c. 1570]	<i>Wa2</i>	Thomas Este for John Wally	<i>STC 22415</i>	73.8
[c. 1580]	<i>Wa3</i>	[J. Charlewood for] John Wally	<i>STC 22416</i>	52.7
[c. 1585]	<i>Wa4</i>	[J. Charlewood, G. Robinson for] John Wally	<i>STC 22416.5</i>	73
[1600]	<i>Ad2</i>	V. Simmes for T. Adams	<i>STC 22419</i>	74.5
1604	<i>Ad3</i>	G. Elde for Thomas Adams	<i>STC 22420</i>	74
1611	<i>Ad4</i>	Anon. for Thomas Adams	<i>STC 22421</i>	74.2
1618	<i>Ad5</i>	Anon. for Thomas Adams	<i>STC 22422</i>	74.1
1631	<i>Wr</i>	[Eliot's Court Press for] J. Wright	<i>STC 22423</i>	74.1
1656	<i>Ib</i>	Robert Ibbitson	<i>Wing B713</i>	74.6
			TOTAL	912.1