CHAPTER 9

WOMEN'S SPELLING IN EARLY MODERN ENGLISH: PERSPECTIVES FROM NEW MEDIA

Mel Evans and Caroline Tagg

1. Introduction

This chapter argues for a sociolinguistic approach to individual variation in Early Modern English spelling that draws on frameworks developed for twenty-first century new media texts. Studies of Early Modern English spelling have tended to focus on the regularisation of the system; that is, research has sought to document, characterise and understand the process through which the localised and variable spelling systems found in Middle English transform into the regularised (and Standardized) Present-Day English system. In this paper, we show how micro-level individual spelling variation provides an important complement to the macro-level examination of regularisation of spelling in the period, arguing that, as with other sociolinguistic phenomena, local practices of early modern writers underpin the broader trajectories of change.[1] The motivations behind, and the interpersonal significance of, these local spelling practices can, we argue, be illuminated by drawing on research into new media practices, however disparate the writing systems in these two periods may initially appear.

Sociolinguistic research has highlighted the potential of spelling as a resource for social meaning for individual language users. Whilst flexibility in spelling practice can be evidenced in informal, vernacular writing throughout the modern English period, it can be argued that new media has 'diffused and magnified' such practices, deregulating what counts as English spelling and opening up the orthographic choices available in a broader range of writing contexts.[2] Within the medium of text-messaging, for example, writers can draw on standard and non-standard spelling forms to signal group membership, or to add a multi-modal dimension to the linguistic channel of communication. As Shortis points out: 'Spelling is now a more flexible friend used for functional economy and identity performance'.[3] The increased scholarly interest that accompanied this shift has led to the development of sociolinguistic frameworks which, we argue, can inform our understanding of Early Modern English spelling practices.

Our focus is the epistolary spelling of four high-ranking sixteenth-century women: Queen Elizabeth I, Elizabeth Bacon, Bess of Hardwick and Joan Thynne. Their correspondence, selected to represent two sub-periods of each woman's life, provides a rich dataset through which to explore the practices and potential social meanings of early modern spelling, and from which to better understand how writers in the period negotiated the various factors operating in a pre-standardized context. The chapter is structured as follows. We outline some key theoretical and empirical studies relating to early modern English spelling, and sociolinguistic and digital media spelling variation, and introduce our corpus and our analytic framework. We then discuss our main findings, quantitatively and qualitatively exploring the preferences of the letter-writers, looking at intra- and inter-speaker variation, and assessing their practices in light of the macro-level norms in contemporary epistles, using the *Parsed*

Corpus of Early English Correspondence, and print, using *EEBO N-Gram Viewer*.[4] Throughout, we appraise our findings and their potential significance using theoretical concepts and frameworks developed for the analysis of spelling variation in digital media, to establish points of continuity as well as points of difference, and to ascertain whether the 'flexible friend' of the 21st century has a comparable acquaintance in the early modern era.

2. Spelling Regularity and Ideologies

The forms and functions of spelling in the digital age may initially appear at something of a distant remove from early modern English. The meaning potential of spelling in recent periods of English (c.1700 onwards) is achieved in part through the manner of deviation from the contemporary normative spelling system. The regularised English spelling system tends towards consistent, predictable forms and, moreover, is imbued with Standard language ideological values: that is, specific forms are prescribed as "correct" and "accepted", and their counterparts are quashed and devalued in an attempt to curtail and control variation.[5] These ideological values, prescribed through institutional channels and public discourses, are subsequently internalised by language users informing their language choices. The degree and nature of deviation from the spelling "standard" in modern English is thus sensitive to the context of use. Personal texts such as letters and text-messages offer a more flexible space for spelling creativity than formal text-types such as public news; the latter are more constricted by pressures privileging homogeneity and conformity to the prescribed standard.[6]

The degree or extent of the flexibility available to language users writing within a standardised system has been subject to debate. Sebba uses the concept of the *zone of social meaning* to explain how such spellings are generally constrained to a set of options reliant on (the appreciable deviation from) the accepted graphic/phonemic conventions.[7] These restrictions mean that effective spelling variation entails knowledge of the standard forms. As Shortis points out, spelling variation in the post-standardisation era can often be seen not as a sign of ignorance of spelling conventions, but as an indication of a 'credible mastery of standard conventions'.[8] However, Deumert has contested whether deviant spellings are genuinely curtailed through their affinity to the spelling norms of a language system, positing that, in fact, all and any forms have the potential to become meaningful, despite, or because of, their higher-degree of spelling "deviancy".[9] Deumert also speculates on how the creativity of new media spellers is acquired and developed; in 21st century contexts, users have to relearn 'a way of writing that is not rule-governed but open', with peer networks and public media, rather than institutional forces, carrying the greatest influence. She notes that such spelling choices carry risk, such as the threat of ambiguity, but that users can adjust to such impediments.[10]

At first glance, early modern English spelling presents a challenge to the sociolinguistic models of variation developed expressly for new media writing, as it lacks the reference point of a standardized system. However, on closer reflection, the properties and potential meanings of spelling over time share many of the same elements; a point reflecting that made by Shortis, who observes the continuities between digital and pre-digital spelling practices 'at least to the nineteenth century'.[11] Early modern individuals' understanding of spelling variation and variant forms seems likely to have tended towards the 'open' comprehension envisaged by Deumert, with rule-governed forces only just starting to come into play. For such writers, the "norm" would be an open system, one potentially shaped through peer-networks and exposure to different media (e.g. manuscripts and print), with prescriptive institutional forces at a nascent stage. The contexts therefore involve the same factors, but with potentially different weightings

and influence. Thus, whilst the linguistic, social and ideological landscapes are appreciably very different for spellers in the early modern period and those of the 21st century, we argue that there are consistencies in the formal and functional dimensions of spelling variation, and that historical spelling can be understood as a system of (potential) local meaning, and not viewed as a chaotic or inconsistent system whose significance lies *only* in its regularised "end-point" (itself a fallacy) in the early 18th century.

3. Early Modern Spelling
The history of English spelling can be understood as the movement toward and away from focussed supralocal varieties. In the Anglo-Saxon period, Classical Late West Saxon is the nominal "standard", found in manuscripts produced outside of its geographical region.[12] Following the Norman Conquest and the supplanting of English within institutional and administrative contexts by French and Latin, written English is more localised and community-bound. The spelling system follows suit, diversifying into various diatopic systems linked to geographical and social practices, with writers adjusting the written system to accommodate regionally-specific changes in their spoken language, as well as potentially capturing idiolectal practices[13]. As illustrated in the *Linguistic Atlas of Late Middle English*, the rich landscape of 'linguistic variation is fully reflected in the written mode'. [14] This can be seen, for instance, in the hundreds of variant spellings of *though*.

Towards the end of the Middle English period, the dialectal spelling systems begin to regularise. The functional ascendency of English into text-types with a national reach necessitated that the spelling system was streamlined and stripped of its local diversification, to ensure that these neutral forms were intelligible to a wider populace.[15] These changes did not go unnoticed; Chaucer's spelling choices, for example, show an awareness of the changing practices and tensions between spoken and written forms.[16] The forces can be divided into top-down (conscious) and bottom-up (unconscious) contributors to regularisation (change).[17]

Printing, which was introduced in England in 1475, is a potential top-down factor; in part, because the spelling of printed texts becomes regular and consistent fairly swiftly, particularly when compared with contemporary manuscripts.[18] For instance, Rutkowska charts the decline of dialectal spellings in multiple editions of *Kalendar of Shepherdes*, as nascent regularisation (and the use of future standard forms) emerges over time.[19] It is generally agreed that print-based spelling in the early modern period was not regularised 'by design' but was instead shaped by technological affordances of production, such as type-setting requirements.[20] In comparison to the apparent speed of change engendered by new media, the impact of print on individuals' manuscript spelling appears more subtle and gradual. Moreover, the stratification of literacies and access to print suggests that printing can only be part of the story, particularly in the earlier stages of regularisation in the fifteenth and sixteenth centuries.

Spelling reformers also constitute a top-down force for regularisation. These men (as they all were) had an explicit ideological agenda, which equated orderly spelling with orderly society. Reformers such as John Hart despaired of the 'darke' spelling, which suffers from 'particular vices and abuse'.[21] They desired a better system of spelling; one, in Richard Mulcaster's words, both 'trew' and 'right'.[22] Brengelman sees the reformists' contribution as being largely ideological, rather than practical, promoting discourses that conceptualise spelling as fixed and regular.[23] Edward Coote's 1596 schoolbook, for example, which appeared

in over 40 editions, endorses spelling of limited variation: in the word *people*, <o> has 'no sound [...] yet we must write it, because it is one of the words we learned'.[24]

As Berg and Aronoff have recently commented, 'no single group seems to have played a notable role in the movement of English spelling toward greater consistency'.[25] Instead, bottom-up forces seem to have a greater explanatory value, 'presumably through the simple interaction of the members of the community of spellings, a sort of self-organizing social network'.[26] In their analysis of the Helsinki Corpus, Berg and Aronoff observe the diachronic organisation of four derivational suffixes, the spelling of which regularises to differentiate homophonous forms from other phonologically-similar morphemes (e.g. suffix <ous> and nouns *office*, *tennis*). Diachronically, their macro-level examination shows 'a clear trend toward consistency', and they speculate that 'this is an instance of a system organizing itself' – a statement that they qualify as 'shorthand' for 'the role of users of the system'.[27]

The role of bottom-up processes in the regularisation of English spelling is both plausible and wide-spread. Kaislaniemi et al. find evidence of generational change in epistolary spellings in the *Corpus of Early English Correspondence*, although this sits alongside considerable "noise" and idiosyncratic variation.[28] Nevalainen suggests that the invariant spellings of some words, particularly native vocabulary, indicate that writing communities agreed on a particular spelling at a fairly early date, achieved through a process of lexical diffusion. This 'relative consensus', or convergence, around a particular graphemic form, impedes later top-down reformist attempts to reconfigure English spelling on wholly phonemic principles.[29]

Thus, in the fifteenth- and sixteenth-centuries institutional, top-down factors played only a partial role in the regularisation of the spelling system, and should be appreciated alongside the local behaviours of language users, who were negotiating the graphemic system and emergent discourses of acceptability in pursuit of particular communicative objectives. In this light, spelling regularisation is as much an individual, micro-level issue as it is a multi-generational, institutionalised, macro-level phenomenon.

4. Individual Spelling Practices

If spelling regularisation is an individual issue, then it is important to consider how socio-biographical context may inform the spelling choices of a language user. Nevalainen notes that '[a]s spelling is something that must be taught, variation is bound to occur as long as educational opportunities are unequally distributed'.[30] Gender therefore shapes manuscript-based spelling practices, with early modern women typically using less regularised spelling than men, reflecting their narrower educational opportunities.[31] In the Innsbruck Letters corpus, the greater use of abbreviations in male-authored letters is linked to their professional mercantile roles.[32] Sönmez explores the spelling practice of two seventeenth-century individuals: William Cavendish and Brilliana Harley, and finds that Harley uses more 'phonetically obscure spellings' that interfere with the 'visual aspects of reading' e.g. <beeg> for *beg*.[33] Sönmez speculates that these spellings create cognitive delay for PDE readers, contributing to a disproportionately negative characterisation of female spelling; Cavendish's spelling is no more regular, and he uses fewer PDE-spellings than Harley. Meta-linguistic comments of the period, even if circulating as stock epistolary phrases, suggest 'an increasing unacceptability and intolerance of poor writing skills and illiteracy among upper-class women'.[34] Women were a target audience for spelling manuals; Coote singles out gentlewomen

who lack 'true orthography [and] are ashamed to write unto their best friends', signalling that gendered practices were part of an emerging appraisal of spelling.[35] Modern-day parallels, if not continuities, include the derogatory reactions to spelling creativity associated with feminine identities in new media. The historical trajectory of spelling practice as a gendered issue warrants further research.[36]

Generational change has also been identified as significant for the regularisation of early modern spelling. [37] By comparison, lifespan change has received less attention: Rutkowska and Rössler propose that lifespan change will be most pronounced 'during the phase of writing acquisition', with minimal change in later life.[38] In relation to new media writing, Shortis shows how respelling choices in text-messaging change as adolescents take on adult roles and peer-group conformity becomes less important.[39] However, pre-standardized systems plausibly offer greater opportunity for change throughout the lifespan. In Middle English, shifts in spelling practice within the Paston letters coincide with other linguistic changes, traceable at intra- and inter-speaker levels, correlating with changing social experiences. [40] To give one specific example studied by Conde-Silvestre and Hernandez-Campoy, the replacement of the runic thorn with the digraph <th> shows a 'positive linear pattern' when four generations of male Paston writers are compared, but intra-generational differences suggests that network membership, arising from geographical mobility among other biographical factors, shape an individual's uptake of the new spelling variant.[41] Evans identifies later-life changes in the sixteenth-century spelling of Queen Elizabeth I, including the adoption of plural and genitive <z> (replacing <s>), which appears to have been an idiosyncratic development.[42] Evans hypothesises that these later-life spelling choices may have contributed to the construction of a distinctive written identity for the monarch, indexing her unique status and helping to authenticate her holograph writing. Sairio identifies a lifespan shift in eighteenth-century Elizabeth Montagu's spelling. Over two decades, Montagu moves away from the emergent standard in the past inflection -ed, and increases her use of a local variant, <d>, potentially to signal her membership of the Bluestocking epistolary network.[43] Stability across the life-span is also significant. Williams posits that persistent idiosyncratic spellings in the correspondence of Maria and Joan Thynne index their 'learning, their relationship with the written language, and possibly even their epistolary 'voice'': '[I]t is hard to imagine that familiar correspondents would have completely missed an individual's personal habits of orthography'.[44] Such interpretations fit with the early modern Erasmian theorisation of the letter as intimate conversation, in which one's handwriting creates the illusion that the recipient is 'listening to their [authors'] voices and looking at them face to face'.[45] In essence, one's epistolary language undertakes identity work. Collectively, these examples suggest that spelling change is motivated by local, as well as supralocal, factors. The concept of a Community of Practice provides a theoretical frame that can explain how particular forms were settled on, or rejected, within a local community of writers.[46] Whilst there is insufficient space to engage with this concept thoroughly here, it is hoped that the following discussion will provide a foundation for the future investigation of this dimension of spelling variation and change.

Historical spelling variation is therefore as complex as other linguistic variables. In the sixteenth century, its potential social resonance may have been particularly acute for women from the upper-ranks, situated at the pinch-point of discourses and practices. The following analysis provides new perspectives on the potential social meanings of early modern spelling,

reading them against theoretical frameworks developed for present-day identity practices and spelling in new media.

5. New Media Spelling and Identity
The role of spelling in new media in present-day English (and other languages) has proven a rich area of study, involving both corpus-based studies which identify broad formal patterns of spelling variation and micro-level qualitative research into the motivations and social processes behind individuals' orthographic choices.[47] Given the substantial differences between present-day new media contexts and those in which our sixteenth-century women were writing, our intention is not to make empirical comparisons, but rather to explore what the theoretical concepts developed in relation to new media spelling might reveal about spelling practices and perceptions in the earlier period.

Studies of new media spelling take an ideological perspective which has the potential to shed new light on earlier spelling practices. New media researchers see spelling as a social practice embedded in, and shaped by, a particular time and place and thereby reflecting a particular set of values, stances and identities[48]. In approaching spelling variation – or respelling – in text-messaging and other relatively 'unregulated' digital modes of communication, researchers generally assume that spelling choices are socially meaningful. These studies identify functional categories that focus on the social achievements of respelling rather than, or alongside, its formal properties and the departure from conventional norms. Three main principles behind respelling practices in text-messaging emerge from the literature:

(1)   performing brevity and speed
(2)   recreating orality
(3)   signalling difference from conventional norms

These categories are not exclusive and researchers recognise that any one respelling is likely to be driven simultaneously by all three principles, albeit to differing degrees. In a seminal study of British text-messaging, Thurlow found that, regardless of the underlying principle, respellings were driven primarily by the demands of social interaction; as Shortis argues, respellings emerge during interaction in response to immediate functional demands (and thus differ between texting communities).[49] In relation to the first category above, this means that the abbreviation of lexical items and omission of punctuation are motivated not so much by attempts to cut costs or reduce effort but to meet the communicative requirement for quick replies. Tagg suggests that abbreviations in her corpus of text-messaging are performative; they constitute part of individuals' identity performances rather than actual attempts to be quick.[50] In Shortis's words, '[a] styling of 'brevity' and suggestion of implicit, context-dependent communication may function as a rhetorical orthographic deixis which implies shared context, shared values and more active modes of reading, so intimating the social closeness of its interlocutors'.[51] Abbreviations in early modern letters might be seen to share, in part, a similar intimation, in that these practices are thought to have signalled the social literacies of the mercantile and professional scribal communities.[52]

Functional strategies in the second category centre round 'conceptual orality', a term used by historical linguists and new media scholars to describe the way written texts can be experienced as 'speech-like'.[53] New media strategies to achieve this include 'paralinguistic

restitution' (e.g. letter repetition to suggest emphasis) and 'phonological approximation'.[54] The latter is broken down by Androutsopoulos into 'colloquial spellings' (recreating conversational features) and 'regiolectal spellings' (reflecting regional pronunciation).[55] Importantly, attempts to reflect spoken language through writing are seen as indexical in that writers seek to recreate the informality and intimacy associated with spoken conversation; in Thurlow's words, the performance of orality 'engenders the kind of playful, informal register appropriate to the relational orientation of text-messaging'.[56] This theorization links to early modern ideas regarding the role that handwriting played in recreating spoken conversation, and may extend to explain orthographic practices of the period.[57]

Strategies in the third category tend not to rely on spoken forms, but on exploiting graphemic properties of a word. According to Androutsopoulos, these include 'phonetic spellings' (known elsewhere as 'eye dialect'), 'homophone spellings' (lexical and graphical substitutions such as <u> for *you* and <fone> for *phone*, respectively) and 'interlingual spellings' (where a word from one language is spelt using the orthographic norms of another).[58] Importantly, although these respellings often achieve social meaning through their departure from a recognized 'standard' norm, they are also constrained by the conventional sound-symbol relationships allowed for a particular language; they work only in a relatively narrow *zone of social meaning*.[59] Eye dialect, for example, is socially meaningful usually because it exploits the default, phonetic spelling of particular sounds in cases where the standard spelling does not (e.g. <luv> for *love*). Sebba gives the example of respellings of *school*, suggesting that while <skool> appears uneducated or rebellious, <zgüül> generally fails to convey meaning because it departs too far from recognized orthographic principles. Of course, as Deumert argues, the *zone of social meaning* is itself socially constructed; what is seen as meaningful shifts over time and varies between communities, and respelling often pushes at the boundaries of this.[60] The question this raises for the study of early modern spelling is whether adherence to, or departure from, the norms of a local writing community might signal social meaning in the immediate context, explaining the likely social significance of a writer's idiosyncratic choices.

Another important element of a new media framework of respelling is Androutsopoulos's distinction between regular and exceptional non-standard spellings: those that occur regularly throughout a text, and those that stand out and indicate a more localised meaning.[61] For example, Tagg shows how one (female) texter respells 'what' as <wot> regularly throughout her text-messages, but on occasions uses the non-standard form to key a switch in footing, such as when she approximates a locally relevant expression 'Wot can i get in for ya?' in offering to buy a friend a drink.[62] As this example shows, exceptional spelling choices can serve to contextualise a text, or part of text; they act as 'graphemic contextualisation cues' to key the frame within which a text should be interpreted, signalling a contrast either with the regular spelling style of a text or with the word's default spelling.[63] As Georgakopoulou argued in an early study of email, code-centred resources such as orthography likely take on a greater pragmatic load in the absence of other paralinguistic contextualisation cues.[64] Whilst it seems likely that early modern readers recognised correspondents' general orthographic profiles as indexical, the distinction between regularised and exceptional spellings may help to identify more localised ways in which a particular spelling conveyed meaning.

Whilst the sites of new media and historical correspondence are undoubtedly very different, our interest lies in exploring the extent to which historical spelling can be (re-)conceptualised through the application of theoretical frameworks developed to understand new media spelling. As Nevalainen and Raumolin-Brunberg observe, the remit of historical sociolinguistics is to apply, test and develop theories, concepts and methodologies developed for present-day language use, following the uniformitarian principle.[65] The core concepts relevant to new media spelling practices therefore offer potential insights for how we think about micro-level spelling practices in earlier eras. That is not to say that typologies of spelling and identity should be imported wholesale from the 21st century and applied without scrutiny on early modern texts. However, we suggest that new media research can provide a useful framework that helps us to make sense of historical spelling at the micro-level.

6. Methodology
6.1 The Corpus

The investigation focusses on the holograph epistolary spellings of four upper-ranking sixteenth-century women: Queen Elizabeth I, Elizabeth Bacon, Bess of Hardwick and Joan Thynne (hereafter, Elizabeth, Bacon, Hardwick, Thynne). By focussing on four women, the results can offer only a snippet view on the macro-level process of regularisation. However, the fine-grained information provided by the micro-level analyses enables an appraisal of how spelling practices may have been shaped by the top-down and bottom-up pressures operating in the period, and thus contributes new evidence of how different individuals may have conceptualised the flexibility of early modern spelling within personal writing. The selection of these particular women was determined by the availability of their correspondence in a suitable electronic format, the duration of their extant correspondence, and access to information about their background.

The Sixteenth-Century Women's Epistolary Spelling corpus (hereafter, SWES) spans the mid-to-late sixteenth century: the period when English spelling shows evidence of focussing, and ideologies appertaining to regular spelling begin to emerge. Each writer's correspondence is split into two parts to investigate lifespan change (Table 1). These sub-periods were selected by sub-dividing the available correspondence for each writer. A semi-arbitrary period of five years (a half-generation window) was chosen as the dividing point, although the gap is longer when material permits. Roughly speaking, each writer's sub-set comprises between 1000-2000 words. Whilst these sample sizes are small for corpus-based studies, the graphemic units provide a usable quantity of data, balanced with the efforts of data processing.

The women's social backgrounds are important due to the hypothesised connections with education, literacy and peer networks. Whilst all four are from the upper ranks, there are significant differences. The highest-ranking woman in SWES is Queen Elizabeth I, who received a Humanist education. Her knowledge of Classical languages may inform her English spelling. Writing was also a central activity in her role as monarch. The sub-periods span the years before Elizabeth's accession to the throne (Part A) and the twilight years of her reign (Part B). Bess of Hardwick was born c.1521/2 in Derbyshire, of modest gentry status. Her ascendancy to become the second wealthiest, and perhaps most influential, woman in England after Queen Elizabeth I was the result of four marriages to increasingly noble and wealthy men.[66] Although there is little evidence of her educational curriculum, her correspondence

indicates her vernacular literacy met her needs as a head of household. The sub-periods cover her first marriage (Part A) and her fourth marriage (Part B). Elizabeth Bacon was the daughter of Sir Nicholas Bacon, the Lord Keeper of the Great Seal to Elizabeth I. Bacon's three marriages left her with ample wealth and means. Like Bess, she was responsible for the day-to-day management of her households, and her correspondence output also indicates her literacy skills in the vernacular.[67] Bacon's correspondence spans the period of her first and second marriage (Part A) and her third marriage (Part B). Finally, Joan Thynne's parents were aspirational gentry. Evidence of Joan's education is indirect: her marriage-broker describes her as 'wyll brvght vp bothe in larnyng & in all thyngs that do a parten to a gentyllwoman'.[68] Joan was responsible for the running of her household, alongside advancing the political career of her husband. The correspondence sub-periods span the early (Part A) and later (Part B) years of her marriage.

WRITER	TIME PERIOD	DATASET NAME[1]	WORD COUNT
Queen Elizabeth I (b. 1533 d.1603).	1550-1563	QE1 A	2844
	1590-1595	QE1 B	7501
Elizabeth Bacon (b. ?1541, d.1621)	1576-1585	BACON A	2747
	1594-1598	BACON B	1054
Bess of Hardwick (b. ?1521/2, d. 1608)	1550-1560	HARDWICK A	1640
	1569-1578	HARDWICK B	3813
Joan Thynne (b.1558, d. 1612)	1575-1590	THYNNE A	2102
	1595-1603	THYNNE B	1363

Table 1: Details of the Sixteenth-Century Women's Epistolary Spelling corpus (SWES).

6.2 *Exploring SWES*
Using AntConc to generate a word-list for each sub-set, we categorised every word by its PDE form (headword), variant spellings (types) and their frequency (tokens) (Figure 1).[69] Similar quantitative methods have been used profitably in various macro- and micro-level studies of historical spelling.[70] To contextualise the SWES data, variant forms are compared in the *Early English Books Online* database, using EEBO N-Gram viewer, and in the *Parsed Corpus of Early English Correspondence* (PCEEC).[71]

---

[1] The datasets were taken from the following sources: Evans, *The Language of Queen Elizabeth I*; *Parsed Corpus of Early English Correspondence (PCEEC), Text Version.*; Wiggins et al., *Bess of Hardwick's Letters: The Complete Correspondence c. 1550-1608.*; Williams, *Women's Epistolary Utterance.*

	A	B	C	D	E	F	G	H	I	J
1	HEADWORD	Tokens	Types	Variant 1	Frequency	Variant 2	Frequency	Varient 3	Frequency	Variant 4
3	to	98	1	to	98					
4	you	87	1	you	87					
5	I	72	1	i	72					
6	and	56	1	and	56					
7	my	55	1	my	55					
8	YOUR	54	3	your	35	youre	17	yore	2	
9	IT	32	2	it	24	yt	8			
10	as	31	1	as	31					
11	for	31	1	for	31					
12	THE	30	2	the	27	ye	3			
13	of	26	1	of	26					
14	have	25	1	haue	25					
15	in	25	1	in	25					

Figure 1: Example of spelling record - Thynne A

The analysis explores the data from three perspectives:

(1)   **Regularity** considers the number of variant forms per headword, producing a profile of spelling variation. For example, <cat> and <kat> are variant spellings of the headword *cat*. One writer may have three variant forms for *cat*, whereas another writer may have only one. The latter writer is considered more regular. This information provides a baseline from which intra- and inter-speaker practices can be compared, and to investigate more specific properties. For reasons of space, the analysis focusses on types of variants, rather than the proportions of tokens for each variant form.

(2)   **Standardness** considers the frequency and distribution of PDE-standard variants in the data to establish the extent to which regularisation in print documents impacted private practices, as well as possible associations of "correct" etymological spellings.

(3)   **Salience** considers spellings that may have had (inter)personal significance, such as highly idiosyncratic spelling variants, and personal names. This sub-group may foreground evaluative ideologies relating to regularity and "correctness", due to the pragmatic salience of the headwords.

        Throughout, we consider concepts and evidence derived from frameworks for new media spelling.

7. Results and Discussion
7.1. Regularity

INFORMANT	Total Variants (n. and per 1000 words)	6 Variants (%)	5 Var (%)	4 Var (%)	3 Var (%)	2 Var (%)	1 Var (%)
QE1	953 (92 / 1000 words)	0	0.1	0.4	2.0	24.3	73.1
BACON	396 (104 / 1000 words)	0	0.0	0.5	2.0	26.3	71.1

HARDWICK	502 (92 / 1000 words)	0	0.2	1.2	6.0	30.9	61.8
THYNNE	792 (238 / 1000 words)	0.4	1.0	2.3	8.8	39.1	48.4

Table 2: Consistency values (%) SWES by author (sub-sets combined).

The results from SWES suggest that the epistolary spelling of the four women was, overall, rather regular. All four women tend towards a one-variant spelling for the majority of words, with one- and two-variant spellings comprising over 80% of spellings in all sub-sets (Table 2). Whilst the significance of the distribution is difficult to assess for early modern English, due to the lack of baseline comparison data, it seems that Berg and Aronoff's argument for a tendency towards regularity finds support in the micro-level practice of the four women. However, it is important to verify the reliability of the results drawn from the whole corpus, as less common words, by definition, will offer a narrower picture of potential variation. Sampling offers a compromise, and regularity values were re-calculated using the 20% most frequent words in each woman's correspondence. The trends of the top 20% headwords are (reassuringly) similar to those for the whole dataset (Table 3).

	Total Variants (n.)	6 Var (%)	5 Var (%)	4 Var(%)	3 Var (%)	2 Var (%)	1 Var (%)
ELIZABETH	144	0	0	0.7	4.2	19.5	75.7
BACON	65	0	0	1.5	0	13.8	84.7
HARDWICK	76	0	0	2.7	13.2	25	59.2
THYNNE	148	1.3	3.4	3.4	10.8	33.1	47.9

Table 3: Consistency values for top 20% most frequent items in SWES by author.

Viewed individually, Bacon and Elizabeth show a greater preference for 1 or 2 variant spellings than Hardwick and Thynne. For Thynne, 12 words (8.1%) have four or more variant forms, including *think* <thinke, thenke, thynke, thenk>, *there* <there, thear, there, thar, theare, theyr, theyre> and *which* <which, whiche, wich, wiche>. None of Thynne's spellings are particularly eccentric – the majority occur in other sub-sets in SWES – but it is striking that the variation persists for native, high frequency lexical items in her writing. The results suggest that regularity in some aspects of an individual's practice may have little influence on other areas of their spelling repertoire.

Seen as a social practice, it is possible that the patterns of spelling variation and regularity would index the women's educational status and learning. The regularity results correlate with each woman's social rank (at birth), and thus their inferred educational background. This correlation supports previous general observations of early modern spelling that connect higher literacies with more consistent spelling.[72] However, it is unclear what top-down and bottom-up facets of literacy may promote regularity. It may be a quality emphasised when learning to write, as indicated by Coote's educational manual. The potential for ideological judgements privileging regularity would entail that the examples of less regular

spelling are also significant; although the meanings of which would presumably be oriented around a necessarily fuzzy, or locally specific, *zone of social meaning*. Alternatively, or in addition, the cognitive impact of repetition – i.e. greater exposure to, and use of, writing – may also be a factor for the sixteenth-century women's practice, helping to consolidate their preferences towards particular spelling forms and graph conventions.

Perhaps surprisingly, given these hypotheses, the analysis of the lifespan sub-sets in SWES provides limited evidence of the consolidation of preferences (Figure 2). Bacon's letters show a decrease in the quantity of two or more variant spellings, indicating an increase in regularity. The letters of Elizabeth and Hardwick show a slight increase in variant forms, and thus a decrease in the regularity of their spelling. Thynne's results are relatively static. (Only Elizabeth's and Thynne's results are statistically significant ($p > 0.05$)). This suggests that the accruement of writing experience and/or exposure to spelling did not necessarily lead to an increase in an individual's spelling regularity; perhaps, as with other sociolinguistic phenomena, individuals respond differently to the same phenomena.[73] From the perspective of emergent standard ideologies, the lifespan results suggest that variable spelling was not stigmatised to the degree that the women felt it necessarily to completely overhaul their practice. From a social practice standpoint, it is possible that, within the contemporary framework of expectations and practices, each individual's spelling choices may have indexed more than their learning and reading. This is explored further below.
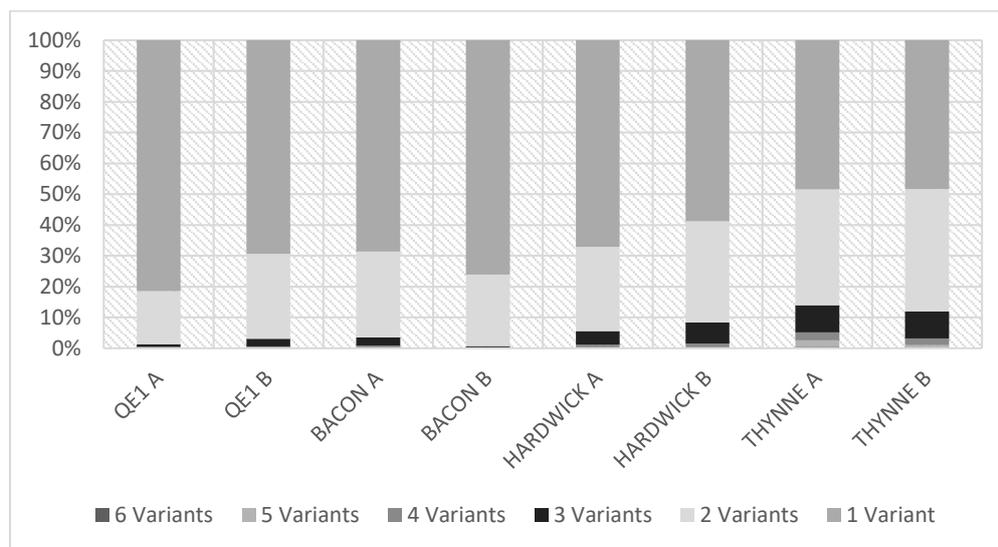

Figure 2: Spelling consistency in SWES: Author sub-sets compared.

7.2. Convergence

The analysis now explores the extent to which the women converge on the same variant forms for the headwords in SWES. Evidence of convergence may exemplify the process of regularisation at the micro-level. Comparative searches of EEBO and PCEEC provide an indication of whether the convergence may arise from supralocal or more local forces. Headwords occurring in at least two of the SWES sub-sets were selected, providing 443 words for analysis.

In the dataset, function words show the greatest inter-speaker consistency. Conjunctions, definite and indefinite articles, and prepositions occur in the same (typically PDE standard) form in the letters of the four women (see the function words in examples 1 and 2). These high frequency words are prime examples for lexical diffusion and linguistic focussing, and thus inter-speaker consistency is expected.[74] Yet there are exceptions. The conjunction *though* has seven variant spellings across the correspondence samples (there are no examples in Bacon's letters), and whilst the PDE-standard form occurs in Elizabeth's and Thynne's letters, it is not their preferred form:

1. thoth the Lade adely haue youseid all the polesy and coneinge to make it (Thynne B, to John Thynne)
2. Though at the first your carire was not the best (Elizabeth B, to James VI of Scotland)

The SWES results mirror the long-standing uncertainty over the spelling of *though* since late middle English, as seen in the 100+ forms documented in ELALME.[75] It is interesting to note that *though* is frequently respelled in new media texts as <tho>, suggesting the continued flexibility of spellings with a weak phonetic correspondence.[76] In EEBO-TCP <though> is the dominant variant by 1600. The preferred spellings of Elizabeth <thogth> and Thynne <thoth> are not found, and <tho> post-dates Hardwick's letters by over fifty years. This suggests that, whilst the PDE-standard form was circulating in print, no writer in SWES adjusts their spelling to converge exclusively towards this form. As in new media texts, literate writers may draw on less conventional forms despite being aware of the conventional (regularised) alternatives. Drawing on a new media framework, Hardwick's preferred spelling <tho> could, for example, be interpreted as a more economical spelling form. The variants used by Elizabeth and Thynne are less convincingly explained by this motivation. Another interpretation, also derived from those observed in new media practices, is that the preferred or regular spelling choices could be understood as part of an identity performance that involves the writer's adherence to idiosyncratic, or perhaps local, forms, despite exposure to more widespread forms. The strength of this interpretation is assessed in the subsequent sections.

The convergence analysis highlights particular graphemes, such as <u/v>, <i/y/e> and final <e>, as contributors to a large proportion of spelling variation in SWES. These conventionalised graphemic substitutions entail that some words have a greater opportunity for variance than others. Interchangeability is particularly prominent in content words that represent core vocabulary items. For example, *loving* occurs in five variant forms that are attributable to conventional substitutions (Table 4). All *loving* variants are present in EEBO-TCP.

WRITER	VARIANTS
Elizabeth	<louinge>, <louing>, <loving>
Bacon	<lovinge>
Thynne	<loueng>, <louing>, <louinge>, <loving>

Table 4: *Loving* spelling variants

Although examples such as *loving* find formal parallels in new media respellings, there is little to indicate that the choice of one or the other carries social meaning for the writers in SWES; there is no obvious connection to addressee or topic, for example. Less consistent writers, such

as Thynne, oscillate between the graph variables more frequently and extensively than the more consistent writers, such as Bacon. For example, all women use <selfe> for *self* (this is also the most frequent variant in EEBO-TCP), but Thynne also uses idiosyncratic variants with doubled consonants, or no final <e>: e.g. 'I shall thenke my sellfe bownd vnto you' (Thynne A, to John Thynne). Thynne's practice can be compared to those of the female texter explored in Tagg who used certain respellings more frequently than her interlocutors, including <wot> for *what* and <tho> for *though*.[77] The question is whether Thynne's idiosyncratic spelling choices – her particular choices and her general penchant for variability – can be seen as carrying out the kind of identity work described of the texter in Tagg, who used different respellings to convey emotions associated with distinct social roles (e.g. indignant friend).

Other words show what could be described as exceptional variation.[78] For instance, *good* occurs 201 times in SWES. 199 examples use the PDE-standard spelling, yet the hapax legomena variants <goode> and <goodde> are used by Hardwick and Thynne, respectively. There is no clear reason for the deviation from their usual practice, and the spellings do not appear to act as contextualisation cues, as is often the case for new media spellings. Instead, these might be attributed to the practice of spelling within a more open system, in which the ideological pressures of normative, rule-governed variants are weaker than in a post-regularised system, as well as the potential for mechanical "slips" arising from the technology of pen and paper.

Overall, the inter-speaker spelling data suggests that there are tensions in the women's (epistolary) spelling systems. Spelling is more fluid and changeable than would be accepted today, perhaps even in new media contexts, and include idiosyncratic spelling variants (see further below) which may have carried some of the social meanings now conveyed in new media texts. Yet, the women are also regularising towards a single variant in many cases, not necessarily the nascent PDE standard form and presumably the result of various sociolinguistic pressures (local writing network norms, lexical diffusion, prescriptivism). The following section examines the potential impact of the latter in more detail.

7.3. Standard and Etymological Spelling

The proportion of PDE-standard spellings in SWES indicates how the private spelling of our sixteenth-century women fits with the trajectory of regularisation in the period. Whilst PDE-standard forms are used by all women, associated with around 60% of headwords, they are not persistently the preferred variant. Nevalainen's suggestion that high frequency core words were subject to focussing more extensively than less frequent (and more etymologically diverse) words finds support in SWES: in the 20% most-frequent headwords, the proportion of forms using PDE spellings increases to over 70%.[79]

Regional differences in pronunciation, and local writing norms, may explain inter-speaker differences. Elizabeth and Bacon, who lived in regions from where the standard forms originate, use more PDE-standard variants than Hardwick and Thynne. Hardwick, who uses the fewest PDE-standard spellings (around 40%), lived in Derbyshire, and her spelling may therefore contain early modern equivalents of what Androutsopoulos calls 'regiolectal spellings' in new media texts. In the light of a new media framework, it is interesting to speculate as to how such spellings may have been understood, and interpreted, by her correspondents further south.[80]

Etymological (re-)spellings, e.g. <doubt> are also relevant. Classical languages had more fixed spelling systems, and many loanwords underwent 'assimilation of English spelling to the Latin equivalent', at least for writers with the requisite education.[81] The regularity of spellings conventions for classical languages has been proposed as a primary factor in the regularisation of English spelling more broadly in the period.[82] Socially, etymological spellings were a contentious issue, part of the larger inkhorn controversy: they signalled learning, and adhered to the greater prestige of the source language, yet also impeded the regularisation of English spelling.[83]

Lemma	Etymological Spelling(s)	Users	Alternative Spellings	Users
Account	<accompt>	Bacon (A)		
Advice	<aduis>, <aduise>	Elizabeth (B), Thynne (B)		
Advise (v.)	<aduysed>, <aduises>	Hardwick (B), Elizabeth (B)		
Avow	<aduowe>, <advowe>	Elizabeth (B)		
Attempt	<attempt>, <attemps>, <attemptz>	Elizabeth (B)		
Doubt	<dowbt>, <doubt>	Thynne (B), Elizabeth (B)	<dowte>, <dout><doute>, <douittinge>	Hardwick (B), Thynne (B), Elizabeth (A & B)
Fault	<falte>, <faulte>, <fault>	Thynne (B), Elizabeth (B)	<faut>, <fawte>	Bacon (A)
Honest	<honest>	Elizabeth	<onnest>, <onest>	Thynne (B)
Traffic	<trafique>	Elizabeth (B)		

Table 5: Etymological spellings in SWES

Based on the nine headwords (sorted by lemma) with a potential etymological (re)spelling (Table 5), Elizabeth uses the greatest proportion of etymological spellings. These occur only in her later writing. The evidence for *doubt* suggests she may have shifted her practice over time, although it is not clear whether this was a conscious shift in practice. Interestingly, Thynne also uses etymological spellings, which would seem to conflict with other attributes of her spelling, and what we know of her education. Contrastingly, the evidence for Bacon suggests that she did not adjust her spelling towards etymological conventions, despite her posited education and general spelling regularity. The results illustrate further how aspects of spelling in one area are not necessarily coherent with an individual's practices elsewhere. Overall, Latinate spellings appear to have had limited significance for the women in their epistolary writing, despite the on-going debates among reformers and educators.

7.4. Idiosyncratic Spellings

This section considers the potential significance of the most unique spellings found in SWES. These variants are the exceptions to the convergence noted above, but they are necessarily an exception to the women's spelling regularity, as the following idiosyncratic spellings represent the preferred spellings unique to one writer in SWES, which appear immune to the influence of the most widely-used conventional spellings circulating in private and public texts. The idiosyncratic variants include modal verbs (*might, shall*), pronouns (*her, your*), and verbs (*trust, receive* and *assure*). Sixteen idiosyncratic variants in SWES occur at least once in EEBO-TCP texts, but the remaining 8 spellings have no other record (Table 6).

Headword	Variant	SWES User	EEBO-TCP (1510-1610): No. of Texts
receive	receaue	QE1	1331
it	hit	QE1	1128
which	whyche	Hardwick	974
thought	thoght	QE1	395
been	byn	Thynne	291
shillings	shyllynges	Hardwick	79
receive	reseue	Thynne	17
your	yower	Bacon	16
might	migth	QE1	6
consider	consither	Thynne	5
assured	ashured	Thynne	3
daughter	dowter	Hardwick	2
trust	trouste	Hardwick	1
trust	troste	Thynne	1
though	thoth	Thynne	0
shilling	sheleinges	Thynne	0
pleasure	plesher	Thynne	0
might	myghit(e)	Thynne	0
majesty	magystye	Hardwick	0
far	fur	QE1	0
her	har	Hardwick	0

Table 6: Idiosyncratic spelling variants in SWES and EEBO-TCP.

Elizabeth's idiosyncratic spellings in SWES are fairly well-attested in the reference corpora. <Receaue> and <hit> occur in over 1000 documents, including mid-century publications of Coverdale and Erasmus. It is tempting to suggest these Humanist works may have influenced Elizabeth's spelling practices. If so, Elizabeth's spelling stabilised, despite the continuing regularisation in subsequent printed works, supporting observations that generational change is a relevant factor for manuscript spelling in the period.[84] Elizabeth's preferences also hint at inter-personal influence. Although fairly common in EEBO-TCP, the only other user of <receaue> in PCEEC is Robert Dudley, Earl of Leicester, a life-long friend and councillor. Dudley also uses <hit>, Elizabeth's alternative spelling of *it*. The other idiosyncratic spellings

in Elizabeth's correspondence, <thoght> <migth> and <fur> are not present in Dudley's (PCEEC) letters. Nevertheless, the presence of the less conventional forms of two high-use lexical items could suggest that their epistolary exchanges helped to sustain the variants within their repertoires.

Local influence may also inform Bacon's sole idiosyncratic spelling: <yower> (*your*). The variant occurs in only 16 works in EEBO-TCP, whereas <your> occurs in over 5000. In PCEEC, <yower> is used by Elizabeth Bacon's brother, Nicholas Bacon, alongside his preferred spelling <your>. It also occurs in the letters of other Norfolk-based writers, including Thomas Calthorpe, a member of a local family associated with Bacon. Conversely, <yower> is not found in the letters of Elizabeth's other brother, Nathaniel, or those of her father, Nicholas Bacon, Lord Keeper. Evidence from *LALME* indicates that <you> and <yower> are the preferred spellings in Norfolk manuscripts in the preceding century.[85] The idiosyncratic variant thus has a regional tradition, as well as a familial salience within Bacon's epistolary networks. However, Bacon is the only writer to use <yower> exclusively, in preference to the regularising form <your>. Curiously, what might be considered a related, or even contingent, spelling, *you* <yow>, is not used by Bacon, although this form *does* occur in the letters of her father and brothers. Thus <yower> is a largely individualistic spelling practice, with some currency in the private spellings of Bacon's (epistolary) social circle.

Hardwick's idiosyncratic spellings include <dowter> (*daughter*) and <har> (*her*). In EEBO, <dowter> occurs only in publications by Suffolk-born John Bale, with no examples in PCEEC sixteenth-century correspondence (although it does occur in the 15th century Norfolk-based Paston letters). <har> is not found in EEBO-TCP, but does occur sporadically in early sixteenth-century correspondence, including the letters of Henry VIII and Lady Whethill. There is no evidence of epistolary or face-to-face network associations here, unlike the examples of Elizabeth and Bacon, above. Instead, the graphemic representation of the vocalic elements in <dowter> and <har> could suggest differences between conventional spellings and Hardwick's pronunciation, which she attempts to remedy in these 'regiolectal' forms. Thynne's idiosyncratic spellings (e.g. <ashured>, <consither> and <plesher>) may also arise from an attempt to represent specific qualities of her pronunciation. In new media contexts, the adoption of phonetic (re)spellings has been linked to the construction of intimacy and informality between writer and addressee, in part because non-standard forms contrast with the Standard variety, and partly due to their greater (iconic) proximity to the writer's spoken idiolect. In the historical setting, it is unclear how strongly these semiotic links would operate. As in present-day new media settings, we could suppose that a contrast with more conventional spellings might be appreciable, although it seems likely that this had little evaluative significance. The representation of the writer's voice seems a more tangible quality within a non-standardized system.

If upper-ranking women were the group most vulnerable to criticism, then unusual and atypical spellings – particularly for words in common usage – would be a site for potential conflict. However, whilst comprising a small proportion of each woman's spelling repertoire, the persistent use of these forms suggests that the social penalties were minimal. Moreover, the EEBO-TCP comparisons indicate that the print was insufficient, on its own, to influence spelling practice. Instead, the evidence suggests that some individual practices were linked to spoken language or connected to local network norms. For a present-day parallel, studies of respelling in text-messaging highlight the emergence of local forms in different contexts and

among different communities, likening the language of text-messaging to a 'supervernacular' with different local realisations, usually shaped in part by the attempt to recreate local spoken forms. In new media texts, the extent to which individuals orientate towards these local orthographic dialects are seen to signal (dis)affiliation and (un)belonging to particular groups.[86] Similar concerns surrounding local norms and inter-personal meaning could help to explain the sustained use of these idiosyncratic spellings in sixteenth-century correspondence, despite the shift towards supralocalisation. These idiosyncratic forms might also be conceived as individuation strategies for the written voice, part of the aesthetic of the Erasmian handwritten letter, distinct from the spoken identity of the writer, yet similarly indexical. Further work into the networks of epistolary writers and the potential impact on spelling practice is desirable.

7.5. Personal Names

Brengelman notes that the irregular spelling of personal names in early modern English contrasts with the regularisation of the system as a whole, although he does not explore this observation in any detail.[87] Shakespeare's variant eponymous spelling is perhaps the best-known exemplar of this irregular practice, and it has recently been used as evidence to discount the Bard of Avon's authorial legitimacy.[88] In present-day literacy research, 'learning to write one's name has both personal and social significance [and represents the] first opportunity to connect oral and written language'.[89] Personal names thus provide a linguistic area in which emergent ideologies surrounding spelling regularity may have been particularly salient.

The SWES results suggest that the significance of personal names may be different for the four women. The headword *Elizabeth* best illustrates these differences. The name has personal significance for (at least) three of the writers in SWES. Yet only Elizabeth I has a single variant spelling: <Elizabeth>. Her consistency can be explained by the authenticating function of her signature, which was designed to showcase her calligraphic skills (indexing her learning and intellect) and impede forgery. The consistency extends back to her adolescent letters, which may indicate that Elizabeth valued the fixedness of her name to a degree not typical of her contemporaries. The regularity of the spelling, bound up with the palaeographic form, can be seen as part of her identity performance as, firstly, learned princess and, later, queen.

By contrast, Bacon uses four variant forms, attributable to <i/y> and <s/z> substitutions (examples 3-5). The preferred spelling <Elizabeth> is used over three decades, exclusively so in the 1590s letters. In earlier letters, <Elezabeth> is the second most frequent form (6 tokens), with <Elisabeth> and <Elyzabeth> used once each. Bacon thus regularises her spelling practice over time, bringing the spelling of her name in line with the consistency typical of her overall practice.

3. Yowr lovinge Sister Elisabeth Doyly
4. Yower lovinge sister Elezabeth Nevell
5. Yowr lovinge sister Elizabeth Periam

Bess of Hardwick, uses two variant forms: <Elyzabeth> and <Elyzabethe> in her early correspondence sub-set. Unfortunately, her later letters see her switch to her initial, <E>, prohibiting a diachronic comparison.

In EEBO-TCP, <Elizabeth> is the preferred spelling, found in 1351 documents. <Elezabeth> occurs in only 3 texts, and <Elyzabeth> is recorded in 80 documents (the majority published before 1550). The <y/i> variable is thought to have regularised towards <i> in the latter-half of the century, which may partly explain this shift.[90] However, the dominance of <Elizabeth> in printed works could also be attributed to the preferred spelling of the monarch herself.

Personal names attest to the individualised nature of spelling in SWES and, moreover, offer no persuasive reason to believe that these women felt their epistolary identity was negatively impacted through the use of such forms. Only Elizabeth I appears to have had a more fixed and regularised approach to personal names, which could reflect the greater significance of these items in written language, connected to her role as monarch.

8. Conclusion

The analysis of SWES illustrates the complexity of spelling variation in private writing in sixteenth-century English, and provides a new perspective on the historical development of English spelling from a sociolinguistic perspective which draws in part on frameworks established in studies of new media spelling. Firstly, the quantitative analysis suggests that spelling regularity showed a possible correlation with education (and may have indexed an individual's educational status), although there was no clear evidence of the most probable causes. Conversely, the results also confirm that spelling variation *could* be extensive even among highly educated women. SWES contains headwords with up to four or five different spellings within the same woman's writing, although comparison with other epistolary spelling is necessary to confirm whether this level of variation is particularly exceptional and potentially connected to gendered literacy.

Secondly, the comparative analysis of each woman's sub-set suggests that regularisation is not a uni-directional or pan-community process. The lifespan trends reveal a mixed picture. Elizabeth, who received the most extensive education, becomes marginally less consistent over time. Thynne, who was an extensive user of correspondence throughout her life, shows minimal changes to her practice in terms of consistency. The comparison of SWES and EEBO-TCP attests to the divergence between print and private spelling. More significantly, it also suggests that print norms did not have an incontrovertible impact on private practices; whilst many forms show convergence, others show a persistent difference between the print majority and the women's personal preferences. Their education and social status suggests this finding may be representative of the literate community more broadly, although further research is necessary.

Thirdly, the results offer little evidence that the women were concerned with negative associations arising from their idiosyncratic spellings, based on the spelling variants of high frequency and socially salient headwords which deviate from the conventional print forms. Similarly, the absence of a shift towards a more regular system over time also indicates that irregularity was not necessarily stigmatized within the social circles of each woman; at least, not to the degree intimated by reformers' contemporaneous debates. All of this raises the question as to whether, and to what degree, irregularity in spelling practice may have signalled an attempt to index social meaning or would have been perceived as such by correspondents.

The SWES evidence suggests that spelling was a flexible and local practice, subject to bottom-up and top-down pressures. Hence, the spelling systems of the four women converge for many high-frequency functional and core headwords, and these spellings are also shared with the spelling systems deployed by their contemporaries in print (e.g. EEBO-TCP) and private writing (e.g. PCEEC). The distribution of such forms might be seen as part of the regularising process, through the intersection of local and supralocal (public media) practices. The exceptions to the emergent regularity, such as idiosyncratic spellings, indicates that spelling remained an open system, which could therefore be shaped by idiosyncratic and local network practices. The evidence from PCEEC indicates that spellings may have been shared within epistolary networks, such as Bacon's <yower> and Elizabeth's <receaue>, and this area requires further investigation. Whilst studies of modern English spelling and twenty-first century new media practices alike have observed the potential for localised practices to emerge in specific correspondent networks, these occur against the backdrop of a (near-)regularised system.[91] For earlier periods, local networks of spelling forms contribute to the subsequent supralocalisation of variants, but the process through which different networks come to converge around particular forms, and thus regularise, and the possible causes and motivations of those writers for doing so, remain unclear.[92] It seems likely that both bottom-up and top-down factors contribute to such processes at the micro-level. Relatedly, the possible impact of socio-pragmatic factors, such as recipient and register, and interactive phenomena, such as accommodation, also warrant consideration, having been pinpointed in new media studies as crucial determinants of present-day spelling choices (chiefly between standard and non-standard forms).[93] The sequentiality of correspondence provides a rich dataset through which to investigate these hypothetical influences.

Another outstanding question is whether the aforementioned properties of each woman's spelling system had social meaning relevant to their identity performance, and it is here that the new media concepts become useful. The SWES data provides no strong evidence that the women were reacting to a proto-standard ideology: there is no coherent shift towards a more consistent or shared system of variants. Instead, the data reveals areas of variation within their practice, linked to accepted conventions of graph substitution (e.g. *loving*), local forms shared within their epistolary network, idiosyncratic forms that constitute an individualised norm, and one-off examples of 'exceptional variation'. Sebba's *zone of social meaning* was developed to explain the extent of socially significant deviation from a prescribed orthographic norm. For the sixteenth-century data, it might be more effective to talk of 'localised zones of social meaning'. Rather than an over-arching top-down normative system from which writers deviate, the women's spelling systems suggest variants are connected to inter-linked localised systems, which are personalised, habitual and (at times) shared with (some of) their interlocutors. The supra-local dimension of some of their spelling choices (e.g. convergence for many function words and core vocabulary items) may have had minimal resonance when local-level associations took precedence. The divergence between SWES and EEBO-TCP indicates that exposure to prestigious public, printed writing was not a guarantee of influence on an individual's personal practice. The evidence of localised forms, such as <yower>, however, does not necessarily imply that all variants were used because they indexed membership of a particular social network. Rather, the patterns in the data suggest a habitual usage that was sensitive, to a degree, to the usage of other writers, as well as one's own personal preferences. In terms of the social meaning of the use or non-use of a particular variant spelling, only Elizabeth may have paid any sustained attention to the particular forms (e.g. personal

name, etymological spellings). Her anticipation of the hegemonic standard spelling ideology could reflect the special significance of the written language for the construction of her social identity as monarch.

For the other writers, spelling may have had more flexible zones of social meaning. It may be that the patterning of variation, rather than specific variant forms, carried more significance as an epistolary identity marker. Thynne, for example, has a variable spelling system that makes extensive use of (accepted) interchangeable graph forms, alongside less conventional spelling practices of the period. The overall result is an epistolary spelling system with a distinctive texture. Unlike PDE, in which readers accustomed to a standardized system hone in on deviant forms, it seems plausible that readers of Thynne's letters, and those of the other women considered here, would have engaged with the spellings more holistically; that is, they would have recognised patterns and preferences across the writing system as a whole, as well as responding to particular variants of particular words. If so, we might point to possible parallels between the regular patterns of respelling seen to characterise 'unregulated' new media texts and the potentially indexical nature of individuals' distinctive spelling profiles in the sixteenth-century. Analysis of spelling practice in the epistolary writings of individuals of other genders and social ranks, as well as in other private text-types, is necessary to confirm these hypotheses. Overall, the new media framework helps to articulate and interpret the complex patterns in the SWES data, offering a critical platform through which to evaluate the sociolinguistic dimensions of historical spelling.

REFERENCES

Androutsopoulos, J. K., 'Non-Standard Spellings in Media Texts: The Case of German Fanzines', *Journal of Sociolinguistics*, 4 (4, 2000), pp. 514–33.

Anthony, L., *AntConc* (version 3.5.6). Windows. (Tokyo, Japan: Waseda University, 2018) <www.laurenceanthony.net/software/antconc>.

Barootes, B. S. W., '"In Fourme of Speche Is Chaunge": Final -e in Troilus and Criseyde, Book II, Lines 22–28'. *The Chaucer Review*, 53 (1, 2018), pp. 102–11.

Basu, A., *EEBO N-Gram Browser* (St Louis: Humanities Digital Workshop at Washington University in St. Louis, 2018) <https://earlyprint.wustl.edu> [accessed 28th Dec. 2018].

Benskin, M, M. Laing, V. Karaiskos, and K. Williamson, *An Electronic Version of A Linguistic Atlas of Late Mediaeval English*. (Edinburgh: University of Edinburgh, 2013) <http://www.lel.ed.ac.uk/ihd/elalme/elalme.html> [accessed 28th Dec. 2018].

Berg, K., and M. Aronoff, 'Self-Organization in the Spelling of English Suffixes: The Emergence of Culture out of Anarchy' *Language*, 93 (1, 2017), pp. 37–64.

Bergs, A., *Social Networks and Historical Sociolinguistics: Studies in Morphosyntactic Variation in the Paston Letters (1421 - 1503)* (Berlin: Mouton de Gruyter, 2005).

Blake, N. F., 'English Versions of Reynard the Fox in the Fifteenth and Sixteenth Centuries', *Studies in Philology*, 62 (1, 1965), pp. 63–77.

Blommaert, J. 'Supervernaculars and their dialects', *Working Papers in Urban Languages and Literacies,* (81, 2011), no pagination.

Brengelman, F. H., 'Orthoepists, Printers, and the Rationalization of English Spelling' *The Journal of English and Germanic Philology*, 79 (3, 1980), pp. 332–54.

Conde-Silvestre, J. C., and J. M. Hernández-Campoy, 'Tracing the Generational Progress of Language Change in Fifteenth-Century English: The Digraph in the "Paston Letters"' *Neuphilologische Mitteilungen*, 114 (3, 2013), pp. 279–99.

Coote, E., *The English Schoole-Maister Teaching All His Scholers, the Order of Distinct Reading, and True Writing Our English Tongue*. (London: Printed by the widow Orwin, for Ralph Iackson, and Robert Dextar, 1596) <www.eebo.chadwyck.com> [accessed 28th Dec. 2018].

Davis, N., 'The Language of the Pastons' in J. Burrow (ed.), *Middle English Literature: British Academy Gollancz Lectures* (Oxford: Oxford University Press, 1954), pp. 45-70.

Daybell, J., *Women Letter-Writers in Tudor England* (Oxford: Oxford University Press, 2006).

Deumert, A., *Sociolinguistics and Mobile Communication* (Edinburgh: Edinburgh University Press, 2014).

Eden, K., *The Renaissance Rediscovery of Intimacy* (Chicago ; London: The University of Chicago Press, 2012).

Eisenstein, J., 'Systematic Patterning in Phonologically-Motivated Orthographic Variation', *Journal of Sociolinguistics*, 19 (2, 2015), pp. 161–88.

Evans, M., *The Language of Queen Elizabeth I: A Sociolinguistic Perspective on Royal Style and Identity* (Chicester: Wiley/Blackwell, 2013).

Georgakopoulou, A., *Narrative Performances a Study of Modern Greek Storytelling* (Amsterdam; Philadelphia: John Benjamins Publishing Company, 1997).

Grace, A., N. Kemp, F. H. Martin, and R. Parrila, 'Undergraduates' Attitudes to Text Messaging Language Use and Intrusions of Textisms into Formal Writing', *New Media & Society*, 17 (5, 2015), pp. 792–809.

Gumperz, J. J., *Discourse Strategies* (Cambridge; New York: Cambridge University Press, 1982).

Harley, J., '"My Ladye Nevell" Revealed'. *Music and Letters*, 86 (1, 2005), pp. 1–15.

Hart, J., *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. The Contents Wherof Are next Folowing,* (London: Henry Denham for William Seres, dwelling at the west ende of Paules, at the signe of the Hedge-hogge, 1569) <www.eebo.chadwyck.com> [accessed 28th Dec. 2018].

Horobin, S., and J. J. Smith, *An Introduction to Middle English* (Edinburgh: Edinburgh University Press, 2009).

Howard-Hill, T. H., 'Early Modern Printers and the Standardization of English Spelling', *The Modern Language Review*, 101 (1, 2006), pp. 16–29.

Kaislaniemi, S., M. Evans, T. Juvonen, and A. Sairio, '"A Graphic System Which Leads Its Own Linguistic Life"?: Epistolary Spelling in English, 1400–1800' in T. Säily, A. Nurmi, M. Palander-Collin, and A. Auer (eds.), *Advances in Historical Sociolinguistics* (Amsterdam: John Benjamins Publishing Company, 2017), pp. 187–213.

Koch, P., and W. Oesterreicher, 'Sprache Der Nähe — Sprache Der Distanz. Mündlichkeit Und Schriftlichkeit Im Spannungsfeld von Sprachtheorie Und Sprachgeschichte'. *Romanistisches Jahrbuch* (36, 1985), pp. 15–43.

Kopaczyk, J., and A. H. Jucker (eds), *Communities of Practice in the History of English* (Amsterdam ; Philadelphia: John Benjamins Publishing Company, 2013).

Labov, W., *Principles of Linguistic Change. Vol. 1: Internal Factors* (Oxford: Blackwell, 1992).

Labov, W., *Principles of Linguistic Change. Vol. 2: Social Factors* (Malden, Mass.: Blackwell, 2002).

Ling, R., N. S. Baron, A. Lenhart, and S. W. Campbell, '"Girls Text Really Weird": Gender, Texting and Identity Among Teens', *Journal of Children and Media*, 8 (4, 2014), pp. 423–39.

Markus, M., 'Abbreviations in Early Modern English Correspondence' in M. Dossena and S. M. Fitzmaurice (eds.), *Business and Official Correspondence: Historical Investigations* (Bern; New York: Peter Lang, 2006), pp. 107–28.

McLeod, R., 'Spellbound: Typography and the Concept of Old-Spelling Editions', *Renaissance and Reformation*, n.s. (3, 1979), pp. 50–65.

Milroy, J., 'Language Ideologies and the Consequences of Standardization' *Journal of Sociolinguistics*, 5 (4, 2001), pp. 530–55.

Milroy, J., *Linguistic Variation and Change: On the Historical Sociolinguistics of English* (Oxford: Blackwell, 1992).

Mulcaster, R., *The First Part of the Elementarie Vvhich Entreateth Chefelie of the Right Writing of Our English Tung, Set Furth by Richard Mulcaster* (London: By Tomas Vautroullier dwelling in the blak-friers by Ludgate, 1582) <www.eebo.chadwyck.com> [accessed 28th Dec. 2018].

Nevalainen, T., 'Early Modern English Lexis and Semantics' in R. Lass (ed.), *The Cambridge History of the English Language* (Cambridge: Cambridge University Press, 2000), pp. 332–458.

Nevalainen, T., 'Variable Focusing in English Spelling between 1400 and 1600' in S. Baddeley and A. Voeste (eds.), *Orthographies in Early Modern Europe* (Berlin; Boston: De Gruyter Mouton, 2012), pp. 127–65.

Nevalainen, T., and H. Raumolin-Brunberg, *Historical Sociolinguistics: Language Change in Tudor and Stuart England* (London: Pearson Education, 2003).

Osselton, N.E., 'Informal Spelling Systems in Early Modern English: 1500-1800.' in N. Blake and C. Jones (eds.), *English Historical Linguistics: Studies in Development* (Sheffield: CECTAL, University of Sheffield, 1984), pp. 123–37.

Parsed Corpus of Early English Correspondence (PCEEC), Text Version. Helsinki and York: University of Helsinki and University of York, 2006.

Puranik, C. S., and C. J. Lonigan, 'Name-Writing Proficiency, Not Length of Name, Is Associated with Preschool Children's Emergent Literacy Skills', *Early Childhood Research Quarterly*, 27 (2, 2012), pp. 284–94.

Rutkowska, H., 'Late Medieval Dialectal and Obsolescent Spellings in the Sixteenth-Century Editions of the Kalender of Shepherdes' in J. C. Conde Silvestre and J. Calle Martín (eds.), *Approaches to Middle English: Variation, Contact and Change* (Frankfurt am Main; New York: Peter Lang Edition, 2015), pp. 129–47.

Rutkowska, H., and P. Rössler, 'Orthographic Variables' in J. M. Hernández-Campoy and J. C. Conde-Silvestre (eds.), *The Handbook of Historical Sociolinguistics* (Chichester, UK: John Wiley & Sons, Ltd, 2012), pp. 211–36.

Sairio, A., *Language and Letters of the Bluestocking Network: Sociolinguistic Issues in Eighteenth-Century Epistolary English* (Helsinki: Soc. Néophilologique, 2009).

Salmon, V., 'Orthography and Punctuation' in R. Lass (ed.), *The Cambridge History of the English Language* (Cambridge: Cambridge University Press, 2000), pp. 13–55.

Sampson, G., 'The Redundancy of Self-Organization as an Explanation of English Spelling', *Language*, 94 (1, 2018), pp. 43–47.

Sebba, M., 'Orthography as Social Action: Scripts, Spelling, Identity and Power' in A. M. Jaffe (ed.), *Orthography as Social Action: Scripts, Spelling, Identity and Power* (Berlin; Boston: De Gruyter Mouton, 2012), pp. 1–20.

Shahan, J. M., 'Introduction to Part I: Overview of Reasons to Doubt' in P. Edmondson and S. Wells (eds.), *Shakespeare beyond Doubt: Evidence, Argument, Controversy* (Cambridge; New York: Cambridge University Press, 2013), pp. 2–12.

Shortis, T., 'Gr8 Txtpectations: The Creativity of Text Spelling', *English Drama Media* (8, 2007), pp. 21–26.

Shortis, T., 'Orthographic Practices in SMS Text Messaging as a Case Signifying Diachronic Change in Linguistic and Semiotic Resources', (Unpublished PhD thesis: The University College London Institute of Education, 2016).

Shortis, T., 'Revoicing Txt: Spelling, Vernacular Orthography and "Unregimented Writing"' in P. Santiago, M. J. Esteve, and M. L. Gea-Valor (eds.), *The Texture of Internet: Netlinguistics in Progress* (Newcastle Upon Tyne: Cambridge Scholars Publishing, 2007). pp. 2-23.

Shortis, T., 'Texting and Other Messaging: Written System in Digitally Mediated Vernaculars' in V. Cook and D. Ryan (eds.), *The Routledge Handbook of the English Writing System* (London; New York: Routledge, 2016), pp. 487–516.

Sönmez, M., 'Perceived and Real Differences between Men's and Women's Spellings of the Early to Mid-Seventeenth Century'' in D. Kastovsky and A. Mettinger (eds.), *The History of English in a Social Context: A Contribution to Historical Sociolinguistics* (Berlin; New York: Mouton de Gruyter, 2000), p. 405–36.

Tagg, C., 'A Corpus Linguistic Analysis of SMS Text Messaging' (Unpublished PhD thesis: University of Birmingham, 2009).

Tagg, C., 'Heteroglossia in Text-Messaging: Performing Identity and Negotiating Relationships in a Digital Space', *Journal of Sociolinguistics*, 20 (1, 2016), pp. 59–85.

Tagg, C., *The Discourse of Text Messaging: Analysis of SMS Communication* (London; New York: Continuum, 2012).

Thurlow, C., 'Generation Txt? The Sociolinguistics of Young People's Text-Messaging', *Discourse Analysis Online*, 1 (1, 2003), no pagination.

Wiggins, A., *Bess of Hardwick's Letters: Language, Materiality and Early Modern Epistolary Culture* (London; New York: Routledge, 2017).

Wiggins, A., D. Starza Smith, A. Timmermann, and G. Williams (eds.), *Bess of Hardwick's Letters: The Complete Correspondence c. 1550-1608* (University of Sheffield Humanities Research Institute, 2013) <www.bessofhardwick.org> [accessed 28th Dec. 2018]

Williams, G. T., *Women's Epistolary Utterance: A Study of the Letters of Joan and Maria Thynne, 1575-1611* (Amsterdam: John Benjamins Publishing Company, 2014).

---

[1] Milroy, *Linguistic Variation and Change*.

[2] Shortis, 'Revoicing Txt: Spelling, Vernacular Orthography and "Unregimented Writing"', 2.

[3] Shortis, 'Gr8 Txtpectations: The Creativity of Text Spelling', 21.

[4] *Parsed Corpus of Early English Correspondence (PCEEC), Text Version.*; Basu, *EEBO N-Gram Browser*.

[5] Milroy, 'Language Ideologies and the Consequences of Standardization'.

[6] Sebba, 'Orthography as Social Action: Scripts, Spelling, Identity and Power', 4–5.

[7] Sebba, 5.

[8] Shortis, 'Gr8 Txtpectations: The Creativity of Text Spelling', 21.

[9] Deumert, *Sociolinguistics and Mobile Communication*, 142–43.

[10] Deumert, 143.

[11] Shortis, 'Revoicing Txt: Spelling, Vernacular Orthography and "Unregimented Writing"', 9.

[12] Horobin and Smith, *An Introduction to Middle English*, 45.

[13] Terttu Nevalainen, *Variable focusing in English spelling between 1400 and 1600*

[14] Horobin and Smith, *An Introduction to Middle English*, 33.

[15] Horobin and Smith, 35–36; Nevalainen, 'Variable Focusing in English Spelling between 1400 and 1600'.

[16] Barootes, 'In Fourme of Speche Is Chaunge'.

[17] Labov, *Principles of Linguistic Change. Vol. 1*, 78.

[18] Blake, 'English Versions of Reynard the Fox in the Fifteenth and Sixteenth Centuries'; Howard-Hill, 'Early Modern Printers and the Standardization of English Spelling'.

[19] Rutkowska, 'Late Medieval Dialectal and Obsolescent Spellings in the Sixteenth-Century Editions of the Kalender of Shepherdes'.

[20] Brengelman, 'Orthoepists, Printers, and the Rationalization of English Spelling'; McLeod, 'Spellbound: Typography and the Concept of Old-Spelling Editions'.

[21] Hart, *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. The Contents Wherof Are next Folowing.*, 2.

[22] Mulcaster, *The First Part of the Elementarie Vvhich Entreateth Chefelie of the Right Writing of Our English Tung, Set Furth by Richard Mulcaster*, 56, 153.

[23] Brengelman, 'Orthoepists, Printers, and the Rationalization of English Spelling'.

[24] Coote, *The English Schoole-Maister Teaching All His Scholers, the Order of Distinct Reading, and True Writing Our English Tongue*, 32.

[25] Berg and Aronoff, 'Self-Organization in the Spelling of English Suffixes', 37.

[26] Berg and Aronoff, 38.

[27] Berg and Aronoff, 47, fn. 11.

[28] Kaislaniemi et al., '"A Graphic System Which Leads Its Own Linguistic Life"?'

[29] Nevalainen, 'Variable Focusing in English Spelling between 1400 and 1600'.

[30] Nevalainen, 146.

[31] Sonmez, 'Perceived and Real Differences between Men's and Women's Spellings of the Early to Mid-Seventeenth Century''; Daybell, *Women Letter-Writers in Tudor England*, 99.

[32] Markus, 'Abbreviations in Early Modern English Correspondence'.

[33] Sonmez, 'Perceived and Real Differences between Men's and Women's Spellings of the Early to Mid-Seventeenth Century'', 420, 429.

[34] Daybell, *Women Letter-Writers in Tudor England*, 100.

[35] Coote, *The English Schoole-Maister Teaching All His Scholers, the Order of Distinct Reading, and True Writing Our English Tongue*.

[36] Ling et al., '"Girls Text Really Weird"'.

[37] Bergs, *Social Networks and Historical Sociolinguistics*; Kaislaniemi et al., '"A Graphic System Which Leads Its Own Linguistic Life"?'

[38] Rutkowska and Rössler, 'Orthographic Variables', 218.

[39] Shortis, ''Orthographic Practices in SMS Text Messaging as a Case Signifying Diachronic Change in Linguistic and Semiotic Resources'.

[40] Bergs, *Social Networks and Historical Sociolinguistics*; Davis, 'The Language of the Pastons'.

[41] Conde-Silvestre and Hernández-Campoy, 'Tracing the Generational Progress of Language Change in Fifteenth-Century English', 290 and passim.

[42] Evans, *The Language of Queen Elizabeth I*.

[43] Sairio, *Language and Letters of the Bluestocking Network*.

[44] Williams, *Women's Epistolary Utterance*, 50, 52.

[45] Eden, *The Renaissance Rediscovery of Intimacy*, 76.

[46] Kopaczyk and Jucker, *Communities of Practice in the History of English*.

[47] Eisenstein, 'Systematic Patterning in Phonologically-Motivated Orthographic Variation'; Tagg, 'Heteroglossia in Text-Messaging'.

[48] Mark Sebba, *Spelling and society the culture and politics of orthography around the world* (Cambridge: Cambridge University Press, 2007).

[49] Shortis, 'Revoicing Txt: Spelling, Vernacular Orthography and "Unregimented Writing"'; Thurlow, 'Generation Txt? The Sociolinguistics of Young People's Text-Messaging'.

[50] Tagg, *The Discourse of Text Messaging*.

[51] Shortis, ''Orthographic Practices in SMS Text Messaging as a Case Signifying Diachronic Change in Linguistic and Semiotic Resources', 89.

[52] Markus, 'Abbreviations in Early Modern English Correspondence'.

[53] Shortis, 'Texting and Other Messaging: Written System in Digitally Mediated Vernaculars'; Koch and Oesterreicher, 'Sprache Der Nähe — Sprache Der Distanz', 15.

[54] Thurlow, 'Generation Txt? The Sociolinguistics of Young People's Text-Messaging'.

[55] Androutsopoulos, 'Non-Standard Spellings in Media Texts'.

[56] Thurlow, 'Generation Txt? The Sociolinguistics of Young People's Text-Messaging'.

[57] Eden, *The Renaissance Rediscovery of Intimacy*.

[58] Androutsopoulos, 'Non-Standard Spellings in Media Texts'.

[59] Sebba, 'Orthography as Social Action: Scripts, Spelling, Identity and Power', 32.

[60] Deumert, *Sociolinguistics and Mobile Communication*, 142.

[61] Androutsopoulos, 'Non-Standard Spellings in Media Texts'.

[62] Tagg, 'Heteroglossia in Text-Messaging'.

[63] Gumperz, *Discourse Strategies*; Androutsopoulos, 'Non-Standard Spellings in Media Texts'.

[64] Georgakopoulou, *Narrative Performances a Study of Modern Greek Storytelling*.

[65] Nevalainen and Raumolin-Brunberg, *Historical Sociolinguistics*.

[66] See Wiggins, *Bess of Hardwick's Letters*.

[67] Harley, '"My Ladye Nevell" Revealed', 5–7.

[68] Williams, *Women's Epistolary Utterance*, 19–20.

[69] Anthony, *AntConc*.

[70] See, for example, Berg and Aronoff, 'Self-Organization in the Spelling of English Suffixes'; Kaislaniemi et al., '"A Graphic System Which Leads Its Own Linguistic Life"?'; Sonmez, 'Perceived and Real Differences between Men's and Women's Spellings of the Early to Mid-Seventeenth Century''.

[71] Basu, *EEBO N-Gram Browser*; *Parsed Corpus of Early English Correspondence (PCEEC), Text Version.*

[72] See, for example, Salmon, 'Orthography and Punctuation'.

[73] Labov, *Principles of Linguistic Change. Vol. 2.*

[74] Nevalainen, 'Variable Focusing in English Spelling between 1400 and 1600'.

[75] Benskin et al., *An Electronic Version of A Linguistic Atlas of Late Mediaeval English*.

[76] Tagg, 'A Corpus Linguistic Analysis of SMS Text Messaging'.

[77] Tagg, 'Heteroglossia in Text-Messaging'.

[78] Androutsopoulos, 'Non-Standard Spellings in Media Texts'.

[79] Nevalainen, 'Variable Focusing in English Spelling between 1400 and 1600'.

[80] Androutsopoulos, 'Non-Standard Spellings in Media Texts'.

[81] Vivian Salmon, *Orthography and Punctuation* : 28

[82] Sampson, 'The Redundancy of Self-Organization as an Explanation of English Spelling'.

[83] Nevalainen, 'Early Modern English Lexis and Semantics', 358–60.

[84] Kaislaniemi et al., '"A Graphic System Which Leads Its Own Linguistic Life"?'

[85] Benskin et al., *An Electronic Version of A Linguistic Atlas of Late Mediaeval English*.

[86] Blommaert, 'Supervernaculars and their dialects'.

[87] Brengelman, 'Orthoepists, Printers, and the Rationalization of English Spelling', 348.

[88] Shahan, 'Introduction to Part I: Overview of Reasons to Doubt', 3.

[89] Puranik and Lonigan, 'Name-Writing Proficiency, Not Length of Name, Is Associated with Preschool Children's Emergent Literacy Skills', 284.

[90] Salmon, 'Orthography and Punctuation', 42.

[91] e.g. Sairio, *Language and Letters of the Bluestocking Network*; Osselton, 'Informal Spelling Systems in Early Modern English: 1500-1800.'

[92] cf. Berg and Aronoff, 'Self-Organization in the Spelling of English Suffixes'.

[93] Grace et al., 'Undergraduates' Attitudes to Text Messaging Language Use and Intrusions of Textisms into Formal Writing'.