

## Change or variation? Productivity of the suffixes *-ness* and *-ity*

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### 12.1 Introduction

Adamson (1989: 204) points out that English has a “double lexicon”, in which almost all native words have Romance or Latinate synonyms whose use is sociolinguistically conditioned. Synonymous pairs of this kind can also be found among derivational affixes, such as the nominal suffixes *-ness* and *-ity*. Results from previous diachronic research (Säily & Suomela 2009, Säily 2011, Säily 2016) suggest a stable gendered style in which women use *-ity* significantly less productively than men, while there is no gender difference in the use of *-ness*.

However, in 18th-century letters in the *Corpora of Early English Correspondence* (CEEC) there is no gender difference with either suffix (Säily 2016). Instead, what emerges as significant is an increase in the productivity of *-ity* over time, a trend that is also apparent in the 17th-century section of the CEEC. There also seem to be differences between social classes, so that, e.g., the productivity of *-ity* is significantly high among professionals. To uncover reasons for this variation, the 18th-century section of the CEEC is here subjected to a more fine-grained analysis.

Firstly, the present study analyses the role played by register in terms of the relationship between the sender and the recipient of the letters, comparing it to the effect of social class at the macro level as well as that of individual outliers. Secondly, the study explores the question of whether the variation in the productivity of *-ity* represents a linguistic change or a shift in style, by comparing letter collections from different social backgrounds. Thirdly, the study seeks to explain the disappearance of the overall gender difference in the productivity of *-ity* by analysing semantic change in *-ness* and *-ity* between the 17th and 18th centuries, again examining whether the change is a linguistic or stylistic development. Finally, the study investigates links between normative grammar and the productivity of *-ness* and *-ity*.

The remainder of this chapter is organised as follows. Section 12.2 surveys the theoretical and methodological background to the study, beginning with morphological productivity and proceeding to sociolinguistics. Section 12.3 focuses on previous research on sociolinguistic variation in the productivity of *-ness* and *-ity*.

Based on the preceding sections, Section 12.4 formulates the research questions explored in the study. Section 12.5 presents the results, while Section 12.6 discusses them and concludes the chapter.

## 12.2 Theoretical background

Morphological productivity was defined by Bolinger (1948: 18) as “the statistically determinable readiness with which an element enters into new combinations”. Taking his idea further, several corpus-linguistic measures of productivity were developed by Harald Baayen and his associates in the 1990s and early 2000s. Three of these measures have stood the test of time and are still recommended by Baayen (2009). The measures are based on *type frequency* (the number of different words formed using the element), *token frequency* (the number of all word tokens formed using the element; if a word occurs more than once in the corpus, it is counted each time) and the frequency of hapax legomena, also known as *hapax frequency* (the number of words formed using the element that occur only once in the corpus). The first of Baayen’s measures is *realised productivity*, which is simply defined as type frequency, and assesses the extent of use of the element. The second measure is *potential productivity*, which is hapax frequency divided by token frequency, and estimates the growth rate of the element. The final measure is *expanding productivity*, which is hapax frequency divided by the number of all hapax legomena in the corpus, and estimates the share of the element out of the overall vocabulary growth.

Baayen’s measures are dependent on the size of the corpus, which makes it problematic to compare measurements obtained from differently sized subcorpora representing, e.g., time periods or social categories. Normalising type and hapax frequencies is not recommended because this would presuppose that they grow linearly with the size of the corpus, which is an invalid assumption (see further Säily & Suomela 2009). Säily & Suomela (2009) present a robust method for comparing type and hapax frequencies across subcorpora of varying sizes. Based on accumulation curves and the statistical technique of permutation testing, the method is data-driven, highly visual and provides a built-in measure of statistical significance. The method is described in more detail in Chapter 5 of this volume. Säily & Suomela (2009) and Säily (2011) show that hapax-based measures are unusable in small corpora, so the results presented here are based on type frequency alone, using two measures of corpus size: (1) the number of running words in the corpus and (2) the token frequency of the element (see Säily 2016 for further discussion of the two).

Romaine (1985) is one of the first to consider productivity from a diachronic perspective. Starting from the assumption that change stems from variation, she hypothesises that competing patterns of word-formation establish themselves through

social or stylistic specialisation. Thus, after entering the language in the Middle English period through French loanwords and later through calques on Latin, *-ity* becomes like a more learned and prestigious version of *-ness*, favoured in somewhat different genres and restricted to certain Romance/Latinate bases (Marchand 1969: 312–313, 334–335; Barber 1976; Riddle 1985; Dalton-Puffer 1996: 120, 128; Cowie 1999: 248, 224). In addition, Riddle (1985) argues that the suffixes undergo semantic specialisation, so that *-ity* becomes more and more associated with the meaning ‘abstract or concrete entity’ and *-ness* with that of ‘embodied attribute or trait’. In the Middle English period, there is also regional variation in the productivity of the suffixes (Gardner 2013: Chapter 5). Further sociolinguistic research on the suffixes is surveyed in the next section.

Several findings from present-day sociolinguistics are of possible relevance to this study. Labov (2001: 259) proposes that linguistic change from below follows a *curvilinear pattern*, originating in the interior social classes rather than the highest or lowest-status group. Another study emphasising the role of the middle class is Milroy (1992: 213), whose *anvil-shaped status/solidarity model* suggests that the socially mobile middle classes have the least close-knit social networks and are thus the most open to innovation. Class is not all that matters, however. Wolfson (1990) shows that the language use of middle-class Americans varies depending on register, or more specifically, the social distance between them and their interlocutors, so that minimally and maximally distant relationships cause similar speech behaviour, whereas less stable relationships, such as those between status-equal friends, are markedly different. She calls this the “*bulge*” theory.

The relative importance of social variation (including class-based variation) and situational or register variation has been hotly debated in the literature. Bell (1984: 151) claims that register variation derives from social variation, whereas Finegan & Biber (2001) see register variation, defined in terms of genre, as primary and claim that it predicts social variation. Like Bell (1984), Nevalainen & Raumolin-Brunberg (2003: 191) make a distinction between register variation according to topic and that according to addressee, hypothesising that social variation is more fundamental than register variation according to addressee, which in turn is more fundamental than register variation according to topic. They test the first part of the hypothesis using the *Corpus of Early English Correspondence* and are able to confirm it in the changes they study, which involve the variables *ye/you*; *-th/-s*; the object of the gerund; *mine*, *thine/my*, *thy*; and *the which/which*. However, the social factors they analyse are region and gender, while social class or rank is not included. The question of the relative importance of class- and register-based variation in the history of English thus appears to remain open, certainly in the field of derivational productivity, which presents the additional complication of the absence of an obvious linguistic variable (see Chapter 5).

Another pertinent issue is that of linguistic versus stylistic change. The key question here is whether the variation and change in the frequency of a linguistic feature observed in a corpus is indicative of language change, as in a change in the grammar of a speech community, or whether it could be, e.g., part of a stylistic shift in the genre(s) represented by the corpus (Nevalainen 2008). A major stylistic shift in recent English is the colloquialisation of many genres of written language (Hundt & Mair 1999). However, some written genres, such as scientific writing, display the opposite tendency of becoming more formal (Biber & Finegan 1997). Colloquialisation can be linked to the sociocultural trend of democratisation; other sociocultural trends influencing language use include urbanisation and standardisation (Culpeper & Nevala 2012). As noted in Chapter 3, the standardisation process of the English language reached a key phase in the 18th century with the rise of normative grammar.

As for how to assess whether a change is linguistic or stylistic, Nevalainen (2008: 32, 34) suggests that if the change is linguistic, it should show up in more than one type of material. If the change is stylistic, on the other hand, we should be able to find other linguistic features participating in the stylistic shift in the corpus (see also Leech & Smith 2005: 89). Szmrecsanyi (2016) proposes the use of statistical modelling as a tool for disentangling grammatical and environmental change: if there is statistically significant change in the effect of a language-internal constraint on the choice of a variant, the change is grammatical, i.e., linguistic. As noted above, however, not all changes present an obvious variable to analyse. Another means is to consider the way in which the change spreads (cf. Nevalainen 2008: 34): a linguistic change is more likely to follow Labov's curvilinear pattern and Milroy's anvil model mentioned above.

### 12.3 Previous research

Sociolinguistic variation in the productivity of the nominal suffixes *-ness* and *-ity* has been studied in 17th-century correspondence (Säily & Suomela 2009), 18th-century correspondence and trial proceedings (Säily 2016) as well as various genres of Present-day English (Säily 2011). The main finding has been that of a stable gender difference in the use of *-ity*: its productivity has been significantly low with women in every corpus except for the 18th-century section of the CEEC.

Säily (2011) connects this difference to a wider trend of men tending to use more nouns than women, while women use more pronouns than men. This has been observed for early English correspondence by Säily et al. (2011) and for spoken and written Present-day English by Rayson et al. (1997) and Argamon et al. (2003), respectively. Argamon et al. (2003) and Säily et al. (2011) interpret the tendency

in terms of Biber's (1988) multidimensional analysis of register variation, which considers the co-occurrence patterns of a number of linguistic features in texts. Biber's Dimension 1 is labelled Informational vs. Involved Production. One of the key features of the informational style is a high frequency of nouns, whereas the involved (interactive and affective) style is characterised by, e.g., first- and second-person pronouns. Thus, the gender difference is explained by the notion of gendered styles: men's style is said to be more informational, whereas women's style is more involved.

The idea presented in Säily (2011) is that if women use fewer nouns than men, they will also use nominal suffixes less productively than men. The question then becomes why women only use *-ity* and not *-ness* less productively than men. Säily (2011) suggests that the semantics of *-ness* is in fact well suited to an involved writing style, as *-ness* is often used to describe embodied attributes or traits, whereas *-ity* is generally used for abstract or concrete entities (Riddle 1985). Furthermore, it would seem that *-ness* often co-occurs with possessive pronouns, as in *your kindness* (see also Baeskow 2012). In a study of the multi-genre ARCHER corpus, Cowie (1999: 224, 260–264), too, tentatively connects *-ness* with an involved style and *-ity* with an informative style based on the genres that they prefer (fiction and sermons vs. scientific and medical prose), but argues against the semantic differentiation proposed by Riddle.

As for why there is no gender difference in the use of *-ity* in 18th-century letters, Säily (2016: 145) suggests that they go against the general tendency because “the educated, culturally homogeneous literati overrepresented in the corpus had developed a style of their own, a nominal style shared by both men and women”, referring to Biber & Finegan (1997), who found that the letter-writing style of the 18th century was more involved but also more elaborated than that of the 17th century in ARCHER (see also Cowie 1999: 222). The development of a shared style only became possible with upper-class women's increased access to education, although they still lacked the wealth of opportunities their male counterparts had (Tieken-Boon van Ostade 2010). According to McIntosh (2008: 231), 18th-century British culture could even be called “feminized”, meaning that the feminine virtues of politeness and sensibility were required of anyone wishing to belong to the better sort, and this was also evident in language use. Fashionable literary salons were hosted by women, and there were more female authors than ever.

In 17th-century correspondence, Säily & Suomela (2009) find that the productivity of *-ity* increases significantly over time, while there is no change in the productivity of *-ness* (see Palmer 2009: 282 for evidence of an increase in the productivity of *-ity* as early as the 16th century in the CEEC). Säily (2016) observes a similar trend over time in the 18th century. The increase in the productivity of *-ity* is corroborated by Lindsay & Aronoff's (2013) study of the *Oxford English*

*Dictionary* (OED), which discovers that the number of new *-ity* derivatives begins to increase drastically from the 17th century onwards and has continued to rise ever since. As noted above, Säily (2016) finds no gender differences in the 18th-century section of the CEEC, but does uncover some class-based differences. The present study analyses 18th-century correspondence in more detail, taking into account, e.g., the relationship between the sender and the recipient of the letters. Furthermore, this study takes advantage of the new version of the software used to compute the results (Suomela 2014), which now provides false discovery rate control (Benjamini & Hochberg 1995), enabling a more accurate assessment of statistical significance.

## 12.4 Research questions

This study explores the following research questions.

1. Do the results reported in Säily (2016) on the 18th-century section of the CEEC remain significant after false discovery rate control?
2. What is the relative importance of class-based variation and register variation according to addressee in the change in the productivity of *-ity*?
3. Is the change in the productivity of *-ity* linguistic or stylistic?
4. Is there a change in the semantics of *-ness* and *-ity* between the 17th and 18th centuries, and if so, is it linguistic or stylistic?
5. Does normative grammar have an influence on the productivity of *-ness* and *-ity*?

Question 1 will be dealt with in Sections 12.5.1 and 12.5.2, the latter of which also touches upon question 2. To address questions 2–4, a series of case studies will be conducted in Section 12.5.3, while question 5 will be discussed in Section 12.5.4.

## 12.5 Results

### 12.5.1 Overall trends

In the use of *-ness*, none of the time periods studied differs significantly from the corpus as a whole. In the use of *-ity*, however, there is a clear change over time. With 40-year periods, for example, the productivity of *-ity* is significantly low in the first period, neither low nor high in the middle period, and significantly high in the last period (Figure 12.1), which indicates that the productivity increases over time, confirming the observation by Säily (2016). These results are similar

to those observed in the 17th-century section of the CEEC by Säily & Suomela (2009: 105–106), so the increasing productivity of *-ity* seems to be a long-term trend in early English correspondence.

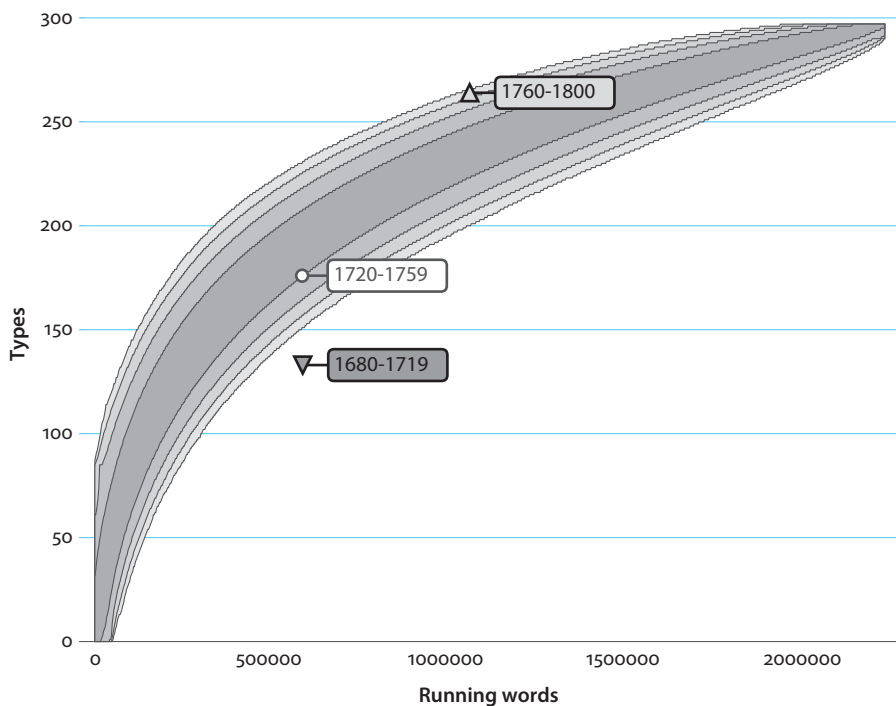


Figure 12.1 Change in the productivity of *-ity* over time, 1680–1800

### 12.5.2 Social categories

As expected, there is no gender difference in the use of *-ness*. Furthermore, this study confirms the observation by Säily (2016) that there is no significant gender difference in the use of *-ity*, either, as shown in Figure 12.2. Given that the productivity of *-ity* seems to have been steadily growing in English correspondence since at least the 17th century and that women used *-ity* significantly less productively than men in the 17th century, the lack of a gender difference in the 18th century must mean that women have caught up with men in the use of *-ity*, rather than men decreasing their usage. Thus, the use of *-ity* undergoes ‘masculinisation’ rather than ‘feminisation’, at least in terms of productivity (but see Section 12.5.3.3 for an analysis of the changing semantics of *-ness* and *-ity* derivatives).

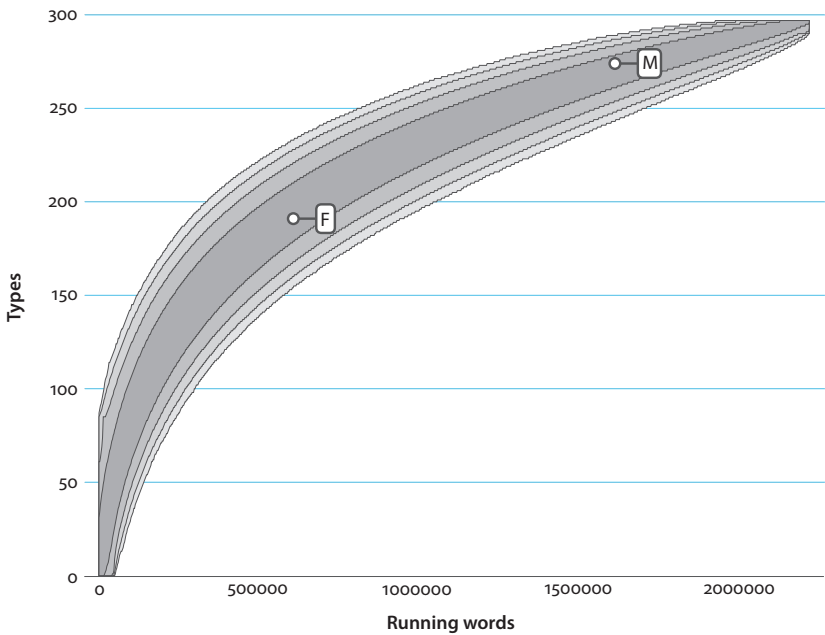


Figure 12.2 Gender and *-ity* types, 1680–1800

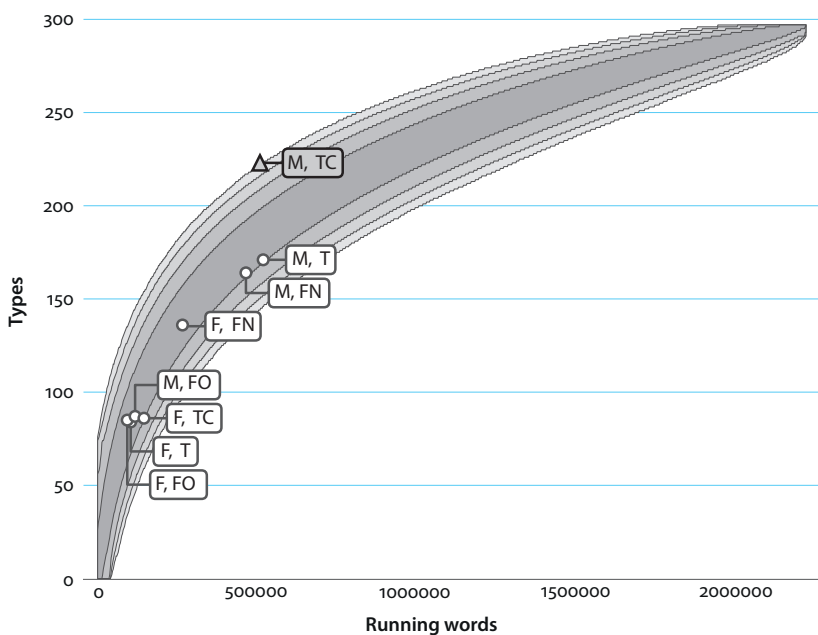
The gender difference remains in one register, however. As shown in Figure 12.3, when the data is divided up according to the relationship between the sender and recipient of the letter, the productivity of *-ity* is significantly high in letters written by men to their close friends (again, there are no significant differences in the use of *-ness*). While McIntosh (2008) claims that the masculine virtue of wit was no longer in vogue in the 18th century, these letters indicate otherwise:

- (12.1) I think I am a very tractable sort of a poet. Most of my **fraternity** would as soon shorten the noses of their children because they were said to be too long, as thus dock their compositions in compliance with the opinion of others. I beg that when my life shall be written hereafter my Authorship's **ductility** of temper may not be forgotten. William Cowper to Walter Bagot, 1789; COWPER W, III, 297 (COWPERW\_063)

It was not only male friends who were at the receiving end of such playful language use:

- (12.2) I protest, it is to me the most difficult of things to write to one of your female geniuses – there is a certain degree of **cleverality** (if I may so call it), an easy kind of derangement of periods, a gentleman-like – fashionable – careless – see-saw of dialogue – which I know no more of than you do of cruelty. Ignatius Sancho to Miss Crewe, 1778?; SANCHO, 132 (SANCHO\_019)

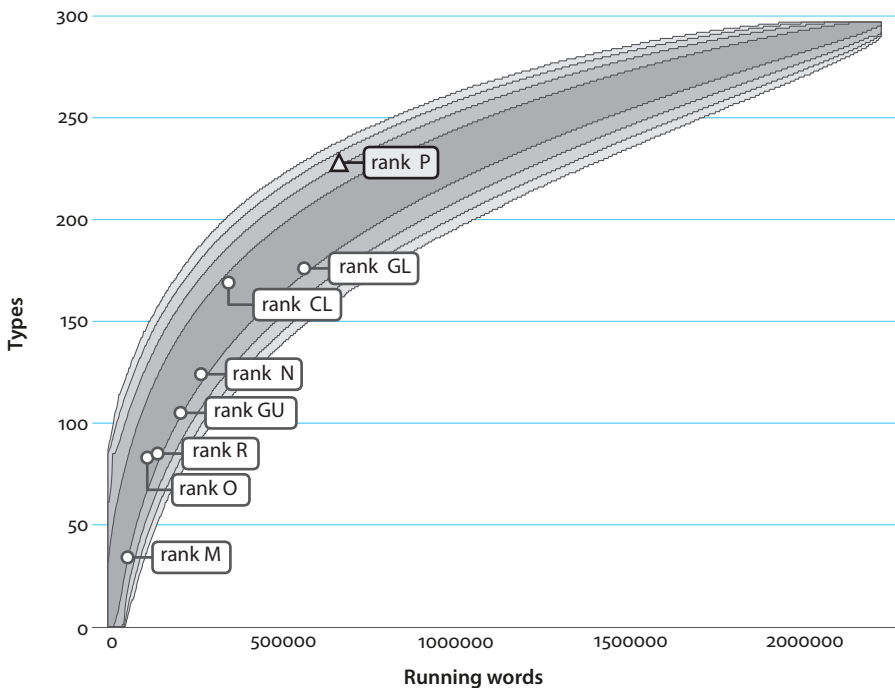




**Figure 12.3** Variation in the productivity of *-ity* across subcorpora based on the gender of the letter writer and the relationship between the writer and the recipient, 1680–1800 (FN = nuclear family, FO = other family, TC = close friends, T = other acquaintances). The productivity of *-ity* is significantly high with men writing to close friends ( $p < 0.00006$ )

In some cases, the use of *-ity* is perhaps more creative than productive, as evidenced by the self-conscious parenthetical remark in (12.2) above (for a discussion of creativity and productivity, see Bauer 2001: 62–71). It seems that men wished to amuse their friends with linguistic creativity, and by using the etymologically foreign suffix *-ity*, they could also subtly show off their learnedness.

Who were the people who led the increase in the productivity of *-ity*? Men writing to their close friends are one good candidate; another is the social rank of professionals, such as authors, lawyers, doctors and government officials. Unfortunately, there is too little data for a closer analysis of, say, professional men writing to their close friends in each time period, or even of professionals over time. While Säily (2016) finds that the productivity of *-ity* is significantly high in letters written by professionals in the corpus as a whole, after FDR control the difference is not quite significant, but there does seem to be a tendency towards that direction (Figure 12.4). Another result by Säily (2016) that is not quite significant after FDR control is the highly productive use of *-ness* by clergy. The unproductive use of *-ness* by royalty, however, remains significant (see Säily 2016 for an explanation of these results).



**Figure 12.4** Variation in the productivity of *-ity* across rank-based subcorpora, 1680–1800 (R = royalty, N = nobility, GU = upper gentry, GL = lower gentry, CL = lower clergy, P = professionals, M = merchants, O = other non-gentry). The productivity of *-ity* is almost significantly high with professionals ( $p < 0.0065$ )

### 12.5.3 Case studies

Having reassessed the statistical significance of the results in Säily (2016) and discovered a gender difference in the register of letters written to close friends, we turn to our other research questions. Section 12.5.3.1 focuses on the relative importance of class- and register-based variation in the change in the productivity of *-ity* by analysing outliers. Section 12.5.3.2 explores the question of whether the change is linguistic or stylistic by comparing the language use of a high-status group and a low-status group at the end of the 18th century. Finally, Section 12.5.3.3 moves from productivity to semantics, asking whether there is a change in the semantics of *-ness* and *-ity* between the 17th and 18th centuries which could explain some of the variation and change in their productivity. As these are small pilot studies, further research is needed to confirm and clarify the results.

### 12.5.3.1 *Individual outliers*

From the macro-level study in Section 12.5.2, let us zoom in on sociolinguistic variation at the micro level and analyse individual outliers in the productivity of *-ity*, listed in Table 12.1. For this analysis, the data set was narrowed down to 58 people from whom there was enough data, defined heuristically as a word count amounting to 2% or more of the word count of the (sub)corpus to which they were compared. Out of these 58 people, 22 were outliers in terms of one or more (sub)corpora, with only two of them being overusers of *-ity*, while the rest were underusers, including two members of the Clift family discussed further in the next section. Besides the full corpus, the subcorpora to which the people were compared included individual ranks (professionals, lower clergy and lower gentry, chosen because they provided the largest amount of data and thus a better chance of statistically significant results), individual genders (female, male) and individual relationships with the recipient (nuclear family, close friends, other acquaintances) as applicable, using both definitions of corpus size (running words, suffix tokens).

The two overusers, Eliza Draper (1744–1778) and William Cowper (1731–1800), both belong to the professional class. Cowper was a religious poet, while Draper was the wife of a government official in India and a friend of Laurence Sterne, the author of *Tristram Shandy*. Cowper is an overuser in terms of three corpora when the size of the corpus is measured in running words: the full corpus, the corpus of men's letters and that of letters written to close friends. Draper, on the other hand, is an overuser in terms of other professionals as well as women, again using running words as the measure of corpus size. Thus, both are outliers even within a category that itself uses *-ity* highly productively, i.e., close friends and professionals. Thanks to the method used, it is implausible that these two outliers could be the reason why these categories seem to use *-ity* highly productively – on the contrary, outliers make the confidence intervals wider, so that it becomes more difficult for a category to be significantly different from the corpus as a whole.

The Notes column of Table 12.1 lists possible reasons why these people are outliers. Cowper (see Example (12.1) above) writes relatively late, and as the productivity of *-ity* increases over time, it is natural for his letters to stand out when they are compared to a corpus that includes earlier periods. With Draper, the reason could be a stylistic one, as she seems to prefer an even more Latinate style than most of her peers (12.3). As for the underusers, many of them are from the earlier periods, when the productivity of *-ity* was in general lower. Another explanation for their underuse may be a shared style among friends and family: for instance, Daniel and Henry Fleming (father and son) are both underusers, as are Charles Lennox, Sarah Lennox and Thomas Pelham-Holles (father, daughter and father's close friend), and Elizabeth and William Clift (siblings). Furthermore, *-ity* seems to be underused in business letters and in letters written by lower-class people.

**Table 12.1** *-ity* outliers sorted by 20-year period (**boldface** = overusers, the rest are underusers; \* = also underuses *-ness*). For explanations of the abbreviations, see Figure 12.4 above (CU = upper clergy)<sup>†</sup>

| Name           |               | First period | Last period | Social rank | Notes  |
|----------------|---------------|--------------|-------------|-------------|--|
| John           | Pinney        | 1680         | 1680        | CL          | early  |
| *Thomas        | Dixon         | 1680         | 1680        | CL          | early (but also underuses <i>-ness</i> )                           |
| Henry          | Fleming       | 1680         | 1700        | CL          | early; cf. Daniel Fleming  |
| Daniel         | Fleming       | 1680         | 1680        | GU          | early; cf. Henry Fleming   |
| Samuel         | Pepys         | 1680         | 1700        | P           | early  |
| *Humfrey       | Wanley        | 1680         | 1720        | P           | fairly early (but also underuses <i>-ness</i> )                    |
| *Ann           | Clavering     | 1700         | 1720        | GL          | fairly early (but also underuses <i>-ness</i> )                    |
| Henry          | Liddell       | 1700         | 1700        | GL          | fairly early; lots of business content                             |
| *Daniel        | Defoe         | 1700         | 1720        | P           | fairly early (but also underuses <i>-ness</i> )                    |
| Thomas         | Secker        | 1720         | 1760        | CU          |  |
| Elizabeth      | Purefoy       | 1720         | 1740        | GL          | lots of business content   |
| Thomas         | Pelham-Holles | 1720         | 1740        | N           | cf. Charles Lennox   |
| Charles        | Lennox        | 1720         | 1740        | N           | cf. Thomas Pelham-Holles, Sarah Lennox                             |
| Theophilus     | Hughes        | 1740         | 1760        | CL          |  |
| <b>Eliza</b>   | <b>Draper</b> | 1740         | 1760        | P           | Latinate style; professional                                       |
| <b>William</b> | <b>Cowper</b> | 1740         | 1780        | P           | late; many letters to close friends                                |
| Samuel         | Crisp         | 1760         | 1780        | GL          | overuses <i>security</i> , <i>opportunity</i> in letters to sister |
| Sarah          | Lennox        | 1760         | 1780        | N           | cf. Charles Lennox   |
| Erasmus        | Darwin        | 1760         | 1780        | P           | overuses <i>quantity</i> , <i>society</i>                          |
| *Elizabeth     | Clift         | 1780         | 1780        | O           | cf. William Clift; low social status                               |
| *George        | Culley        | 1780         | 1780        | O           | lots of business content; low social status                        |
| *William       | Clift         | 1780         | 1780        | P           | cf. Elizabeth Clift; lower-class background                        |

<sup>†</sup> The importance of the distribution of the outliers' social ranks should not be overestimated as the table only includes people from whom there was enough data, and these people may represent a skewed rank distribution compared with the corpus as a whole.

(12.3) I say not this, with a view to disqualify and extort refinements or flattery, but from such a consciousness of my own **imbecility** as makes me very serious, when reduced to the **necessity** of self examination – if therefore, you have the **generosity**, which I take you to have, you will rather endeavour to correct my foibles than to add to it by your encomiums –

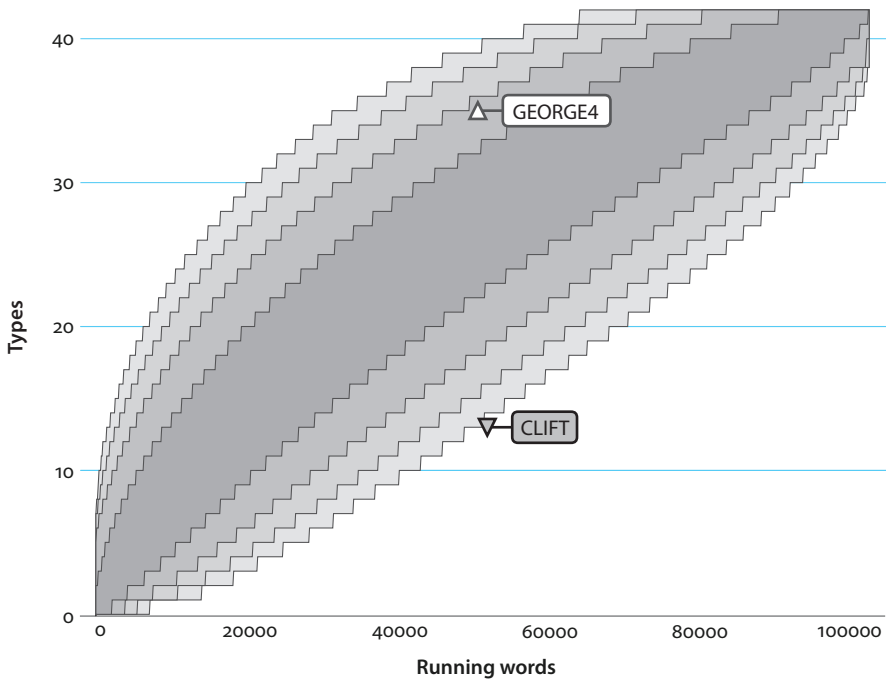
Eliza Draper to John Wilkes, 1775?; DRAPER, 175 (DRAPER\_019)

The fact that the two overusers are both professionals speaks for the importance of class-based variation in the increase in the productivity of *-ity*, even though the general tendency of professionals to overuse *-ity* did not reach significance in our macro-level analysis. On the other hand, Cowper is also an overuser in terms of people writing to their close friends, which reinforces the significant role of register already seen in the macro-level analysis of social categories.

### 12.5.3.2 *Royalty vs. the Clifts*

Let us now shift our focus on two small groups of people at the opposite ends of the social spectrum in the final period of the corpus, 1780–1800 (CEECE collections CLIFT and GEORGE 4). Is there a difference in the productivity of *-ity* in family letters written by the lower-class Clifts on the one hand and by the royal Hanover family on the other? Out of the Cornish Clift siblings, the women, Elizabeth and Joanna, worked as domestic servants, while the men's occupations included steward (the eldest brother John), shoemaker (Thomas), sailor (Robert) and museum curator (the youngest brother William, who received more schooling than his siblings and moved to London). The majority of our royal family letters, too, are between siblings: the crown prince George (later king George IV), his brothers Frederick, William, Edward, Ernest, Augustus and Adolphus, and his sisters Charlotte, Augusta, Elizabeth and Amelia.

Even though neither the royalty nor the lowest, 'other' category differs from the corpus as a whole in Figure 12.4, we do see a significant difference when limiting the comparison to the two smaller groups. As shown in Figure 12.5, the Clifts underuse *-ity* compared with the royalty. In fact, more than two thirds of their instances consist of the most common *-ity* word in the corpus as a whole, *opportunity*, used in a formulaic manner at the beginning of the letters, as in (12.4). Their second most common *-ity* lexeme is *prosperity*, used in closing formulae, and the other two *-ity* words used by Elizabeth Clift, *calamity* and *civility*, are also common in the corpus as a whole. It is only the social climber, William (from whom we have the most data), who uses *-ity* somewhat more diversely, as in (12.5).



**Figure 12.5** Productivity of *-ity* in letters written to nuclear family members in the CLIFT and GEORGE 4 collections, 1780–1800. Owing to lack of data, the samples used here are individual letters rather than people (see Chapter 5)

(12.4) My Dear Brother

I have once more took an **oppurtunity** of writing a few lines to you hoping it will find you and my Brother thos in Good health as this leves me at Present I Bless the Lord for it [...]

Elizabeth Clift to William Clift, 1796; CLIFT, 140 (CLIFT\_043)

(12.5) [...] guided and performed in a wonderfull manner but by what means we shall be for ever ignorant, at least on this side of what we call **eternity**, and by some invisible power – and which power we call God – thus far we may go – but when we come to argue and reason on things which cannot be demonstrated such as the shape, **materiality**, co-partnership and co-this and that, the residence &c of this invisible being [...]

William Clift to Elizabeth Clift, 1797; CLIFT, 157 (CLIFT\_051)

The usage by the royalty is much more diverse: while *opportunity* is their most common *-ity* word, it only comprises 37% of all instances. The suffix is used especially extensively by the princes, who often write to their eldest brother about happenings abroad, as in (12.6). It is also often used to describe human attributes,

such as *anxiety*, (*in*)*civility*, *credulity*, *felicity*, *rationality*, *sensibility*, *sincerity* and *tranquillity*, as in (12.7).

- (12.6) Great many reports are spread about the Peace with the Empire, but as probably you will be much better informed about their **authenticity** than I can, I will say nothing more upon this subject, except that, should a Peace take place soon, I am very much afraid our affairs in Brittany will not succeed.

Prince Adolphus to the Prince of Wales, 1795;

GEORGE 4, III, 83 (GEORGE4\_114)

- (12.7) I hope that my too easy **credulity** has been too forward on this occasion; if so you can but say that I am very *silly*; if not, you may soon guess what I must feel.

Princess Augusta to the Prince of Wales, 1798;

GEORGE 4, III, 442 (GEORGE4\_158)

The results imply that even though the increase in the productivity of *-ity* in English correspondence had been going on for at least two centuries by the end of the 1700s, lower-class informants had not caught up with those above them.<sup>1</sup> Furthermore, the difference between the lowest and highest ranks suggests that Milroy's (1992) anvil model does not fully apply to this change, even if it is led by the middling rank of professionals. Based on this case study, it seems that the change in the productivity of *-ity* is not linguistic in the sense of a change in the grammar of the speech community as a whole; rather, it is connected to changing styles of letter writing among middle- and upper-class users.

### 12.5.3.3 *Semantics*

Our final case study focuses on the semantics of *-ness* and *-ity* in the 17th and 18th centuries. Given that the overall gender difference in the productivity of *-ity* disappears in the 18th century, is it possible that this is because *-ity* is used in the meaning 'embodied attribute or trait' more often in this century, making it a better match to women's involved writing style? Furthermore, does Riddle's (1985) claim that this meaning is more characteristic of *-ness* than of *-ity* hold equally well for both the 17th and the 18th centuries? What about her claim that the meaning 'abstract or concrete entity' is more characteristic of *-ity* than of *-ness*?

As the process of semantic classification is resource intensive, analysing these issues in the entire corpus would be impossible. Therefore, the data set was reduced to two samples, one from 1600–1679 and the other from 1720–1800. Each sample

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1. A pragmatic reason for the underuse of *-ity* among lower-class users is that the topics they discussed may not have required a frequent and varied use of abstract nouns. In accordance with this hypothesis, the Clifts also underuse *-ness* compared with the royalty.

consisted of 22 men and 8 women who contributed five hapax legomena (words occurring only once in the individual's letters) for both suffixes, amounting to 300 instances for both *-ness* and *-ity*. The proportion of women, c. 25%, was consistent with the full corpus. Hapax legomena were used in order to avoid the most common, lexicalised types, such as *business*. To make the data more homogeneous, the highest and lowest social ranks (royalty; merchants, other non-gentry) were excluded. Within these limits, the people and instances were chosen randomly. However, even this data set turned out to be too large to classify in a reasonable amount of time, so it was further reduced by randomly selecting 10 instances from women and 30 instances from men in both periods, for a total of 80 instances for both *-ness* and *-ity*. While small, this data set still yielded interesting results, lending support to Labov's (1978 [1972]: 204) rule of thumb that a study of 25 people, with as few as five people per category, may be enough to form a general picture of a phenomenon (see also Mannila et al. 2013).

The reason why the classification was so difficult was because the two meanings posited by Riddle (1985) are extremely context-dependent. Riddle (1985: 458) notes that the meanings 'embodied attribute or trait' and 'abstract or concrete entity' closely correspond to the notions 'specific' and 'generic', respectively. In my analysis, it turned out that almost any word could have either meaning, the only way of differentiating between them being whether or not there was something in the context indicating a specific individual or thing whose 'embodied attribute or trait' the word was. Thus, it could be said that the meaning was often vague (as opposed to ambiguous, see Saeed 1997: 60–62) between genericity and specificity. As suggested by Baeskow (2012: 27), the specificity was frequently manifested syntactically by means of a possessive construction, as in *your sauciness* or *the wetness of the weather*, and Cowie (1999: 263) goes so far as to state that this is the only possible criterion for distinguishing between the attribute and entity meanings. However, what should we do with examples like (12.8) and (12.9)?

(12.8) give me leave, Sir to demand of you once more & to demand of you with the last **earnestness** the return of your paternal tenderness, which I have forfeited by the unhappy step I have made.

Edward Gibbon to his father, 1755; GIBBON, I, 5–6 (GIBBON\_004)

(12.9) The Lord Ranelagh having taken upon him to relate what has past between the King and himself I suppose it may bee no **vanity** in mee to tell you the particulars of the reception I had from his Ma<sup>tie</sup> when I attended him at Windsor the 18th of July being the next day after I arrived.

Arthur Capel to his brother, 1676; CEEC: ESSEX, 74 (ESSEX\_015)



It could be argued that uses like the above are metaphorical and extend the meaning into entity territory (cf. Nevalainen & Tissari 2010: 149–151). However, while *earnestness* could be seen as an entity used as an instrument in (12.8), it is also the specific earnestness of Edward Gibbon and could be paraphrased as *I am earnest*. Similarly, even though *vanity* in (12.9) could be regarded as a metaphorical substance, it is clearly the vanity of the writer, Arthur Capel, and the instance could be paraphrased as *I am not vain*. Therefore, I have chosen to include the above in my ‘embodied attribute or trait’ category.

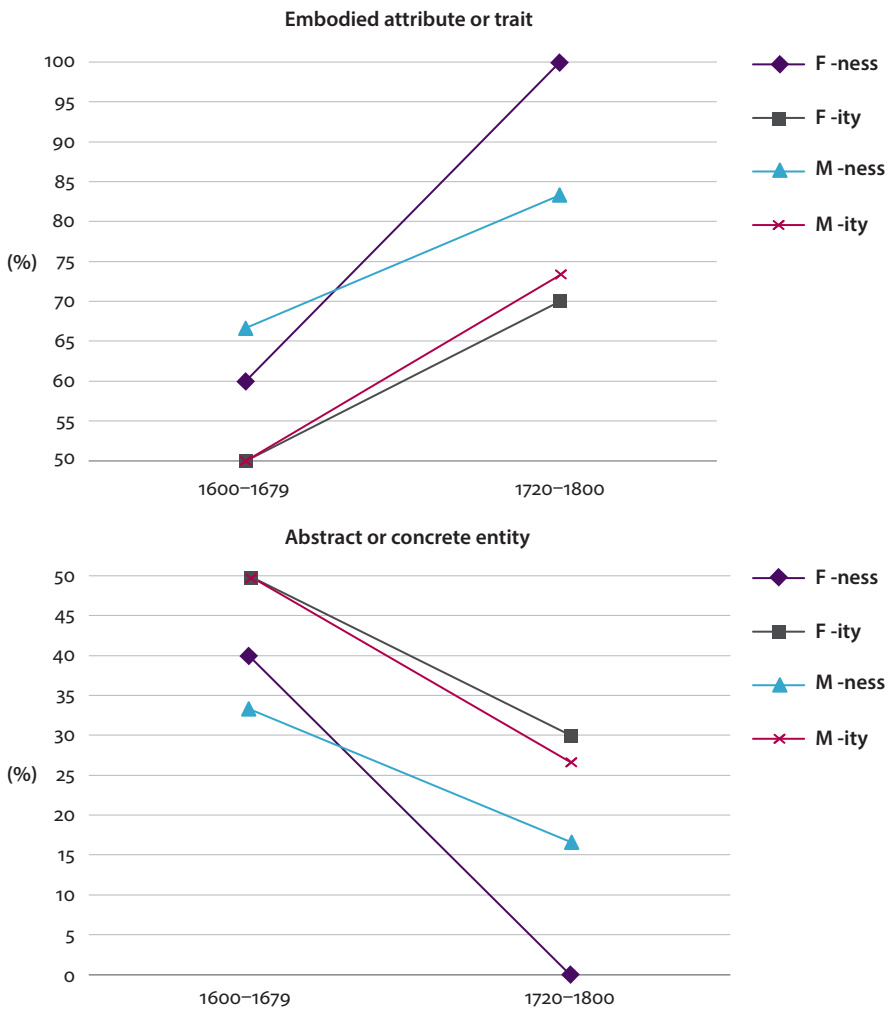
My ‘abstract or concrete entity’ category includes words that can context-independently be regarded as entities, such as *witness* and *university*, as well as polysemous words used in their entity sense, e.g., *rarities* ‘rare objects’ and *absurdities* ‘instances of absurdity’, even if these appear in a possessive construction. Furthermore, the category includes generic or even somewhat specific uses which could not straightforwardly be paraphrased as X IS ADJ, as in (12.10).

(12.10) I am confident you will hate all plundering and vnmercifullness.

Brilliana Harley to her son, who is in the army, 1643;  
CEEC: HARLEY, 206 (HARLEY\_060)

While somewhat idiosyncratic, my categorisation is at least consistent; I have gone through the instances multiple times, and they were sorted in a random order during analysis to avoid any biases. With all this in mind, let us have a look at the results, shown in Figure 12.6. It seems that Riddle (1985) is correct in that the meaning ‘embodied attribute or trait’ is more common with *-ness* than with *-ity*, while the reverse is true for the meaning ‘abstract or concrete entity’, although the difference between the suffixes is not as great as might be expected. Interestingly, however, the proportion of the trait meaning increases over time for both *-ness* and *-ity* and for both genders, while the proportion of the entity meaning decreases. Thus, Riddle’s claim that the entity sense has been gradually increasing for *-ity* and disappearing for *-ness* does not seem to hold for the correspondence genre. The differences between the genders should not be made too much of as the number of instances from women is very low.

To ensure that the results were not due to my classification, I reclassified the instances so that only those which appeared in possessive constructions (and were not context-independently categorisable as entities) were counted towards the meaning ‘embodied attribute or trait’. The main result of an increase in the trait meaning and a decrease in the entity meaning over time was preserved for both suffixes and both genders. For women, the entity meaning was more frequent for *-ness* than for *-ity* in the 17th century, but this could be coincidental as the number of instances was very low.



**Figure 12.6** Semantics of *-ness* and *-ity* in a sample of 17th- and 18th-century letters (F = women, M = men)

18th-century letters do, then, seem to refer to embodied attributes or traits more often than 17th-century letters in the case of both *-ness* and *-ity*, lending support to McIntosh's (2008: 231) claim of the feminisation of 18th-century culture (if we accept the proposition that talking about embodied attributes is part of an involved style, which in the 17th century was especially characteristic of women). It is possible that letter-writing, at least for the upper classes in our corpus, was more about maintaining and building social relationships and identities than about conveying information. Even though the style was more 'nouny' than before, this did not mean that the orientation was more informational; rather, writer and addressee

involvement were expressed in a more elaborated style by both men and women. As mentioned in Section 12.3, this is in accordance with Biber & Finegan's (1997) finding that 18th-century letters are both more involved (Dimension 1) and more elaborated (Dimension 3) than 17th-century letters.

Biber (2001), however, re-computes the dimensions for 18th-century material rather than using those based on present-day material, discovering that the informational vs. involved dimension is basically split in two in the 18th-century material and that the letters in the ARCHER corpus can only be characterised as involved according to the first dimension. While he concludes that 18th-century letters are not "personally involved and interactive" (Biber 2001: 105), this is in my opinion not entirely justified because there are still plenty of involvement features on the first dimension, including first- and second-person pronouns, modal verbs, mental verbs and general emphatics. Moreover, the second dimension seems to be more about orality than about ego/addressee involvement, and only drama scores especially high along the dimension. The range of variation along the second dimension is narrower than that along the first dimension, so the differences between the genres are not as great as Biber's (2001: 105) description might lead us to believe.

#### 12.5.4 Normative grammar

As noted by Yáñez-Bouza in Chapter 3, normative grammar may influence language use. On the other hand, Cowie (2003) argues that proscriptive attempts at standardisation in word-formation could be a reaction to increased productivity. Either way, most 18th-century grammarians do not have much to say about *-ness* and *-ity*. While *-ness* is mentioned by, e.g., Greenwood (1722: 186) as an ending that creates abstract nouns from adjectives, *-ity* and most other suffixes of a foreign origin are not discussed as productive suffixes but as terminations in previously borrowed or derived words.

Kirkby (1746: 61–63, as cited in Görlach 2001: 174) considers *-ness* to be in competition with *-th*, as in *warmness/warmth*, but does not mention *-ity* in this context. Greenwood (1722: 203) discusses *-ity* (conflated with *-ty*) among rules "whereby to know when a Word is derived from the *Latin*, and how it may be made *Latin* again", Metcalfe (1771: 71) in "How do you know when English Words are derived from Words in other Languages?", and Fenning (1771: 98) in "From what Latin words do the English ones that end in *ty* come?". By this, the authors would seem to imply that *-ity* was not or should not be used as a productive suffix, or possibly that their intended audience, who were often children, would not be able to use it in such a way. The first implication is clearly not borne out by the data, as the productivity of *-ity* increases during the period, so it could perhaps be seen as a (very subtle) reaction against the trend. The second implication, too, is doubtful,

as the women in the corpus, who did not as a rule receive a classical education, use *-ity* as productively as men in most registers. Most probably no such implications were intended, and this was simply the ‘received’ way of describing Latinate suffixes in the grammars of the period.

Campbell (1776: 391–393) objects to several long words in *-ness*. Firstly, he discourages the use of terms “composed of words already compounded, where of the several parts are not easily, and therefore not closely united”, such as *bare-faced-ness*, *shame-faced-ness*, *un-success-ful-ness*, *dis-interest-ed-ness*, *wrong-headed-ness* and *tender-hearted-ness* (his hyphenation), a couple of which are 18th-century neologisms according to the OED. “They are so heavy and drawling, and withal so ill compacted, that they have not more vivacity than a periphrasis, to compensate for the defect of harmony.” Secondly, he disapproves of words such as *peremptoriness*, in which the accented syllable is followed by “too many” syllables: “For though these be naturally short, their number, if they exceed two, makes a disagreeable pronunciation.” By contrast, he praises the “easy fluency” of the *-ity* words *levity*, *vanity* and *avidity*, which the OED classifies as loanwords from previous centuries. A quick calculation shows that the proportion of extremely long *-ness* tokens (between 16 and 19 characters) in fact increases over time in the corpus, so it seems that Campbell is unsuccessfully objecting to a widespread phenomenon. The playwright Samuel Crisp, for instance, is happy to use *disinterestedness* four years after the publication of Campbell’s *The philosophy of rhetoric*:

(12.11) Now I am talking of Law matters, it puts me in mind to tell You I have some thoughts of new making my Will; and of joining that honestest of beings, Jack Edison, of Basinghall Street (and whom I have had experience of, between 30 and 40 years) with You as a Joint Executor; being fully convinc’d of his perfect integrity of **disinterestedness**, and likewise of his experience and conduct of business; so that he would prove a very usefull Assistant to You, in Case of need; and exclusive of that as You and I are neither of Us young, I think one would wish the due execution of a Trust, should not hang upon one single Life.

Samuel Crisp to his sister, 1780; CRISP, 55 (CRISP\_013)

It may well be that the productivity of *-ness* on complex bases increases during this period, prompting the response by Campbell, but more research is needed to verify this. The hypothesis is lent some support by Anderson’s (2000) study of the OED (as cited in Palmer 2009: 14), which finds that the productivity of *-ness* on suffixed bases increases in the 17th and 18th centuries and decreases in the 19th century. The decrease probably cannot be attributed to proscription as it occurs particularly on Latinate suffixed bases, whereas Campbell seems to be mostly objecting to (compound) bases containing native suffixes.

## 12.6 Conclusion

The results of this study indicate that the productivity of *-ity* continues to increase significantly in 18th-century correspondence and that women have mostly caught up with men in the use of the suffix. It seems that the change is led by the professional class, following Labov's (2001) curvilinear pattern and Milroy's (1992) anvil model. Deviating from the anvil model, however, the lowest classes are lagging behind compared to the highest-status group. Aside from class, register in terms of the relationship between the sender and the recipient of the letter also plays a role: in keeping with Wolfson's (1990) bulge theory, the less stable relationship between friends is a trigger for the productive or creative use of *-ity*. Especially men seem to wish to impress and amuse their friends by using the suffix. Thus, it comes as no surprise that the individuals who use the suffix the most productively, William Cowper and Eliza Draper, belong to the professional class, and one of them is a man writing to his friends.

As class and register seem to be interconnected, it is difficult to weigh their relative importance in the change. One way to do this might be to compare the statistical significance of the macro-level differences. While the subcorpus of men writing to their close friends differs from the corpus as a whole at  $p < 0.00006$ , the subcorpus of professionals differs from the corpus as a whole at a lower level of  $p < 0.0065$ , which is not significant after false discovery rate correction. By this measure, register variation according to addressee is more important than class-based variation in the productivity of *-ity*. However, the measure may be affected by factors like corpus balance.

On the one hand, the increase in the productivity of *-ity* appears to be stylistic: it seems to be connected to the change towards a more involved and elaborated style in the correspondence genre observed by Biber & Finegan (1997). As noted by McIntosh (1986, 2008), the cultural ideals of politeness and elegance also show up in the language use of the upper classes. That the lowest classes are lagging behind is evident in our case study of the Clift siblings, who use *-ity* significantly less productively than the siblings in the royal family of the time. Lower-class writers may not have had a full command of the intricacies of the changing correspondence genre, nor would this have been necessary if they only wrote to people with whom their relationship was minimally distant (cf. Wolfson 1990). On the other hand, the change in *-ity* could be connected to the overall increase in the productivity of *-ity* observed by Lindsay & Aronoff (2013) in the OED, which would make it at least partly linguistic. This is supported by the fact that the productivity of *-ity* is increasing in 18th-century courtroom discourse as well (Säily 2016: Figures 6–7), although the change there could also be due to the increasing formality of the genre,

i.e., another stylistic trend (Huber 2007). More genres should be studied to reach a firmer conclusion.

As for semantic change, both *-ness* and *-ity* shift towards trait meanings in the usage of both genders between the 17th and 18th centuries with *-ness* in the lead, while the share of entity meanings decreases. The change is probably stylistic and, like the increase in the productivity of *-ity*, connected to the temporary increase in elaboration and involvement in the letter genre discovered by Biber & Finegan (1997). As *-ity* is now used more to express involvement, making it a better match to women's consistently involved style, the overall gender difference in its productivity disappears. Future research should attempt to verify the results of the semantic study using a larger data set. To make this more automatic and thus less resource intensive as well as less dependent on the analyst's intuitions, the change could be studied, e.g., by examining collocates (Renouf 2012) or through topic modelling (Rohrdantz et al. 2012).

Despite the increase in the productivity of *-ity*, 18th-century grammarians do not discuss it as a productive suffix. Campbell (1776) objects to long words in *-ness*, which could possibly be a reaction against an increase in the productivity of *-ness* on complex bases. To determine whether this could be the case, future research should analyse variation in the productivity of *-ness* across different base types in the corpus. The overall productivity of *-ness* does not change in the 18th-century section of the CEEC, nor is there register-based variation in its productivity. Sociolinguistic variation is limited to a near-significant tendency for clergy to overuse *-ness* (cf. its high productivity in sermons discovered by Cowie 1999: 239) and to a significant tendency for royalty to use it less productively, as they tend to repeat the same few *-ness* tokens in fixed expressions (see further Säily 2016).