

The Rivalry between English Adjectives Ending in *-ive* and *-ory*

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1. Introduction¹

One of the peculiarities in the English lexicon is the occurrence of pairs of competing words which share the same base or root, and differ from one another only by their derivational affix. Examples of the plentiful instances of such items include words with *ante-/pre-*, *-ance/-ancy*, *-ence/-ency*, *-ic/-ical*, *-ous/-al*, *in-/un-*, *super-/hyper-*, and *en-/in-*. The most significant reason for the co-existence of rival derivational elements on the one hand, and of the resulting competing words, on the other, is the historical influences that other languages have had on English, most notably, French, Latin, and Greek. In earlier centuries, and particularly in the Early Modern English period, new words were borrowed from foreign languages, and the differences between the source languages have left their mark on English.

The instances of rivalry between word-formational patterns in present-day English has famously been commented on by Marchand (1969), who makes observations on a number of competing affixes, and often explains the etymological background to the co-existing patterns. Similar accounts can likewise be found in earlier grammars and books on English usage. Recently, more concentrated studies have been conducted on individual competing patterns, making use of a variety of methods and databases previously unavailable (e.g., Kwon (1997) on the negative prefixes *in-/un-*, Kaunisto (2001; 2007) and Gries (2001; 2003) on adjectives ending in *-ic/-ical*).

This paper will examine the rivalry between adjectives ending in *-ive* and *-ory*.² In present-day English, there are several adjective pairs in *-ive/-ory*, such as *articulative/articulatory*, *compulsive/compulsory*, *delusivel/delusory*, *derisivel/derisory*, *explorativel/exploratory*, *investigativel/investigatory*, *manipulativel/manipulatory*, *preparativel/preparatory*, and *stimulativel/stimulatory*, to name but a few.³ As noted by Fowler (1926 s.vv. *differentiation*; *-ic(al)*), whenever two or more alternative words exist for the same referent, language tends to either assign different meanings to the rival forms, or “clear away” the unnecessary words. The present study examines the occurrence and use of adjectives in *-ive/-ory* in dictionaries, books on correct language use (such as Fowler 1926), as well as in large, multi-million-word corpora of both historical and present-day English. The study attempts to explore the kind of rival words in *-ive/-ory* which have entered the language, and how (and when) the competition between such words was resolved.

2. Corpus materials used in the study

It can be argued that the variety of possibilities in the study of English lexicology, word-formation, and morphology has been greatly enhanced and improved through the advent of large, multi-million-word

¹ Research on this article has been financially supported by a grant from the Academy of Finland (number 212731).

² It is important to emphasize here that the analysis in the present paper discusses pairs *ending* in *-ive* and *-ory* in English, including loan words, instead of concentrating solely on English-coined adjectives with the affix *-ive* or *-ory* added to the base. An attempt to examine only words coined in English, as will be observed, would be riddled with complexities.

³ Many words ending in *-ive* and *-ory* also have nominal uses, and although there may have been rival noun pairs in *-ive/-ory*, this type of competition is considerably rarer than corresponding instances of rivalry between adjectival pairs in *-ive/-ory*. Therefore nouns ending in *-ive/-ory* are not discussed in greater detail in the present study.

corpora. In fact, lexical studies addressing other than function words or the most commonly used lexical words usually set relatively high requirements on the size of the corpora studied. In order to examine the usage of adjectives in *-ive/-ory* in present-day English, two large corpora were studied: the 100-million-word *British National Corpus (BNC)*, representing written and spoken British English, and the 360-million *Corpus of Contemporary American English (COCA)*, which includes written and spoken American English. The *BNC* materials were examined by using the *BNCWeb* interface⁴ created at the University of Zürich. The *COCA* corpus, compiled by Mark Davies at Brigham Young University, is freely available online (at <http://www.americancorpus.org>). It must be noted that in addition to size, the two corpora have some structural differences, and there is a possibility – though perhaps not particularly drastic in light of the present study – that some of the results gleaned from the corpora could be affected by the differences in their composition. Although the fundamental aim of both corpora is to represent British and American English in general, covering a variety of genres and registers, the overall structures of the corpora differ from each other. Furthermore, the *BNC* covers written texts and transcriptions of spoken language dating from 1960 to 1993 (with the emphasis on 1975-1993), while *COCA* includes 20 million words from each year between 1990 and 2007. Despite these caveats, which appear to be unavoidable in corpus linguistics, it was nevertheless felt that the *BNC* and *COCA* were sufficiently comparable with each other as representing British and American English usage that the results derived from them may be considered as having some validity.

As regards historical materials, the problems faced by linguists even in the present day involve the lack of sufficiently large and representative historical corpora, or electronic archives or databases of texts from earlier centuries, which would come with interfaces that lend themselves easily to linguistic research. For the present study, searches for words in *-ive* and *-ory* were conducted from the commercially available *Literature Online* database, which includes the sections of British prose fiction works from 1514-1903, containing altogether 61.1 million words of text. Similar searches were made on the publicly available version of the *Early American Fiction (1789-1875)* online database, hosted by the University of Virginia (at <http://etext.virginia.edu/eaf>), containing 11.4 million words. In order to include non-fiction texts in the study, an 11.5-million-word collection of non-fiction texts compiled from the Internet, and representing British and American texts from between 1550 and 1960, was examined as well.⁵ The number of words in both the historical and present-day materials in the corpora analysed for the present study, altogether add up to approximately 544 million.

3. Etymological background of *-ive* and *-ory*

As is the case with a substantial number of English affixes, the origins of *-ive* and *-ory* in English can be traced back to Latin and French. The Latin adjectival suffix *-īvus*, the model for the corresponding suffixes in Romance languages, and the English *-ive*, was attached to participial verbal stems, as in *actīvus*, *affirmatīvus*, *captīvus*, and *natīvus*, the core meaning of the suffix being ‘characterised by, having the quality of, or tending to an action’ (*OED*, s.v. *-ive*; Jespersen 1942:453-455; Marchand 1969:315; Miller 2006:203-205). The affix came into English via French loan words in the Middle English period, with the first attested loans in the *OED* including *hastive* (first citation dating from 1297), *abortive* (a1300), *positive* (a1300), *plentive* (c1330), and *active* (1340). The coinage of new words in *-ive* in English has heavily favoured Latinate verb stems, but what probably assisted the incorporation of the suffix into the English derivational system was that the link between the adjectives in *-ive* and their underlying verbs is often transparent.⁶ Marchand (1969:316) observes that a number of Latin loans in *-ive* “could be analysed as derived from [existing] English verbs in *-s* or *-t*”. He points out that this pattern then served as a basis for native coinages with the suffix attached to verbs ending in */t/* or */s/*,⁷ occurring from the sixteenth century onwards, e.g., *boastive*, *combative*, *debatative*, *supportive*,

⁴ For further information on *BNCWeb*, see <http://homepage.mac.com/bncweb/manual/bncwebman-home.htm>.

⁵ For details on the criteria for the selection of texts, and the types of text included in the collection, see Kaunisto (2007:19-20; 304-343).

⁶ In fact, in many instances – though not always – the Latin stems themselves have clear verbal counterparts in English. Very often the stems have served as bases for English verbs in *-ate* (e.g., *appreciate*, *communicate*, *decorate*, *hesitate*, and *investigate*).

⁷ Adams (2001:34) mentions that some bases also end in */z/*, one example being *appraise* > *appraisive*, and Plag (1999:80) further includes bases ending in */d/* in the list. As observed by Metcalfe and Astle, the */d/* at the end of

and *wastive*. In some cases – which are rather few in number – the adjectives have nominal bases, as in *architective*, *bossive*, and *guessive* (see also Bain 1879:248; Plag 2003:97). The English-coined noun-based adjectives recorded in the *OED* are often jocular and not in frequent use; a more established example is *authoritative* from the noun *authority*, following the pattern of the Latin loan *quantitative* and its corresponding noun *quantity* (Marchand 1969:317).

The English suffix *-ory* has its origins in the Latin suffix *-orius*, which in turn was a “compound” affix consisting of the agentive noun suffix *-or* and the adjectival ending *-ius* (*OED* s.v. *-ory*²). According to Marchand (1969:336-337), the Latin adjectives in *-orius* originally had a semantically closer relation to the corresponding “agent substantive” in *-or* (‘pertaining to the entity denoted by the base noun’), but later on the adjectives were increasingly regarded as being connected more directly with the underlying verb. This reinterpretation brought new shades of meaning to subsequent coinages with *-orius*, namely ‘destined to’ and ‘having the quality or nature of’ the action denoted by the base verb. Marchand emphasises that these latter senses are relevant as regards English adjectives in *-ory*. In his view these adjectives clearly relate to the base verb, not the noun in *-or*, for which English applies the adjectival suffix *-(i)al*. Thus, for example, the adjective *executory* relates to the verb *execute*, and *executorial* to the noun *executor*.⁸

The earliest words ending in *-ory* in English are again French loans, the first recorded words in the *OED* including *invitatory* (a1340), *transitory* (c1374), *preparatory* (1413), and *consolatory* (1430). Similarly to the Latin adjectives in *-ivus*, the suffix *-orius* was attached to the second participial stems of verbs, which ended in */t/*, */d/*, */s/*, or */z/*, and this is apparent in English coinages in *-ory* as well. Among the earliest English adjectival coinages in *-ory* are *compellatory* (1527), *recusatory* (1529), *dedicatory* (1565), and *condemnatory* (1563), for which the *OED* gives no Latin or French equivalent (see also Marchand 1969:337).

As can be seen from some of the examples given above, a number of adjectives in *-ive* and *-ory* actually end in *-ative* and *-atory*, and there is some desire to consider the latter elements as suffixes in their own right.⁹ From a purely synchronic point of view, this makes sense in some instances, as adjectives such as *affirmative* and *affirmatory* can be analysed as *affirm* + *-ative/-atory* (Marchand 1969:317, 338; Bauer 1983:224; see also Metcalfe and Astle 1995 s.v. *-ive* and Peters 2004 s.v. *-ative*). A notable example can also be found in the fifteenth-century coinage *talkative*, with *-ative* attached to the native base *talk*. Marchand (1969:317) notes that in this case, the ending mimics the numerous adjectives ending in *-ative*. Indeed, the *-at-* element in several loan words or Latin-based coinages, including *affirmative/affirmatory*, comes from the Latin participial stem of verbs in *-are* (*OED*, s.v. *-ative*). Of course, if a corresponding English verb in *-ate* exists (e.g., *congratulate*), the adjectives would now be analysed as having the suffixes *-ive/-ory* rather than *-ative/-atory*. However, considering the main focus of the present study, i.e., the lexical competition between adjectives ending in *-ive/-ory*, the status of the ending as an affix on the one hand, and the status of the lexeme as a loan word or the result of native derivation on the other, are not crucial issues. The scope of this study includes all those adjectives ending in *-(at)ive* and *-(at)ory* which could conceivably have, or have had, a rival word with the other ending.

4. Earlier comments on the rivalry between *-ive* and *-ory*

An examination of English usage manuals, grammars, and books on English word-formation, shows that competition between adjectives ending in *-ive* and *-ory* has not caught scholars’ attention as much

the base is usually replaced by */s/* in the derivatives, as in *conclude* > *conclusive*, *decide* > *decisive*, *persuade* > *persuasive* (1995:188).

⁸ Garner (2003) observes some instances where adjectives in *-ive/-ory/-orial* might be potentially confused with one another. However, the comments mostly involve reminders on the forms in *-orial* relating to the underlying noun in *-or* rather than the verb. In only one instance, *accusative/accusatory/accusatorial*, does Garner provide examples of the three forms used synonymously. Because of the presumed rareness of instances where forms in *-orial* fall into genuine competition with adjectives in *-ive/-ory*, adjectives in *-orial* are not examined in greater detail in the present study.

⁹ For example, Urdang (1982) gives a separate entry for both *-ative* and *-atory*. Other sources are more likely to list *-ative* rather than *-atory*: in the *OED* and *Chambers Dictionary of Etymology* (1988), *-ative* is given its own entry, whereas *-atory* is not.

as other rival patterns. While the competition between affixes such as *-ic/-ical*, *-ity/-ness*, *-ion/-ment*, *-ancel/-ancy*, *-encl/-ency*, and *in/-in-* has been commented on in many works with separate sections devoted to the affix pairs, and some of them have been the subject of in-depth published studies, the *-ive/-ory* rivalry has received comparatively scant attention. The only sources examined which specifically observe the semantic overlap of *-ive* and *-ory*, and the resulting competition between *-ive/-ory* adjective pairs, are Marchand (1969:338) and Plag (1999:80). In English usage manuals, the practice has usually been to present brief comments on only a few individual adjective pairs in *-ive/-ory*, without a broader entry attempting to highlight the major differences between these adjectives in general. The number of separate entries of competing word pairs often corresponds with whether the rivalry between the affixes in general is also commented on in an entry of its own. As mentioned, the number of *-ive/-ory* adjectives covered in such manuals is relatively low: most works consulted for the present study only have entries for two or three *-ive/-ory* pairs (if any pair is commented on, it is usually *derisive/derisory*). An interesting exception in this respect is Garner (2003), who notes as many as 55 *-ive/-ory* pairs in American English, but again, no generalisations are made on the use of the pairs on the whole.

As regards the rivalry between adjectives in *-ive* and *-ory*, Marchand says that

The usual semantic implication of adjectives in **-ory** is ‘destined to, serving for, tending to –’, but the nuance is often merely ‘connected with, pertaining to –’ what is denoted by the (Latin or English) verb. In the latter shade of meaning, adjectives in **-ive** often compete with those in **-ory** [...] (1969:338)

In other words, Marchand observes the senses in which the adjectives overlap; however, no further commentary is given on possible tendencies to prefer one form over the other, as he does extensively, for example, in the case of adjectives in *-ic/-ical* (Marchand 1969:240-244). This is perhaps because patterns with adjectives in *-ive/-ory* simply did not suggest themselves as clearly.

One thus has to attempt to examine the separate general commentaries made on the affixes *-ive* and *-ory*, and to see whether any major differences between them help in portraying possible preferences in the selection of the form whenever rival forms exist. Paraphrases of the meanings of the affixes provided in grammars, dictionaries, and usage manuals are not always very helpful, as the glosses are often rather vague, or overlap. This is particularly the case with the broader senses of the type ‘relating to’ or ‘characterised by’. However, some observations can be made on the basis of the glosses. Firstly, the sources examined seem to support Marchand’s claim cited above on the two affixes sharing the meaning ‘connected with’ or ‘pertaining to’. If we take it that no major difference is entailed by these paraphrases and others of the type of ‘of or having to do with’, ‘characterized by’, ‘relating to’, and ‘of or involving’, then the sense of “general connection” with the action denoted by the verb is given to both affixes in, e.g., Urdang (1982), *Chambers Dictionary of Etymology* (1988), *Longman Dictionary of the English Language* (1991), *The New Oxford Dictionary of English* (1998), and Stockwell and Minkova (2001). Interestingly enough, the paraphrase ‘tending to’ also occurs as one of the senses given for both affixes, but it is more often found under *-ive* than *-ory*. A sense that is only given for *-ory*, however, is ‘serving for’ (e.g., Marchand 1969:338; Stockwell and Minkova 2001:93). One might therefore postulate whether a distinguishing factor between the affixes is the degree of purpose or intention with which the action of the base verb is performed. In other words, is it possible that in the case of a competing pair of adjectives in *-ive/-ory*, the form in *-ive* indicates a mere tendency towards an action, whereas that in *-ory* suggests a more pronounced aim to perform it? Would one find evidence for such patterns showing that one is more likely to talk about *a celebrative mood* (where the adjective has a descriptive function), but *a celebratory parade* (where the adjective is a classifier)?

One final fascinating remark made on *-ory* worth mentioning is found in Marchand, who says that “[a]ll combinations have a learned or scientific tinge” (1969:336). However, it must be noted that Marchand does not make this observation in contrast with words with any other particular affix. It is unlikely that this feature should play any crucial role in characterising differences between words ending in *-ive/-ory*.

5. Adjectives ending in *-ive* and *-ory* in dictionaries

One way of investigating the historical trends in the rivalry between word-formational processes is to examine the dates of their first citations in the *OED* (see Aronoff and Anshen 1998; Bauer 2001). Although there are several reservations to be had as regards the interpretation of the *OED* data (see, e.g., Görlach 1991; Nevalainen 1999), not only because of the numerous antedatings found to the first citations recorded in the *OED*, a comparison between the numbers of first citations within periods of 50 or 100 years can at least be regarded as indicative of the relative popularity of affixes among new words entering the language in a given period of time.

Table 1 below presents the numbers of first citations of adjectives ending in *-ive* and *-ory* in the *OED*.¹⁰ The figures include both loan words as well as English coinages, which is justifiable for a number of reasons (cf. Kaunisto 2007:45-48). Firstly, the *OED* is not always unequivocal in its etymologies of the adjectives in question, and the true origin of some words may never be clearly resolved. In addition, considering the occurrence of rival pairs in *-ive/-ory*, it is possible for one member of the pair to be a foreign loan, while the other is a result of English coinage. This factor is also relevant from the viewpoint of the overall role that the previous existence and the usage of such word pairs may have in the future coinage and usage of such adjectives. In other words, one must study both the level of coinage and the subsequent use of these lexemes.

Table 1. The numbers of first citations of adjectives ending in *-ive* and *-ory* in the *OED*.

	<i>-ive</i>	%	<i>-ory</i>	%
1250-99	1	100.0	-	0.0
1300-49	6	85.7	1	14.3
1350-99	53	89.8	6	10.2
1400-49	62	91.2	6	8.8
1450-99	48	84.2	9	15.8
1500-49	89	80.2	22	19.8
1550-99	163	64.4	90	35.6
1600-49	376	68.1	176	31.9
1650-99	212	61.6	132	38.4
1700-49	56	51.9	52	48.1
1750-99	65	62.5	39	37.5
1800-49	203	62.3	123	37.7
1850-99	210	63.1	123	36.9
1900-49	33	63.5	19	36.5
1950-89	15	68.2	7	31.8
total	1592		805	

¹⁰ What is of most importance in reading the figures in Table 1 is the horizontal lines indicating the ratios of new adjectives in *-ive* and *-ory*. The numbers of first citations in the vertical columns are obviously relevant, but the changes in the number of new words in either affix from one fifty-year period to the next should not be overinterpreted. For instance, the vertical columns would appear to indicate a sharp decrease in the number of new adjectives in both *-ive* and *-ory* in the eighteenth century, followed by an equally drastic increase in the nineteenth century. Although to some extent this may correspond with the actual entrance of new words in the lexicon across the centuries, it is possible that the drop, observed with several other affixes in the *OED* (e.g., *-ment* in Bauer 2001:9), is a reflection of the differences in the variety of source materials used by the compilers of the dictionary (see, e.g., Nevalainen 1999:338).

Since the study examines those patterns of usage of *-ive* and *-ory* which could have produced rival pairs, the analysis excludes noun-based instances of English coinage with *-ive*, a pattern which is not attested for *-ory* either in the previous literature or among the *OED* entries.

Examining the first citations of the adjectives in Table 1, there are several things to observe. To begin with, the adjectives in *-ive* outnumber those in *-ory*, with the *OED* listing approximately twice as many adjectives in *-ive* as in *-ory*. The difference between the numbers of new words in *-ive* and *-ory* is highest in the Middle English period, which demonstrates the strong influence that French had on English at the time. It can be seen that the proportion of new words in *-ory* does not begin to increase to a marked degree until the sixteenth century, which in turn reflects the increasing flow of Latin loans.

The *OED* includes altogether 459 pairs of adjectives in *-ivel-ory*. This is a sizeable number: of all the adjectives ending in *-ory*, more than half have had a rival form in *-ive*, and conversely, almost three out of 10 adjectives in *-ive* have had a rival ending in *-ory*. Table 2 below shows the numbers of first citations of these adjectives in different fifty-year periods, dividing them into groups according to whether the word occurred before or after its rival form.¹¹

Table 2. First citations of rival adjective pairs in *-ivel-ory*.

	<i>-ive</i> before <i>-ory</i>	<i>-ory</i> before <i>-ive</i>	<i>-ive</i> after <i>-ory</i>	<i>-ory</i> after <i>-ive</i>
1300-49	1	1	-	-
1350-99	16	2	-	-
1400-49	20	6	2	-
1450-99	18	8	1	-
1500-49	29	11	1	2
1550-99	39	53	13	17
1600-49	60	46	47	53
1650-99	27	25	31	41
1700-49	6	9	9	20
1750-99	10	12	13	13
1800-49	18	16	40	41
1850-99	9	5	33	57
1900-49	-	1	3	8
1950-89	-	-	2	1
total	253	195	195	253

As can be seen in Table 2, of all the adjective pairs in *-ivel-ory*, 253 words in *-ive* occurred before their counterparts in *-ory*, whereas 195 adjectives in *-ory* were recorded before their rivals in *-ive*. The difference between these numbers is, however, not very drastic. Looking at the separate fifty-year periods, we may note that this difference is most pronounced in the Middle English period; in fact, the figures for the latter half of the sixteenth century show that there were more new adjectives in *-ory* (53) without a previously existing counterpart than corresponding ones in *-ive* (39). This again may be regarded as a reflection of the increased influence of Latin in comparison to the earlier centuries. The numbers for the neologisms in *-ive* and *-ory* (i.e., in the columns “*-ive* before *-ory*” and “*-ory* before *-ive*”) in the following fifty-year period show that the situation became more balanced. As for the two columns on the right-hand side, which present the numbers of first citations for those adjectives that “completed the pair” (and thus contributed to the lexical rivalry), the same rise with adjectives in *-ory* can be seen in the Early Modern English period.

¹¹ In 11 instances, the first citations of the rival *-ivel-ory* adjectives were dated from the same year, and are not included in Table 2.

The larger overall number of adjectives ending in *-ive* is also evident in their inclusion in a number of Early Modern English dictionaries, as can be seen in Table 3, which presents the type frequencies of adjectives in *-ive* in *-ory* in the entries or definitions in the dictionaries.¹²

Table 3. The type frequencies of adjectives ending in *-ive* and *-ory* in Early Modern English dictionaries.

	<i>-ive</i>	<i>-ory</i>	# of <i>-ive/-ory</i> pairs
Mulcaster (1582)	26	15	2
Coote (1596)	10	1	-
Cawdrey (1604)	18	5	-
Bullokar (1616)	45	18	1
Cockeram (1623)	63	20	1
Blount (1656)	158	49	1
Kersey (1702)	121	48	5

One can observe from the figures in Table 3 that the numbers of adjectives in *-ive* are larger than those in *-ory* in all dictionaries examined. The overall numbers of adjectives included also generally increase over time, which probably reflects both the developments in the art of lexicography as well as the expansion of the vocabulary. One striking detail in Table 3, however, is the low number of rival pairs in *-ive/-ory*. In Kersey (1702), the five rivals in *-ive/-ory* are *decisive/decisory*, *declarative/declaratory*, *executive/executory*, *exhortative/exhortatory*, and *persuasive/persuasory*, and the two forms are presented as synonymous. The practice of mentioning alternate forms began to increase after Johnson's 1755 dictionary, and in present-day general dictionaries, the inclusion of rival variants is frequent: for example, *Collins English Dictionary* (1995) lists 130 competing pairs in *-ive/-ory* altogether.

As noted earlier, previous literature shows few generalisations made on the adjectives ending in *-ive* and *-ory*, especially in relation to another. One of the safest generalisations to be made based on observing the adjectives without rivals in the *OED* is the use of *-ive* in grammatical and linguistic terms, e.g., *ablative*, *allative*, *conjunctive*, *genitive*, *nominative*, and *preteritive*. This preference already existed in Latin and French, and is clearly visible in the English lexicon through loans (see also Miller 2006:211-214). The suffix *-ive* also appears to be more common than *-ory* when attached to already-existing verbs in English, as in *adjustive*, *appointive*, *boastive*, *caressive*, *chattative*, *floatative*, *perpetuative*, and *thinkative*. Similar words in *-ory*, however, have been coined as well, e.g., *condolatory*, *corroboratory*, *negotiatory*, and *propagatory* – some of them being as playful in tone as the ones in *-ive*, as *puffatory* and *thumpatory*. Some English deverbal coinages have produced competing *-ive/-ory* pairs, e.g., *advisive/advisory*, *accelerative/acceleratory*, *articulative/articulatory*, *celebrative/celebratory*, *innovative/innovatory*, *regulative/regulatory*, and *scribbleative/scribbleatory*. The relation between the numbers of such coinages in *-ive* and *-ory* largely reflects the difference between all the adjectives in *-ive* and *-ory*. Otherwise, obvious differences between their uses are hard to tease out. Considering Marchand's note on the "learned or scientific tinge" of the adjectives in *-ory* (1969:336), it must be observed that this applies to adjectives in both *-ive* and *-ory*, without a perceptible difference between the two types.

6. The corpus study

Given the considerably larger sizes of the available modern English corpora, the study emphasized the identification of the most prominent adjectival rivals in *-ive/-ory* in the 100-million-word *BNC* and the 360-million word *COCA* corpora. The 84-million word historical data was then examined in order to

¹² The results in Table 3 are based on searches from a selection of dictionaries in the *Lexicons of Early Modern English* database (*LEME*; edited by Ian Lancashire), a commercially available online database at <http://leme.library.utoronto.ca>.

cast additional light on the possible differences and similarities in the use of the adjectives. In the selection of *-ivel-ory* pairs for closer study from the present-day corpora, the minimum frequency of the less common form was set at 40, mainly to ensure that there would be a sufficient number of occurrences to draw conclusions from.¹³

The search for rival pairs in *-ivel-ory* in the corpus data produced a fascinating result in that the corpora included only a few competing pairs which exceeded the frequency threshold. The *BNC* provided eight, and *COCA* ten pairs that met the set criteria. Compared to words with other rival endings, this is a low number; for example, Gries' analysis of adjectives in *-ic/-ical* (2003:60) shows that the 90-million-word written section of the BNC includes as many as 39 pairs meeting the same criteria. Table 4 below presents the adjective pairs with the highest frequencies in *BNC* and *COCA*:

Table 4. The most frequently occurring *-ivel-ory* adjective pairs in *BNC* and *COCA*.

	<i>BNC</i> <i>-ivel-ory</i>	<i>COCA</i> <i>-ivel-ory</i>
<i>compulsive/compulsory</i>	238 / 1696	984 / 956
<i>cursive/cursory</i>	68 / 159	213 / 550
<i>declarative/declaratory</i>	43 / 16	261 / 97
<i>derisive/derisory</i>	91 / 85	229 / 32
<i>discriminative/discriminatory</i>	18 / 255	53 / 1155
<i>illusory/illusory</i>	2 / 205	67 / 573
<i>innovative/innovatory</i>	1007 / 93	5429 / 2
<i>investigative/investigatory</i>	290 / 42	2615 / 85
<i>participative/participatory</i>	110 / 143	145 / 932
<i>refractive/refractory</i>	59 / 69	119 / 188
<i>regulative/regulatory</i>	17 / 1200	100 / 6771
<i>transitive/transitory</i>	54 / 132	59 / 392

Of the twelve pairs in Table 4, *cursive/cursory* and *refractive/refractory* were excluded from closer analysis, as their forms have had distinctly separate meanings since they were introduced into the English lexicon and thus have not entered into genuine lexical competition with each other.¹⁴

In the historical materials, *-ivel-ory* pairs were likewise few, and the token frequencies were fairly low. However, some supplementary observations can be made on the earlier uses of the ten adjectives examined below.

6.1. *Compulsive/compulsory*

Both *compulsive* and *compulsory* were originally used synonymously, both in the sense 'forced, obligatory' and 'compelling, coercive'. This is also apparent in the *Literature Online* material, which includes instances of the adjectives used synonymously by the same writer:

- (1) a. [...] he was, therefore, of opinion, that if the king of Corea had in any shape deviated from the neutrality which he professed, satisfaction should be demanded in the usual form; and when

¹³ Drawing conclusions on the use of low-frequency words may sometimes be hazardous, since even with multi-million word corpora, idiosyncratic uses in individual texts can drastically skew the results. It is therefore vital not to put too much weight on the absolute frequencies of words; instead, one must be mindful of the numbers of texts including the sought item.

¹⁴ *Cursive* has always related to a style of writing, and the common sense of *cursory* is 'running over a subject in a rapid, hurried manner'. *Refractive* has generally referred to the refraction of light, while *refractory* means 'stubborn'. The *OED* does include a sense for *refractive* (s.v.) identical to *refractory*, but this is labelled "rare", and none of the instances of *refractive* in the corpora studied had this sense.

that should be refused, it might be sound necessary to proceed to compulsive measures. (Tobias Smollett, *Adventures of an Atom* (1769), 98-99)

- b. Finally, Gotto-mio acceded to this system, which he had formerly approved in conjunction with Twitz-er; and preparations were made for using compulsory measures, should the colonists refuse to submit with a good grace. (Tobias Smollett, *Adventures of an Atom* (1769), 187)

In present-day English, however, the most common sense of *compulsive*, seen in both *BNC* and *COCA* is ‘suggestive of obsession’, as in *a compulsive gambler*, while some instances can be found in the sense ‘having the power to compel’. *Compulsory*, on the other hand, today almost always means ‘obligatory’, as in *compulsory military service*. The psychological sense for *compulsive* was introduced in the early twentieth century, and the semantic differentiation between the two forms has since become quite complete. In fact, it appears that the differentiation is regarded as so clear that the pair has not been commented on or given an entry in any of the usage manuals consulted for this study.

6.2. Declarative/declaratory

The only usage manual consulted which comments on the *declarative/declaratory* pair is Garner (2003 s.v. *declarative; declaratory; declamatory*). He notes that the two forms are largely synonymous, both meaning ‘having the function of declaring’, but that their uses have become fixed in different contexts: *declarative* is used as a grammatical concept (as in *a declarative sentence*), whereas *declaratory* is the preferred form in the language of legislature and government (e.g., *declaratory judgements*). This view is also borne out by the present-day corpora, especially *COCA*.

6.3. Derisive/derisory

As mentioned in Chapter 4, among the rival pairs in *-ive/-ory*, *derisive/derisory* is the pair that one is most likely to find mentioned in usage manuals (e.g., Copperud 1980 s.v. *derisive, derisory*; Bailie and Kitchin 1988 s.v. *derisive, derisory*; Howard 1993 s.v. *derisive or derisory*). This may partly have to do with the example of influential works in the field, such as Fowler (1926), but also because the pair shows a high degree of semantic differentiation. Originally both forms were synonymous, meaning ‘expressing derision’, as in the following examples:

- (2) a. Gertrude colored to her temples, for it was Mrs. Ellis’ voice, and the tone in which she spoke was very derisive. (Maria S. Cummins, *The Lamplighter* (1854), 128)
- b. Pluck nearly split with laughter at what she related of the Master and the Primer, whereby also Rose was similarly affected, yet not so naturally as the old man, but like one startled from a dream, or in whom an imprisoned phantasmal voice breaks out wild and derisory. (Sylvester Judd, *Margaret*, Vol. 1 (1851), 267)

In the late nineteenth century, *derisive* also began to be used in the sense ‘worthy of derision, laughable’, as in *The offer they made was derisive*. This sense was later assigned to *derisory*, and the form in *-ory* gradually became favoured with the use. Peters (2004 s.v. *derisive or derisory*) points out that in the *BNC*, the form in *-ive* almost always carries the sense ‘expressing derision’, often modifying nouns such as *laugh, tone, and attitude*, but that *derisory* sometimes also has this sense as well. Peters also notes that *derisory* is considerably less frequent than *derisive* in American English, and that in the 140-million-word section of American English in the *Cambridge International Corpus*, *derisive* also means ‘laughable’. However, while the occurrences of the adjectives in the *COCA* data indeed show that *derisory* is considerably rarer, *derisive* was not once used in this sense. As for the 32 occurrences of *derisory*, half of them had the sense ‘laughable’, and the other half meant ‘expressing derision’.

6.4. Discriminative/discriminatory

Of the two forms, *discriminative* is older, having emerged in the seventeenth century. The form in *-ory* was coined in the early nineteenth century. The adjectives were originally used synonymously, meaning ‘relating to making distinctions’. In the twentieth century, a new sense with a noticeably negative value judgement has been assigned to *-ory*, used when referring to unfair or prejudiced treatment of groups of people, as in “Our present travel and immigration policies are grossly discriminatory for persons with HIV infection” (*PBS Newshour*, June 20, 1990; from the *COCA* corpus). This is the most common sense of *discriminatory* in both *BNC* and *COCA*. The considerably less numerous instances of *discriminative* in both corpora only carry the neutral sense, often in texts relating to behavioural sciences. Occasionally the form in *-ory* is found in the neutral sense as well, although less often. Examples (3a) and (3b) below include instances of *discriminative* and *discriminatory* used in the sense ‘relating to making distinctions’:

- (3) a. And so the experience of seeing something as blue has logical conditions in that one logically cannot have it unless one can discriminate between objects in respect of their being or not being blue. To someone without this discriminative capacity, either congenitally or because it has not been developed, a thing can present a blue appearance, but he cannot see it as blue. (*BNC*, CK1 226)
- b. Most of the respondents could manage the tests associated with the comb, cup, spoon, sugar and gloves. But items such as the ability to name four parts of a watch, to tell the time, to identify three coins, and follow verbal and written instructions in order to select the correct one of two tablet bottles, had more discriminatory power. (*BNC*, BOW 746)

Considering the great difference between the numbers of occurrences of the two forms in *BNC* and *COCA*, one might assume that *discriminative* is being ousted from the language. Although this may be the case in general everyday language (where even *discriminatory* might not be heavily prominent), it is also possible that *discriminative* has already become sufficiently established to keep its place in the language of various scientific fields, such as psychology.

Interestingly enough, the *OED* entries for the adjectives do not clearly convey the difference between the two forms; in fact, the definition of *discriminatory* consists merely of a crossreference to *discriminative*.

6.5. Illusive/illusory

The original sense of the two adjectives is ‘of the nature of an illusion’ or ‘giving false impression, deceptive’, as in “the actors really knew all the time that their professions were illusory” (*BNC*, A69 1151). In this sense, *illusory* is nowadays the favoured form, as can be seen in the raw frequencies of the adjectives in Table 4. Sometimes *illusive* is also found in this sense:

- (4) For more than a week, designers here have searched for updated definitions of femininity and romance in their spring '97 collections. They have dissected the terms and experimented with all of the components that come together to make that illusive magic, and two designers even flirted with the legend of Coco Chanel. (“Paris flirts with Chanel”, *Houston Chronicle*, Oct. 16, 1996)

According to Garner (2003 s.v. *elusive*; *elusory*; *illusory*; *illusive*; *allusive*), *illusive* is often mistakenly used in the sense of *elusive* ‘hard to grasp, catch, or understand’, probably because of their phonological likeness. Some examples of *illusive* in this sense were found in the *COCA* corpus, e.g., “detectives had followed a winding trail in pursuit of an illusive murderer” (“Dangerous Liaisons”, *NBC Dateline*, May 4, 2007). Garner similarly provides some examples involving people trying to avoid being captured. However, it could be argued that the difference between the senses ‘illusion-like’ and ‘hard to understand’ are very difficult to clearly distinguish from one another when reference is being made to abstract or semi-abstract concepts. For example, the adjective in *the illusive forces of terrorism* could as well refer to the “hard-to-catch” nature of the terrorists as well as their deceptively “illusion-like” characteristics. Thus the areas semantically covered by *elusive* and *illusive* may, in fact,

overlap. What further complicates the analysis of the corpus data is that some of the instances of *illusiv*e (such as the example of the “illusive murderer”) are found in transcriptions of radio and TV broadcasts, and it is not entirely impossible that *illusiv*e has merely replaced *elusiv*e during the transcription process.

6.6. *Innovative/innovatory*

Based on the corpus data, *innovative* appears always to have been used more frequently than *innovatory*. In *COCA*, *innovatory* occurs only twice. The adjectives mostly tend to mean ‘having the quality of innovating, introducing something new’, and no difference has been observed or proposed as existing between the uses of the two forms – none of the usage manuals consulted even provided an entry for the pair. However, the 93 instances (in 65 texts) of *innovatory* in the *BNC* urge one to try to suggest uses that might separate it from *innovative*. Although the majority of instances appear to have the descriptive sense of ‘innovating, introducing something new’, in some cases, there may be room to think of *innovatory* as having a more classifying function, having the sense of ‘relating to innovations’:

- (5) It would be tragic if teachers committed to achieving worthy and high ideals felt that idealism was dead, and if the innovatory drive which has characterised English schools ran out of energy. (*BNC*, B28 1640)

In example (5), it is conceivable that the drive of English schools that is referred to was not actively ‘innovating’ itself, but that the drive involved in a more passive sense the aim of producing educational innovation. It must be noted, however, that clear examples of this type from the data are hard to come by, and that even such a use would not separate the uses of the two forms, as similar examples of *innovative* can be found. For instance, the data includes cases of *innovative capacity/potential/resources*, where one might likewise perceive a more classifying rather than a descriptive sense. Thus it seems apparent that the two forms have the same uses, with *innovative* being clearly favoured with all of them.

6.7. *Investigative/investigatory*

According to the *OED*, both *investigative* and *investigatory* were coined in the early nineteenth century (the first citations dating from 1803 and 1836 respectively), both meaning ‘characterized by investigation, inclined to investigation’. The present-day corpora show a clear preference towards the use of *investigative*. As noted in the *OED*, *investigative* has produced a number of fixed expressions, especially in relation to journalism, e.g., *investigative journalism/journalist/reporting/writer*. In both the *BNC* and *COCA* corpora, instances relating to journalism do indeed favour the form in *-ive*. Otherwise, the two forms are used in a broadly similar fashion. Both forms are used in reference to official entities serving the purpose of investigating, with no clear difference apparent in their use when modifying words such as *agency/authorities/board/body/committee/powers*. In fact, Garner (2003 s.v. *investigative; investigatory*) proposes *investigatory* to be ousted altogether if a clear line of differentiation does not emerge.

6.8. *Participative/participatory*

The basic meaning given for both *participative* and *participatory* in the *OED* is ‘participating, characterized by participation’. Interestingly, the *OED* also includes comments on their specific areas of use. The field of business administration and its conventions of decision-making have been singled out under the entry for *participative* (*OED* s.v., sense b). The entry for *participatory*, on the other hand, notes the adjective as used in the same sense, but “spec. in government, etc., involving members of the community in decisions; allowing members of the general public to take part, as *participatory art, broadcasting, democracy, radio, television, theatre*”. The *BNC* includes 110 instances of *participative* in 48 different texts, and 143 instances of *participatory* in 70 texts. It is interesting to observe that the special fields of usage for the two forms noted in the *OED* are prominent in the corpus. Most of the occurrences dealing with business management prefer the use of *participative* (often modifying words

such as *approach*, *management (style)*, and *method*). *Participatory*, on the other hand, is clearly favoured when referring to democracy, with some variation between the two forms: the phrase *participative democracy* occurs in the corpus 7 times (in 5 different texts), and *participatory democracy* 47 times (in 18 texts). As regards other types of activity, both forms were found, with a tendency to favour the form in *-ory* in connection with references to radio and television broadcasting.

As for the use of the adjectives in American English, Garner (2003 s.v. *participatory*; *participative*) regards *participative* as a “needless variant” which could be dropped from use. In *COCA*, the number occurrences of *participatory* (932) is considerably greater than that of *participative* (145). In the *BNC*, the corresponding frequencies of each form were more even; it appears that the occurrence of the forms in British and American English differ on this point. Furthermore, the lines of differentiation between the forms according to field of use are perhaps not as pronounced as in British English. Of all the instances of *participative*, a greater proportion deals with styles of management than is the case with *participatory*, but it does appear that *participatory* is used in this connection as well.

6.9. *Regulative/regulatory*

As can be seen in Table 4, the frequencies for *regulative/regulatory* in the present-day corpora show a strong preference for the use of *regulatory*, although *regulative* is of much earlier origin (the first citation in the *OED* of *regulative* dates from 1599, and that of *regulatory* from 1823). The predominance of the form in *-ory* is also observed by Garner (2003 s.v. *regulatory*; *regulative*). The occurrences of the adjectives in the corpora do not suggest any drastic signs of differentiation between the two forms. The fact that *regulatory* appears to be the “regular” word is reflected in the relative rarity of the use of *regulative* with administrative or legislative contexts, i.e., *regulatory* is preferred with nouns such as *agency/body/committee*.

6.10. *Transitive/transitory*

The *OED* definitions for *transitive* and *transitory* show these adjectives as sharing some of their early uses (e.g., ‘passing into another condition, momentary, transient’), while *transitive* has also major uses in the terminology of grammar (‘having a direct object’), logic, and mathematics. The occurrences of the adjectives in the corpora indicate that in present-day English their uses do not tend to overlap, as the uses of *transitive* are almost exclusively within the realm of terminology. It is therefore not surprising that the pair has not been commented on in usage manuals.

7. Summary of the findings

There are several things to point out and discuss in the results of the study, considering the listings and first citations of the adjectives in *-ive* and *-ory* in the *OED*, the occurrence of competing *-ive/-ory* pairs in the corpus data, as well as the characterizations of the usage of the rival pairs in usage manuals. First of all, the number of competing rival pairs in the *OED* is noteworthy, with approximately half the recorded words in *-ory* having a counterpart ending in *-ive*, constituting some 450 competing pairs. However, the corpora examined included only a small fraction of those pairs, particularly as regards items with any meaningful token frequencies. It may therefore be concluded that the large number of *recorded* rival pairs does not necessarily predict substantial rivalry between the words. In many cases, it appears that the recorded adjectives in *-ive* and *-ory* (or just one member of the rival pairs) may always have been rare, or a number of them have become obsolete. Of course, one factor that may have an effect on the low number of rivals is the nature of the corpora examined. Considering that adjectives in both *-ive* and *-ory* may be regarded as having “a learned, scientific tinge”, it is possible that more rivals in *-ive/-ory* could be found in corpora including more scientific texts. Be that as it may, further examination of the issue would require more voluminous corpora.

The relatively low number of prominent competing pairs in *-ive/-ory* is largely in line with the occurrence of entries for such pairs in books on “correct” English usage. Other types of competing items, e.g., words ending in *-ic/-ical*, *-ancel-ancy*, or *-encel-ency* are more frequently covered in these books. One curious exception is Garner (2003), who gives more entries for *-ive/-ory* pairs than for those in *-ancel-ancy* and *-encel-ency* combined (which are more numerous in most other usage manuals). One

possible explanation of this may be the relatively frequent occurrence of words in *-ive* and *-ory* in the language of legal English, on which Garner has published specialized usage manuals.

Considering the ten *-ive/-ory* pairs discussed individually in Chapter 6, the group can be characterized as fairly heterogeneous as regards the degree and type of differentiation between the forms. The uses of some of the pairs are fairly straightforward, and are covered with only a few remarks, while others show potential for more in-depth study in the future. It also appears that the competition between the forms has been resolved – or partially resolved – in a variety of ways. The differentiation of some pairs has occurred by assigning each form more or less clearly separate meanings. The pair with the highest level of semantic differentiation is *compulsive/compulsory*, followed by *derisive/derisory*. In the case of some other pairs, such as *declarative/declaratory* and the British English usage of *participative/participatory*, the meanings of each are basically similar, but the forms have diverged into different contexts or domains of use. A third group of rivals includes cases where the two forms are synonymous, but one of the forms is clearly predominant, suggesting a possible further weakening and gradual ousting of the unnecessary variant. Such pairs, according to the corpus study here, include *illusiv/illusory*, *innovative/innovatory*, *regulative/regulatory*, and possibly also *participative/participatory* in American English. The variation in the behaviour even with these four pairs can be noted, as in three of these cases the form in *-ory* is the dominant one (*illusory*, *regulatory*, *participatory*), whereas with *innovative/innovatory*, the form in *-ive* is the more frequent one. Finally, two of the pairs examined show signs of two of these tendencies: while the uses of *discriminative/discriminatory* are indicative of semantic differentiation, the overall frequencies of the two pairs are lopsided, and may again suggest that the viability of the rarer form (*discriminative*) might be questioned in the future. In the case of the synonymous rivals *investigative/investigatory*, on the other hand, one of the forms (*investigative*) was found to have produced fixed expressions with domain-specific words, while the rival form (*investigatory*) was also considerably less frequent and thus possibly in danger of extinction in the years to come. It can thus be said that at least among the words discussed here, there have been a number of ways of resolving the competition, without any one pair having affected all the others by analogy.

8. Conclusion

Based on the results of the present study, it can be said that while the analysis of the dictionary as well as corpus data revealed a number of things about the rivalry between English adjectives ending in *-ive/-ory*, some of the questions originally posed remained unanswered, and new questions suggest themselves. Further examination of a larger number of pairs in *-ive/-ory* might provide more information on the temporal aspects of different types of processes of change. For example, have there been general tendencies to oust one of the forms in any period of time, and if so, has there been there any kind of consistency or harmony as to which forms were favoured? Considering the trends of change in recent history seen in connection with the words examined in the present study, it was seen that some more drastic changes did not begin until the twentieth century. This reminds us that the use of many *-ive/-ory* pairs, like language in general, is in a constant state of flux, and we must try to find means to examine the shifts more closely and based on the present currents of change, even attempt to see what the language will be like tomorrow. It appears that achieving a fuller understanding of some of the issues discussed in the present paper still requires further study on corpora even larger than the ones examined here – sometimes even half a billion words of corpus data is not enough. Clearly generalisable tendencies affecting the choice of using the forms in *-ive* and *-ory* are somewhat elusive. It is to be hoped, however, that the answers to the questions remaining will not be entirely illusive/illusory.

References

- Adams, Valerie. 2001. *Complex Words in English*. Harlow: Longman.
- Aronoff, Mark and Frank Anshen. 1998. "Morphology and the lexicon: lexicalization and productivity", in *The Handbook of Morphology*, edited by A. Spences and A.M. Zwicky. Oxford: Blackwell. pp. 237-248.
- Bailie, John and Moyna Kitchin. 1988. *The Essential Guide to English Usage*. London: Chancellor Press.
- Bain, Alexander. 1879. *A Higher English Grammar*. London: Longmans and Co.
- Bauer, Laurie. 1983. *English Word-formation*. Cambridge: Cambridge University Press.

- Bauer, Laurie. 2001. *Morphological Productivity*. Cambridge: Cambridge University Press.
- Blount, Thomas. 1656. *Glossographia*. London: Printed by T. Newcomb. Wing B3334. Electronic version included in the *Lexicons of Early Modern English* database (<http://leme.library.utoronto.ca>).
- Bullokar, John. 1616. *An English Expositor*. London: Printed by J. Legatt. STC 4083. Electronic version included in the *Lexicons of Early Modern English* database (<http://leme.library.utoronto.ca>).
- Burchfield, Robert (ed.). 1996. *The New Fowler's Modern English Usage*. 3rd edition, 1st edition 1926. Oxford: Clarendon Press.
- Cawdrey, Robert. 1604. *A Table Alphabeticall*. London: Printed by I.R. for E. Weauer. STC 4884. Electronic version included in the *Lexicons of Early Modern English* database (<http://leme.library.utoronto.ca>).
- Chambers Dictionary of Etymology*. 1988. Edinburgh: Chambers.
- Cockeram, Henry. 1623. *The English Dictionarie*. London: Printed by Eliot Court's Press for N. Butter. STC 4561. Electronic version included in the *Lexicons of Early Modern English* database (<http://leme.library.utoronto.ca>).
- Collins English Dictionary*. 1995. 3rd edition, 1st edition published 1979. London: HarperCollins.
- Coote, Edmund. 1596. *The English Schoole-maister*. London: Printed by the Widow Orwin, for R. Iackson and R. Dexter. Electronic version included in the *Lexicons of Early Modern English* database (<http://leme.library.utoronto.ca>).
- Copperud, Roy H. 1980. *American Usage and Style*. New York: Van Nostrand Reinhold.
- Fowler, Henry W. 1926. *A Dictionary of Modern English Usage*. Oxford: Clarendon Press.
- Garner, Bryan. 2003. *Garner's Modern American Usage*. 2nd edition, 1st edition (published as *A Dictionary of Modern American Usage*) 1998. Oxford: Oxford University Press.
- Gries, Stefan Th. 2001. "A Corpus-linguistic Analysis of English *-ic* vs *-ical* Adjectives", in *ICAME Journal*, 25. pp. 65-107.
- Gries, Stefan Th. 2003. "Testing the sub-test: a collocational-overlap analysis of English *-ic* and *-ical* adjectives", in *International Journal of Corpus Linguistics*, 8.1. pp. 31-61.
- Görlach, Manfred. 1991. *Introduction to Early Modern English*. Cambridge: Cambridge University Press.
- Howard, Godfrey. 1993. *The Good English Guide. English Usage in the 1990s*. London: Macmillan.
- Jespersen, Otto. 1942. *A Modern English Grammar on Historical Principles. Part VI: Morphology*. Copenhagen: E. Munksgaard.
- Kaunisto, Mark. 2001. "Nobility in the History of Adjectives Ending in *-ic* and *-ical*", in *LACUS Forum XXVII*, edited by R.M. Brend, A.K. Melby, and A.L. Lommel. Fullerton, Ca.: Linguistic Association of Canada and the United States. pp. 35-45.
- Kaunisto, Mark. 2007. *Variation and Change in the Lexicon: a corpus-based analysis of adjectives in English ending in -ic and -ical*. Amsterdam and New York: Rodopi.
- Kersey, John. 1702. *A New English Dictionary*. London: Printed for H. Bonwicke. Electronic version included in the *Lexicons of Early Modern English* database (<http://leme.library.utoronto.ca>).
- Kwon, Heok-Seung. 1997. "Negative prefixation from 1300 to 1800: a case study in *in-/un-* variation", in *ICAME Journal*, 21. pp. 21-42.
- Longman Dictionary of the English Language*. 1991. Burnt Hill: Longman.
- Marchand, Hans. 1969. *The Categories and Types of Present-Day English Word-Formation*. 2nd edition, 1st edition 1960. München: C.H. Beck.
- Metcalfe, J.E. and C. Astle. 1995. *Correct English*. Tadworth: Clarion.
- Miller, D. Gary. 2006. *Latin Suffixal Derivatives in English and their Indo-European Ancestry*. Oxford: Oxford University Press.
- Mulcaster, Richard. 1582. *The First Part of the Elementarie which entreateth of right writing of our English tung*. Printed by T. Vautroullier. STC 18250. Electronic version included in the *Lexicons of Early Modern English* database (<http://leme.library.utoronto.ca>).
- Nevalainen, Terttu. 1999. "Early Modern English Lexis and Semantics", in *The Cambridge History of the English Language, Volume III: 1476-1776*, edited by Roger Lass. Cambridge: Cambridge University Press. p. 332-458.
- The New Oxford Dictionary of English*. 1998. Oxford: Clarendon Press.
- The Oxford English Dictionary*. 1992. 2nd edition on compact disc, prepared by I.A. Simpson and E.S.C. Weiner. 1st edition 1933. Oxford: Oxford University Press and Software. (*OED*)
- Peters, Pam. 2004. *The Cambridge Guide to English Usage*. Cambridge: Cambridge University Press.
- Plag, Ingo. 1999. *Morphological Productivity. Structural Constraints in English Derivation*. Berlin: Mouton de Gruyter.
- Plag, Ingo. 2003. *Word-Formation in English*. Cambridge: Cambridge University Press.
- Stockwell, Robert and Donka Minkova. 2001. *English Words: History and Structure*. Cambridge: Cambridge University Press.
- Urdang, Laurence. 1982. *Suffixes and Other Word-Final Elements of English*. Detroit: Gale Research Company.

Selected Proceedings of the 2008 Symposium on New Approaches in English Historical Lexis (HEL-LEX 2)

edited by R. W. McConchie,
Alpo Honkapohja, and Jukka Tyrkkö

Cascadilla Proceedings Project Somerville, MA 2009

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Kaunisto, Mark. 2009. The Rivalry between English Adjectives Ending in *-ive* and *-ory*. In *Selected Proceedings of the 2008 Symposium on New Approaches in English Historical Lexis (HEL-LEX 2)*, ed. R. W. McConchie, Alpo Honkapohja, and Jukka Tyrkkö, 74-87. Somerville, MA: Cascadilla Proceedings Project.

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Kaunisto, Mark. 2009. The Rivalry between English Adjectives Ending in *-ive* and *-ory*. In *Selected Proceedings of the 2008 Symposium on New Approaches in English Historical Lexis (HEL-LEX 2)*, ed. R. W. McConchie, Alpo Honkapohja, and Jukka Tyrkkö, 74-87. Somerville, MA: Cascadilla Proceedings Project. www.lingref.com, document #2168.