

## 5 EARLY MODERN ENGLISH LEXIS AND SEMANTICS

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### 5.1 Introduction

#### 5.1.1 Overview

Despite the long life and stability of core vocabulary, the rate of language change is no doubt greatest in the lexicon. Lexical words differ from phonemes and grammatical morphemes in that they can be freely added to the existing stock. As we shall see in more detail below, the Early Modern English period is marked by an unprecedented lexical growth. It is achieved both by extensive borrowing from other languages and by exploiting native resources by means of word-formation.

One of the most obvious differences between Old English and Present-Day English is the increase in borrowed lexis. According to one estimate, loan words take up a mere three per cent of the recorded vocabulary in Old English, but some seventy per cent or more in Present-Day English (Scheler 1977: 74). In Early Modern English their share varies between forty per cent and fifty per cent of the new vocabulary recorded (Wermser 1976: 40).

This large-scale borrowing no doubt reflects both the various foreign contacts of the period and the growing demands made on the evolving standard language. This is the period in the history of English when for the first time the vernacular extends to practically all contexts of speech and writing. Borrowed lexis supplies new names for new concepts, but also increases synonymy in the language, thus providing alternative ways of saying the same thing in different registers.

The means by which words are formed are increased by a number of new productive elements that owe their existence to borrowed lexis. Towards the end of the Early Modern English period the set of negative prefixes, for example, includes not only the native *un-* but also four ele-

ments of foreign origin, *a-*, *dis-*, *in-* and *non-*. They are largely used to form new words from the borrowed section of Early Modern English lexis, as in *asymmetric*, *dissimilar*, *infrequent*, and *non-member*.

The reverse side of borrowing is that it contributes to lack of transparency in the lexicon. It had started to build up with the French element in Middle English, and continues especially with the intake of Latinate vocabulary in the Early Modern English period. As a result, English shows no formal connection between a large number of semantically related words, such as *amatory* and *love*, *audition* and *hearing*, and *anatomy* and *cutting up*.

Against this background it is not surprising that vocabulary building is one of the concerns of Early Modern educationalists. Charles Hoole, a London schoolmaster and author of a number of educational treatises, strongly recommends the study of Latin even for such children ‘as are intended for Trades, or to be kept as drudges at home, or employed about husbandry’. Hoole argues that they would find it:

to be of singular use to them, both for the understanding of the English Authors (which abound now a dayes with borrowed words) and the holding discourse with a sort of men that delight to slant it in Latine.

(Hoole 1659: 24)

The introduction of new words does not preclude semantic change, and words often acquire new senses in the course of time. When John Chamberlain wrote to his friend Dudley Carleton in 1608 saying that ‘I am sorry to heare Sir Rowland Lytton is so crasie’ (Chamberlain 1939: 251) he was not referring to Sir Rowland’s state of mind, but rather to his impaired physical health. It is often the older meanings of words that present problems to modern readers of Early Modern English texts.

The cumulative effect of the various lexical processes can be seen in the ways in which lexical fields are enriched in our period. A case in point is (*up*)*rising*. There are no fewer than twenty partly overlapping terms to describe this ‘horrible sin against God and man’ in Shakespeare alone. Nine of them go back to Middle English (*commotion*, *conspiracy*, *discord*, *dissension*, *insurrection*, *rebellion*, *riot*, *subversion*, *tumult*), five acquire the meaning in Early Modern English (*broil*, *chaos*, *confusion*, *revolution*, *sedition*), and seven are new words introduced after 1485 (*disorder*, *faction*, *mutiny*, *revolt*, *turbulence*, *turmoil*, *uproar*) (Pugliatti 1992).

Sometimes the pace of change was so rapid as to be commented on by near-contemporaries. ‘Words and phrases of ancient usage’ and ‘of doubtful signification’ are cited by the revisers of the Second Edwardine *Book of*

*Common Prayer* (1552) to be among the principal reasons for publishing a new edition in 1662:

That most of the alterations were made . . . for the more proper expressing of some words or phrases of antient vsage, in terms more suteable to the language of the present times; and the clearer explanation of some other words and phrases that were either of doubtfull signification, or otherwise liable to misconstruction. (Brightman 1921: 31–3)

Unique insights into Early Modern English lexis are provided by contemporary dictionaries. The earliest are bilingual Latin dictionaries, but bilingual and multilingual dictionaries of living languages also begin to be compiled for the benefit of language learners in the first half of our period. The first monolingual dictionaries of English emerged in the early seventeenth century. Their main task was to provide glosses for the increasing stock of learned vocabulary, or ‘hard words’. As the period advanced, monolingual English dictionaries extended their coverage to include ordinary everyday usage. A milestone in this long march was Samuel Johnson’s *Dictionary of the English Language* (1755), which set a model for posterity both in content and in form.

At the beginning of the Early Modern English period neither orthography nor the patterns of word-formation were tightly regulated. Private writings varied more than the printed word, and spellings were not just a matter of learning but of choice. Well into the seventeenth century, the number of spelling variants that a word could have in print was much larger than in the eighteenth. As Vivian Salmon (this volume) shows, the process of spelling standardisation was only nearing its completion towards the end of our period. For the better part of the period, several formally related words could be coined without any clear difference in meaning. This freedom of choice led to a large number of doublets such as *frequency* (1553) and *frequentness* (1664), *immaturity* (1540) and *immatureness* (1665), *immediacy* (1605) and *immediateness* (1633). In the course of time one variant usually became established at the expense of the other, or variant forms acquired different senses, as in the case of *light*, *lighten* and *enlighten*.

The three hundred years from William Caxton to Dr Johnson constitute a period of transition during which the spelling and the morphological shape of words became to a great extent fixed. Although large numbers of new words have been added, the forms that were codified in grammars and dictionaries in the eighteenth century have changed relatively little in the course of the last two hundred years. However, as Barbara Strang (1970: 131) reminds us, the change of tone may be extensive. Many words which

now may be only a little colloquial, or have no stylistic colour at all, were for Johnson 'low', including *banter*, *coax*, *dodge*, *flippant*, *fop*, *frisky*, *fun*, *fuss*, and *simpleton*.

### 5.1.2 Words and lexemes

This chapter discusses the various ways in which the lexicon was enriched and stratified in the formative centuries of the emerging standard language. Where no ambiguity arises, I use the term *word* in the technical sense of *lexeme*. In everyday usage *word* usually refers to an orthographic or phonological *word-form*, and forms such as *sing*, *sang* and *sung* would count as three separate 'words'. In the more technical sense of 'lexeme', *word* corresponds to a more abstract unit, basically the combination of a form and the sense(s) associated with it in a dictionary entry. A lexeme subsumes all its inflectional word-forms; *sing* 'to make musical sounds with the voice' is realised by five: *sing*, *sings*, *sang*, *sung*, and *singing* (present participle). Derivationally related words, such as *singable* 'that can be sung' and *singer* 'person who sings', are separate lexemes.

A lexeme may be morphologically simple (*sing*) or complex. Complex lexemes are made up of two or more elements. Compounds consist of free morphemes (*lovesong* of *love* and *song*), and derivations are made up of a free morpheme and one or more bound affixes (*unsung* of the prefix *un-* and *sung*; *singable* of *sing* and the suffix *-able*). It is also possible to coin words by means of 'zero' derivation. By this process a word is converted to another word class without the addition of an affix. This is how the verb *clean* ('to make clean') derives from the corresponding adjective *clean*. The process is usually called either zero-derivation or conversion. In what follows, I shall primarily use the latter term.

Productive word-formation processes provide speakers with systematic means of enriching their lexical resources. I shall refer to the structured inventory of words as *the lexicon*. Generally speaking, the lexicon provides each individual lexeme with four kinds of information:

- (a) *morphological* internal structure and word-forms
- (b) *syntactic* word-class and other grammatical properties
- (c) *semantic* word meaning and sense relations with other words
- (d) *syntagmatic* collocations with other lexemes

The lexicon also assigns words to mutually defining sets, or lexical fields, such as *age*, *kinship* and *colour*. All the lexical properties of words are, of course, liable to change with time, including lexical field membership. The

present-day inventory of *vehicles* would be considerably larger than the principal set of ‘things for *carriage*’ proposed by John Wilkins (1668: 257), which includes *coach* (*chariot*), *wain* (*waggon*), *chariot* and *cart* (*carr*, *Dray*, *Tumbrel*) – all with wheels – and, without wheels, *sedan* (*litter*), *Barrow*, *sled*, and *Welsh cart*.

In this chapter I shall be mostly concerned with the first three aspects of lexical structure (a)–(c). They are viewed from the diachronic perspective of vocabulary change, i.e. how new lexemes and meanings enter the lexicon in Early Modern English (5.3–5.6). I have less to say about their collocational ranges apart from phrasal lexicalisation (5.5.4.5) and the broad diatypic issue of how words are layered in the lexicon according to use (5.2). My chief interest throughout the discussion is the ways in which these various processes, by reshaping the EModE lexicon, at the same time redirect the lexical potential of the English language.

When we discuss the expansion of vocabulary, one further distinction remains to be made, namely the difference between *types* and *tokens*. *Type* refers to a linguistic entity, such as lexeme or its inflectional word-form, and *token* to its actual realisations in texts. Distinct lexeme types are thus represented by the total grammatical scatter of their different word-forms, and distinct word-form types by the total number of word-form occurrences. *The Harvard Concordance to Shakespeare* (Spevack 1973: v) shows that the Shakespeare canon consists of a total of 884,647 word-form tokens, which represent 29,066 different word-form types. The concordance does not, unfortunately, tell us how many different lexemes these 29,066 word-forms represent, but a recent estimate judges the number to be about 17,750 (Scheler 1982:89). In what follows, I shall mostly be dealing with lexeme types, even where reference is made to such quantitative notions as frequency of loan words in Early Modern English.<sup>1</sup>

## 5.2 The expanding lexicon

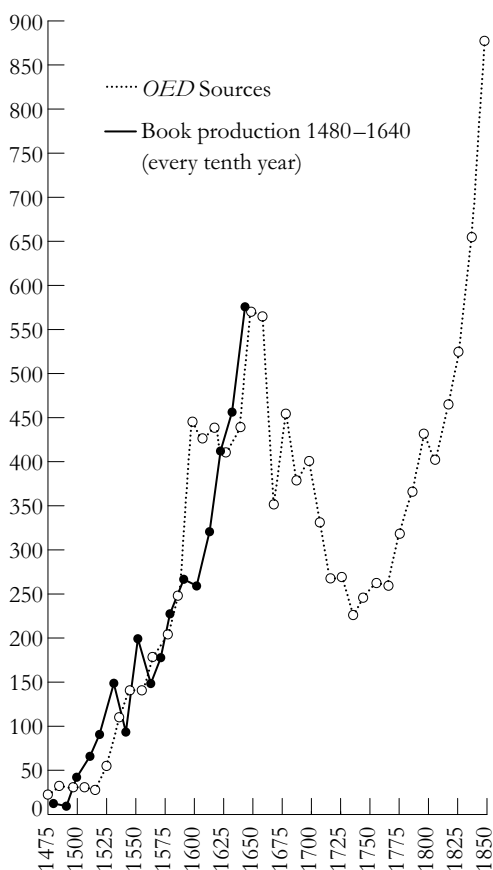
### 5.2.1 Dictionary evidence

The time from the early sixteenth to the mid-seventeenth century marks a period of heightened lexical activity. Statistics derived from chronological dictionaries suggest that this period presents the fastest vocabulary growth in the history of English in proportion to the vocabulary size of the time. Comparisons based on the *Chronological English Dictionary* (CED) show that this extremely rapid growth reaches its peak in the sixty years from 1570 to 1630. The CED further suggests that growth continued in the hundred years from 1680 to 1780 but on a more moderate scale (Wermser 1976: 22–3, Görlach 1991: 136–7).

Looking at the expansion of the Early Modern English lexicon as a whole, we can see that the period from about 1530 to 1660 marks the sharply rising slope of an S-shaped curve of growth (Finkenstaedt & Wolff 1973: 35). The rise is not only due to the introduction of new loan words but to the productive use of word-formation processes. This is noteworthy considering that complex lexemes are generally under-represented in dictionaries (see 5.3.1). Since chronological statistics must, however, always be considered provisional and hence approached with caution, the rest of this section will evaluate this information in terms of both methodology and substance.

When estimating lexical growth, we should bear in mind that the diachronic reconstruction of lexis is fundamentally different from the reconstruction of phonology, morphology and syntax. The reason is the very open-endedness of vocabulary as opposed to the more or less finite systems in grammar and phonology. It is true that a fairly limited number of extant texts makes it possible to reconstruct the basic principles of word-formation available at any given time. But it is not possible even to approximate the actual contents of the lexicon of a language without an extremely large and varied collection of data. The number of texts on which lexical reconstruction can be based increases with the growth of literacy. The written tradition will also preserve large numbers of words that would have been lost in a predominantly oral culture. With a relatively recent period such as Early Modern English, the data sources are of an entirely different magnitude from, say, Old English, and the lexicographer is slowly beginning to get to grips with actual usage (Finkenstaedt & Wolff 1973: 33).

There is so far no Early Modern English dictionary proper to supplement the information contained in *The Oxford English Dictionary* and the various editions derived from it, such as the *CED*. This is regrettable because the *OED* is far from being an ideal data base for chronological statistics. As Schäfer (1989b: 69) points out, the criteria governing what is recorded in the *OED* reflect a word's status and frequency at the time of compilation, not at the period of origin. The literary bias of the dictionary is made explicit in the preface to its first volume (1888: v): its most important sources are 'all the great English writers of all ages'. This means that extant texts were sampled in proportion to their literary merit with less concern given to such issues as equal chronological coverage. The shorter edition of the *OED* and the *CED* directly based on it are even more obviously intended as lexical aids for readers of English literature (Schäfer 1980: 76). Although the Early Modern period is generally well represented in the sources of these dictionaries, because of the sampling bias, we do not gain a true reflection of the rich variety of writings that have come down to us.

Figure 5.1 Chronological distribution of *OED* Sources

As a rough measure, we may compare the chronological distributions of the *OED* sources with the diachronic increase in the number of new lexemes. Figure 5.1 (from Schäfer 1980: 52) shows the number of sources used per decade, together with the total number of books produced between 1480 and 1640. The vocabulary growth recorded is presented in figure 5.2 (absolute figures based on the *CED*, drawn from Wermser 1976: 23). The two graphs are very similar, which suggests, naturally enough, that the number of sources used is reflected in the number of new lexemes recorded. Nevertheless, the two graphs do not match exactly. The vocabulary curve peaks around 1600, and the source curve around 1650. The Shakespearian period evidently provides more first citations than can be accounted for by the increase in source works. It would therefore seem that the sampling error is not so great as to mask

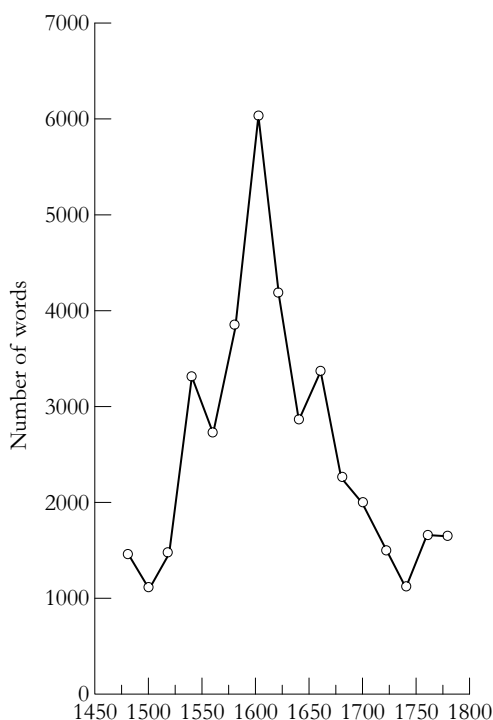


Figure 5.2 Diachronic increase in number of lexemes

the heightened lexical productivity shown by the written sources in the decades around 1600. At the same time, the underrepresentation of the early part of our period in the *OED* sources is obvious. This varying density of coverage also appears from the general reliability rates that Schäfer (1980: 65) calculated for the first datings attributed to various Early Modern English authors by the *OED*. The rate is admirably high for Shakespeare (ninety-three per cent), much lower for Nashe (sixty-three per cent), and lower still for Malory and Wyatt (fifty per cent and forty-two per cent, respectively). Considering the Early Modern English period as a whole, the imbalance in primary sources cannot be ignored when assessing lexical growth on the basis of the dictionary.

### 5.2.2 *Speaker innovation*

The very notion of lexical growth may suggest a unilinear course of expansion and a steadily growing lexicon. To realise that this is clearly oversimplifying matters, we need only consider stillborn neologisms, words that are



recorded only once, and have had no lasting effect on the language. And they are merely the tip of the iceberg. Word-coining is a common activity in all ages, and countless speaker innovations have occurred in various domains of language use although there may be no record of them. If they are not adopted by other speakers, and do not spread, new words pass unnoticed by lexicographers.

In most cases, literary and technical language will serve as our witness for the lexical innovation and ingenuity of the past, because it has had a better chance of being preserved for posterity than ordinary everyday language. The following unique occurrences are drawn from the list of Shakespeare's Latinate neologisms compiled by Garner (1982). These words that did not catch on make up almost one third of Shakespeare's Latinate coinages, that is, the new words attributed to him which contain Latin, French or Greek elements, including borrowed affixes (156).

acture, adoptious, allottery, anthropophaginian, appertainment(s), attax(d), attemptable, besort, chapeless, cloistress, cloyment, comptless, conception, concernancy, concupy, confineless, congree(ing), con-greet(ed), conspectuity(-ies), convive, copatain, correctioner, cursorary, defunctive, demi-devil, demi-natured, demi-puppet(s), directitude, dislikin, dismask(d), disproperty(-ied), disvouch(d), dotant, emball(ing), embrasure(s), empiricitic, enacture(s), encave, enpatron, enschedule(d), ensear, enshield, ensinew(ed), escot(ed), exceptless, exposure, exsufficate, extincture, facinorous, fleshment, forevouch(d), fustilarian, immask, immoment, immure(d), imperceiverant, implorator(s), inaidible, injoin(ed), insisture, insultment, intenible, interjoin, intrinse, inventorial(ly), invised, irreconciled, irregulous, marcantant, medittance, moraler, nonregardance, oathable, o'ergalled, o'erperch, offendress, offenseful, omittance, outjest, pauser, pedascul, phantasime, phraseless, practisant(s), preambulate, preceptial, precurrer, probal, questant, razorable, recountment(s), rejoindure, remediate, repasture, reprobance, reputeless, revengive, rumourer, scrimer(s), solidare(s), sortance, sternage, substractor(s), successant(ly), superdainty, superpraise, sur-addition, temperality, uncurbable, undercrest, under-honest, ungenitur'd, ungrave(ly), unpay, unpitiful(ly), unplausive, unprovoke(s), unqualified, unrecuring, unseminar'd, unsisting, unswayable, untempering, untent, invulnerable.

As these Shakespearian coinages suggest, new words may quite easily be rejected or ignored by the speech community. Many of them were obviously intended as nonce words, such as *unprovokes*, a direct contrast to *provokes* in *Macbeth* (II.iii. 29–30). Metrical requirements may have prompted doublets like *acture* and *enacture(s)*, *cursorary* and *cursor* (Garner 1982:156).

The reasons why so many of the others did not find a lasting place in the language are varied and hard to specify. Some may have been felt semantically opaque or functionally dispensable. With *fleshing* and *insult* available, *fleshment* and *insultment* were not needed to fill a lexical gap. Other neologisms might have been objected to, at least by those who knew Latin, because they violated the principles of Latin word-formation. Shakespeare combined, for instance, the prefix *dis-* with nouns to form verbs, as in *disproperty(-ied)*. This is not allowed in Latin, where the privative prefix *dis-* can be added only to verbs. However, as Garner points out, the practice was common enough at the time, as the *OED* record amply testifies: *disgarboil* (1566), *disgarrison* (1594), *disgarbage* (1612), *disgarland* (1616), *disflesh* (1620), *disgospel* (1642), *disgaol* (1647), *disgavel* (1683).

The fact that so many of Shakespeare's Latinate neologisms have not been recorded since must be partly accidental and partly the result of inadequate dictionary coverage. Most of these forms cannot be objected to in principle, because the patterns of word-formation used by Shakespeare were productive in his time. To pick out a random set, *phraseless*, *rumourer*, *outjest* and *superdainty* would be perfectly legitimate words in Early Modern English on a par with such parallel forms as *limitless* and *spiritless* (noun + adjectival suffix *-less*); *frequenter* and *murmurer* (verb + agent noun suffix *-er*); *outstay* and *outweigh* (prefix *out-* + verb); and *superfine* and *superserviceable* (prefix *super-* + adjective). A number of Shakespeare's other similar formations have fared much better: the privative adjectives *countless*, *motionless* and *priceless*, for example, and the agent nouns *employer*, *protester* and *torturer*.

I have given the above list in order to illustrate the extent to which a single author may utilise the lexical potential of his language – or in some cases simply be an early adopter of a neologism coined by someone who never put it in writing. To do full justice to Shakespeare, it should perhaps be mentioned that some estimates attribute to him no fewer than 1,700 neologisms, or first attestations, including compounds (Garner 1982: 153). The two-thirds of his Latinate neologisms that did continue in use include a good many that are still current in Present-Day English ranging from *amazement* and *epileptic* to *negotiate* and *pedant*.

The peak period of Early Modern English lexical activity produced many learned coinages that have not been attested since. The pains of learning them must have outweighed the gains for those without the benefit of a classical education. The publication of Robert Cawdrey's *A Table Alphabeticall* (1604) coincided with this period. It was the first in a long line of monolingual dictionaries to gloss 'hard vsuall English wordes'. Cawdrey states on the title page that they were 'gathered for the benefit &

helpe of Ladies, Gentlewomen, or any other vnskilfull persons, Wherby they may the more easilie and better vnderstand many hard English wordes, which they shall heare or read in Scriptures, Sermons, or elsewhere, and also be made able to vse the same aptly themselves’.

### 5.2.3 *The common core*

One of the basic aspects of lexical growth is its role in the stratification of the lexicon. Only part of the new vocabulary in any language will find its way into the *common core*, which is shared by the written and spoken medium alike, by all registers, and by all social and regional varieties. It is this common core that is most resistant to change even in a language like English, which has been the most avid borrower of all Germanic languages.

The best early accounts of the common core in Early Modern English are provided by contemporary bilingual and multilingual dictionaries and polyglot wordlists. Stein (1985) lists over 160 editions of such works from the sixteenth century alone. Besides the continuing demand for Latin dictionaries, the expansion of trade and travel also intensified the need for wordlists, vocabularies and dictionaries of the spoken vernaculars, notably French, Italian and Spanish.

Although it has not received much scholarly attention, the core lexis in these works could well be compared with that found in eighteenth century monolingual English dictionaries (see 5.2.4). A good example of the depth and detail of some of the early works is the first bilingual English-French dictionary included in John Palsgrave’s *Lesclarcissement de la langue francoyse* (1530). The entries in the ‘table of Verbes’, for instance, usually consist of complete sentences (see Stein 1985: 121–39, and further 1997).

I baake a batche of breed in an ouen . . .  
 I Baake a pastye or any suche lyke thyng . . .  
 I Baare I vncouer a thyng or make it bare . . .  
 I Baste meate as it is in rostyng at the fyre . . .  
 I Baaste a garment with threde . . .  
 I Babyll I clatter / I am full of wordes . . .  
 I Backe I make the backe of a knyfe or sworde or other toole . . .

Gordon (1980: 13) estimates that as much as four-fifths of the original recorded prose vocabulary of Old English has survived in use until the present day. This original Germanic stock includes the names of everyday objects and actions, the commoner adjectives, verbs and adverbs, the terms

of family and social relationships, and grammatical function words (pronouns, prepositions, articles, auxiliary verb forms).

In the course of time, the common core has also absorbed a number of loan words. Scheler (1977: 73) calculates that roughly fifty per cent of the core vocabulary of English has remained Germanic, as opposed to some twenty-six per cent of the entire recorded word-stock. We may conclude that the Early Modern English period did enrich the lexical resources of English considerably, but did not break off native continuity. It is the parts of the lexicon that were affected that we shall turn to next.

#### 5.2.4 *Stratification*

One of the features of a standard language is maximal variation of function. Standardisation means that one variety spreads to all possible fields of discourse, including the most prestigious ones. The development of a supraregional written standard had begun in the Chancery in the first half of the fifteenth century. In the sixteenth century English became the predominant language of law and of the reformed church, and in the eighteenth it overcame the last Latin bastions in the field of scientific enquiry. This course of events led to a sharp increase in technical terms in Early Modern English.

Compilers of *An Early Modern English Dictionary* will be in a better position than those who work on Old and Middle English in that they will have plenty of primary material to classify the vocabulary into different strata around the common core. Both literary and colloquial lexis can be accessed, the literary more successfully than the colloquial, and both no doubt more reliably in the eighteenth century than in the fifteenth (for discussion of literary usage, see Adamson this volume). Geographical and social variation can also be recovered in the form of dialectal vocabulary and slang, although nothing like a dialect atlas of Early Modern England could be envisaged on the basis of the textual sources available (Görlach this volume).<sup>2</sup>

Different fields of discourse, by contrast, are abundantly documented: the Early Modern English dictionary project has a bibliography of nearly 14,000 titles from 1475 to 1700 (Bailey *et al.* 1975: vii). Here we can witness a rapid diversification of specialist fields, which are developing their own terminologies. Some idea of the development (although owing to the inadequate source materials, not a fully reliable one) is given by Wermser (1976: 131), who shows the increasing share of specialist terms in the new lexis recorded in four Early Modern English subperiods:

1460–74	7.4 per cent
1560–74	16.3 per cent
1660–74	29.3 per cent
1760–74	41.3 per cent

Many specialised fields are already represented in the earliest monolingual glossaries and dictionaries. As shown in detail by Schäfer (1989a), well over a hundred publications providing such lexical information appeared during the period 1475 to 1640 alone. The majority of translator's glossaries were appended to works translated from Latin, and frequently deal with medicine, religious instruction, education and polemics. The glossaries included in thematically arranged introductions to contemporary knowledge are also illuminating. Schäfer (74–5) lists the following fields in which early specialist terminologies were compiled: alchemy, animals, Arabic, architecture, the Bible, canting, carving, classics, cosmography, Euclidean definitions, fariery, fencing, geography, grammar, Hebrew coins and measures, heraldry, herbals, hunting and falconry, inkhorn terms, law, logic, mathematics, medicine, military (fortification, ordnance), minerals, names, 'old' words, philosophy, poetry and poetics, rhetoric, terms of association, theology, weights and measures. The list shows that it was the non-core lexis that called for comment from very early on. The glosses vary in fullness from one-word paraphrases, as in *grace* 'fauoure' (as a biblical term) and *glasyers* 'eyes' (in thieves' cant), to those of encyclopaedic length. The following entries illustrate the rich variety of these 'terms of art':

*Supercilium* a small fillet in the top of the cornish.

(Joannis Blum, *The Booke of Five Collumnes of Architecture*, transl. by I.T., 1601:1)

*To Cavere*, is to turne thy point under thine adversaries Rapier on the other side, when thou art bound, or he doth thrust at thee.

(G.A. Pallas Armata, *the Gentlemans Armorie*, 1639, fo. B3 r)

*Circles* are the way whereby the poles of the Zodiacke doe moue in roundnesse from the poles of the world. These doe take their names of the saide poles: and so they are called circle Articke, and circle Antarticke, these circles are distant of the said poles of the world, 23. degrees, and 33 minutes.

(Pedro de Medina, *The Arte of Navigation*, transl. by John Frampton, 1595, fo. 37 v)

*Of a Consonant*. A Consonant is a letter, which maketh a sound onely with a vowell. It is single, or double. The single Consonant is a semi-vowell, or a mute. A semi-vowell is a consonant, that hath the halfe sound of a Vowell.

(Thomas Granger, *Syntagma Grammaticum*, 1616, fo. C2 v)

*Alienation*, is as much to say, as to make a thing an other mans, to alter or put the possession of lande or other thinge from one man to another.

(John Rastell, *An Exposition of Certaine Difficult and Obscure Wordes and Termes of the Lawes of this Realme*, 1579, fo. 17 v)

Although their exact definitions may have changed, many of these terms are still current in Present-Day English, as we are vividly reminded by Rastell's (1579) entries for *baile*, *burglarie*, *contract*, *morgage*, *testament* and *voucher*.

What is perhaps surprising about these lexical aids is the rich documentation of lexical specialisation at such an early date. It is also interesting to note that the terms are usually not localisable. Even the early books on husbandry do not appear to distinguish dialect words, but rather tend to aim at general intelligibility by including synonymous terms from different regional varieties. Fitzherbert (1534: 27) crosses a dialectal line when he heads one of his sections 'To carry out donge or mucke and to sprede it.' *Muck* was the northern term for 'manure', and *dung* the southern.

An increasing number of specialist dictionaries could be added to the above list from the latter half of our period. To name just one, Sir Henry Manwayring's *The Sea-mans Dictionary* (1644) was the first and for over a century the best treatment of maritime terms. Manwayring's entry for *man-of-war* is typical in explanatory detail:

*Man of War*. I doe not meane to describe what a Captaine or man is, who is a man of War, but a Ship of War (which is called a man of War among Sea-men) making use of the figure *Metonimia* (*continens pro contento*). These qualities, commodities and conditions, I require in a Ship, which I would say should be a right brave man of War: first, she must saile well; secondly, be roomie betwixt the Decks; thirdly, flush without any falls, (for hindering men to passe too and fro at ease,) she must beare out her lower tire all reasonable fitting weather (which if she doe, the lower she carries them the better) her chase and bowe must be well contrived, to shoote as many Peeces right fore-ward, and bowing, as may be (for those parts come to be most used in fight) the Ordnance not to lie right over one another, but so, as that upon the least yawe of the helme, one Peece or other may ever come to beare: And lastly, she must beare a stowte-saile, such a Ship well manned, with men convenient, to ply their Ordnance, handle the sailes, and use some small shot, were worthy to be called a man of War; That Ship which wants any of these, is like a Souldier who should want either a hand, a legge, or an Arme.

It is noteworthy that about a dozen of the terms used here have their own main entries in the dictionary. According to the *OED* the following eight

were first introduced in a nautical sense or as terms of warfare in Early Modern English: *deck* (1513), *flush* (1626), *falls* (1644), *tier* (1573), *chase* (1634), *bow* (1626), *yaw* (1546) and *small shot* (1593).

Specialist terms figure more and more prominently in seventeenth-century hard-word dictionaries. John Bullokar sometimes indicates the field of discourse of a hard word in his *An English Expositor* (1616). Thomas Blount does so frequently in *Glossographia* (1656), and cites his authorities in the case of law terms, for instance. The title page of Elisha Coles' *An English Dictionary* (1676) especially mentions terms of divinity, husbandry, physic (i.e. medicine), philosophy, law, navigation, mathematics and other arts and sciences. Coles also includes dialect words, and even supplies cant terms and archaisms.

A major source of deliberate learned loans (inkhorn terms) is Henry Cockeram's *The English Dictionarie* (1623). Cockeram drew heavily on Thomas's Latin–English dictionary (1587) and introduced a large number of new words into English by anglicising Thomas's Latin entries. He further suggested 'translations' for common colloquial words (*To Babble. Deblaterate, Babling. Loquacity, Verbosity, loue of Babling. Phyllogie*). In fact, about twenty-five per cent of the 3,413 neologisms that the *CED* cites from the period 1610 to 1624 derive from dictionary sources, and Cockeram makes a sizable contribution to them. Another twenty per cent come from *belles lettres*, about thirteen per cent from theology, and fourteen per cent from natural sciences and other professional literature (Wermser 1976: 114–15).

Early monolingual glossaries and dictionaries will not be of much help to a lexicographer looking for Early Modern English colloquialisms, except in the case of cant terms. On the other hand, dictionaries of living languages often provide a range of English synonyms from different registers, including the more colloquial. Randle Cotgrave's *A Dictionary of the French and English Tongues* (1611) figures prominently in the *CED* record of new words. The following illustrate the wealth of colloquial (near-)synonyms it supplies (Wermser 1976: 117–19, Görlach 1991: 153–4):

- FOL. A Foole; asse, goose, calfe, dotterell, woodcocke; noddie, cokes, goosecap, coxcombe, dizard, peagoose, ninnie, naturall, ideot, wisakers;  
 GARÇE. A wench, lasse, girle; also, (and as wee often meane by the first) a Punke, or Whore.  
 MAL. Ill, bad, naughtie, lewd; scuruie, mischieuous, hurtfull, harmefull, shrewd; vnseemlie; vncomelie, vndecent; sicke, diseased, crazie, pained, sore, ill at ease.  
 RUSTIQUE. Rusticall, rude, boorish, clownish, hob-like, lumpish, lowtish, vnctuill, vnmanerlie, home-bred, homelie, sillie, ignorant.



It was not until the eighteenth century that the most common, everyday words were recorded in monolingual dictionaries, notably by John Kersey, Nathan Bailey and Samuel Johnson. Many scholars studying early colloquial usage have turned to drama and private documents such as letters and diaries and, less frequently, to records of court hearings (see Williamson 1929, Wyld 1939, Evans 1950–1: Salmon 1967; Nevalainen 1983). Salmon (1967) uses Shakespeare's Falstaff plays to analyse the colloquial expressions typical of spoken interaction. They include formulas of greeting, parting and summoning, forms of address, exclamations and asseverations. These exclamations would be termed colloquialisms around 1600: *alas*, *well-a-day* (regret); *fie*, *pish*, *tilly-fally* (disdain); *ha* (= PDE *eh?*, seeking agreement); *beigh*, *lo* (surprise); *beigh-ho* (resignation), *tut* (impatience). The list could be lengthened by adding what Salmon calls summoning formulae: *what*, *what ho*, *why*, *I say*; and oaths: *zounds*, *'sblood* (anger or surprise), *Jesu* (pleasure, surprise, excitement), *Lord* (wide range of emotions), and *marry* (< *Mary*; very mild expletive used in answering).

#### 5.2.5 *Obsolescence*

The glossaries and 'old-word' dictionaries of the sixteenth and seventeenth centuries indicate the extent to which Old and Middle English texts had become incomprehensible. People were no longer expected to be capable of interpreting Old English laws or reading their Chaucer, or indeed their Spenser, who revived a number of Chaucerisms, without the help of glossaries. These developments are also partly connected with the evolution of the standard literary language. A large number of the Middle English words that after 1500 fell out of use from the emerging standard appear in northern regional varieties and Scots (Görlach 1987).

Thomas Speght has as many as 2,700 entries in his collection of 'old and obscure words in Chaucer' (1602). The entries are typically brief: *accidie* l. 'wanhope', *swa* b. 'also', 'so' (l. here stands for assumed Latin origin, and b. for native Saxon). E.K.'s explanatory notes to Spenser's *Shepheard's Calender* (1579) similarly contain frequent glosses on archaic and dialectal words of the type: *Welkin* 'the skie', *Gange* 'goe' (fo. 10). If anything, these examples show that obsolescence, too, is a relative notion. *Accidie* and *welkin* both occur in contemporary Elizabethan texts, *accidie* in the sense of 'sloth' rather than 'wanhope' (as also in Chaucer's list of the seven deadly sins). *Swa* is historically the same word as Early Modern English *so*, and *gange* is related to *go*, but they had changed beyond recognition in the course of time (cf. Schäfer 1989a: 33, 49).



Lexical change is often gradual in common, everyday words. Comparing Chaucer with Shakespeare, we can see that while Chaucer used such synonymous pairs as *swink* and *labour*, *wone* and *dwel*, and *sweven* and *dream*, Shakespeare no longer has *swink*, *wone* or *sweven*. Both have *delve* and *dig*, and *clepe* and *call*, but Chaucer prefers the first member of each pair, Shakespeare most of the time the second (Görlach 1991: 140). *Clepe* clearly has overtones of obsolescence, for instance, in *Iudas I am, yclipped Machabeus* (*Love's Labour's Lost*, V.ii.602). Shakespeare could also draw upon four other synonyms of 'to be called': *hight*, *name*, *intitule* and *nominate*, of which *hight* is an archaism, and *intitule* and *nominate*, recognisable neologisms (Cusack 1970: 4–5). *Hight* and *cleped* continue to be labelled as archaisms in the eighteenth century, and are included in George Campbell's list of words 'no longer understood by any but critics and antiquarians' (*The Philosophy of Rhetoric* 1776: 411; cf. Tucker 1967: 67).

As the retranslations of the Bible and revisions of *The Book of Common Prayer* testify, the Early Modern English time span is long enough for even prestigious vocabulary to pass from old-fashioned to archaic and obsolete, and to be altogether superseded. Eighteenth-century scholars objected to both archaic and 'low' vocabulary in the 1662 *Book of Common Prayer* and the 1611 Authorised Version of the Bible. Thus Anthony Purver's 'Quaker's Bible' (1764), the only complete independent Bible translation published in the eighteenth century, appends long lists of archaic and obsolete words found in the Authorised Version. Norton (1985) shows that these lists can also be supported from other sources. However, since many of these words are not felt to be archaic today, Norton concludes that they had lost currency in the sixteenth and seventeenth centuries and regained it in the nineteenth. In a number of cases this revival may be directly attributed to the influence of the Authorised Version. Among such words listed by Purver are the following, with his datings added in brackets: *avenge* (revenge), *changes*, as in *changes in raiment* (suits), *eschewed* (refrained from), *laden* (loaded), *ponder* (consider), *unwittingly* (unawares), and *warfare* (war).

Given the phenomenal growth-rate of the lexicon in the decades around 1600, it would be interesting to know what the life expectancy of these new words was. Gaining an overall view of the rate at which words fell into disuse in Early Modern English is, however, complicated by a number of issues. Polysemy is one of them. A lexeme may lose some of its senses, including the original one, while maintaining one or more recent ones. *Entitle* or *nominate* can no longer be used synonymously with *call* in Present-Day English in the sense of 'name' or 'be named' when speaking of people.

It is nevertheless possible to approach the question from the viewpoint

of total obsolescence, and study the lexemes that lexicographers mark as obsolete because they are not attested after a given date. This is what Neuhaus (1971) did in his study based on the *SOED*. He found that between 1460 and 1620 more new words were introduced than obsolete ones lost. The period 1640–80, however, showed a higher than average disappearance rate for words introduced after 1530. In other words, the intensive period of neologising is followed by a corresponding increase in obsolete words. Most of these obsolete words disappear during their first decade, and many are cited only once. As they apparently do not form part of the current lexis at any time, one would feel disinclined to talk about obsolescence proper. Rather, these cases may partly indicate an overzealous desire to enrich the Early Modern English lexicon. This certainly was the case with neologisers like Cockeram. Many still-born neologisms no doubt also reflect the Early Modern English expansion of derivational means in the lexicon, which resulted in redundant parallel formations (Finkenstaedt & Wolff 1973: 84–8, Wermser 1976: 92–102; see 5.5).

### 5.3 Lexical processes

#### 5.3.1 Overall distributions

This section provides an overview of the varying degrees to which different lexical processes were being implemented in Early Modern English. Serving as a background to the individual sections on borrowing, word-formation and semantic change, the section also discusses the general conditions, linguistic and extralinguistic, under which these processes operate.

Borrowing differs from the other processes in that it is externally conditioned by language contact, and not directly regulated by linguistic constraints. It is true that short-term oral contacts such as the Far-East trade almost exclusively yield nouns in Early Modern English, but this trend points to lexical gaps rather than linguistic conditioning. As we saw in 5.2.3, grammatical words are nonetheless less likely to be borrowed than content words.

Word-formation, typically affixation, resembles inflectional processes in that it has linguistic input and output constraints. Suffixation, for instance, commonly changes the word-class of the base, thus altering the range of syntactic functions that it may assume. While word-formation and borrowing add to the number of existing lexemes, semantic changes typically lead to polysemy in the lexicon. They are no less relevant, of course. Bailey *et al.* (1975: xxi) rightly argue that 'little can be said about the channels that innovation follows if the growth of new senses for existing vocabulary is not

measured and compared with the introduction of new word forms'. The basic mechanisms of semantic change are reviewed in section 5.6, below.

The information available in the *CED* will provide a rough idea of the relative frequency of borrowing and word-formation as means of expanding the lexicon in Early Modern English. The figures given below, drawn from Wermser (1976: 40), exclude meaning shifts but contrast loan words with the principal processes of word-formation, that is, affixation, compounding and conversion (zero-derivation), in seven Early Modern English subperiods. A further comparison is established with the contribution of minor word-formation processes, including onomatopoeia (*giggle* 1509), reduplication (*knick-knack* 1618), clipping (*miss* for *mistress* 1666) and blending (*tritritical* from *trite* and *critical* 1709). The latter two, clipping and blending, are still relatively new and infrequent in Early Modern English. New words of uncertain origin are even fewer and they are not included in the comparison.

Before we turn to the figures, two limitations of the data should be pointed out. First, the *CED* excludes all *OED* subentries of lexemes. This means that the various word-formation processes, especially compounding, are not satisfactorily represented. Secondly, the *OED* does not provide us with as complete a record of technical terms as would be possible on the basis of the sources used; the *SOED*, on which the *CED* is based, further limits the number of specialist terms. Since they are largely the domain of foreign loan words in Early Modern English, borrowing is incompletely represented, too. We may therefore conclude that all these means of augmenting the lexicon are less than optimally covered. On the other hand, since the principles of exclusion apply more or less across the board, we should be able to detect at least the major changes in the impact of the various processes by comparing their distributions in Wermser's seven periods (see, however, 5.2.1 for further discussion of the limitations of the *OED*).<sup>3</sup>

	Loan words	Affixations, compounds, conversions	Minor processes	Total for subperiod
1460–74	53%	38%	5%	96% 716
1510–24	40%	43%	10%	93% 796
1560–74	45%	42%	8%	95% 2,105
1610–24	51%	42%	5%	98% 3,413
1660–74	48%	40%	8%	96% 2,032
1710–24	38%	48%	10%	96% 919
1760–74	41%	45%	10%	96% 1,149

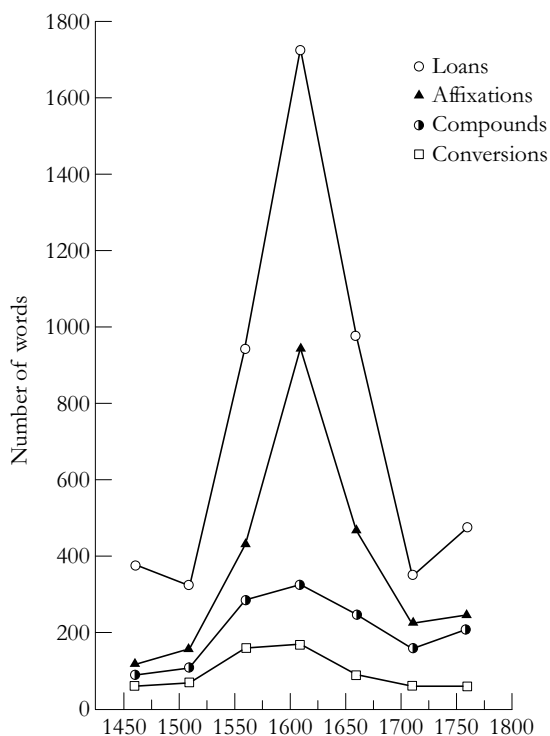


Figure 5.3 Absolute frequencies of loan words, affixations, compounds and conversions

The figures suggest that borrowing is by far the most common method of enriching the lexicon in Early Modern English. With the exception of the period 1510–24, loan words constitute a higher proportion of all neologisms in the sixteenth and seventeenth centuries than the three major word-formation processes of affixation, compounding and conversion put together. The same is true of 1460–74, the peak period for borrowing in relative terms. In the eighteenth century the tide is beginning to turn, and loan words are outnumbered by derivations and compounds.

Figure 5.3 presents the absolute frequencies of loan words, affixations, compounds and conversions in Wermser's Early Modern English subperiods. The curves never intersect but run parallel to each other with only some minor changes in direction. With the exception of the last subperiod, these data suggest that the processes have had relatively fixed rankings as the means of enriching the Early Modern English lexicon. This information should, however, be supplemented by their relative frequencies.

We may compare the relative distributions of the four processes by

breaking down the composite percentages given above. The peak periods for borrowing remain unchanged. Affixations rank as the second-most frequent means of enriching the lexicon. They, too, peak around 1600. It is interesting to note, however, that the relative frequency of borrowed prefixes and suffixes increases steadily – from some twenty per cent at the beginning of the Early Modern English period to seventy per cent at the end of it (Wermser 1976: 64). Compound words come third in this comparison, leaving conversion as the least frequently attested means in the period. However, compounding and conversion peak at different times. The share of compounds rises from the relative low of nine per cent in 1610–24 to a peak of eighteen per cent at the end of the period. By contrast, conversions reach their relative peak early on, nine per cent in 1510–24, and show only another minor rise two hundred years later, 1710–24.

For the sake of comparison, we may turn to Cannon's (1987) analysis of new words introduced into American English between 1963 and 1981. The most striking aspect in this comparison is the much reduced role of borrowing in American English, which remains well below ten per cent of the total of 13,683 new words recorded. By far the largest category is 'additions', compounds and affixations, which amount to twenty-nine per cent and twenty-four per cent, respectively. (Here the results are not fully compatible with our Early Modern English data, as Cannon's definition of a compound is more liberal than most lexicographers'; he admits some phrasal lexemes such as *can of worms* and *meat and potatoes*; Cannon 1987: 200; cf. Bauer 1989: 255.) The label 'shifts' is used of both conversions and meaning shifts, which correspond to twenty per cent of the cases. The remaining eighteen per cent are called 'shortenings' and include backformations, blends and clippings. Allowing for certain differences in the principles of compilation and definitions in the dictionaries referred to, it nonetheless appears that massive borrowing has now subsided. Affixation has remained a central process, while compounding and especially the various processes of shortening have gained momentum since Early Modern English. Leaving meaning shifts out of the account, conversions can be shown to have retained their relative position at well below ten per cent of the total.

This brief comparison does not imply a unilinear development of these processes from Early Modern English to present-day American English, and even less so to present-day British English. At best it may be seen as indicative of the directions that already appeared to be taking shape in the eighteenth century. Even with a liberal margin for error, the figures clearly suggest that in Early Modern English the basic lexical processes had very

different weightings from those found today in one of the principal varieties of Present-Day English.

We may also detect shifts of emphasis in the chronological distributions of neologisms by word-class in the course of our period (Wermser 1976: 82). Nouns constitute more than half of the neologisms throughout Early Modern English. Their relative share rises from the mid-seventeenth century onwards, and reaches seventy per cent in 1760–74. Adjectives are the second-most frequent word-class. Their share is close to twenty per cent throughout the period and exceeds it in 1560–1724, reaching its maximum of twenty-eight per cent in 1660–74. The proportion of verbs reaches twenty per cent of the total only twice in Early Modern English, around 1510–24 and 1610–24, and dwindles to a mere eight per cent at the end of the Early Modern English period. The decline of verbs is partly attributed by Wermser (83) to the preponderance of nouns in scientific terminology, which proportionately increase from the middle of the seventeenth century onwards. Nouns also continue to predominate in post Early Modern English. They constitute about seventy-seven per cent of Cannon's (1987: 256) recent American English data, and more than eighty per cent of the borrowings attested in the *SOED* after 1800 (Tournier 1985: 329).

### 5.3.2 *Productivity*

So far the application of the various lexical processes has been discussed in terms of their lexeme tokens. This approach reveals the means, and the extent to which they are being used, at a given time. It gives us a broad idea of the chronological stratification of the lexicon, and reflects the interests and activities of the people building up their lexical resources. The number of loan words, for instance, grows largely to meet the demands, real or imagined, of the expanding functions of the standard language.

This does not, however, mean that only numerical comparisons are relevant when assessing the lexical productivity of a given age. Important though this information is, it is only one aspect of the issue. The other side of the coin is the limitations of the various processes and the range of possible but unattested lexemes. Some of these constraints were already referred to above in relation to Shakespeare's stillborn neologisms. We shall now move on to a more detailed survey of the kind of factors that regulate lexical productivity.

Derivational processes resemble inflections in that both add fairly constant meaning components to their bases and stems: the inflectional suffix

-s is used to assign nouns a plural meaning, the lexical suffix *-less* to turn nouns into privative adjectives. The resultant meanings can be computed from their component parts (*meaning + s*; *meaning + less*). The processes do not, however, remain stable across time. New means are acquired and some previously productive ones may cease. The latter development increases the likelihood that a complex lexeme may in the course of time lose its compositional motivation and become unanalysable. In Early Modern English *wanton*, for instance, was no longer analysable as a combination of the prefix *wan-* ‘un’ and *towen* ‘disciplined’.

The factors that contribute to lexicalisation or the loss of compositional motivation of complex lexemes vary from semantic and syntactic to phonological. The lexicalisation of *bussy* in Early Modern English is a typical instance of parallel developments. In Middle English the compound *housewife* had two variants, one with a secondary stress on *wife*, and the other without. With secondary stress, the second element of the compound remained the same as in *wife*. In the variant without secondary stress, the long vowel was shortened in Middle English, the /w/ was lost, and the word was telescoped into *bussif*, *buzʒif* or *bussy* in the early sixteenth century (Barber 1976: 325). As a result of these changes, the morpheme boundary disappeared, and the compound lost its transparency. The semantic specialisation of *bussy* as ‘a woman or girl of low or improper behaviour’ fixed the new lexicalised form.

Alongside synchronically opaque lexicalised words, we have lexemes that are morphologically fully transparent but no longer represent a productive pattern. The suffixes *-le/el* and *-th* are among those that lose their productivity in Early Modern English. According to Marchand (1969: 324), the native suffix *-le/el* had declined by 1400 as a means to form instrumental nouns. Its last diminutive derivations date from before 1600 (*knobble* ‘small knob’ 1485; *standel* ‘young tree left standing for timber’ 1543). Similarly, the native suffix *-th* was only used to form a few nouns in Early Modern English. They include the deverbal derivations *growth* (1557) and *spilth* (1607), and the deadjectival *coolth* (1547). *Breadth* (1523) and *width* (1627) were both presumably established by analogy with such related forms as *length* ([349]). Speakers of Early Modern English could evidently analyse even the less regular derivations such as *breadth*, based on *brede*, into their component parts, a base and the suffix *-th*. Analysable formations like this must nonetheless be considered lexicalised towards the end of the EModE period, because they could not be augmented by means of synchronic word-formation rules.<sup>4</sup>

Lexical productivity itself has many dimensions. A process may have linguistic constraints and assume a limited input and output range, which



means that it is only applicable to certain well-defined bases and will only produce derivations of a well-defined kind. This is particularly the case with suffixation. The suffix *-ness* is thus used to form nouns from adjectives (*brisk* – *briskness*), *-er* forms nouns from verbs (*scrape* – *scraper*) and from other nouns (*stocking* – *stockinger* ‘stocking weaver’), and *-ly* adverbs from adjectives (*tight* – *tightly*). The base may also be semantically specified. The suffix *-able*, for instance, is typically adjoined to active transitive verbs to derive passive adjectives (*drinkable* ‘that can be drunk’, *attainable* ‘that can be attained’).

Prefixes have fewer word-class restrictions on their input range than suffixes, and they do not alter the word-class of the base. In Early Modern English the negative and reversative prefix *un-* is used quite freely with a variety of bases, both native and borrowed. Barber (1976: 189) lists nouns (*uncircumcision* 1526, *uncertitude* 1541), adjectives (*uncivil* 1553, *uncomfortable* 1592, *uncome-at-able* 1694), participles (*uncloaked* 1540, *uncivilized* 1607), verbs (*unbelieve* 1547, *undeserve* 1621), and adverbs (*uncircumspectly* 1535). In Present-Day English *un-* is restricted to deadjectival and deverbal derivations.

As a rule there are fewer input constraints on conversions and compounds than on affixes. Unlike affixes, neither are based on a closed set of morphemes. The most common type of conversion in Early Modern English is the derivation of verbs from nouns (e.g. *gossip* 1590, *invoice* 1698 (193)). Noun + noun compounds are by far the most productive type of compounds both in Early Modern and Present-Day English. They are also recognised by William Bullokar, the author of the first grammar of the English language to be published in English. In this *Pamphlet for Grammar* (1586: 61) he illustrates the process with the following set of examples and their paraphrases:

On an erth-bank ner medow-ground, I saw a hors-comb ly, Which I browht into a hors-mil that a ston-wal stood nih, And fynding thaer an elmen plank, I sowht for a wood-betl And woodn wedges, but found nawht, sauing a laten-ketl.

(*Compositions and substantiue adiectiues resolved by prepositions of, for, or, with.*)

On a bank of erth or erthn bank, ner ground for medow, I saw a comb for a hors ly, which I browht into a mil with hors, that stood nih a stonen wal, or wal of ston, and fynding thaer an elm-plank, or plank of elm, I sowht for a betl for wood, and wedges of wood, but found no-thing, sauing a ketl of laten.

The examples include both hyphenated nominal compounds (*earth bank*, *meadow ground*, *horse comb*, *horse mill*, *stone wall*, *wood beetle*, *latten kettle*) and



phrases consisting of an adjective and a noun (*elmen plank, wooden wedges*). The compounds on the list differ as to their degree of lexicalisation. *Horse comb* and *stone wall*, both going back to Old English, are institutionalised by Bullokar's time. *Meadow ground* is first recorded in 1523, and *horse mill* in 1530. Both would have been well established by the time Bullokar was writing. Of the rest (*latten kettle, wood beetle*) there is no previous record in the *OED*. On the basis of this evidence they are non-lexicalised items formed by productive compounding rules.

In our search for lexical productivity, we should perhaps make a further distinction between productivity and creativity. Thus the word *tissue* did not have its biological sense in Early Modern English, but used to mean 'a rich kind of cloth (especially one with gold and silver in it)' or 'a band or girdle of rich material' (Barber 1976: 154). From the latter half of the sixteenth century onwards, the word could be used of any woven fabric or stuff. The biological sense 'animal or plant tissue' was first recorded in the nineteenth century. What we are witnessing here is an instance of semantic change. It does not apply to other lexemes in a rule-governed way, but provides the speakers with a creative means by which to enrich the lexicon in a motivated but largely unpredictable way. The various strategies employed to change word meaning, including metaphoric extension, are reviewed below in section 5.6.

All lexical and semantic processes are naturally limited by the pragmatic fact that 'words serve as concept-forming tools, as crystallization points for semantic material, and the containers for the result of this process' (Lipka 1990: 178). Hence, under normal circumstances, the prior existence of a well-established word would be sufficient to block the admission of a new one. In Early Modern English, however, this principle of economy is relaxed with a large section of the new lexical intake. This lexical extravagance no doubt goes back to such factors as competition between old and new processes and the stylistic values attached to *copiousness* (see 5.4.1).

Synonymous operations could be applied to one and the same base quite freely especially during the sixteenth and seventeenth centuries. This led to the richness of multiple derivations characteristic of the period. Synonymous verb forms were created by the prefix *en-* and the suffix *-en*, and their combination: *length* (1300), *lengthen* (1500–20), *enlength* (1530) and *enlengthen* (1646). Some bases could give rise to no fewer than five privative variants: *disthronize* (1583), *disthrone* (1591), *dethrone* (1609), *unthron* (1611), and *dethronize* (1611/56) (Görlach 1991: 180). A large number of these multiple derivations did not outlive the Early Modern English period, and some of those that did have become semantically differentiated in Present-Day English (e.g. *light/lighten/enlighten*).

A productive process may also be blocked if its potential input base is marked. Loan versus native-word status can act as such a marker. The people introducing French and Latin loan words must have had at least some knowledge of these languages, but borrowed lexemes were not always morphologically transparent to their Early Modern English users. There is some evidence to the effect that loan derivations may in fact have been marked as monomorphemic wholes for the purposes of conversion. Biese (1941: 260) shows that there is an increasing tendency since Middle English to avoid forming conversion verbs from native nouns that are derived by means of native suffixes. Exceptions such as *freedom* (1548) number less than a dozen as opposed to the several hundred derivations of foreign origin that were converted into verbs in Biese's data (e.g. *alliance*, *deputy*, *funeral*, *indenture*, *mortgage*; 256–9).<sup>5</sup>

Generally speaking, loan words show vastly varying degrees of integration into English. In a number of cases it is no longer possible to tell whether the word has in fact been borrowed as such, or derived by means of affixation. The *OED* marks words like *abasement* (1561) and *development* (1756) as being modelled on French (*abaissement*, *développement*). The uncertainty is no doubt caused by the fact that the borrowed suffix *-ment* is added to native bases in such hybrid forms as *allowment* (1579), *betterment* (1598), *fulfilment* (1775) and quite a few others (Gadde 1910). They show that the suffix was a productive element in Early Modern English word-formation, and that forms that might have entered the language as unanalysed wholes had in the course of time become transparent.

A number of affixes, more suffixes than prefixes, came into Middle English from French. At first it was more common for native suffixes to be adjoined to borrowed bases than borrowed suffixes to be added to native bases (Baugh 1951: 215). In Early Modern English the increase in hybrid forms testifies to the productivity of the new affixes, which had by now been integrated into the native stock. The affixes that were generalised in Early Modern English include the diminutive suffix *-let* (*streamlet*, *townlet* 1552, *winglet* 1611, *sparklet* 1689, *runlet* 1755), and the prefix *non-*, which spread from legal language into wider use towards the end of the sixteenth century (*non-obedience*, *non-user*, *non-entity*, *non-member*, *non-existent*, *non-preaching*, *non-conformist*, *non-life*; Marchand 1969: 179, 326). However, with the introduction of new technical coinages based on Latin and Greek models, a tendency to avoid hybrids was strengthened from the seventeenth century onwards (Görlach 1991: 176). At the end of our period, new loan words and affixes were again more strictly compartmentalised and less productive than the older layers in the lexicon.

To sum up, the productivity of word-formation processes was increased during the first two centuries of the Early Modern English period by the loose constraints regulating their input ranges and synonymy. A word could serve as a base for multiple synonymous derivations. Fewer affixes fell into disuse than were introduced in the wake of borrowing. Hybrid formations were found with affixes that had come into English in the Middle English period, and were fully naturalised in Early Modern English. All these factors contributed to lexical growth. It would seem that the proliferation of overlapping word-formations was one of the responses to the growing functional demands made on the evolving standard language. Multiple derivations were common before any one variant form had become well-established or fully institutionalised. Those variants that came to be fixed were codified in dictionaries in the eighteenth century.

## 5.4 Borrowing

### 5.4.1 *Motives and attitudes*

Lexicographical sources suggest that borrowing was the single most common way of augmenting the Early Modern English word stock. In the latter half of the fifteenth century and the first decades of the seventeenth, it was more frequent than the various word-formation processes put together (see 5.3.1, above). Borrowing from foreign languages, especially from Latin, was also an issue that provoked a great deal of discussion and controversy in an era when the standard language was taking shape.

From the beginning of the sixteenth century until the 1580s, the ‘insufficiency’ of the vernacular was a common cause of complaint. Much of the controversy arose in connection with translation of the classics and the Bible. It was argued that English lacked the prestige of French and Latin as a language of learning and literature. English was ‘rude’ and ‘barbarous’, inexpressive and ineloquent, and it did not have the technical vocabulary required in specialised domains of language use, for example in medicine. The need to expand the lexicon was then partly practical, to coin new words for new concepts, and partly stylistic, to provide a richness of vocabulary, known as *copiousness* or *copy* (*copia verborum*), which was considered the hallmark of a literary language (Jones 1953: 3–31, 68–141).

One of the early neologisers of the utilitarian kind was Sir Thomas Elyot. His innovations for the most part come from the classical languages, and include a number of words that are still current, such as *animate*, *education*, *encyclopaedia*, *frugality*, *metamorphosis*, *modesty* and *persist* (Barber 1976: 79).

In his preface to *Of the Knowledge whiche Maketh a Wise Man* (1533, fo. A3), Elyot states his aims as follows:

I intended to augment our Englyshe tongue, wherby men shulde as well expresse more abundantly the thyng that they conceyued in theyr hartis (wherfore language was ordeyned) hauynge wordes apte for the purpose: as also interprete out of greke, latyn/ or any other tonge into Englysshe, as sufficiently/ as out of any one of the said tongues into an other . . . there was no terme new made by me of a latine or frenche worde, but it is there declared so playnly by one mene or other to a diligent reader that no sente[n]ce is therby made derke or harde to be vnderstande.

It was the growing tendency to borrow merely for the sake of magniloquence that gave rise to the Inkhorn Controversy in the latter half of the sixteenth and early part of the seventeenth century. What came to be seen as superfluous learned borrowings from Latin were heavily criticised. In *The Arte of Rhetorique* (1553, fos. 86v–87r), Thomas Wilson gives a graphic illustration of their overuse by quoting ‘An ynkehorne letter’, which he claims is genuine. It contains, for instance, the following loan words that had not been attested before: *accersited*, *adepted*, *adjuvate*, *celebrate*, *clemency*, *collaud*, *condisciple*, *contemplate*, *dominical*, *fatigate*, *frivolous*, *impetrate*, *invigilate*, *scholastical*, *sublimity* and *revolute* (Barber 1976: 84–5). Although Wilson may have intended them all as examples of the inkhornisms of his day, many of them were in fact preserved for posterity, some even without overtones of excessive formality. One argument in favour of loan words was in fact that they would quickly lose their strangeness and become naturalised (Gotti 1992: 331).

The eloquence of learned loans was promoted by people like Cockeram, to whom ‘hard words’ were, as he states in the preface to his dictionary (1623), ‘the choisest words themselues now in vse, wherewith our language is enriched and become so copious’. The Inkhorn Controversy itself died down in the course of the seventeenth century, but the affectation of innovations continued to be criticised. In his *Grammatica linguae anglicanae* (1653: xxi), John Wallis states that English is now copious to the extent of luxury (*ad luxuriam copiosa*).

During the Restoration, loan word criticism takes a new turn when it begins to be directed at the affected use of French loans. The number of French loans at the time is, however, in no way comparable to the earlier influx of Latin-based vocabulary. It must therefore be the social and cultural aspirations associated with the use of French words and phrases in speech that were satirised by Dryden, Etheridge and other Restoration

playwrights. The impact of French continued to cause concern in the eighteenth century. George Campbell (1776: 413) protested against redundant synonymy:

Are not *pleasure*, *opinionative*, and *sally*, as expressive as *volupty*, *opiniatre*, and *sortie*? Wherein is the expression *last resort*, inferior to *dernier resort*; *liberal arts*, to *beaux arts*; and *polite literature*, to *belles lettres*?

Dr Johnson saw more harm done at the level of collocations and phraseology, and directed his criticism against translations:

No book was ever turned from one language into another, without imparting something of its native idiom; this is the most mischievous and comprehensive innovation; single words may enter by thousands, and the fabrick of the tongue continue the same, but new phraseology changes much at once; it alters not the single stones of the building, but the order of the columns. If an academy should be established for the cultivation of our stile . . . let them, instead of compiling grammars and dictionaries, endeavour, with all their influence, to stop the licence of translatours, whose idleness and ignorance, if it be suffered to proceed, will reduce us to babble a dialect of *France*. (Johnson 1755: 5)

In the following sections, I shall confine myself to borrowed lexemes without trying to assess the impact of loan translations (*calques*) on the lexicon. Unlike the case in Old English, loan words are probably the more common of the two in Early Modern English. Loan translations were, however, resorted to even by linguistic purists in the sixteenth and seventeenth centuries on a par with native word-formation processes as a means of augmenting native lexical resources. In his biblical translations, Sir John Cheke introduced, without much success, such calqued forms as *gainbirth* ‘regeneration’, *gainrising* ‘resurrection’, *onwriting* ‘superscription’ and *moond* ‘lunatic’. He also used *binordes* for ‘parables’, *hundreder* for ‘centurion’ and *washing* for ‘baptism’ (Barber 1976: 91).

#### 5.4.2 *Loan word status*

The status and identity of loan words varies in the borrowing language. Some issues of their lexical productivity have been touched upon in section 5.3.2 above. The process of borrowing may even be quite heterogeneous as far as individual lexemes are concerned. Two aspects of this variability in Early Modern English merit separate discussion: reborrowing of the same foreign item, and the varying degrees of lexical and morphosyntactic integration displayed by borrowed lexis.

## 5.4.2.1 Multiple borrowing

The fact that a lexeme has at one point been borrowed into English does not necessarily settle its status in the lexicon. Doublets are a case in point. According to Reuter (1936: 1), about two-thirds of all the loan verbs borrowed from Latin at one time or another have had two forms. After the eighteenth century they were only preserved if they were semantically differentiated. Thus we have, for instance, both *conduce* (1425), derived from the Latin present stem of the verb *conducere*, and *conduct* (fifteenth to sixteenth century) from the past participle *conductus*; *confer* (1528) from *conferre* and *collate* (1558) from *collatus*; *construe* (1362) and *construct* (1610); *resurge* (1575) and *resurrect* (1772), and so on. Where no semantic differentiation had taken place, it was more common for the present stem forms to fall out of use. Thus *captive*, *exone*, *retrabe*, *repone* and *reverb* were all lost in the developing standard language (but not in Scots), while their longer variants *captive*, *exonerate*, *retract*, *repose* and *reverberate* were preserved (Scheler 1977: 45–6, Reuter 1936: 19–30).

Multiple borrowings should perhaps be distinguished from etymological ‘corrections’ of borrowed words. It was not seldom that earlier French-derived loans were restored to their Latin shape in the course of the late Middle English and EModE periods. This process gave rise to a number of doublets such as *avontery* v. *adultery* and *parfit* v. *perfect* (Görlach 1991: 145; see further 5.4.3.1).

Malapropisms and folk etymologies illustrate the opaqueness of ‘hard words’ to ordinary people. John Hart (1570) is one of the first to comment on the confusion arising from such formally similar items as *temperate* and *temporal*, *stature* and *statute*, and *abject* and *object* (Danielsson 1955: 69). Uncertainty of this kind was increased by the introduction of synonymous doublets. As they seriously detracted from the one-form–one-meaning principle of lexical economy, doublets must have made the language barrier even greater for the less educated.

On the other hand, oral borrowings from living languages could also appear in a variety of forms. Deciding on the shape of words caused particular problems with languages that had no written form. The case of *rac(c)oon*, borrowed from the Powhatan (Virginia) dialect of Algonquian, provides a good illustration. According to the *OED*, it first appeared in two plural forms as *rahawcums* and *rangroughcums* in a narrative by Captain Smith in 1608. In 1610 we find the forms *aracoune* and *arathkone*, and in 1624 *aroughcun* and *rarowcun*. The modern form *raccoon* is first attested in 1672.

What etymologically counts as the same form could also be reborrowed

into different fields of discourse. The French past participle *animé* is first attested in English in 1577 as a name given to various resins (according to the *OED*, presumably because they contain so many insects as to be ‘animated’). In the eighteenth century the same form reappears as a term of heraldry, ‘in action and showing a desire to fight’. Because they are semantically so wide apart, the two instances of *animé* must be treated as homonyms rather than as different senses of the same lexeme. Reborrowing may thus increase homonymy in the lexicon.

At the other end of the scale, we have polysemy arising from a borrowed sense being added to the meaning range of a loan word. Both general and specific senses are evidenced, although it is often far from easy to tell sense borrowing from native change. Thus Chaucer resorts to the loan words *declination* and *hemisphere* only as astronomical terms, while a number of their modern senses first appear in the sixteenth century. In *The Governor* (1531: 240 v.) Elyot decides against using *intelligence* in its usual sense of ‘understanding’ because

intelligence is nowe vsed for an elegant worde/ where there is mutuall treaties or appoyntementes/ eyther by letters or message specially concerning warres.

Baugh (1951: 270) gives these examples as illustrations of sense borrowing in the Renaissance. Foreign influence cannot, of course, be ignored in an age like this; it was all-pervasive. On the other hand, there is no *a priori* reason why especially the older layers of loans should not acquire new senses as a result of language-internal semantic developments.

#### 5.4.2.2 Integration

Internal meaning changes supply evidence of a high degree of integration of a loan word into the receiver language. So do changes affecting the lexical field into which the loan enters. The fact that the Franco-Latin *animal* successfully replaced the Middle English French loan *beast* in the general sense of ‘living creature’ in Early Modern English speaks for its naturalisation. As *deer*, the native word for ‘animal’, had become common in its present sense in Middle English, and *beast* had acquired its brutal, non-human associations early on, Samuels (1972: 73–4) suggests that the introduction of *animal* filled a need in the lexicon. We may generally assume that borrowing for necessity produced more both semantically and lexicogrammatically integrated loans than borrowing for sheer *copy*.

One way of assessing lexical integration is to look at the productivity of



loan words as bases for word-formation processes. In the case of *animal*, the *OED* record suggests that the noun became derivationally integrated in the course of the seventeenth and early eighteenth centuries, while its compounds and collocations do not begin to appear until the eighteenth.

<i>Derivations</i>		<i>Compounds/collocations</i>	
animalic	1677	animal kingdom	1706
animalist	1678	animal pieces	1711
animalness	1731	animal food	1749
animalise	1741	animal flower (Actinia)	1767
animalisation	1767	animal heat	1779
animalised	1784	animal electricity	1793

As in the case of *animal*, borrowing usually means that native and borrowed lexemes will cooccur in the same lexical sets. In these etymologically mixed sets, words with related conceptual meanings need not be formally related. Loan-word integration thus promotes lexical dissociation. This typically occurs in the more technical and non-colloquial registers in Early Modern English, which borrowed the second elements in pairs like *belly/ventral*, *book/bibliography*, *egg/ovum*, *heart/cordial*, *naked/nudity*, *night/nocturnal*, *saying/dictum* and *sun/heliocentric* (for borrowed prefixes, see 5.5.2).<sup>6</sup>

Borrowing for necessity might be expected automatically to lead to morphosyntactic integration in terms of free admission of inflections and syntactic functions. But not all loans that presumably fill gaps are integrated in this way in all registers. In technical domains, ‘need-filling’ loans often have a special status as terms. In this capacity they may occur only in fixed phrases, be rarely inflected, and assume only a limited range of syntactic functions in the sentence. In the language of law, new terminology was commonly formed by combining a native term, or an integrated loan word, and its foreign (near-)synonym (Mellinkoff 1963: 121–2, Koskenniemi 1968: 116–17). The following binomials illustrate the strategy that has a long history in legal language and still prevails in Early Modern English. They are drawn from Rastell (1579) and Mellinkoff (1963). (The exact dates refer to their first attestations in legal use; the others to first datings of the French loan components.)

bargain and sale	(F + OE; 1579)
breaking and entering	(OE + F; 1617)
final and conclusive	(F + Lat.; 1649)
maintenance and upkeep	(F + OE; fifteenth century)
new and novel	(OE + F; fifteenth century)
pardon and forgive	(F + OE; fifteenth century)
tax and tallage	(F + F; 1534)



It is hard to tell the extent to which binomials were motivated by loan-word accommodation alone. It would appear that repetitive word pairs were a more-or-less automatic feature in the rhetoric of a number of formal registers at the time (see e.g. Rissanen 1975, and Adamson this volume). The following passage comes from the indictment of Sir Nicholas Throckmorton, accused of high treason in 1554. It illustrates the way in which loan words were coupled with other loans or native lexemes in parallel constructions. It is noteworthy that all the verb pairs should appear uninflected in structures of complementation. This kind of register-specific use of loan words does not greatly promote their syntactic or semantic independence. More particularly, if these Middle English loans had been confined to fixed collocations in all registers, there would have been little likelihood of their morphosyntactic integration.

. . . and also thou wast adherente to the Queenes Enimies within hir Realm, giuing to them *Ayde and Comfort*, &c. and also *falsly and trayterously* didst *conspire and intend* to *depose and deprive* the Queen of hir Royal Estate, and so finally destroy hir, &c. and also thou didst *falsly and traiterously denise and conclude* to take violently the Tower of London, &c.

([HC], *State Trials*, p. 64; italics added)

### 5.4.3 Sources

#### 5.4.3.1 Latin

Latin was the dominant source of borrowed lexis in Early Modern English. During the period of about 1560 to 1670 well over half of the loan words attested in the *CED* come from Latin. Only at the very beginning of the EModE period are direct loans from French more frequent than Latin loans, which even in the eighteenth century comprise some forty per cent of the loan word total. According to Wermser (1976: 45), the peak period of Latin borrowing in absolute terms is around 1610–24, and the lowest point is reached a hundred years later 1710–24, when the figures fall to a mere eighth of the peak period (1047 v. 131 attestations in the *CED*, respectively). Since they also include words that are only found in dictionaries, the figures for 1610–24 are slightly inflated, but not so much as to obscure the overall tendency (see 5.2.4; Barber 1976: 169).

The Early Modern English Latin loans are on the whole bookish, although many belong to the general vocabulary. Their status also changed as the period advanced. Latin was increasingly used to introduce specialist terms, ‘terms of art’, into the vernacular. Up to the 1520s, Latin loans cover about twenty per cent of the total of new terms, but during the next 150 years their proportion attains the forty per cent level (Wermser 1976: 55).

Specialists themselves defended borrowing by appealing to the lack of exact or equivalent technical terms in English. The success of Latin terminology may be partly attributed to its lack of ambiguity. While promoting the use of English, the Royal Society, for instance, openly endorsed the one-form-one-meaning principle. Many must also have shared Robert Boyle's view of 'the propriety' of retaining Latin terms. Latin was the *lingua franca* of international science and scholarship, and eminent scientists such as Bacon, Harvey and Newton continued to write their major works in Latin (see Vickers 1987: 8–22, Gotti 1992).

In the period of intense borrowing of Latin terms, it was the fields of medicine, zoology, botany (animal and plant names in particular) and theology that gained most. Mathematics and architecture appear to reach their peaks in 1560–74, anatomy in 1610–24, and architecture, botany and general scientific terms again in 1660–74 (Wermser 1976: 55). In the Restoration period Latin became quite unfashionable in general use, but continued to be extensively used for technical terms (Barber 1976: 171). As the share of specialist terms in the lexical intake steadily grew in the eighteenth century, new Latin loans and neo-classical formations became increasingly associated with technical registers.

In the Middle English period, Latin influence was largely filtered through French, often to the extent that it is difficult to know which of the two languages provided the immediate source for a given loan word. In a number of cases, both probably served as models. In the Renaissance it is more common to find that loans go back to Latin directly, although their sources may vary from Classical to Neo-Latin. The largest group in Barber's (1976: 173) *OED* sample of some 400 Latin loans covering the period 1500–1700 come from medieval Latin. Early Modern English also produces doublets of direct loans from Latin and Middle English borrowings of what are regular French developments of the same items (Serjeantson 1961: 262):

count	(ME)	compute	(1631)
garner	(ME)	granary	(1570)
poor	(ME)	pauper	(1516)
ray	(ME)	radius	(1597)
spice	(ME)	species	(1551)
strait	(ME)	strict	(1578)
sure	(ME)	secure	(1533)

The classical revival and prestige of Latin prompted quite a few respellings and, in some cases, spelling pronunciations of what were considered

‘corrupt’ forms borrowed via French into Middle English. This process of restoration went on from the fourteenth to the sixteenth century. Respellings include such common words as *debt* for *dette*, *doubt* for *doute*, *indict* for *endite*, and *victuals* for *vitailes* (see Lass this volume, Salmon this volume, Scheler 1977: 47).

Most of the Latin loans in Early Modern English are nouns, adjectives and verbs. Nouns are frequently taken over morphologically unaltered in the nominative case (e.g. *augur*, *circus*, *medium*, *interior*). This is particularly the case with loans from modern Latin since the sixteenth century. Many technical terms preserve their original plural forms: *formula* – *formulae*, *fungus* – *fungi*, *genius* – *genii*, *genus* – *genera*, and many more. Other Latin case forms are also borrowed, for instance, the ablative in *folio*, *proviso*, *rebus* (pl.), and *via*. Latin verb forms are adopted as nouns in *deficit*, *exit*, *caveat*, *ignoramus*, *recipe*, *veto*, *tenet*, *fiat* and entire verb phrases in *facsimile* and *factotum*. Adverbs and prepositions appear in *alias*, *alibi*, *extra*, *interim*, *item* and *verbatim* (Serjeantson 1961: 263–4).

The other principal mechanism of accommodating Latin words is by morphological anglicisation. One way to do that is to drop the Latin inflectional ending. This principle gives us such forms as *constriction* from *constrictionem* (accusative), *expunge* from *expungere*, *immature* from *immaturus* and *terrific* from *terrificus*. This was a particularly common procedure with verbs. As pointed out above in 5.4.2, verbs were adopted either in their present stem or in their past participle form (c.f. *imburse*, *immerge*, *transcribe* v. *commemorate*, *enumerate*, *imitate*). The latter type were originally participles in Middle English, but were overwhelmingly adopted as base forms in Early Modern English. Reuter (1936: 4–15) traces this process of change by calculating the ratios of present stem forms as against participial formations in individual authors. Chaucer has about 200 Latinate verbs derived from the present stem, and thirty-seven derived from the past participle. The corresponding ratio is 300 to 100 in Caxton, 200 to 400 in Shakespeare, and as high as 250 to 850 in Cockeram (whose verbs mostly come from Thomas’s Latin dictionary).

Participial adjectives were commonly formed on the Latin nominative stem in Early Modern English. Most of the adjectives in Barber’s data (1976) formed by dropping the Latin inflection go back to *-atus* and end in *-ate* (e.g. *immediate*, *inveterate*, *commensurate*). Many of them have since become obsolete, including *alienate*, *conflate*, *contaminate* and *expiate*, or been replaced by participial forms in *-ated*. Other typical Early Modern English forms are those ending in *-al* (from Latin *-alis*), as in *official* and *transcendental*. Adjectives based on the oblique stem end in *-ent* or *-ant* (*frequent*, *relevant*).

The data in Barber (1976: 173–4) show that nouns that drop the Latin inflections often end in *-y*, which corresponds to the Latin nominative stem *-ius*, *-ia*, *-ium*, as in *commentary*, *deliry* ('delirium') and *prelaty* ('prelacy'). Other types include *-ic*, *ism*, *-ian* and *-ine*. Nouns formed on the oblique stem commonly end in *-ion* (e.g. *invitation*, *prelusion*, *relaxation*).

Another way of anglicising Latin forms was to replace the Latin derivational ending by the well-established terminations that had come into Middle English via French (see 5.5.3). The most common types of nouns are those ending in *-ity* (from L *-itās*), like *immaturity* and *invisibility*, and in *-ence*, *-ency*, *-ancy* (from L *-entia* and *-antia*), such as *transcendence*, *delinquency* and *relevancy*. By far the most common adapted endings with adjectives are *-able*, *-ible* (from *-ābilis*, *-ibilis*), as in *inviolable* and *susceptible*, and *-ous* (from *-us*), as in *invions* 'pathless'.

The following chronological survey of Latin loans from 1476 to 1776 illustrates the range of Latin borrowing in Early Modern English. It is drawn mainly from Serjeantson (1961: 260, 264–5), and is hence based on the *OED*.

- 1476–99 dismiss 1477; instruct 1477; inspector 1479; verbatim 1481; convalesce 1483; hostile 1487; permit (vb) 1489; concussion, popular 1490; victim 1497; produce (vb) 1499
- 1500–49 cadaver 1500; integer 1509; genius 1513; junior 1526; fungus 1527; vertigo 1528; acumen 1531; folio 1533; area, exit, peninsula 1538; abdomen 1541; circus 1546; augur, axis 1549
- 1550–99 vacuum 1550; genus, medium, specie(s) 1551; caesura 1556; corona 1563; innuendo 1564; cerebellum 1565; decorum 1568; nasturtium 1570; interregnum 1579; compendium, viva-voce 1581; omen 1582; militia 1590; radius, sinus 1597; virus 1599
- 1600–49 premium 1601; torpor 1607; equilibrium 1608; specimen 1610; spectrum, series 1611; census 1613; vertebra 1615; tenet 1619; squalor 1621; agend-um (-a), veto 1629; fiat 1631; formula 1638; onus 1640; crux, impetus 1641; focus 1644; data 1646
- 1650–99 copula 1650; album, larva 1651; complex, vortex 1652; pallor 1656; pendulum 1660; nebula, rabies 1661; minimum 1663; corolla 1671; serum 1672; calculus, stimulus 1684; lens, lumbago, status 1693; antenna 1698
- 1700–49 nucleus 1704; cirrus 1708; caret 1710; inertia 1713; locus 1715; propaganda 1718; alibi 1727 (adv., n. 1774); auditorium 1724; ultimum 1731; maximum 1740
- 1750–76 colloquial, minutia, -ae 1751; cellulose (n.) 1753; decorator 1755; insomnia 1758; tentacle 1762; fauna 1771; bonus 1773; extra, herbarium 1776.

## 5.4.3.2 French

The statistical comparison in Wermser (1976: 45) shows that French accounts for well over a half of all the borrowed lexis at the beginning of our period. Its relative share remains between twenty and thirty per cent of the total in the seventeenth and eighteenth centuries in Wermser's four sub-periods (see 5.3.1, above). The account in Pennanen (1971a: 13), based on a sample of about 4,000 French loans from 1550 to 1700, is arranged by decades. It shows that, in absolute terms, French borrowing reaches its peak in 1570–1620, with another brief rise in 1650–60. Pennanen's data further indicate that the rate of obsolescence of these loans is highest in the first half century (1550–1600), and decreases towards the end of the seventeenth century.

Pennanen's study also considers the difference between integrated loans and those that the *OED* marks as phonologically and/or morphologically unassimilated. What is striking is the increase in the number of unassimilated loans since the 1640s. Their share of the French loans in 1651–1700 is more than double the corresponding figure for the previous century, 1550–1650.

Unlike Latin, French loan words come from a living language. In Early Modern English they mirror England's cultural and political contacts with France, as well as the influence of French emigrants, who settled in England in the late sixteenth and seventeenth centuries. The fifteenth and sixteenth-century loans no doubt in part continue to reflect the role of French as a language of administration and law, but much of the seventeenth-century variation can only be explained in terms of Anglo-French relations, which were revived during the Restoration, after the various tensions that had existed between the two countries since the 1620s were relaxed.

The large number of unassimilated loans in the latter half of the seventeenth century speaks for the fashion among the cultivated upper social ranks of introducing French words and phrases into ordinary conversation. It was this fashionable use of French that writers like Dryden, and later Addison, Johnson, Campbell and others objected to. The *OED*-based study by Leidig (1941) suggests that even many relatively assimilated eighteenth-century loans related to food, drink, travel, sport, the arts and luxury goods did not become a lasting part of the Present-Day English lexicon. Leidig argues that this vein of borrowing subsequently petered out in the late eighteenth century for two reasons. The French Revolution put an end to the cultural influence of the nobility in the country, while England at the same time was becoming increasingly bourgeois in outlook,

and the middle classes gained a more prominent position in the transmission of the literary culture.

In form, French loan words do not depart greatly from their sources. Morphological anglicisation takes place, however, with some affixes that already have a corresponding form in English. *Contre-* is thus changed into *counter-* (as in *counterpoint*), *-té* into *-ty* (*docility, fidelity*), and verbs take the native suffix *-ize* (*anathemize*; Barber 1976: 177). Unanglicised words retain their original forms (*contrepied, naïveté*). In most cases loans retain their original spelling, or something close to it. Their pronunciation also remains as close to the original as allowed by the English phonological system – or the speaker's command of French. The tendency reflects the changing functions of French loans, ranging from necessary terms used by all social ranks to marked foreignisms, which, since 1550, indicated membership of a prestigious and educated elite (Görlach 1991: 168).

Where ME loans are pronounced with a /tʃ/ in words like *chandler* and *broach*, and in *rage* with a /dʒ/, EModE loans record the changes that had in the meantime taken place in the French sound system, so that *chandelier* and *brochure* are pronounced with a /ʃ/ and *rouge* with a /ʒ/. ME loans were mostly integrated into English, and affected by native English sound changes, such as the GVS (see Lass, this volume). Thus we have the diphthong /aɪ/ in words like *nice* and *vine*, which were borrowed in Middle English, but a long monophthongal /i:/ in the EModE nouns *machine* and *police* (Skeat 1970: 12–13). Like many other EModE borrowings from French, they have also retained the main stress on the second syllable.

Serjeantson (1961: 157) notes that Early Modern English loans nonetheless often display sound substitutions and stress shifts. The more widespread the use of a loan word, the more likely it is to undergo processes of substitution that replace, for example, nasal vowels by the combination of an oral vowel and a nasal consonant (e.g. /ɒn/ in *envelope*). In the same way, the French short /a/ is replaced by /æ/, and the final /e/ by the diphthong /eɪ/; both are shown by *ballet* /bæleɪ/. The great majority of the Early Modern English loans come from the emerging standard variety of Central French. Some words have their origins in Provençal (*mistral* 1604, *lucerne* 1626, *lingo* 1660, *gavotte* 1696 and *troubadour* 1727) and Swiss-French dialects (*chamois* 1560; Serjeantson 1961: 158–9).

The late fifteenth-century loans include a number of items that are still current in Present-Day English. The following are a few illustrations: *domicile*, *industry* 1477, *cite* (vb), *consume* 1483, *elegant* 1485, *band* (n.), *decision* 1490, and *intuition* 1497. Serjeantson (160–2) surveys the different fields of discourse of the later loans. The sixteenth-century borrowings include a

number of military and naval terms, such as *trophy* 1513, *pioneer* 1523, *pilot* 1530, *colonel* 1548, *volley* 1573 and *cartridge* 1579. Trade loans are also frequent: *palliasse* 1506, *livre* 1553, *indigo* 1555, *vase* 1563, *cordon* 1578 and *portmanteau* 1584. There are already quite a few ‘social’ loans, including *minion* 1556, *bourgeois* 1564, *vogue* 1571, *esprit* 1591, *genteel* 1599, *madame* 1599, as well as the now obsolete *sirrah* 1526. Other areas can be illustrated by *scene* 1549, *machine* 1549, *grotesque* 1561, *potage* 1567, *promenade* 1567, *hautboy* 1575 and *moustache* 1585.

As shown above, the second half of the seventeenth century was more susceptible to French borrowing than the first. The category of military, naval and diplomatic loans includes *cartouche* 1611, *brigade* 1637, *platoon* 1637, *mêlée* 1648, *envoy* 1666, and *aide-de-camp* 1670 (the last is one of the many French loans marked as non-assimilated in the *OED*). ‘Social’ loans are particularly frequent in this period: *repartee* 1645, *liaison* 1648, *naïve* 1654, *class* 1656, *decor* 1656, *rapport* ‘relationship’ 1661, *malapropos* 1668, *metier* 1674, *faux pas* 1676, *beau* 1687, *verve* 1697, *menage* 1698. Other areas of borrowing include arts and literature, dress, games and dancing, and food: *rôle* 1604, *crayon* 1644, *soup* 1653, *cabaret* 1655, *cravat* 1656, *memoirs* 1659, *champagne* 1664, *ballet* 1667, *nom-de-plume* 1679, *pool* 1693, *denim* (< *serge de Nîmes*) 1695, *attic* 1696, *mousseline* 1696 and *vinaigrette* 1698.

In the eighteenth century, food and cooking continue to attract French loans (e.g. *casserole* 1706, *croquette* 1706, *ragout* 1710, *hors d'oeuvre* 1742, *liqueur* 1742); so do literature, music and art (e.g. *critique* 1702, *belles lettres* 1710, *connoisseur* 1714, *vaudeville* 1739, *dénouement* 1752, *précis* 1760, *brochure* 1765). The variety of other cultural loans can be illustrated by *civilization* 1704, *écu* 1704, *envelope* 1707, *salon* 1715, *bouquet* 1716, *police* 1730, *roulette* 1734, *glacier* 1744, *picnic* 1748, *etiquette* 1750, *gauche* 1751, *fête* 1754, *dentist* 1759, *femme de chambre* 1762, *passé* 1775, *souvenir* 1775 and *regime* 1776. There is a noticeable increase in political and scientific, especially chemical, terminology of French origin towards the very end of the eighteenth century.

French influence on English phrasing is also considerable. Prins (1952: 32) dates its peak period to late Middle English, but it continues to be felt in Early Modern English. These loan translations range from polite turns of speech, such as *at your service*, *do me the favour*, *to engage somebody in a quarrel*, *to make (one's) court to*, *to make* (later: *pay*) *a visit*, to idiomatic phrases like *by occasion*, *in detail*, *in favour of*, *in the last resort*, *in particular*, *to the contrary*.

#### 5.4.3.3 Other European languages

With few exceptions, the share of loans from European languages other than Latin and French remains well below ten per cent of the loan word total in



the Early Modern English period. The languages that contributed most are Greek, Italian, Spanish, and Dutch.<sup>7</sup> The contribution of the the rest of the European languages increases in the course of the eighteenth century, as does the share of non-European languages. The relative share of the latter exceeds the ten per cent level in the last decades of our period (Wermser 1976: 45).

#### 5.4.3.3.1 Greek

The renaissance revival of classical learning also intensified direct borrowing from Greek, although it is in no way comparable to the massive borrowing from Latin. Many Greek loans were still filtered through Latin or French, to the extent that the term *Latinate* may be used to cover all three (see 5.2.2). The *CED* figures cited above reflect the *OED* practice of recording the immediate donor language of the loan word as its etymological source. A more varied picture of the Greek impact on Early Modern English may perhaps be provided by illustrating both those loans that came from classical Greek and those that were mediated through Latin. The following illustrations, drawn from the *CED* and Serjeantson (1961: 269–70), show that Greek loans are mostly learned. Some of them have since become popularised but the vast majority consists of technical and scientific terms. It was the method of combining originally Greek lexical elements that established itself as an important source of international scientific terminology in the nineteenth century. In the Early Modern English period most of the specialised loans belong to the fields of theology, classical civilisation and mythology (Barber 1976: 175).

As in the case of Latin, most of the Greek loans are nouns, adjectives and verbs. Nouns predominate, and usually take the English plural morpheme *-s*. The first decades of our period do not provide any direct Greek loans in the *CED*. In the following survey, Lat. indicates that the word entered English through Latin.

- 1500–99 alphabet (Lat.) 1513; drama (Lat.) 1517; dilemma (Lat.) 1523; hyperbole (Lat.) 1529; phrase (Lat.) 1530; catastrophe (Lat.) 1540; crisis (Lat.) 1543; arthritis (Lat.) 1544; isthmus (Lat.) 1555; hegemony 1567; acme 1570; pathos 1579; praxis 1581; dialysis 1586; hypothesis 1596
- 1600–99 archive (Lat.), strophe 1603; onomastic 1609; hexapla 1613; epiglottis 1615; meteorology 1620; program (Lat.) 1633; coma 1646; electric (Lat.) 1646; psyche 1647; cosmos 1650; elastic 1653; euphemism 1656; nous 1678; narcosis 1693
- 1700–76 phlox, monotony 1706; camera (Lat.) 1708; terpsichore 1711; aphrodisiac (adj.) 1719; anaesthesia (Lat.) 1721; thyroid 1726; bathos 1727; triptych; philander 1731



## 5.4.3.3.2 Italian

In the ME period the vast majority of loans of Italian origin came into English usage through French. While this indirect borrowing continued in the early part of the EModE period, direct loans were becoming increasingly common. In Tudor times, England had direct contacts with Italy through the Flemish trade conducted with Venice, and private travel in Italy also became fashionable, thus spreading the knowledge of Italian culture.

Many of the early loans are related to trade; for instance, *traffic* (F) 1506, *parmesan* 1519, *caravel* 1527, *artichoke* 1531, *carat* 1552, *bankrupt* (F) 1553, *majolica* 1555 and *frigate* 1585. The cultural loans that entered English in the sixteenth century range from literature, music and architecture to social activities: *ballot*, *carnival*, *cupola*, *duomo* 1549; *sonnet* 1557; *cameo* 1561; *lottery* 1567; *pilaster* 1575; *piazza* 1583; *duel(lo)* 1588 (1591); *madrigal*, *stanza* 1588; *motto* 1589; *canto* 1590; *belvedere* 1596; *fresco*, *stucco* 1598; and *canzone* 1599. Some terms have since undergone meaning changes, and their original senses have become obsolete. They include *scope* 'mark for shooting at' 1534, *cassock* 'a horseman's coat' 1550, *cartel* 'a written challenge' (F) 1560, *cavalier* 'a horse-soldier' 1560, *manage* 'to control a horse' 1561 and *garb* 'grace' or 'elegance' 1591 (Serjeantson 1961: 186–9).

Loans related to Italian products, social customs and arts accumulate in the seventeenth and eighteenth centuries. Some geological and medical terms also appear. Serjeantson (189–90) groups the following under life and society: *umbrella* 1609, *lagoon* 1612, *gala* 1625, *gusto* 1629, *incognito* 1638, *regatta* 1652, *gambit* 1656, *firm* 1744 and *imbroglio* 1750. The scientific terms borrowed are mostly popular: *volcano* 1613, *granite* 1646, *bronze* 1721, *lava* 1750, *tufa* 1770, *malaria* 1740, *influenza* 1743. Many architectural terms borrowed in this period have gained a lasting position in English, e.g. *portico* 1605, *villa* 1611, *grotto* 1617, *balcony* 1618, *mezzanine* 1711, *arcade* 1731. The same applies to many of the musical terms: *opera* 1644, *recitative* 1645, *sonata* 1694, *solo* 1695, *tempo* 1724, *trombone* 1724, *oratorio* 1727, *concerto* 1730, *soprano* 1730, *aria* 1742, *pianoforte* 1767 (= *fortepiano* 1769) and *false alto* 1774. The visual arts borrowed *catafalque* 1641, *bust* 1641, *mezzotint* 1660, *cartoon* (F) 1671, *terra-cotta* 1722 and *dilettante* 'a lover of fine arts' 1733.

## 5.4.3.3.3 Spanish

Direct contacts between England and Spain were intensified in the first part of the Early Modern English period, partly due to the good relations under Queen Mary. Besides native Spanish words, Spanish contacts also introduced into English a number of loans of non-European, mainly of American and African, origin. The spectrum of Hispanic borrowing can

be illustrated by some of the fields of discourse that the loans represent (Serjeantson 1961: 197–200). They include trade terms and products (*cask* ‘barrel’ 1557, *anchovy* 1596, *sherry* 1597, *lime* (fruit) 1622, *cargo* 1657), people and titles (*don* 1523, *renegade* 1583, *hidalgo* 1594, *booby* 1599, *creole* 1604, *desperado* 1610, *toreador* 1618, *matador* 1681), and military and political terms (*grenade* (F) 1532, *armada* 1533, *embargo* 1602, *junta* 1623, *corvette* (F) 1636, *flotilla* 1711). Other widespread loans are *tornado* 1556, *peccadillo* 1591, *sombrero* 1598, *spade* (cards) 1598, *sierra* 1613, *guitar* 1629, *escapade* (F) 1653, *siesta* 1655, *esplanade* (F) 1681, *marinade* (F) 1704, *mantilla* 1717 and *cigar* 1735. The American-based Spanish loans relate to people, products and nature: *cannibal* 1553, *negro* 1555, *maize* 1565, *potato* 1565, *alligator* 1568, *tobacco* 1577, *banana* 1597, *ananas* 1613, *vanilla* 1662, *avocado* 1697, *barbecue* 1697, *tortilla* 1699 and *pampa* 1704 (Scheler 1977: 64).

#### 5.4.3.3.4 Dutch

Because they are so closely related, Flemish, Frisian, Afrikaans and Low German proper are often included in diachronic accounts of Dutch borrowing. Alternatively, these varieties are grouped together under ‘Low German’ (see Serjeantson 1961: 170, Scheler 1977: 25, den Otter 1990: 262). In any case, the vast majority of these loans are evidently of Dutch origin in the strict sense of the word. In view of the great affinity of these varieties – it is often impossible to tell the immediate source of a loan word without external evidence on purely formal grounds – I shall in the following account adopt the broader view, and discuss Dutch loans in the wider sense of the term, including the influence of the neighbouring varieties.

Den Otter (1990) used the online *Oxford English Dictionary* to calculate the share of these ‘once-Dutch’ words of all the new lexis introduced in each century, and found that their relative proportion peaks in the fifteenth century (1.2 per cent), drops slightly in the sixteenth (0.7 per cent), and then remains relatively stable throughout the seventeenth and eighteenth centuries (about 0.5 per cent of the total). In absolute terms, the greatest number were introduced in the sixteenth century.

Den Otter’s survey shows that most of the fifteenth-century loans reflect the common commercial interests of the Dutch and the English, as they are typically related to goods, cloth and rope. The late fifteenth-century loans include *guilder* 1481, *excise* 1494 and *bosc* 1495. Trade terms continue to be borrowed in the sixteenth century, together with nautical vocabulary, e.g. *gulden* 1502, *scone* 1513, *dock* 1513, *splice* 1524, *dollar* 1553 and *yacht* 1557. A variety of other items were also borrowed: *wagon* 1523, *snuff*

(‘inhale’) 1527, *steady* 1530, *bully* 1538, *snip* 1558, *bumpkin* 1570, *catkin* 1578, *spatter* 1582, *filibuster* 1587, *split* 1590, *rant* 1598 and many others.

The seventeenth-century entries are mainly navigational, but terms from commerce, warfare and art were also widely borrowed (Serjeantson 1961: 176–8): *smack* 1611, *keelhaul* 1626, *cruise* 1629, *jib* 1661, *yawl* 1670; *brandy* 1654, *tea* 1655, *duffel* 1677, *smuggle* 1687; *knapsack* 1603, *onslaught* 1625, *easel* 1654, *sketch* 1668. Other loans from the period can be illustrated by *banker* 1601, *slur* 1609, *drill* 1611, *skate* 1656, *slim* 1657 and *bustle* 1684. In the eighteenth century, basically the same variety of loans can be detected (*gin* 1714, *schooner* 1716, *roster* 1727, *cookie* 1730, *spillikin* 1734, *yankee* 1765, *caboose* 1769, *mangle* 1774), with the addition of some words from South African Dutch (*kleof* 1731, *steenbock*, *springbok* 1775).

#### 5.4.3.3.5 Others

The lexical influence of other European languages on Early Modern English is more sporadic, and especially in the early part of the period filtered through French, Dutch and Spanish. The following illustrations are mostly drawn from Serjeantson (1961) and Finkenstaedt & Wolff (1973).

As in the case of Spanish, direct contacts with Portuguese were mainly established in the sixteenth century. The words borrowed are mostly related to the Portuguese settlements and colonies in Africa, India, the Far East and America: *apricot* 1551, *coco* 1555, *flamingo* 1565, *molasses* 1570, *banana* 1572, *mango* 1582, *copra* 1584, *mandarin* 1589, *guinea* 1598, *tank* 1616, *pagoda* 1618, *dodo* 1628, *macaque* 1698, *teak* 1698, *veranda* 1711, *auto-da-fé* 1723, *palaver* 1735 (Finkenstaedt & Wolff 1973: 147).

Early Modern English borrowed directly but not extensively from the Celtic languages within the British Isles. There is some overlapping between the individual languages – *whisky* (1715), for instance, has been assigned both to Irish and to Scots Gaelic – but in most cases the immediate source of the loan has been identified as one of the three main donor languages. Irish is the source of *bog* 1505, *brat* 1505, *trousers* 1599, *Tory* 1646 and *galore* 1675. Loans from Scots Gaelic include *glen* 1489, *plaid* 1512, *slogan* 1513, *gob* 1550, *ptarmigan* 1599 and *Gaelic* 1774. The number of Welsh loans is the smallest of the three, including *flannel* 1530 and *coracle* 1547.

The Scandinavian languages Swedish, Danish, Norwegian and Icelandic all contributed to EModE lexis. Most of the loans are related to Scandinavian products, culture and nature. Among those that have been preserved until the present day are *rug* 1551, *gruesome* 1570, *bat* (mammal) 1575, *snag* 1577, *snug* 1595, *troll* 1616, *skittles* 1634, *gauntlet* 1661, *rune* 1690, *fjord* 1694, *cosy*, 1709, *saga* 1709, *lemming* 1713, *tungsten* 1770 and *eiderdown*

1774. The corpus-based study of Moskowich & Seoane (1995) suggests that a large number of the Scandinavian loans that were found in Middle English, particularly those denoting physical action, were no longer in active use in Early Modern English. Many of those that are attested belong to the semantic fields of law (*bench*) and social relations (*bond*, *call* [vb]).

The High-German loans from the early part of our period are very few; one notable area of borrowing in the latter half is mineralogy. The scope of High-German borrowing can be illustrated by listing some items that still occur in Present-Day English, such as *landgrave* 1516, *lobby* 1553, *carouse* 1567, *hamster* 1607, *sauerkraut* 1617, *plunder* 1632, *zinc* 1651, *bismuth* 1668, *cobalt* 1728, *pumpnickel*, *quartz* 1756, *iceberg* 1774 and *nickel* 1775.

Although infrequent, Russian loans are still more numerous than those from the other Slavonic languages. They include *rouble* 1554, *Czar* 1555, *steppe* 1671, *mammoth* 1706, *ukase* 1729 and *suslik* (a species of ground-squirrel) 1774.

#### 5.4.3.4 Non-European languages

The influence of non-European languages on Early Modern English is frequently mediated through other European languages. For the first time, non-European loans exceed ten per cent of the total of the new borrowed lexis in the last decades of the EModE period (Wermser 1976: 45). The following survey, mostly drawn from Finkenstaedt & Wolff (1973: 149–56), illustrates loans that entered English through direct contacts, either trade or actual settlement. In the EModE period, England began to expand globally, first to the eastern coast of North America and the West Indies in the seventeenth century. Extensive trade networks were also established with West Africa, India, Indonesia and South America. Nearer to home, trade in the southern and eastern Mediterranean was of particular importance.

A number of words came into English in the seventeenth century from Turkish. Many of them were of Persian or Arabic origin and only mediated through Turkish. Most of the direct loans were nouns: *janizary* 1529, *horde* 1555, *vizier* 1562, *caftan* 1591, *jackal* 1603, *sherbet* 1603, *yogurt* 1625 and *pasha* 1646. The direct Persian loans include *turban* 1561, *shah* 1564, *divan* 1586, *bazaar* 1599, *caravan* 1599, *pilau* 1612, *mullah* 1613, *parsee* 1615 and *seersucker* 1757.

Near-Eastern borrowings are also mainly nouns, and most of them come from Arabic. The bulk of Arabic words, however, enter Early Modern English via Spanish, Portuguese, Italian or Turkish. There are very

few direct loans before 1500, and equally few in the eighteenth century. Many of the sixteenth- and seventeenth-century borrowings are still current, such as *sheikh* 1577, *hashish* 1598, *ramadan* 1599, *henna* 1600, *arrack* 1602, *fakir* 1609, *imam* 1613, *Moslem* 1615, *mohair* 1619, *Koran* 1625, *harem* 1634, *Allah* 1702. Although most biblical terms were borrowed earlier through Latin, some direct loans from Hebrew can also be found in our period: *Jehovah* 1530, *log* 1530, *Talmud* 1532, *shekel* 1560, *torah* 1577 and *bethel* 1617.

As with most non-European languages, direct loans from the various African languages are isolated nouns (e.g. *zebra* 1600, *baobab* 1640, *chimpan-  
zee* 1738, *mumbo jumbo* 1738 and *gnu* 1771).

The many languages of the Indian subcontinent, mainly Hindi, Urdu and Tamil, also contributed to Early Modern English. The richest variety of these loans came in the seventeenth century, but some earlier and later ones are also attested: *typhoon* 1588, *curry*, *coolie* 1598, *toddy* 1609, *nabob*, *rupee* 1612, *guru*, *pariah*, *tyre/tyer* 1613, *sahib* 1627, *cot* 1634, *pundit* 1672, *bungalow* 1676, *dungaree* 1696, *tom-tom* 1693, *maharaja*, *pukka*, *mongoose* 1698, *jute* 1746, *shampoo* (vb) 1762 and *jungle* 1776.

The languages of Indo-China, mostly Malay, are the immediate source of a few Early Modern English loans, including *bamboo* 1598, *paddy* 1623, *cockatoo* 1634, *orangoutang* 1699 and *kapok* 1750. There are also some words borrowed from Chinese, such as *Japan* 1577, *litchi* 1588, *ginseng* 1654 and *ketchup* 1711. Japanese loan words include *shogun* 1615, *sake* 1687, *soy* 1696 and *mikado* 1727.

With the first English colonies in Virginia and New England, direct contacts were established with North America in the early seventeenth century. Besides the rich inheritance of place names, there are a number of words relating to wildlife and the local ways of life that were borrowed from North-American Indian languages, for instance, *raccoon* 1608, *opossum* 1610, *moccasin*, *persimmon* 1612, *moose* 1613, *wigwam* 1628, *papoose*, *skunk*, *tomahawk* 1634, *hickory* 1676 *totem* 1760 and *caucus* 1763. Direct South-American loans are, by contrast, rare – *Inca* 1594, *jaguar* 1604 and *jacaranda* 1753 are among the few recorded. Much of the lexical influence of South-American Indian languages was mediated through Spanish (see above, 5.4.3.3.3).

## 5.5 Word-formation

### 5.5.1 Introduction

Word-formation is concerned with the patterns of language on which new lexemes are formed. It accounts for composites which are analysable both

formally and semantically. Basically they consist of a sequence of a modifying element (determinant) and the element modified (determinatum). Using this distinction, the main EModE word-formation processes can be described in terms of free lexemes or bases and bound affixes as follows (Marchand 1969: 2; Lyons 1977: 521; Quirk *et al.* 1985: 1520):

- (1) derivations consisting of an affix and a base:
  - (a) *prefixation* adding a prefix (determinant) to the base (determinatum) without a change of word class (*bero* → *antibero* (1714); see 5.5.2)
  - (b) *suffixation* adding a suffix (determinatum) to the base (determinant), usually with a change of word class (*modernize* → *modernizer* (1739); see 5.5.3)
- (2) *compounding* adding a base to another (*bread* + *basket* → *bread-basket* (1522), determinant + determinatum; see 5.5.4)
- (3) *conversion* (or zero-derivation) assigning the base to a different word class without changing its form (*pioneer* n. (1523) → *pioneer* vb (1780); see 5.5.5)

This classification reflects the important typological change in English from stem-formation in Old English to word-formation as we know it today. In the course of the Middle English period invariant free lexemes came to be established as bases for word-formation, and the rich stem allomorphy of OE was largely lost in derivational morphology (see Kastovsky 1985, 1992a). In this respect Early Modern English is already Modern. As far as productive means of affixation are concerned, however, it is expanding. At the end of the period, the set of productive prefixes and suffixes closely resembles the present-day one.

Word-formation processes are best classified in structural terms, i.e. in terms of the word-classes that they apply to and those that they produce. So terms such as *denominal* and *deverbal* are used below to refer to lexemes formed from nouns and verbs, respectively. *Moderniser* is an instance of a deverbal noun, a noun derived from the verb *modernise* by means of the suffix *-er*. Prefixes also apply to specific word classes but no word-class change is effected as a result of prefixation. Since prefixes constitute a closed class, the options available at any given time are accounted for by a semantic classification of the productive elements (see 5.5.2).

Foreign influence is reflected in Early Modern English word-formation in a sharp increase of non-native elements as productive affixes. New affixes arise as a sufficient number of borrowed complex lexemes are interpreted as morphologically transparent. This happened to a wealth of Middle English loans, which were integrated into English and analysed as consisting of a base and a separate meaningful affix. The new adoptive affixes had

a profound effect on the composition of the Early Modern English lexicon in that, as the number of affixes multiplied, non-native elements clearly outnumbered the native in terms of both type and token frequency.

As most of these newly adopted affixes were practically limited to foreign – Romance and classical – bases, the effects of their naturalisation can be seen in a quantitative shift towards a non-native basis of coining new words in Early Modern English. This development finally establishes two lexical strata in the English lexicon, with some far-reaching consequences for the phonological and morphological makeup of the language (see Lass, this volume).

According to the information contained in the *CED*, the share of Germanic bases in new coinages falls from about thirty-two per cent at the beginning of the Early Modern English period to some thirteen per cent at the end. They are outnumbered by French and, since the end of the sixteenth century, Latin bases. It is in fact Latin that is the single most frequent source of new derivations from the mid-seventeenth century onwards. An even more dramatic change is observed in the etymological distributions of affixes. At the beginning of our period, the proportion of native affixes was some eighty per cent of all new derivations, but at the end, a mere thirty per cent (Wermser 1976: 64, 67).

### 5.5.2 *Prefixation*

While prefixation was poorly represented in Middle English word-formation, proportionately more new prefixes were introduced into Early Modern English than suffixes. This multiplication of prefixes increased synonymous means of derivation, especially in literary and other technical registers.

We may turn to hybrid forms in order to see how well the new affixes were integrated. The use of Latinate affixes with native bases spread in Early Modern English. This suggests that they were analysable to native speakers and becoming assimilated into the Early Modern English lexicon. It is, however, interesting to note that very few new hybrids of this kind occur in the writings of Elyot, Ascham, Mulcaster, Jonson and other scholars of the time. Most classicists were conservative and preferred homogeneous morphemes. They may be contrasted with more liberal neologisers, who did not hesitate to combine heterogeneous elements.

Garner (1983) compared Shakespeare's use of twelve Latinate and five native prefixes in hybrid forms with their use in the 1611 Authorised Version of the Bible. The Latin prefixes included were *con-*, *contra-*, *de-*, *dis-*,



*in-* (negative), *inter-*, *post-*, *pre-*, *pro-*, *re-*, *super-* and *trans-*; the native forms were *be-*, *fore-*, *out-*, *over-* and *under-*. Garner found that Shakespeare used 101 different hybrid words 178 times altogether. If hybrids with *un-* are included, the number of hybrid lexemes rises to 400. The Authorised Version contains only seven hybrids used twenty-four times in all; with the prefix *un-*, the number amounts to forty-one, approximately one tenth of the number found in Shakespeare. None of those appearing in the Bible are new formations, but most of them go back to Middle English, whereas Shakespeare can here be credited with as many as 137 neologisms. The rest of his hybrids are mostly renaissance formations. If *un-* is excluded from the account, only the following hybrids occur in the Bible: *recall*, *renew*, *foreordain*, *overcharge*, *overpast*, *overplus* and *overturn*; of them, only the forms with *re* involve a borrowed prefix. By contrast, the sole prefixes with no hybrid forms in Shakespeare are *de-* and *pro-*, both still of limited use in Early Modern English. It appears that, even in the Renaissance, hybrids were often controlled by etymological considerations. Hence learned borrowing did not promote maximal integration of the borrowed elements.

Unlike many borrowed suffixes, prefixes do not affect the sound structure of the base, but they may themselves carry either a secondary or primary stress (see further Lass, this volume). As they do not change the word-class of the base, and (some two thirds of the productive prefixes in Early Modern English) are not limited to any one word-class, their main linguistic function is semantic. My discussion of Early Modern English prefixes is therefore based on meaning. It provides an itemised account of the increase in productive prefixes grouped according to semantic distinctions, much along the lines suggested by Quirk *et al.* (1985) for Present-Day English. These broad semantic categories show the relations between contrasting and competing elements. If a prefix is polysemous, it is discussed separately under the relevant entries. My analysis differs from Quirk *et al.* in that items such as *after*, *out* and *over* come under compounding rather than prefixation, because they also function as free lexemes (adverbs and prepositions).

### 5.5.2.1 Negative and reversative prefixes

As the negative prefixes *in-*, *non-* and *dis-* became productive in late Middle and Early Modern English, derivational means for expressing antonymy in the lexicon were significantly increased. *Dis-* could also be used to derive reversative and privative verbs. The only native prefix to express negative and reversative meanings in Early Modern English was *un-*.

5.5.2.1.1 Negative (*a-*, *dis-*, *in-*, *non-*, *un-*)

Throughout Early Modern English, *un-* remains the most common negative prefix. It expresses complementary and contrary semantic relations ('not', 'the opposite of') and combines with adjectives, both simple and derived, native and borrowed (e.g. *unfit*, *unfortunate*, *ungodly*, *uncommon*, *uncivil*, *unfashionable*, *uncomfortable* (sixteenth century); *undesirable*, *un-English*, *uncritical*, *unconditional*, *unearthly* (seventeenth century); *unprimitive*, *unconscious*, *unabsurd*, *un-British*, and *undramatic* (eighteenth century). It is established with derivations ending in *-able* and found with postposed prepositions, as in *uncome-at-able* (1694). It occurs with participial adjectives (*unbecoming*, *undeserving*, *unabated*, *unabsorbed*) and, since the sixteenth century, with past participles of prepositional verbs, as in *unheard-of* (1592), *uncared-for* (1597), *uncalled-for* (1610), and *unwished-for* (1632). In the sixteenth and seventeenth centuries *un-* could even intensify negative adjectives ending in *-less* (*unboundless*, *uncomfortless*, *undauntless*, *uneffectless*, *unhelpless*). As with most adjectival prefixes, adverbs based on *un-*adjectives are common (*unluckily*, *undoubtedly*, *unfortunately*, *unalterably*, *unhandily*).

Early Modern English also continues to form nouns by means of *un-* ('the opposite of', 'lack of'), but they are far less numerous than adjectives. The sixteenth century records, for instance, *uncharity*, *ungratitude*, *unsuccess*; the seventeenth, *unculture*, *unintelligence*, *unobservant*, *unsatisfaction*; the eighteenth *unconcern* and *unreserve*. Even a few backformed verbs occur in the sixteenth and seventeenth centuries, such as *unknow* from *unknowing*, *undeserve* (< *undeserving*), *unbecome* (< *unbecoming*), and *unbeseem* (< *unbeseeming*).

The negative prefix *non-* ('not') came into English from Law Latin through Old French. The earliest native coinages were legal terms, such as *non-ability*, *non-appearance* (fifteenth century), and *non-feasance*, *non-performance*, *non-resident*, *non-user* (sixteenth century). Although *non-* prefers Latinate bases, hybrids occur from the fifteenth century onwards (*non-knowledge* 1503, *non-truth* 1648, *non-freedom* 1658, *non-swearer* 1690, *non-foreknowledge* 1740). All the early derivations are nouns. The input range for *non-* was broadened in the seventeenth century, when adjectives and participles began to appear with the prefix (*non-harmonious*, *non-graduated*, *non-preaching*, *non-communicant*). This occurred at a time when the use of the prefix was extended to other domains of learning, especially to philosophy and religion (end of the sixteenth century: *non-obedience*, *non-necessity*; seventeenth century: *non-member*, *non-natural*, *non-resistance*, *non-existent*, *non-entity*, *non-elect*, *non-juror*, *non-collegiate*, *non-compounder*, *non-descript*; eighteenth century: *non-adherence*, *non-conductor*). With few exceptions, such as *non-act*, *non-concur*, *non-licentiate*, *non-* does not combine with verbs in Early Modern English.

The rise of the negative prefix *in-* was influenced by both French and Latin borrowing. It reached the status of a productive morpheme at the beginning of the EModE period. *In-* is broadly synonymous with *un-*, and it is attached to adjectives and nouns of French and Latin origin. As in Latin, the prefix loses its nasal component in certain contexts due to assimilation; it is spelled *im-* before bilabial consonants, *il-* before /l/, and *ir-* before /r/. The numerous EModE adjectives with *in-* include, for example, *inextinguishable*, *insufferable*, *inseparable*, *infrequent*, *inanimate*, *infertile*, *inconsequent*, *inimitable*, *inhospitable* (sixteenth century); *inofficious*, *insusceptible*, *intangible*, *insensitive*, *inharmonic*, *injudicious*, *inadequate*, *inadvertent*, *inalienable*, *inarticulate*, *incoherent*, *inexperienced* (seventeenth century); *inadmissible*, *incautious*, *inaccurate*, *inharmonious* (eighteenth century). Nouns are also common: *inhospitality*, *inexperience*, *incivility*, *inclemency*, *inutility* (sixteenth century); *incoherence*, *inabstinence*, *inactivity*, *inaptitude*, *incapacity*, *incompetence*, *insobriety* (seventeenth century); *inaction*, *inapplication*, *inattention*, *incaution*, *intolerance* (eighteenth century). In some cases, it is not possible to tell on formal grounds if the word in fact goes back to a negative adjective instead of being derived from a noun. Where no adjective is available, no such uncertainty arises.

In Early Modern English it was possible to attach *in-* to any adjective of French or Latin origin, as well as to past participles, as in *incivilized*, *imposed*, *inconcerned*, *inconnected*, *indisputed* and *unexpected*. A number of these forms were rivalled by parallel derivations with *un-*, and have since given way to them. *In-* has stood its ground better with denominal formations. Along with such adjectives as *unable* and *unequal*, for example, which in Early Modern English had *in-*forms, we still use the nouns *inability* and *inequality*.

The origins of *dis-* go back to French and Latin. It was common in reversative and privative verb derivations since the fifteenth century (see next section) but also appeared with nouns, adjectives and verbs forming complementary and contrary opposites basically synonymous with *un-*. Adjectives formed by means of *dis-* in Early Modern English include *discontent*, *dispassionate*, *discourteous*, *disadvantageous*, *dissimilar*, *disharmonious*, *discontinuous*, *disrespectful* and *disreputable*. Noun-formations have two related senses, 'lack, absence of N', as in *distrust*, *discommodity*, *disuse*, *discredit*, *discontinuity*, *disability*, *disaffection*, *disregard*, *dispassion*, and 'the converse of N', as in *disorder*, *disfavour*, *discourtesy*, *dislike*, *disservice*, *disunion*, *disesteem*, *disapproval*, *disbelief*, *disinclination* (Marchand 1969: 161). *Dis-* is almost exclusively associated with Romance bases and competes with the other negative prefixes for denominal and deadjectival formations in Early Modern English. With verbs it is virtually unrivalled in the sense 'not', 'fail to', however. Its Early

Modern English attestations include *disapprove*, *disaffirm*, *disesteem*, *disrespect* and *dissatisfy*.

The prefix *a-* ('not'), originally from Greek, was of very limited productivity in Early Modern English. It is attested in such technical deadjectival formations as *atheological*, *asymbolic*, *apsychical*, *asymmetric* and *asyllabical*.

#### 5.5.2.1.2 Reversative and privative (*de-*, *dis-*, *un-*)

*Un-* is the most common prefix in Early Modern English to convey reversative and privative (objective or ablative) senses. It marks the reversal of verbal action (*undo*), and either removal of something denoted by the base (*unnerve*; object relation), or removal of something from a place denoted by the base (*unhouse*; ablative relation). *Un-* forms mostly transitive verbs from both native and borrowed bases. Its many reversative coinages include *unbewitch*, *unbless*, *unconsecrate*, *undress*, *unfreeze*, *unload*, *unmarry*, *untwist* (sixteenth century); *unblock*, *undraw*, *unfurl*, *unlatch*, *unlink*, *unmount*, *unravel* (seventeenth century); *uncoil*, *unhitch*, *unlay*, *unstow* (eighteenth century). *Un-* became particularly popular with verbs in *-ize* and *-ify* from about 1600 onwards, as in *uncivilize*, *uncanonize*, *unbarbarize*, *unnaturalize*, *unsanctify*, *undeify*, *undignify* and *unglorify*.

The increased productivity of denominal conversion verbs since Middle English provided input material for the privative type. The two senses, objective and ablative, can be illustrated by *unburden*, *uncloak*, *unman* / *unbosom*, *unkennel*, *unstock* ('remove a ship from the stocks') (sixteenth century); *unballast*, *unfrock*, *unnerve* / *uncage*, *unbinge*, *unbook*, *unsphere* (seventeenth century); *unbale*, *unguard* (eighteenth century). Occasionally, *un-* could redundantly intensify privative verbs, as in *unbare* and *undecipher*.

The other current reversative and privative prefix was *dis-*. It prevailed with Romance bases, but was occasionally attested with native ones as well, as in *disballow*, *disentangle*, *disflesh*, *dishearten*, *dislimb*. The first reversative coinages with *dis-* are dated to the late fifteenth century (e.g. *discompose*). After 1500 the usage becomes common: *disappear*, *disanimate*, *disestablish*, *disinfect*, *disunite* (sixteenth century); *disanoint*, *disassociate*, *dislink*, *disanonize* (seventeenth century); *disarrange*, *disconnect*, *disqualify* (eighteenth century).

Privative coinages are similarly generalised with *dis-* in Early Modern English, as in *dismerit*, *distune* (fifteenth century); *disburden*, *disceptre*, *discountenance*, *disborn*, *disrank* (sixteenth century); *disedge*, *discloud*, *disinterest*, *disprivilege*, *disgarland* (seventeenth century); *disbud*, *disgown*, *dismast*, *diswarren* (eighteenth century). The ablative sense 'remove from', 'put out of' occurs in *displace*, *dishouse*, *discease*, *disparish*, *disorb* and *disbar*.

In post Early Modern English, *dis-* is somewhat recessive in reversative derivations, partly because of the adoption of another prefix of Latinate

origin, *de-*, towards the end of the eighteenth century (cf. *deobstruct* 1653). Privative senses are also generalised with *de-*, but to a lesser extent than the reversative sense. Some tentative privative coinages occur in Early Modern English: *detomb* 1607, *dethrone* 1609, *detruth* 1647, *demast* 1666, *delawn* 1726 ‘deprive (a bishop) of his lawn’, *debark* 1744.

#### 5.5.2.2 Locative and temporal prefixes

A few Early Modern English locative (spatial) prefixes are polysemous, notably *fore-* and *mid-* (both also temporal) and *sub-* and *super-* (also intensifying; see 5.5.2.5). These senses did not arise in the EModE period through semantic change, but in the case of *fore-* and *mid-* go back to Old English, while those of the Latin-derived *sub-* and *super-* are good candidates for sense borrowing (see 5.4.2).

The distinction between prefixation and compounding is here made on formal grounds. Particles (adverbs and prepositions) which combine with other free lexemes are hence discussed under compounding. For particles *after*, *by*, *forth*, *in*, *off*, *on*, *out*, *over*, *through*, *under* and *up* combining with nouns, see 5.5.4.1.8; with adjectives, 5.5.4.3.7; and with verbs, 5.5.4.4.1 and 5.5.4.5.3.

##### 5.5.2.2.1 Locative (*a-*, *fore-*, *inter-*, *mid-*, *sub-*, *super-*, *trans-*, *circum-*, *extra-*, *supra-*)

Native locative prefixes proper are in the minority in Early Modern English. The prefixal element *a-* is a reduced form of the Old English locative preposition *on*, *an*. As Marchand (1969: 139) points out, it is not a true prefix, because it does not function as the determinant of the combinations it forms. It is added to verbs – less frequently to nouns – and the formations are used as predicative adjectives or adverbs with a meaning similar to the progressive aspect (‘in a state/position of’). Its Early Modern English deverbal coinages include *acrook* (1480); *ajar* ‘jarring’, *acry*, *aflaunt*, *askew*, *atilt* (sixteenth century); *adrift*, *agape*, *asoak*, *astride*, *aswim* (seventeenth century); *asquat*, *atwist*, *astraddle* (eighteenth century). Denominal derivations (*aflame*, *ahorseback*, *ashore*, *a-tiptoe*) are fewer but they include a number of nautical terms such as *astear*, *asterboard*, *atrip*, *aweather* and *aweigh*.

*Fore-* (‘in front of’, ‘before’) goes back to the Old English particle meaning ‘before’, with respect to place as well as time. In Early Modern English it serves as a productive locative and temporal prefix. In its locative function it combines with nouns, forming such coinages as *forename*, *forecourt*, *forehand*, *foredeck* (sixteenth century); *forepeak*, *foreyard*, *foretack*, *foreground*, *fore-edge*

seventeenth century; *forearm*, *foreshore*, *forewoman* (eighteenth century). It does not combine freely with other word classes.

*Mid-* ‘middle’ is descended from an Old English adjective, but can be considered a marginal prefix in Early Modern English. It produces both locative and temporal nouns. Although *mid-* usually combines with native words, its derivations are mostly technical (medical, botanic, astronomic, nautical). They include *mid-channel*, *mid-earth*, *mid-finger*, *mid-heaven*, *midland*, *midriver*, *mid-ship* and *midwicket*.

*Sub-* (‘beneath’, ‘under’) is increasingly used as a nominal prefix with personal nouns in the sixteenth and seventeenth centuries, as in *sub-constable*, *sub-head*, *sub-treasurer*, *sub-almoner*, *sub-agent*, *sub-commissioner*, *sub-officer* and *sub-postmaster*. The prefix also occurs with non-personal nouns (*subsection*, *subdialect*, *subcommittee*, *subspecies*). Its deadjectival uses gain ground in scientific terminology after 1600 in formations like *subcostal*, *sublingual*, *submarine*, *submucuous*, *subrenal* and *subspinal*. Deverbal derivations, by contrast, are rare (*subcontract* 1605, *subdistinguish* 1620, *sub-let* 1766).

Locative derivations with *super-* (‘over’, ‘above’) are less frequent. They include some denominal coinages (*superstructure*, *superimposition*) and adjectives like *superordinate*, *superlunary* (after *sublunary*) and *superterranean* (after *subterranean*), as well as some other technical terms formed to match derivations with *sub-*. *Supra-* (‘over’, ‘above’) is a weak rival of *super-* (*supra-aerial*, *supra-lunary*). The native particles *over* and *under* in compounds partly overlap with these new locative prefixes (see 5.5.4 below).

The prefix *inter-* (‘between’, ‘among’) is used in Early Modern English to form verbs, nouns and adjectives. The deverbal derivations are due to both Old French and Latin loans, while the denominal and deadjectival ones owe more to Latin models. The prefix can take native as well as borrowed bases. It became weakly productive in most derivational categories towards the end of the Middle English period, but was not generalised until the sixteenth century. Its deverbal derivations include *interlink*, *intermix*, *intermarry*, *interfold*, *intertangle* (sixteenth century); and *interdeal*, *interlock*, *interwork*, *intervisit*, *intertwine* (seventeenth century). The denominal derivations often convey the sense ‘intermediate’, ‘connecting’ or ‘reciprocal’, as in *interspeech*, *interlight*, *intermark* and *interthing*. The deadjectival coinages with *inter-* are mostly technical terms including *interlunar*, *interstellar*, *intermundane*, *interscapular* and *interfoliaceous*.

The prefix *trans-* (‘across’) is common in Early Modern English Latin loans. It also became mildly productive on its own and combined with denominal verbs often in the sense ‘change the N’ (*transnature*, *trans-shape*, *transplace*, *transdialect*, *transcribble*), nouns (*translocation*, *transcoloration*), and



some adjectives (*trans-substantial*, *translunary*). Other mildly productive locative prefixes in Early Modern English include the Latin-derived *circum-* ‘around’ (*circumclose*, *circumsail*) and *extra-* ‘outside’ (*extra-judicial*, *extra-uterine*).

#### 5.5.2.2.2 Temporal (*ante-*, *fore-*, *mid-*, *post-*, *pre-*, *re-*)

There are three synonymous prefixes in Early Modern English for expressing the temporal notion ‘before’, namely the native *fore-*, and the Latin-based *pre-* and *ante-*. The most recent and least productive of the three is *ante-*, which appears in technical registers from the sixteenth century onwards forming adjectives (*antediluvian*, *antepaschal*, *antemundane*) and nouns (*antetbeme*, *antedate*, *antetype*, *antenoona*, *ante-eternity*). The prefix has a locative sense in *antestomach*, *antechapel* and *anteroom*.

The native prefix *fore-* continued to produce deverbal and denominal coinages both with native and borrowed bases, but was losing ground in the verbal group towards the end of the Early Modern English period. Its deverbal formations include *foreappoint*, *forearm*, *foredoom*, *forefeel*, *foremention*, *foreshadow* (sixteenth century), *forebode*, *foreact* and *fore-reach* (seventeenth century). Its denominal derivations are mostly locative; temporal senses appear in *foregame*, *foremother*, *forenight* ‘previous night’ and *foretime* ‘past’.

The nominal and verbal prefix *pre-* reached full productivity with verbs of Latin origin in the sixteenth century (e.g. *preconceive*, *pre-elect*, *precontract*, *prejudge*, *premeditate*). The seventeenth century formed, for instance, *predetermine*, *predigest*, *predispose*, *pre-establish*, *prepossess* and the eighteenth, *preconcert* and *precontrive*. Denominal derivations are frequent from the late fifteenth century onwards including *preapprehension*, *pre-equipment*, *preassurance*, *preconception*, *predisposition*, *pre-existence*, *prearrangement* and *pretaxation*. In Early Modern English, *pre-* did not combine with nouns to form adjectives of the type *pre-war*. There was, however, a tendency to use the prefix as an intensifier meaning ‘exceedingly’, as in *pre-pleasing* 1530, *pre-pious* 1657, *pre-regular* 1674.

*Post-* (‘after’) owes its existence to Latin loan models. It contrasts with *pre-* but is less productive. What we find in Early Modern English are a few nouns (e.g. *post-date*, *post-eternity*, *post-noon*), verbs (*post-date*, *post-exist*), and adjectives (*postmeridian*, *post-deluvian*). The locative sense is not current in native coinages.

Temporal coinages with the native *mid-* (‘middle’) are mostly nominal and include *midnoon*, *midtime*, *mid-season* and *mid-week*.

The rise of the prefix *re-* (‘again’, ‘back’) in the fifteenth century was due to both French and Latin models. It became very productive during the Early Modern English period with transitive verbs, both native and foreign,



expressing repetition of the action denoted by the base. The meaning aspects conveyed range from improving the previous, inadequate result of the action to restoring a previous state or result. In contrast to loan words, where the prefix is usually unstressed, it tends to be stressed in native formations. The vast variety of verbs derived by means of *re-* include *reassume* (fifteenth century); *reassure*, *reconsider*, *re-enforce*, *re-examine*, *regain*, *replant*, *reprint* (sixteenth century); *reinforce*, *readmit*, *readjust*, *reappear*, *reboil*, *recast*, *recompose*, *refill*, *reinvest*, *reset*, *reproduce* (seventeenth century); and *reabsorb*, *recapture*, *recede*, *reconstruct*, *recount*, *redress*, *reopen* (eighteenth century). The prefix naturally appears with deverbal nouns, as in *redelivery* and *re-election*.

### 5.5.2.3 Prefixes of opposition and support

(*anti-*, *co-*, *contra-*, *counter-*, *pro-*)

The EModE period also generalised prefixes that might be called attitudinal, among them *counter-* and *anti-*, and the more marginal *pro-* and *co-*. *Counter-* ('against') goes back to French. Appearing first in some learned coinages in late Middle English, it gained wider currency in the second half of the sixteenth century in denominal and deverbal derivations. These denominal coinages typically have the sense 'done as a rejoinder to or in return for N', as in *counterplea*, *counterbond*, *counterstroke* (sixteenth century); *counterplot*, *countercharge*, *counterevidence*, *counterpressure* (seventeenth century); *counterattraction*, *counterdeed*, *counterstep* (eighteenth century). The rarer locative sense 'opposite and parallel' occurs in *counterbalance*, *counterpart*, *counterbook* and *counterfoil*. Deverbal coinages with *counter-* are relatively less numerous. They include *countermine*, *counterplot*, *countermarch*, *countersecure* and *counteract*. In the seventeenth century *counter-* was rivalled by another Latinate form, *contra-*, as in *counter-/contrafissure*, *-natural*, *-distinct*. In most cases forms with *counter-* became generalised.

Greek and Latin loan words gave rise in Early Modern English to the prefix *anti-* ('against', 'opposing'), which started to gain currency in the latter part of the sixteenth century. It was first used to denote the rival candidate of the opposite party in religious contexts, as in *antipope*, *antideity*, *antigod*. The general senses of its denominal coinages are 'against' and 'opposing' (*anti-king*, *anti-parliament*, *anti-hero*, *anticlimax*). *Anti-* also formed adjectives with the sense 'opposing' (e.g. *anticeremonial*, *antimonarchical*, *anti-papal*, *antipatriotic*). The spread of the prefix to chemico-medical terminology in the seventeenth century produced derivations with such more specific readings as 'counteractive', 'neutralising' or 'preventive of' (*antifebrile*, *antihypnotic*, *antihysterical*, *anticatarrhal*, *antiseptic*).

*Pro-*, the antonym of *anti-* in the sense ‘in favour of’ did not arise in the Early Modern English period. The only productive use was in denominal derivations denoting ‘the substitute of’, where Early Modern English follows the Latin model (*pro-legate*, *pro-rector*, *prorex*, *pro-tribune*, *pro-vice-chancellor*). In this sense *pro-* competes with another Latin-derived prefix, *vice-*, which goes back to the fifteenth century. In Early Modern English, *vice-* is more productive than *pro-*, as it combines both with nouns (*vice-collector*, *-consul*, *-master*, *-agent*, *-roy*, *-president*, *-god*, *-warden*) and, since the seventeenth century, with adjectives (*vice-ministerial*, *-apostolical*).

Early Modern English continues the pattern found in Latin and Old French to form denominal derivations with *co(n)-* (‘joint’, ‘fellow’). Most of the native coinages are personal nouns of the type *cobeir*, *co-burgess*, *co-defendant*, *co-guardian*, *co-juror*. Non-personal nouns also occur (*co-eternity*, *co-agency*, *co-existence*, *co-effect*). Verbs with *co-* are less frequent (*co-unite*, *co-articulate*, *co-work*, *co-appear*, *co-ordain*). The few adjective coinages include *co-essential*, *co-eval*, *co-infinite* and *co-extensive*. Following Latin and French models, Early Modern English also coined some forms with *com-* and *con-* (e.g. *commingle*, *condvide*).

#### 5.5.2.4 Pejorative prefixes (*mal-*, *mis-*, *pseudo-*)

The main pejorative prefixes in Early Modern English are *mis-* and *mal-*. *Mis-* has its origins in both Old English and French, and can be applied to native and borrowed bases in the senses ‘wrongly, badly, amiss’. In the fifteenth and sixteenth centuries it also means ‘unfavourably’. It combines with verbs and deverbal nouns, enjoying great popularity between 1550 and 1650. Its Early Modern English deverbal derivatives include *misname*, *misgive*, *misjudge*, *mishandle*, *mistranslate*, *misapply*, *mistern*, *misinterpret*, *misquote*, *mismatch*, *mispronounce* (sixteenth century); *misvalue*, *misconstruct*, *misapprehend*, *misconjecture*, *misspell*, *miscalculate*, *misexplain* (seventeenth century); and *missexpress*, *mismeasure*, *misfire*, *misconduct* (eighteenth century). While some nouns with *mis-* were coined in their own right, most are derived from deverbal forms. The following instances exemplify both: *misfortune*, *misreligion*, *misaffection*, *miscomputation*, *miscarriage*, *misgrowth*, *misconduct* and *misalliance*.

*Mal-* (‘ill, evil, wrong, defective, improper’) is adopted from Middle English French loans, but it does not become productive until the seventeenth century. In Early Modern English it is largely limited to nouns in formal administrative and legal language, including *maladministration* 1644, *malpractice* 1671, *malexecution* 1689, *malinstitution* 1714, *malconduct* 1741 and *malconformation* 1776.

Around 1600, formations with *pseudo-* (from Greek, ‘false’) become quite common. Its use is largely restricted to personal nouns such as *pseudo-Catholic* 1605, *pseudo-Moses* 1613, *pseudo-politician* 1628. *Pseudo* may have been interpreted as a full word especially in the early part of our period, because it could also occur as an independent adjective and noun. Around 1800 it may be called a living prefix (Marchand 1969: 188).

#### 5.5.2.5 Intensifying prefixes (*arch-*, *hyper-*, *proto-*, *sub-*, *super-*; *be-*, *en-*)

Two kinds of intensifying prefix operate in Early Modern English: those that form denominal and deadjectival derivations expressing degree and size (*arch-*, *hyper-*, *proto-*, *sub-*, *super-*), and those that are adjoined to simple or conversion verbs to reinforce different semantic elements of the base (*be-*, *en-*). In certain theoretical frameworks the latter constitute a special category of prefixes that alter the word-class of the base (see ‘conversion prefixes’ in Quirk *et al.* 1985: 1546). The present analysis is supported by the large number of doublets in Early Modern English where the prefix-formation is matched by a suffix-formation or a pure conversion (*enlength*, *enlengthen* v. *length*, *lengthen*; see 5.3.2).<sup>8</sup>

The Early Modern English lexicon was enriched by a number of moderately productive prefixes expressing degree and size, notably *arch-*, *proto-*, *super-*, *hyper-* and *sub-*. They partly reduplicated the native particles *over* and *under*, as both could be attached to nouns and adjectives (see 5.5.4). The two means would, however, differ in terms of register and productivity.

*Arch-*, which represents Greek ‘supreme’, ‘highest’, was first prefixed to nouns denoting a title or an office, either ecclesiastical or profane (e.g. *arch-priest*, *arch-prelate*, *arch-chaplain*; *archduke*, *arch-governor*, *arch-architect*, *arch-gunner*). In the seventeenth century it was extended to non-personal names (*arch-beacon*, *arch-city*, *arch-piece*). Its pejorative reading ‘worst’ is attested since the beginning of the sixteenth century, as in *arch-traitor*, *arch-enemy*, *arch-heretic*, *arch-villain* and *arch-hypocrite*.

A partial synonym of *arch-* is the Latin-derived *proto-* (‘chief’, ‘first’). It became productive towards the end of the sixteenth century in learned denominal derivations such as *protoplot*, *protoparents*, *protochronicler*, *proto-protestant*, *proto-Bishop*, *protorebel* and *protodevil*.

*Super-* (‘over’, ‘beyond’) is adapted from Latin loans. In a native coinage the intensifying sense is first attested in the adjective *superfine* (1575). Its later Early Modern English formations include *superserviceable*, *super-royal* and *supersensual*. The prefix also has a purely locative sense (see 5.5.2.2.1).

*Hyper-*, a cognate of *super-* (originally from Greek ‘over’, ‘too much’),

becomes an English prefix around 1600. It combines only with learned bases, as in *hyper-prophetical*, *hyper-magnetic*, *hyper-superlative*. In the early derivations the sense conveyed may be merely ‘that which is beyond’ (*hyper-angelical*, *hyper-physical*).

*Sub-*, the opposite of *super-*, is first attested in the sixteenth century in its corresponding locative sense ‘below’, ‘under’. It also became mildly productive in the sixteenth and seventeenth centuries in the intensifying sense ‘somewhat/not quite x’, as in *sub-red*, *sub-goldish*, *sub-angelical*, *sub-rustic* and *sub-dulcid*.

The verbal prefix *be-* goes back to Old English, and is very common in the sixteenth century. It combines with denominal and deadjectival bases (conversion verbs) and is associated with a variety of ornate senses ranging from ‘equipped or covered with’ to ‘beset with’. Early Modern English denominal-verb derivations can be illustrated by *belime*, *bemire*, *begrime*, *bejewel*, *bestain*, *beblood*, *becrown*, *begift*, *becloud*, *bemist* (sixteenth century); *benet*, *besmut*, *bestar*, *becurl*, *belace* (seventeenth century); and *bedevil*, *benig* (eighteenth century).

Deadjectival verbs with *be-* were usually more intensifying than their unprefixed counterparts (*becalm*, *bedim*, *besot*, *bemad*, *belate*, *bemean*). With other verbal bases the prefix *be-* could be used to mark transitivity, or simply to intensify the meaning of the base. Examples of the first function, of the type ‘to bemoan a man’, are *bedaub*, *bedash*, *belabour*, *bemock*, *bepaint*, *bestick*. The intensifying function of the prefix is detectable in *berate* (‘rate vehemently’), *bestir*, *bewilder*, *bedeck*, *bedazzle* and *bebless* (‘bless profusely’).

As many of the functions of *be-* could be replaced by plain unprefixed forms, the *be-*derivatives mostly duplicated them. This was even more often the case with the prefix *en-* (*em-* before /p/ and /b/), which goes back to Middle English loans from French. *En-* correlates with several general senses (‘to put into x’, ‘to make into x’, ‘to get into x’), and it is primarily applied to denominal bases. It became productive in the fifteenth century, and was widely used in the sixteenth in both native and non-native verbs, which thus rivalled denominal conversion verbs (see 5.5.5.2.1). *Endanger*, *encrown* and *embull* (‘to publish in a bull’) appear in the last decades of the fifteenth century. The sixteenth century formed *emball*, *emblazon*, *embody*, *engage*, *encamp*, *encipher*, *encoffin*, *encompass*, *encribble*, *endungeon*, *enflesh*, *enfold*, *engulf*, *ensheath*, *enshrine*, *ensnare*, *ensnarl*, *enthrall*, *entomb*, *entrap*, *entrench*, *enwall* and many more. From the seventeenth century are recorded *embank*, *emblaze*, *embox*, *encase*, *enchurch*, *encolour*, *enfetter*, *enfrenzy*, *engrace*, *enjail*, *enjewel*, *enlist*, *enslave*, *ensole* and *enstamp*. The far fewer eighteenth-century derivations include *embale*, *embed*, *emblossom* and *enrapture*. Derivations from deadjectival

bases are common in the Early Modern English period, although rarer than denominal ones. They include *endear*, *ennoble*, *embrace*, *enrough*, *embitter*, *enhappy*, *embrown*, and *encrimson*.

*En*-derivations occur quite freely with the suffix *-en*, as in *enbrighten*, *embolden*, *encolden*, *enbarden*, *enhearten*, *enlengthen*, *enliven*, *enquicken*, *ensweeten* and *enviden*. Because of Latin influence, *in-* was in some cases used in parallel with *en-*; in others it replaced it. *In-* (*im/il/ir-*) was favoured with Latinate bases, yielding forms such as *imburse*, *imingle*, *inspirit* and *impalace*. In some French loan verbs such as *enclose* and *encounter* the prefix resembled the native locative particle *in*. By analogy, the use of *en-* was extended to add an intensifying meaning aspect to a number of simple verbs (*encover*, *emblaze*, *engird*, *enkindle*, *entwine*, *entrust*, *embind*, *encheer*). In poetry, both *en-* and *be-* could be used freely to supply an extra syllable. They may evoke a poetic register, but often need have no other function except the metrical one (Salmon 1970: 17).

#### 5.5.2.6 Quantitative prefixes (*bi-*, *demi-*, *mono-*, *multi-*, *pan-*, *poly-*, *semi-*, *tri-*, *twi-*, *uni-*)

The main prefixes to express quantity in Early Modern English are *uni-*, *bi-*, *tri-* and *multi-*, which go back to Latin, and the Greek-derived *mono-* and *poly-*. They are primarily used to form technical terms. The only native prefix, *twi-*, has literary associations.

*Uni-* ('one') first appeared in fifteenth-century adaptations of Latin adjectives, and became marginally productive in Early Modern English in denominal and deadjectival coinages such as *unifoil*, *univalve*, *unitrine* and *unipresent*. Its synonym *mono-* is perhaps even more marginal; it occurs in few adjectives towards the end of our period (*monoptic*, *monopyrenous*, *monospherical*).

The prefix *bi-* ('two') first became moderately productive in deadjectival derivations in the sixteenth century (*bicorporated*, *bicapited*, *biforked* (sixteenth century); *bicapsular*, *bicipitous* (seventeenth century); *bipennate*, *bilobed*, *bimaculate(d)* (eighteenth century). The corresponding native prefix *twi-* ('two') is weaker. Besides a few adjectives of the type *twi-gated*, *twi-pointed* and *twy-forked*, it produced some nouns and verbs (*twichild*, *twi-reason*; *twifallow*). *Tri-* ('three') combines with nouns and adjectives from the sixteenth century onwards to form technical terms, as in *triarchy*, *trigram*, *trilemma*, *trisyllable*; *tripersonal*, *trilinear*, *triliteral*.

*Multi-* ('many') started to gain ground from the seventeenth century onwards as a productive prefix in deadjectival formations such as *multivarious*, *multisiliquous* and *multicapsular*. It was partly competing with *poly-*, which

had begun to appear in the sixteenth century in learned denominal and deadjectival derivations with Greek or Latin bases (e.g. *polyangle*, *polydemonism*, *polyscope*, *polyacoustic*, *polynomial*).

Other prefixes expressing quantitative notions in Early Modern English are *pan-* ('all'), and *semi-* and *demi-*, both meaning 'half'. *Pan-* goes back to Greek, and is found in English coinages since about 1600. They are mostly scholarly nouns and adjectives such as *panharmony*, *pangrammatist*, *panopticon*, *pandedalian* and *pan-Britannic*.

*Demi-* is abstracted from French loan words. It was first attested as an English prefix in the fifteenth century, and became fairly productive in Early Modern English forming derivations such as *demigod*, *demi-island*, *demi-devil*, *demicritic*, *demimale*. It was particularly used to derive technical terms, for instance, in the fields of heraldry (*demi-lion*, *demi-ram*), warfare (*demibastion*, *demicannon*, *demibake*), music (*demicrotchet*, *demi-quaver*, *demiditone*), and weights and measures (*demibarrel*, *demigroat*). In most cases it was subsequently replaced by *half-* and *semi-*.

*Semi-* (from Latin 'half') became productive in late Middle English, and was generalised in Early Modern English in nouns and adjectives of non-native origin. The prefix mainly contributed to technical terminology in various domains including music (*semitone*, *semi-quaver*, *semi-breve*), mathematics (*semi-axis*, *semi-angle*, *semi-base*), astronomy (*semi-sextile*, *semi-quadrant*), religion and philosophy (*semi-Atheist*, *semi-Arian*, *semi-infidel*), and architecture (*semi-channel*, *semi-relief*).

### 5.5.3 Suffixation

Despite the spate of new productive prefixes, prefixal means of derivation are clearly outnumbered by suffixal in Early Modern English. Most of the suffixes, too, are of foreign origin, and many had already gained their productive force in late Middle English. Quite a few of them had in fact arisen in the context of loan-word accommodation (e.g. *-al*, *-ate*, *-ant/ent*; see 5.4.3.1). In view of the number of suffixes borrowed, it is significant that the most productive individual suffixes should be native. Barber (1976: 185–8) shows that *-ness* and *-er* produce the most nouns in the period 1500–1700. Similarly, *-ed* and *-y* are the most frequently attested adjective suffixes.

While derivation by native suffixes involves no changes in the stress or phonological shape of the base, borrowed suffixes vary in this respect. Especially when new suffixes combine with foreign bases the main stress may be attracted to the syllable immediately preceding the suffix, or it may



be carried by the suffix itself (see Lass this volume 3.6.2–3.6.3). These stress-affecting suffixes include *-arian*, *-ation*, *-ee*, *-eer*, *-ese*, *-esque*, *-ette*, *-ial*, *-ian*, *-ic*, *-ician*, *-ious* and *-ity*. But a non-native stress assignment is not always identifiable as a ‘stress shift’. Where suffixation serves the purpose of loan-word accommodation, it may involve a stem which need not have an adapted English equivalent (Marchand 1969: 215–25).

In the following survey, suffixes are grouped both by the word class that they form (noun, adjective, adverb and verb suffixes) and by the word class that they combine with (e.g. denominal, deverbal suffixes). This choice reflects the view that the main function of suffixation is grammatical, changing the word-class and hence the grammatical potential of the lexeme. Semantic distinctions are then established within the limits of these categories (Quirk *et al.* 1985, Kastovsky 1985). The main exception to this principle is denominal noun suffixes in that they do not affect the word-class of the base.

Most of the new suffixes hardly reflect any semantic gaps in the derivational system of Early Modern English. Some of them serve attitudinal (diminutive, pejorative) functions, but the vast majority quite simply appear to provide homogeneous means of derivation in the etymologically divided lexicon, thus reduplicating the native resources.

### 5.5.3.1 Noun suffixes

Noun suffixes constitute the largest group of all Early Modern English suffixes. Denominal and deverbal noun suffixes can be semantically divided into concrete and abstract. The former have agentive, diminutive or gender-denoting senses; the latter mostly express status and domain (denominal) or action and fact (deverbal).

#### 5.5.3.1.1 Denominal nouns: concrete (*-eer*, *-er*, *-ess*, *-et*, *-ette*, *-ician*, *-kin*, *-let*, *-ling*, *-ster*, *-y*)

The suffixes that express occupation and other related agentive notions include the Old English *-ster* and *-er*, and the French-derived *-eer* and *-ician*. In Early Modern English *-ster* is largely restricted to male agent nouns. Many of these coinages have pejorative senses (*gamester*, *whipster*, *bangster* ‘bully’, *penster*, *rhymester* and *trickster*). Female agent nouns could be derived from forms in *-ster* by means of the suffix *-ess* (*backstress* 1519, *seamstress* 1613, *songstress* 1703; for other derivations with *-ess*, see below).

The suffix *-er* is extremely productive with verbal bases, but also yields denominal nouns in Early Modern English (*tinner*, *podder*, *jobber*, *stockinger*).



In the late fifteenth century it begins to produce agent nouns in *-grapher* (*historiographer, cosmographer, scenographer, lexicographer*). The type *-loger* (e.g. *philologer, physiologer, mythologer*) has since given way to *-ist*. The suffix is further used to derive nouns denoting ‘an inhabitant of’, as in *cottager, islander, docker, Icelandic, New Englander*, but there are also several rival types.

The French-derived suffix *-ician* is used productively since the mid-fifteenth century to derive nouns denoting persons skilled in an art or science. It often correlates with earlier names of arts and sciences ending in *-ic* (*geometrician* 1483, *arithmetician* 1557, *mechanician* 1570, *politician* 1588, *dialectician* 1693).

The other French-based suffix *-eer* became productive in the seventeenth century. With the exception of military terms (*privateer, blanketeer*), most of the Early Modern English coinages are derogatory (*garreteer* ‘literary hack’, *pamphleteer, pulpiteer, sonneteer*).

Denominal diminutive and feminine suffixes in Early Modern English include the native *-ling* and *-et*, the Middle English formatives *-ess* and *-kin*, as well as the Early Modern English innovations *-y* and *-let*. The suffix *-ling* adds a diminutive or depreciative sense to the animate noun expressed by the base. The latter shade of meaning has typically been applied to human nouns since the sixteenth century, as in *worldling, groundling, squireling* and *authorling*. The suffix is also common with names of young animals and plants (e.g. *porkeling, kidling, catling, troutling, seedling, oakling*). Most of the coinages with *-ling* are denominal, but deadjectival and deverbal forms also occur (*tenderling, weakling, weanling, starveling, changeling*).

The diminutive suffix *-et* probably owes as much to ME French loans with this ending as to the corresponding OE suffix *-et*. Early Modern English coinages are mostly diminutives, such as *broocket, porket, locket, feveret, sippet, smicket* (the latter two from *sop* and *smock*, respectively). The late Modern English diminutive suffix *-ette* seems to represent both French *-ette* and *-et*.

The French-derived suffix *-ess* was established in the fourteenth century. It was used productively to form feminine nouns in Early Modern English both with borrowed and native bases, including coinages such as *actress, ambassadress, laundress, murtheress, poetess* (sixteenth century), and *farmeress, heiress, peeress, spinstress, stewardess, tutoress* (seventeenth century). The suffix was either added directly to its masculine counterpart (*heiress, tailoress*), or to a reduced form, following Latin and French models (*ancestress, adultriss, procurress*).

The diminutive suffix *-kin* came into Middle English from Dutch loan words. In Early Modern English it appeared with both animate and inanimate nouns (*napkin, rutterkin* ‘swaggering gallant’, *cannikin, lambkin, bulkin*,

*bumpkin, ciderkin*). The suffix is also found in oaths such as *God's bodikins, pitikins* (from *pity*).

The hypocoristic suffix *-y* (*-ie*) seems to have originated in Scottish personal names of the type *Charlie* in the mid-fifteenth century. Pet names also passed into the category of common nouns in Early Modern English (*kitty* (Catherine) 'young girl', *lowry* (Laurence) 'fox', *jockey* (John and Jack) 'professional rider'). Similar derivations from common nouns include *daddy, brownie, laddie, granny, hubby* 'husband' and *mousy*.

The diminutive suffix *-let* was established in English by about 1550. It appears to have been modelled on both French and the earlier suffix *-et*. The suffix became increasingly productive during the Early Modern English period both with native and non-native bases, deriving, for instance, *streamlet, ringlet, townlet, kinglet, droplet, winglet, lamplet, sparklet, bandlet* and *runlet*.

5.5.3.1.2 Denominal nouns: mostly abstract (*-age, -ate, -cy, -dom, -ery, -ful, -hood, -ing, -ism, -ship*)

The group of denominal suffixes that denote status, domain and other related semantic notions consists of *-dom, hood* and *-ship*, which go back to Old English, and *-age, -ery, -ism, -ate* and *-cy*, which are modelled after Middle English loans. They all derive abstract nouns.

The suffix *-dom* was mainly used to create abstract nouns meaning 'status, condition', or 'realm' (*archdukedom, birthdom, heirdom, mayordom, motherdom, peerdom, priestdom, queendom*). The pejorative sense that is common today is absent from most Early Modern English coinages (but cf. the inherently negative *cuckoldom, devildom*).

The denominal suffix *-hood* is moderately productive in Early Modern English in the senses 'status of' or 'time of', producing, for instance, *motherhood, sainthood, squirehood, boyhood* and *babyhood*. Some deadjectival coinages also occur, such as *lustibood, hardibood*.

The basic senses of *-ship* are 'state, condition' or 'rank of'. It produced a number of new coinages in Early Modern English, among them *guardianship, prefectureship, membership, courtship, lectureship, ownership, authorship* and *relationship*. It also evolved a new sense denoting 'a skill at' in such derivations as *workmanship, horsemanship* and *scholarship*.

The French-derived suffix *-age* has been used as a denominal and deverbal suffix since late Middle English. Denominal derivatives from personal nouns usually denote a condition, state or collectivity in Early Modern English (e.g. *baronetage, clientage, matronage, orphanage*). Besides collectivity, derivatives from non-personal nouns may express system and material (*leverage, leafage, mileage, oarage*). Some derivations denoting place or abode are

also found, including *parsonage* and *vicarage*. For deverbal coinages, see 5.5.3.1.4.

The suffix *-ery* (*-ry*) comes from French and yields both abstract and concrete nouns in Early Modern English. Its abstract derivations denote ‘state, business’ or ‘behaviour of’ (*barbery*, *rivalry*, *smithery*, *joinery*; *chemistry*, *dentistry*); the sense conveyed by the coinage may be pejorative, as in *bigotry*, *drudgery*, *foolery*, *savagery*, *slavery*, *thievery*, *pedantry*. Forming mass nouns from personal nouns the suffix also conveys the sense of collectivity, as in *peasantry*, *soldiery*, *tenantry* and *Welsbry*; things taken collectively are denoted by items such as *cutlery*, *ironmongery*, *stationery*, *crockery*, *machinery*, *confectionery* and *scenery*. Finally, *-ery* produces locative count nouns meaning ‘place of activity, abode’ (*brewery*, *chandlery*, *fishery*, *heronry*, *nursery*, *printery*, *swannery*, *tannery*).

Many nouns ending in *-ist* correspond to an abstract noun in *-ism* denoting a principle or a doctrine. This suffix has been in productive use since the sixteenth century. In Early Modern English it was mostly associated with non-native bases, as in *criticism*, *Anglicism*, *protestantism* and *modernism*, but coinages on native bases also occurred (*witticism* ‘a witty remark’, *truism*, *Irishism* ‘Irish idiom’).

The denominal suffix *-ate* is mainly attested in renderings of Latin words in the sense ‘office, function’ or ‘institution of’. It gained some currency in Early Modern English, producing such coinages as *tribunate*, *triumvirate*, *patriarchate*, *syndicate*, *baccalaureate*, *episcopate* and *electorate*.

The denominal suffix *-cy* is modelled on *-ancy* and *-acy* (see 5.5.3.1.5). It becomes productive in the eighteenth century and derives a few nouns denoting state or position, including *chaplaincy* 1745, *cornetcy* 1761 and *ensigncy* 1767.

Two other denominal suffixes worth mentioning are the native *-ing* and *-ful*. Alongside its verbal use, *-ing* derives mass nouns from concrete nouns. Early Modern English coinages mainly denote collectivity or substance. They include *tiling*, *paling*, *plaiding*, *channeling*, *toweling*, *quilting*, *matting*, *silvering*, *sugaring*, *plumbing*, *leggings* and *icing*.

Although *-ful* is more productive as an adjective suffix, it also derives nouns with the sense ‘the amount that N contains’, as in *mouthful*, *pailful*, *basketful*, *houseful*, *fistful*, *glassful*. The noun status of these formations is shown by their capacity to take the plural ending in Modern English. In some cases their status may still be variable: *mouthfuls* v. *mouthful*.

#### 5.5.3.1.3 Deverbal nouns: concrete (*-ant/ent*, *-ard*, *-ee*, *-er*)

Deverbal nouns divide roughly into two categories semantically, personal nouns derived by means of *-er*, *-ant/ent*, *-ee* and *-ard*, and abstract nouns usually expressing action or fact, derived by means of *-ation*, *-ment*, *-ance/ence*, *-al*, *-ing*,

*-ure* and *-age*. Only *-er* and *-ing* are of native origin; all the rest are adopted from French. However, Kastovsky's (1985) comparison of Old English and Modern English deverbal nouns reveals a remarkable continuity of the main semantic types. The adoption of the passive benefactive suffix *-ee* in Early Modern English marks the only significant semantic addition, making it possible to derive personal nouns denoting the goal of verbal action.

The agentive suffix *-er* is almost fully productive deriving personal nouns from dynamic verbs, both native and borrowed (e.g. *examiner*, *lecturer*, *tattler*, *beeler*, *modernizer*). It also forms other animate nouns (*pointer* – a dog breed, *springer* – a fish that springs, salmon). The suffix is not limited to agentive nouns in Early Modern English but can appear with non-animate nouns expressing a variety of semantic notions from instrumentality ('that which V-ing is carried out with': *poker*, *duster*) to objective ('that which is being V-ed': *drawers*, *wrapper* 'headdress') and locative senses ('where V-ing takes place': *boiler*, *slipper*). It is also frequently attached to compounds (*new-comer*, *bystander*, *sleep-walker*). The spelling variants *-ar* and *-or* occur in sixteenth- and seventeenth-century latinised forms where *-er* was earlier used, as in *beggar*, *liar*, *pedlar* and *sailor*, *vendor*, *visitor*.

The participial suffix *-ant/ent* was first used in Middle English to accommodate French and Latin legal terms. It was increasingly analysed as an English suffix in Early Modern English because its derivations could be connected with a verb (e.g. *attendant* 1555 – *attend*; *dependant* 1588 – *depend*; *claimant* 1747 – *claim*). Besides personal nouns, the suffix is associated with instrumental nouns, such as *illuminant* 1644, *solvent* 1671 and *absorbent* 1718. It does not operate on native bases in Early Modern English.

Another deverbal noun suffix to gain currency in Early Modern English is *-ee*, which goes back to Law French term pairs like *donor/donee* in Middle English. They came to be associated with the corresponding verbs in English, and *-ee* began to derive personal nouns denoting the goal or beneficiary of the action expressed by the passive meaning of the verb (*grantee* 1491, *debtee* 1531, *mortgagee* 1584, *referee* 1621, *payee* 1758). The suffix spread to Germanic bases in Early Modern English, as in *trustee* 1647, *drawee* 1766.

By contrast, the suffix *-ard* did not last long in current usage. It was used to derive depreciative epithets of the type *braggart* 1577, *stinkard* 1600 and *laggard* 1702, but became more or less non-productive after 1700.

#### 5.5.3.1.4 Deverbal nouns: mostly abstract (*-age*, *-al*, *-ance/ence*, *-ation*, *-ing*, *-ment*, *-ure*)

The native suffix *-ing* produces both abstract nouns denoting activity or state and concrete nouns denoting the results of the activity expressed by

the verb. The first type consists of verbal nouns (gerunds); because it is fully productive with all verbs, it is usually considered to represent a grammatical rather than a lexical process (Quirk *et al.* 1985: 1547). The second type can be considered properly lexical. It is also very common, and even derives plural nouns. Early Modern English examples include *clearing(s)* ‘pay’, *diggings*, *engraving*, *etching*, *savings*, *scrapings* and *shearings*. Derivations with *-ing* can also express other semantic notions, for instance, instrumental (*coating*, *stopping*, *stuffing*, *wadding*) and locative (*landing*).

Except for *-ing*, most Early Modern English deverbal affixes denoting action or fact go back to Middle English loans. Perhaps the most productive of them is *-ation*, because it is the only alternative available for verbs ending in *-ise*, *-ate* and *-ify*. It first acquired its derivative character in the fifteenth century with verbs in *-ify*. Early Modern English examples are *amplification*, *modification*, *verification*, *identification* and *beautification*. Derivations with *-ise*-verbs become productive in the early seventeenth century, including *authorisation*, *catechisation*, *formalisation*, *pulverisation*. Just like many derivatives from verbs in *-ify* and *-ise*, forms involving verbs in *-ate* often have French or Latin counterparts. In many cases it is impossible to tell whether a given form is the result of borrowing or deverbal derivation in Early Modern English (cf. *education*, *saturation*, *alternation*, *intimidation*, *affiliation*). This also applies to derivations from unsuffixed verbs, because native bases are on the whole rare (but cf. *flirtation* 1718, *starvation* 1778).

The suffix *-ance/ence* was naturalised in late Middle English and derives abstract deverbal nouns denoting action or the result of action. It becomes quite productive in Early Modern English. Although the suffix is not restricted to loans, most of its coinages have Romance bases (*admittance*, *appliance*, *clearance*, *consistence*, *guidance* (sixteenth century); *compliance*, *condolence*, *emergence*, *reliance* (seventeenth century); *convergence*, *remittance*, but cf. *bearance* (eighteenth century)).

The deverbal and denominal suffix *-age* similarly goes back to the late Middle English period. Its earliest deverbal coinages were abstract nouns denoting action or fact but resultative and locative senses also emerge in Early Modern English, where the suffix readily takes both native and non-native bases (*anchorage*, *drainage*, *leakage*, *luggage*, *package*, *postage*, *storage* and *sweepage*). In some cases such as *anchorage*, *postage* and *storage*, for instance, it is not possible to say whether the derivative is in fact deverbal or denominal.

The suffix *-al* can be considered naturalised by about 1400. It chiefly derives countable abstract nouns from dynamic verbs; both native and non-native bases appear from the seventeenth century onwards (*denial*,

*recital, removal, survival* (sixteenth century); *approval, committal, disposal, proposal, renewal, revival* (seventeenth century); *avowal, bestowal, carousal, suppliant* (eighteenth century)).

The suffix *-ment* was established in Middle English, but its derivative pattern appears to be stabilized only in the mid-fifteenth century. It is mostly attached to non-native bases to derive both abstract and concrete nouns, including *abasement, assessment, astonishment, management, retirement, treatment* (sixteenth century); *aggrandizement, amusement, assortment, commitment, engagement, environment* (seventeenth century); *equipment, fulfilment, statement* (eighteenth century). The suffix *-ure* became mildly productive in Early Modern English with verbs ending in *-s* or *-t*, deriving action nouns on the model of loan-word pairs of the type *pressure/press* and *closure/close*. Many Early Modern English coinages have not survived to the present day (*clef-ture, vomiture, raisure, praisure*; but cf. *departure, enclosure, erasure, exposure*).

#### 5.5.3.1.5 Deadjectival nouns (*-acy, -ancy/ency, -by, -ity, -ness, -ton*)

There are two marginal deadjectival noun suffixes which both form personal nouns in Early Modern English, *-by* and *-ton*. Both are native, and presumably derived in imitation of place names. The suffix *-by* derives, for instance, *sureby* 1553 ‘dependable person’, *rudesby* 1566, *sneaksby* 1580 ‘mean fellow’, and *idle(s)by* 1589. The forms with *-ton* (‘fool’) include *skimmington* 1609 and *simpleton* 1650.

The main suffixes that derive abstract nouns from adjectives are the native *-ness* and the French-derived *-ity*. Both are very productive in Early Modern English and have partly overlapping input ranges. Both are used to form derivatives that denote abstract states, conditions and qualities, and this is the semantic domain that prevails with *-ness*. It prefers native bases but is not limited to them. Its Early Modern English attestations include *commonness, heartiness, disingenuousness, self-consciousness, uprightness, wariness, wittiness* and *younghness*. It also readily appears with participles (*invitingness, premeditatedness*).

The suffix *-ity* has a wider semantic range than *-ness*; in addition to the abstract notions of state, condition and quality, it is found in coinages such as *capability, oddity, peculiarity* and *regularity*, which may have concrete denotations and appear in the plural. The suffix was adopted from late Middle English French and Latin loan words, but from the sixteenth century onwards it became synchronically associated especially with adjectives ending in *-able/ible, -ic, -al* and *-ar*. Except for a few cases with native bases such as *oddity*, *-ity* was applied to Latinate bases, as in *capability, inflammability, compatibility, feasibility, infallibility, eccentricity, elasticity, electricity, brutality, virtuality, regularity, similarity*. For the rivalry between *-ness* and *-ity*, see futher Romaine (1985).



The suffix *-acy* is licensed in English by French and Latin loans, where it served as an adaptational termination. In late Middle English it also began to be used productively to denote state or quality in derivations based on words ending in *-ate*. Most Early Modern English coinages with *-acy* are deadjectival, e.g. *obduracy*, *effeminacy*, *intricacy*, *subordinacy*, *intimacy*, *illiteracy*, *accuracy* and *legitimacy*; denominal forms include *piracy*, *magistracy* and *curacy*.

The first instances of *-ancy/ency* as a productive suffix appear in the fourteenth century, but it was only generalised in the sixteenth. It derives abstract nouns meaning ‘state or quality of being x’ from nouns and adjectives ending in *-ant/ent*. With the exception of a few denominal derivations, EModE coinages with *-ancy/ency* are mostly deadjectival (e.g. *consistency*, *decency*, *efficiency*, *sufficiency*, *vacancy* (sixteenth century); *agency*, *compliance*, *deficiency*, *fluency*, *redundancy*, *tendency* (seventeenth century); *convergency*, *brilliance* (eighteenth century)). There was some competition between *-ancy/ency* and the related deverbal suffix *-ance/ence*, for instance, in such doublets as *fragrancy/fragrance*, *intelligency/intelligence*, *persistency/persistence*. In most cases the latter form prevailed, partly perhaps because *-ance/ence* was also used as an anglicising termination for French and Latin loans.

### 5.5.3.2 Noun/adjective suffixes (*-(i)an*, *-arian*, *-ese*, *-ist*, *-ite*)

This group consists of suffixes, all of them non-native, which form nouns and adjectives on a denominal and deadjectival basis. They were first used to anglicise French or Latin loans, but were generalised as English formatives in the Early Modern English period.

The suffix *-(i)an* is chiefly added to proper nouns to form personal nouns and non-gradable adjectives meaning ‘belonging to x’, ‘pertaining to x’. It was first used to anglicise Latinate loans in Middle English. Native derivations are very frequent from the sixteenth century onwards. The range of Early Modern English coinages can be illustrated by *Lancastrian*, *Devonian*, *Chaucerian*, *Etonian*, *Lutheran*, *American*, *Jamaican* and *Sumatran*. Forms like *Parisian* and *Australian* with the French suffix *-ien* were re-latinised accordingly. A number of derivations with *-(i)an* arose from latinised modern names such as *Cantabrigian* 1540 (from *Cantabrigia* for *Cambridge*), *Oxonian* 1540 (from *Oxonia* for *Oxford*), *Norwegian* 1605 (from *Norvegia* for *Norway*) and *Salopian* 1700 (from *Salop* for *Shropshire*).

The denominal suffix *-arian* was first used to anglicise Latin words in *-ārius* in the sixteenth century. In the seventeenth, a large group of terms were coined meaning ‘member of a sect’, ‘holder of a doctrine’ (e.g. *latitudinarian*, *sectarian*, *Trinitarian* and *Unitarian*). The suffix soon gained wider



currency in Early Modern English. Its coinages are chiefly nouns derived from Latin bases; some of them may also function as adjectives (*attitudinarian*, *Parliamentarian*, *septuagenarian*, *sexagenarian*).

The denominal suffix *-ite* ('member of a community, faction', 'follower of') appeared chiefly in Middle English ecclesiastical translations, and spread to native personal and place name derivations in the Early Modern English period, as in *Wycliffite* 1580, *Siamite* 1601, *Bedlamite* 1621, *Cromwellite* 1648, *Zionite* 1675, *Jacobite* 1689, *Williamite* 1689, *Mammonite* 1712 and *Bostonite* 1775. The suffix also became very productive in scientific nomenclature towards the end of the eighteenth century.

The principally denominal suffix *-ist* first appeared in Latin and French loans in Middle English. It can be considered naturalised by about 1600. It is used to derive personal nouns and adjectives signifying 'one connected with N', 'supporter of a principle or an ideology' or 'a person exercising a given profession'. Early Modern English coinages include *novelist* 'innovator', *tobacconist* 'one addicted to tobacco', *linguist*, *humorist* (sixteenth century); *duellist*, *monopolist*, *flutist*, *votarist*, *non-conformist*, *florist*, *bigamist*, *violinist* (seventeenth century); and *egotist*, *ebonist* (eighteenth century).

The denominal suffix *-ese* seems to be derived from EModE Italian loans denoting nationality and place of origin, such as *Milanese*, *Genoese* and *Chinese*. It was generalised in personal nouns and adjectives denoting remote foreign countries in late Modern English, where it was competing with *-(i)an* and *-ite*. The few EModE coinages include *Cingalese* and *Siamese*.

### 5.5.3.3 Adjective suffixes

An increasingly large number of suffixes for deriving adjectives from nouns appeared in Early Modern English. The more than half a dozen native suffixes and the two 'semi-suffixes' (*-like* and *-worthy*) usually formed adjectives from both native and non-native bases. They were augmented by almost as many borrowed ones, most of which became productive in the sixteenth century and were restricted to loan lexis. The two main deverbal suffixes *-able* and *-ive* go back to late Middle English.

Largely synonymous suffixes naturally lead to many competing derivations at an age of rapid and relatively unmonitored lexical growth. The *OED* lists altogether eight adjectival forms connected with the noun *arbour*, for instance. Native means are only used in *arbour'd* 1596; all the rest anglicise the etymologically related Latin adjective by non-native means: *arbory* 1572, *arboreous* 1646, *arborical* 1650, *arborary* 1656, *arboral* 1657, *arbo-real* 1667 and *arborous* 1667 (Finkenstaedt & Wolff 1973: 62). From this

wealth of choice, only *arboreal* seems to enjoy any currency in Present-Day English.

#### 5.5.3.3.1 Denominal adjectives: native suffixes (-*ed*, -*en*, -*ful*, -*ish*, -*less*, -*ly*, -*some*, -*y*; -*like*, -*worthy*)

The most frequent adjective suffixes in Barber's (1976: 187) Early Modern English material are the native -*ed* and -*y*. Both derive chiefly concrete adjectives. The suffix -*ed* forms possessive adjectives meaning 'provided with N'. It takes both native and foreign bases, as in *conceited*, *looped*, *palsied*, *roofed*, *spirited* (sixteenth century); *dropsied*, *fanged*, *intelligenced*, *leisured*, *pebbled*, *propertied* (seventeenth century), *cultured*, *flavoured*, *foliated*, *grassed*, *pronged* (eighteenth century). Its coinages can also have the sense 'having the shape or qualities of N', as in *piped*, *orbed* and *domed*. The suffix is further used to derive adjectives from compounds (*honeycombed*, *mother-witted*) and syntactic groups, the latter part of which need not have an independent existence (*bare-brained*, *lily-livered*, *long-haired*, *pig-beaded*, *pot-bellied*, *silver-tongued*, *rose-lipped*).

The suffix -*y* is usually added to concrete mass nouns to derive gradable adjectives meaning 'full of N, covered with N, characterised by N'. It is not limited to native bases. Its Early Modern English coinages include *dirty*, *gloomy*, *healthy*, *shaggy*, *spicy*, *sunshiny*, *wiry* (sixteenth century); *creamy*, *draughty*, *grimy*, *nervy*, *nutty*, *rickety*, *silky* (seventeenth century); *funny*, *glazy*, *sloppy*, *wispy* (eighteenth century). There are also some deadjectival coinages with -*y* signifying 'somewhat, suggesting x' (*brittly*, *brownly*, *dusky*, *haughty*, *lanky*). For its deverbal derivations, see 5.5.3.3.3.

The suffix -*ish* derives gradable and non-gradable adjectives chiefly from proper and countable nouns. Its prevailing senses are 'belonging to N', 'having the character of N'. In Early Modern English it continues to form adjectives expressing nationality and origin, as in *Turkish*, *Jewish*, *Cornish*, *Swedish*, *Polish*. Many derivatives have a derogatory sense (e.g. *bookish*, *fiendish*, *girlish*, *Romish*, *waspish*, *waterish* (sixteenth century); *fairish*, *mobbish*, *modish*, *monkeyish*, *owlish* (seventeenth century); *babyish*, *mulish*, *rakish*, *summerish* (eighteenth century)). From late Middle English, -*ish* also appears with colour adjectives conveying the sense 'nearly, but not exactly x' (*blackish*, *brownish*, *purplish*); and from the sixteenth century it commonly derives adjectives with an approximative sense (*darkish*, *fairish*, *genteelish*, *tallish*, *thinish*, *warmish*; cf. -*y*, above, and *sub*-, 5.5.2.5).

Early Modern English also continues to make productive use of -*ful*, which derives gradable adjectives chiefly from abstract nouns with the sense 'ful(l) of N', 'having, giving N'. Early Modern English coinages include, for instance, *deceitful*, *useful* (fifteenth century); *beautiful*, *delightful*, *hopeful*, *reproachful*,

*successful* (sixteenth century); *eventful*, *fanciful*, *hasteful*, *tasteful*, *wistful* (seventeenth century). The suffix appears to be losing ground after the seventeenth century except in formations with *un-*, which occur throughout the period (*unartful*, *uncareful*, *unhelpful*, *unreproachful*, *unsuccessful*, *unuseful*).

Etymologically, the negative counterpart of *-ful* is *-less*. It derives adjectives meaning ‘without N’, ‘not giving N’. With *-ful* becoming more abstract in late Middle English, the two suffixes are no longer necessarily regular opposites, as the derivatives containing both *un-* and *-ful*, for instance, clearly indicate. Since then, *-less* derives adjectives even more independently. Early Modern English coinages can be illustrated by *seamless*, *workless* (fifteenth century); *honourless*, *lidless*, *limitless*, *matchless*, *priceless*, *sexless* (sixteenth century); *gainless*, *honeyless*, *letterless*, *noiseless*, *stateless*, *stomackless* (seventeenth century); *rayless*, *shelterless*, *thornless* (eighteenth century).

The denominal adjective suffix *-ly* conveys the sense ‘having the (good or bad) qualities of N’. It forms gradable adjectives chiefly from concrete nouns, as in *beggarly*, *cowardly*, *leisurely*, *masterly*, *orderly*, *portly*, *princely*, *ruffianly*, *vixenly*. With expressions of time, *-ly* denotes recurring occurrence (*hourly*, *monthly*, *quarterly*, *weekly*). A native competitor for *-ly* is the semi-suffix *-like* (see below).

The OE suffix *-some* (‘characterised by’) continues to form chiefly denominal adjectives in Early Modern English (*awesome*, *burdensome*, *danger-some*, *healthsome*, *laboursome*, *quarrelsome*, *troublesome* (sixteenth century); *frollic-some*, *glesome*, *humoursome*, *joysome*, *playsome* (seventeenth century); *fearsome*, *nettlesome* (eighteenth century)). The suffix also derives some deadjectival and deverbal adjectives (*brightsome*, *darksome*, *hindersome*, *meddlesome*, *tiresome*).

The denominal adjective suffix *-en* has the basic sense ‘made of, consisting of N’ as well as the derived one ‘resembling, like N’. The latter is gaining ground in Early Modern English, and new coinages often have both senses; *flaxen* and *milken*, for example, denote both material and colour. Concrete senses are still current, however, as appears from data such as the paraphrases given by Bullokar (1586: 61) for *earthen*, *elmen* and *stonen* (5.3.2 above). He also illustrates the alternative way of expressing material by means of nominal compounds (*earth bank*, *elm plank*, *stone wall*).

The semi-suffix *-like* ‘resembling’, ‘befitting’ – called so by Marchand (1969: 356) because it can also occur independently – made its appearance in the fifteenth century. Negative coinages can be found since the sixteenth century. EModE examples of *-like* include *bishoplike*, *godlike*, *fleshlike*, *ladylike*, *unchristianlike*, *ungentlemanlike*, *unmanlike*, *unwarlike*.

The other denominal semi-suffix used to derive adjectives is *-worthy*, which goes back to Old English. It has limited productivity in Early

Modern English with only few coinages such as *noteworthy* and *praiseworthy*. No negative formations appear until late Modern English.

#### 5.5.3.3.2 Denominal adjectives: borrowed suffixes (-*al* (-*ial*/*ical*/*orial*/*ual*), -*ary*/*ory*, -*ate*, -*esque*, -*ic*, -*ous*)

According to Barber's (1976: 187) *OED* data, the most productive of the borrowed adjective suffixes between 1500 and 1700 is -*al*, with its variants -*ial* and -*ical*. The suffix owes its existence to Latin loans in -*ālis* ('having the character of', 'belonging to'), -*al* being its anglicised form since Middle English. In Early Modern English -*al* could be attached to nouns of Latin and Greek origin, as in *horizontal*, *hexagonal*, *positional*, *baptismal*, *global* and *regimental*. There are very few coinages from native words (e.g. *burghal* 1591 from *burgh*). Coinages in -*ial* arise in the sixteenth century, and include, for example, *amatorial*, *ensorial*, *dictatorial*, *imperial* and *professorial*. The variant form -*ical* was often associated with the names of sciences, as in *arithmetical*, *logical* and *rhetorical*. It was not uncommon for forms in -*ical*, both new coinages and loans, to have shorter variants in -*ic*, as in *mathematical* 1522 v. *mathematic* 1549, *analytical* 1525 v. *analytic* 1590, *grammatical* 1526 v. *grammatic* 1599, *tactical* 1570 v. *tactic* 1604, *theoretical* 1616 v. *theoretic* 1656. The form -*ical* is occasionally used to derive non-scientific words such as *whimsical* 1653, *nonsensical* 1655 and *lackadaisical* 1768. On analogy with Middle English loans such as *spiritual*, -*ual* could also form derivatives from anglicised Latin words in Early Modern English (*accentual*, *conceptual*, *eventual*, *tactical*).

The French-derived suffix -*ous* ('full of', 'of the nature of') is earlier than the other borrowed adjective suffixes. It largely gained its productive force in the fourteenth century, and in Early Modern English it derived adjectives from both native and foreign nouns. Coinages with native bases are less numerous (e.g. *burdenous*, *murderous*, *slumberous*, *tetterous*, *thunderous*, *wondrous*). Its foreign-based derivations include *hasardous*, *momentous*, *odorous*, *poisonous*, *prodigious*, *sorcerous*, *usurious*, *verdurous*. The suffix also takes words ending in -(at)ion (*ostentatious*, *vexatious*) and -y (*analogous*, *monotonous*). It also commonly adapts Latin adjectives with no fixed anglicising termination.

The suffix -*ic* ('pertaining to') occurs in ME French loans. The first English formations begin to appear in learned words in Early Modern English, including derivations of ethnic and other proper names (*Celtic*, *Finnic*, *Gallic*, *Germanic*, *Icelandic*, *Miltonic*). Other EModE coinages include *aldermanic*, *bardic*, *operatic*, *oratoric* and *scaldic*. Terms such as *operatic* and *oratoric* have earlier derivations in -*ical*. Overall, technical terms in -*ic* represent complex correlative patterns many of which ultimately go back to Greek. Thus many loan words in -y tend to derive adjectives in -*ic* (e.g. -*graphy*, -*logy*,

-metry). So do words in *-sis* (*mimesis/mimetic*), *-ite* (*parasite/parasitic*), *-cracy* (*democracy/democratic*) and *-m(a)* (*drama/dramatic, problem/problematic*).

The suffix *-ary* was first used to anglicise adjectives of Latin origin. English coinages begin to appear in larger numbers from the sixteenth century onwards, and include, for example, *cautionary*, *complementary* (sixteenth century); *fragmentary*, *probationary*, *supplementary* (seventeenth century); *complimentary*, *residuary*, *revolutionary* (eighteenth century). The basic semantic difference between *-al* and *-ary* is that the latter usually also expresses purpose or tendency (cf. *fractional* ‘of the nature of a fraction’ v. *fractionary* 1674 ‘tending to divide into fractions’).

Having served as an anglicising termination in Latin and French loan words in Middle English, the suffix *-ate* became mildly productive in the Early Modern English period as a denominal adjective suffix. All its coinages derive from foreign bases (*affectionate*, *compassionate*, *dispassionate*, *opinionate*, *roseate*).

The suffix *-esque* derives adjectives chiefly from proper nouns (‘in the style of N’). The overwhelming majority of Early Modern English adjectives in *-esque* are Romance loans. The first native coinages are recorded in the eighteenth century (*picturesque*, *carnavalesque*).

#### 5.5.3.3.3 Deverbal adjectives (*-able*, *-ive*, *-y*)

The main suffixes forming adjectives from verbs in Early Modern English are the French-derived *-able* and *-ive*, and the native *-y*. They had all become productive prior to the Early Modern English period. The suffix *-able* is primarily deverbal, although denominal derivations also occur. It derives both active (‘fit for doing’) and passive meanings (‘fit to be done’). In Early Modern English it is equally productive with borrowed and native transitive verbs, and the passive sense is more common than the active one (e.g. *advisable*, *approachable*, *attainable*, *conquerable*, *countable*, *eatable*, *drinkable*, *readable*; cf. active: *answerable*, *perishable*, *speakeable*, *suitable*). Negative coinages with *un-* may antedate their affirmative counterparts (dates in brackets), as in *unaccusable* 1582 (c. 1646), *unavoidable* 1577 (c. 1638), *unbreakable* 1480 (1570), *unclimbable* 1533 (c. 1611) and *unconsumable* 1571 (1641). Coinages from phrasal and prepositional verbs occur after the sixteenth century (*come-at-able* 1687, *get-at-able* 1799). Denominal coinages are very much in the minority, but convey both active and passive meanings (*actionable*, *fashionable*, *leisurable*, *marriageable*, *marketable*, *palatable*, *sizeable*). The spelling variant *-ible*, due to Latin loan words, spread to Latin-derived coinages (*compressible*, *perfectible*, *resistible*).

The suffix *-ive* (‘pertaining to’) continued to anglicise adjectives of French and especially Latin origin in Early Modern English. It is also

increasingly used as a deverbal suffix to derive adjectives from Latin-based verbs ending in *-s* or *-t* in English as, for instance, in *amusive*, *conductive*, *coercive*, *depressive*, *extortive*, *persistive*, *preventive* and *sportive*. Derivations from native bases are rare and usually jocular (*babblative*, *writative*).

The only native suffix to produce deverbal adjectives is *-y* ('having the tendency to'; see 5.5.3.3.1). These derivations become common in the EModE period (*chokey*, *crumbly*, *drowsy*, *slippy* (sixteenth century); *floaty*, *speny*, *sweepy* (seventeenth century); *clingly*, *fidgety*, *shaky*, *shattery* (eighteenth century)).

#### 5.5.3.4 Adverb suffixes (*-like*, *-ly*, *-way(s)*, *-ward(s)*, *-wise*)

All the productive adverb affixes in Early Modern English are of native origin, which is a unique situation in the mixed derivational system. As *-ly*, the most common of them, is almost fully productive in Present-Day English, some accounts such as Marchand (1969) treat it as an inflectional suffix. On the other hand, since its function is specifically to change word class, and since it has distributional limitations in Early Modern English, especially with respect to elementary adjectives, it is discussed here under derivation (see further 5.5.5.3; Koziol 1972: 272–3, Quirk *et al.* 1985: 1556, Nevalainen 1997). Because of their limited productivity, the rest of the adverb suffixes are covered by Marchand (1969), too, under derivation, *-ward(s)* as a suffix, and *-like*, *-way(s)*, and *-wise* as semi-suffixes. They all supply denominal means of adverb derivation.

The form *-ly* is the late Middle English reduced form of *-lyche*, an earlier combination of the adjective suffix *-ly* (< OE *lic*) and the OE adverb suffix *-e*. As in Present-Day English, *-ly* is most commonly used to derive adverbs of manner, respect and degree in Early Modern English. It is applied to adjectives, participles and numerals (*bandily*, *commandingly*, *shortsightedly*; *firstly*, *thirdly*) as well as to nouns (*agely*, *partly*, *purposefully*). The suffix occasionally derives adverbs from adjectives in *-ly*, as in *friendlily* and *livelily*. With adjectives in *-ic/ical* it regularly displays the form *-ally* (*domestically*, *historically*, *poetically*). On the other hand, it is used less widely than today to derive intensifiers, with which zero-derived forms are common (e.g. *exceeding/extreme/surpassing well*; see 5.5.5.3).

The semi-suffix *-wise* ('in the form or manner of') is the second-most productive adverb suffix in Early Modern English. It is even listed by Bullokar (1586: 41) together with *-ly* as an adverb suffix to denote qualities (*tablewise*, *heartwise*). It serves both as a deadjectival and, increasingly, as a denominal suffix (*hooked-wise*, *humble-wise*, *leastwise*, *likewise*, *roundwise*; *end-wise*, *lengthwise*, *sidewise*, *sporting-wise*, *theatre-wise*).



There was already some competition between *-wise* and the other semi-suffix *-way(s)* ('in the way, manner of', 'in the direction of') in the sixteenth century, for example, in such cases as *longwise/longways* and *lengthwise/lengthways*. The suffix *-way(s)* was only mildly productive in Early Modern English. It was extended to nominal bases (*breadthways*, *edgeway(s)*, *endway(s)*, *crossways*, *sideway(s)*) but became at the same time less productive as a depronominal and deadjectival suffix (*anyway(s)*, *someway*, *likeways*, *straightway*).

In the sense 'in the direction of' *-way(s)* was rivalled by the suffix *-ward(s)*. The latter was attached to prepositional adverbs, cardinal points and, especially since the sixteenth century, to nouns to derive adverbs of direction. Its EModE attestations include *leftward*, *north-eastward*, *south-westward*; *landward(s)*, *seaward(s)*, *skyward(s)*, *sunward(s)*, *windward(s)*.

As shown in 5.5.3.3.1, *-like* was productive as an adjective suffix in Early Modern English. Hence adverbial occurrences with *-like* may be treated either as zero-derivations from homonymous adjectives or as derivations by means of the denominal adverb suffix *-like*. The latter view is espoused by Koziol (1972: 272), who cites such EModE coinages as *gentlemanlike* 1542, *bishoplike* 1555, *wifelike* 1598, *fatherlike* 1604 and *lionlike* 1610.

#### 5.5.3.5 Verb suffixes (*-ate*, *-en*, *-er*, *-(i)fy*, *-ise*, *-le*)

Early Modern English had inherited three productive native verb suffixes, *-en*, *-er* and *-le*, and generalised three non-native ones, *-ate*, *-(i)fy* and *-ise*. The native form *-en* was used primarily deadjectivally to derive both transitive-causative ('make x') and intransitive verbs ('become x') in Early Modern English. Verbs in *-en* were perhaps originally extensions of earlier suffixless verbs, but were predominantly interpreted as deadjectival by the sixteenth century; no deverbal derivations appear after about 1660, and denominal coinages are very rare (MEG VI: 357). The suffix also has phonological input constraints, the bases having to end either in a stop or a fricative. EModE coinages in *-en* include *brighten*, *chasten*, *deafen*, *fatten*, *lengthen*, *moisten*, *stiffen*, *weaken* (sixteenth century); *dampen*, *deepen*, *flatten*, *frighten*, *redde*n, *ripen*, *widen* (seventeenth century); *broaden*, *madden*, *tighten* (eighteenth century).

The suffixes *-le* and *-er* are similar in that they both have reiterative senses, and originally were not always associated with existing roots. Most EModE coinages in *-le* denote repetition of small movements (*crackle*, *draggle*, *dribble*, *fizzle*, *hackle*, *prattle*, *quackle*, *snuffle*). The coinages in *-er* express sound or movement (*flutter*, *gibber*, *patter*, *snicker*, *sputter*, *stutter*, *whimper*). Both suffixes have phonological constraints: an /l/ in the base excludes *-le*, and an /r/ disfavours *-er*.



The suffix *-ate* made its appearance in Middle English as an anglicising termination with Latin participles, and appeared with other verb forms after about 1400. As Reuter (1934: 106–7) shows, by the sixteenth century nearly half of the verbs in *-ate* have no prior attestations as participles, and therefore cannot be considered backformations, but rather derivations in their own right. From the sixteenth century onwards, *-ate* was used to form verbs from Latin nominal stems and Romance nouns. The suffix was very productive in the sixteenth and seventeenth centuries with attestations such as *capacitate*, *debilitate*, *fabricate*, *facilitate* and *fertilitate*. It did not, however, oust Latinate verbs which had already been adapted by means of *-(i)fy* or *-ise*, and forms such as *edificate*, *deificate*, *pulverizate* were short-lived.

Another causative suffix to become productive in the sixteenth century is *-(i)fy*. It originated in French and Latin loans in Middle English and, like the other non-native verb suffixes, continued to adapt loan verbs even after becoming an independent English formative. As a naturalised suffix it was frequently attached to Latinate bases, but native bases are also in evidence. Transitive denominal derivations outnumber deadjectival ones and, from about 1700, derogatory senses are common (*beautify*, *fishify*, *Frenchify*, *uglify* (sixteenth century); *countrify*, *happify*, *ladyfy*, *stonify*, *typify* (seventeenth century); *monkeyfy*, *toryfy*, *townify*, *speechify* (eighteenth century)).

The most productive of the new suffixes is *-ize*, which first appeared in Middle English Latin and French loans. The suffix is considered naturalised towards the end of the sixteenth century, when a number of new deadjectival and deverbal coinages are witnessed, including *bastardise*, *equalise*, *gentilise*, *popularise*, *spiritualise* and *womanise*. Most of these derivations are transitive, and have a causative sense, but intransitive instances ('act as') are also found especially between about 1580 and 1700 (e.g. *gentilise*, *monarchise*, *paganise*, *soldierise*). This was a period when *-ise* was used to derive a large number of technical terms chiefly from neo-Latin bases; adjectives in *-al*, *-(i)an*, *-ar* and *-ic*, for example, readily took the suffix. The coinages include *apologise*, *criticise*, *fertilise*, *formalise*, *humanise*, *Italianise*, *mechanise*, *methodise*, *monopolise*, *patronise*, *personalise* and *satirise*.

### 5.5.4 Compounding

Multiple criteria are needed to arrive at an adequate definition of compounds in English. A compound may be defined, as in Quirk *et al.* (1985: 1567), as a lexical unit consisting of more than one base, and functioning both grammatically and semantically as a single word. The chief problem is to distinguish compounds from grammatical phrases which consist of a

premodifier and a head (*blackbird* v. *black bird*). The problem is accentuated when we are confronted with historical data. Orthographic criteria offer no reliable guidelines even in Present-Day English, where a compound may be written either ‘solid’, hyphenated or ‘open’ (*flowerpot*, *flower-pot*, *flower pot*). We may assume that Early Modern English does not deviate much from Present-Day English in that compounds as a rule have the main stress on the first element and the secondary stress on the second element in simple two-word compounds. This type of information is not, however, readily available for individual problem cases in Early Modern English.

Morphosyntactic criteria are more useful in a diachronic context. Compounds have complex morphological representations that serve as inputs to inflectional rules. Thus the plural of *flowerpot* is *flowerpot* + *s* (cf. the corresponding co-ordinate phrase *flower* + *s* (and) *pot* + *s*). Similarly, it is not possible for a determinant of a compound to be modified independently of the whole. We cannot, for example, intensify an adjective that forms part of a compound (cf. \**a very blackbird* v. *a very black bird*).

Internally most compounds can be understood as telescoped clauses, and thus motivated in terms of the syntactic–semantic functions of their constituent elements (Marchand 1969: 22, Quirk *et al.* 1985: 1570). They include Subject–Verb, Verb–Object, and Verb–Adverbial relations, all productive in Early Modern English:

- |                      |        |                                 |
|----------------------|--------|---------------------------------|
| <i>flea bite</i>     | (1570) | ‘a flea bites’ → S + V          |
| <i>book-seller</i>   | (1527) | ‘x sells books’ → V + Obj.      |
| <i>night-fishing</i> | (1653) | ‘(x) fish at night’ → V + Advb. |

The notion of semantic unity referred to above implies a degree of lexicalisation: compounds are expected to have a meaning which can be related to but not directly inferred from their component parts. In practice semantic transparency is a continuum ranging from totally opaque former compounds such as *bussy* (< *housewife*) and *gammer* (< *grandmother*) to fully transparent coinages, such as *book-seller* and *grave-digger* (called synthetic compounds by Marchand 1969: 17 and Bauer 1988: 255; see also Kastovsky 1986a, and 5.3.2). Although compounding involves open-class lexical items, it can be semantically compared with prefixation: one element is modified by another, and together they constitute a functional unit. Three types of relation are traditionally distinguished (Lass 1987: 200–1):

- (a) determinative (*tatpuruṣa*), e.g. *goldfish* 1698, *steam-engine* 1751
- (b) copulative (*dvandva*), e.g. *merchant-taylor* 1504, *queen-mother* 1602/*mother-queen* 1591
- (c) exocentric (*bahuvrīhi*), e.g. *busybody* 1526, *redskin* 1699

Both (a) and (b) are endocentric in the sense that one of the bases is functionally equivalent to the whole – in (b) either one in fact. In (c), bahuvrihi compounds, no such determinatum is overtly present. It could be interpreted as a zero morpheme representing an entity specified by the compound. These exocentric formations are sometimes called pseudo-compounds. I adopt the traditional view and discuss them under compounding rather than conversion.

Both dvandva and bahuvrihi compounds are much rarer in Present-Day and Early Modern English than the first type, determinative compounds. Hatcher (1951), however, adduces evidence that there is an Early Modern English revival of dvandva compounds, which begins in the sixteenth century. This is a literary tendency greatly influenced by classical models, such as *oxymoron*. Shakespeare coined, for instance, such imaginative and often satirical coinages as *giant-dwarf*, *king-cardinal*, *master-mistress*, *sober-sad* and *pale-dull*. In the seventeenth century dvandvas made their way into technical language (*hydraulico-pneumatical* 1661, *anatomic-chirurgical* 1684).

The overwhelming majority of Barber's (1976: 192) some two hundred or so Early Modern English compounds are nouns, three-quarters of them of the form N + N. Compound adjectives are much rarer, and verbs and adverbs extremely rare. Barber's subject matter analysis reveals that compounding is used in many different fields. Large groups are connected with practical affairs such as farming (e.g. *sheep-brand* 1586, *pin-fallow* 'winter fallow' 1668), fishing (*heaving-net* 1584, *anchor-tow* 1637), commerce (*Bristol-diamond* 1596, *transfer-book* 1694), and tools (*pinching-iron* 1519, *spoon-hammer* 1688). Another large group consists of names of birds (*spoonbill* 1678), and especially plants (*rose-campion*, 1530, *waterdock* 1548, *lung-flower* 1597, *rot-grass* 1631). Names for people are also common (*bawdy-basket* 1567, *scrapepenny* 1584, *Frenchwoman* 1593). Properly scientific or scholarly terms form a distinct minority (anatomy: *pine-glandule* 'pineal gland' 1615; arithmetic: *offcome* 'product' 1542). Even the religious terms coined are mostly popular (*will-work* 'a work performed by the human will, without divine grace' 1538, *gospel-lad* 'Covenanter' 1679).

The following discussion is based on word-class distinctions of the determinatum (noun, adjective, verb) with a section of its own on exocentric compounds. A further division is made according to the determinant (noun, a verbal form in *-ing*, verb, adjective, adverb, particle). As with suffixes, syntactic–semantic criteria are then applied within these formal categories largely following the distinctions made in Marchand (1969), Koziol (1972) and Quirk *et al.* (1985). Because of limitations of space, only the main types productive in Early Modern English can be presented here.

## 5.5.4.1 Compound nouns: endocentric

## 5.5.4.1.1 Noun + Noun

The most common type of compound noun in Barber's (1976: 192) EModE material consists of two morphologically simple nouns. They are mostly determinative and thus endocentric with one base being modified by the other. Depending on whether or not the compound can be paraphrased in terms of a copula sentence, i.e. a subject–complement relation (either 'N1 is N2' or 'N2 is N1'), we may make a distinction between what Marchand (1969: 40) calls the copulative type and the rectional type (the former including traditional dvandvas). Both go back to Old English, and regularly place the determinant first, followed by the determinatum.

Besides the additive dvandva compounds discussed above, the copulative type can be interpreted more widely to include other semantic relations involving the copula. In fact, as Jespersen (*MEG* VI: 147) points out, the exact limitation of cases is often doubtful. *Boy-king* may be understood as a person who is both a boy and a king (dvandva), a boy who is also a king, or a king who is also a boy. Compounds are often open to more than one reading. In the case of copulative compounds we can make Marchand's (1969: 40–1) distinction between subsumptive (*oak tree*) and attributive (*girl friend*) types.

The subsumptive type shows the semantic relation of hyponymy (N1 (is a hyponym of) N2). It is well attested in Early Modern English in cases like *pathway*, *pumice-stone*, *puss cat*, *shrew-mouse* and *roadway*. The attributive type (N2 (is) N1) is particularly common with determinants denoting the sex of the determinatum, both people (*boy-angel*, *maid-servant*, *man-nurse*, *woman-cook*, *woman-grammarian*, *woman-poet*) and animals (*bull-calf*, *cock-chicken*, *hen-partridge*, *jack-merlin*, *jenny-ass*, *tompuss*). Cases where the order of the elements is reversed are generalised in Middle English; their Early Modern English attestations include *beggar-boy*, *beggarwoman*, *bondmaid*, *shepherd girl*, *servant-gentleman*, *washerwoman*, *turkey-cock* and *turkey-ben*.

Other copulative relations between N1 and N2 are physical or functional resemblance and composition. Their range of variation in Early Modern English can be illustrated by coinages many of which are still in current use:

N2 (is like) N1: *bell-flower*, *bull-frog*, *dragon-fly*, *jelly-fish*, *kettledrum*, *needle-fish*, *star-thistle*, *T-beard*

N2 (consists of) N1: *ironware*, *meat-pie*, *paper money*, *steel-pen*, *stone-jug*, *tin-kettle*

Non-copulative, rectional compounds show an even greater variety of syntactic–semantic relations in Early Modern English. The determinant is often associated with a subject function (e.g. agent, instrument), and the determi-

natum with the functions of an affected or effected object. The two can also have a part-whole relationship, which may be interpreted in terms of salient possession, or they may be linked by an adverbial relation of spatio-temporal location or instrumentality. These adverbial relations are often interpreted in terms of purpose ('N2 is for N1'; cf. Quirk *et al.* 1985: 1575). Rectional compounds are exemplified by the following paraphrase relations; again, many of these EModE coinages are still current in Present-Day English.

N1 (powers/operates) N2: *air-gun, mouth-organ, steam-engine* (1751), *water-clock*

N1 (yields/produces) N2: *cane juice, cow dung, cowhide, cowslip wine, heat-fever*

N1 (has) N2: *apron-string, arrow-head, door-ring*

N1 (is located) at N2: *bird cage, bread basket, fire place, key-hole, money-box, guest-chamber*

N1 (is V-ed by means of) N2: *horse-whip, teeth-brush*

It is also possible to reverse the functions of the determinant and determinatum:

N2 (controls/works with) N1: *boatman, chairman, coachman, fireman, livery-man, postman*

N2 (yields/produces) N1: *corn mill, honey bee, sugar cane*

N2 (has) N1: *cross bun, flagship, stone-fruit*

N2 (is located) at N1: *ground-nut, mountain-ash, skylark, table-spoon, tomb-stone, water-lily, morning star, night-light, winter-cherry*

The possessive relation 'N1 has N2' is typically expressed by genitive compounds involving animate determinants (*Jew's harp, mother's-tongue*). There are many plant names of this kind (*goat's beard, hog's fennel, cat's foot*), including a number of loan translations (*dog's tongue* < Greek < Lat. *cynoglossum*, *dog's-tooth* < Lat. *dens canis*).

While genitive compounds were already productive in Old English, plural compounds began to gain ground in Middle and Early Modern English. In Early Modern English it is not always possible to distinguish between the two in cases such as *sales-book*. There are few explicit forms like *mice-trap*. Most *s*-compounds can generally be explained in rectional terms: *banksman* 'overlooker at a coal mine', *deathsman* 'executioner', *draftsman*, *groomsman* 'bestman', *tradesman* (N2 controls/works with N1); *beeswax*, *goat's wool*, *lamb's wool* (N1 yields/produces N2).

#### 5.5.4.1.2 Adjective + Noun

A compound noun with an adjective determinant is motivated by an attributive subject-complement relation ('N is adj.'). The type goes back to Old

English. Many of its Early Modern English attestations denote animate beings, as in *blackbird*, *freshman*, *granddaughter*, *madwoman* and *nobleman*. They are common throughout the period; only ethnic nouns of the type *Cornishman*, *Englishwoman* begin to lose ground (Marchand 1969: 64). Surviving EModE coinages with inanimate denotata include *broad-sheet*, *common-room*, *dead-weight*, *hardware*, *highlight*, *bothouse*, *longboat* and *smallpox*.

The adjective functioning as the determinant may be a zero-derived noun, in which case the compound commonly expresses an object or adverbial relation (see 5.5.4.1.1). These compounds can be further interpreted in terms of purpose (*sick-house* ‘house for the sick’, *poor-box*, *wetnurse*). The type does not occur in Old English, and is rare before 1600.

#### 5.5.4.1.3 V-ing + Noun

Where the determinant is realised by a verbal form in *-ing*, the coinages display paraphrase relations similar to rectional N + N compounds. The determinant acts as a verb, and the determinatum may assume a semantic role expressed by a subject, object or adverbial function. With very few surviving coinages from Middle English, the subject type gains ground in Early Modern English (Marchand 1969: 71).

Verb + Subject: *dancing-girl* ‘the girl dances’, *floating bridge*, *flying squirrel*, *folding door*, *humming bird*, *rolling-stone*, *serving-maid*

Verb + Object: *heaving-net* ‘heave a net’, *looking glass*, *riding horse*, *smelling bottle*, *spending money*

Verb + Place Adverbial: *dining room* ‘dine in a room’, *landing place*, *melting pot*, *waiting room*, *writing table*

Verb + Time Adverbial: *calving time*

Verb + Instrumental Adverbial: *burning-glass* ‘burn with a glass’, *drawing-knife*, *knitting-needle*, *walking-stick*

Many of the object and adverbial types have a deverbal noun as determinant and may be further interpreted in terms of purpose (‘N is designed for the purpose of V-ing’). This derived reading motivates the type *riding-coat* ‘coat used for riding’ (*dressng gown*, *hunting whip*, *travelling box*).

A simple copulative relation is in evidence with cases such as *drinking bout* (1672) and *whooping cough* (1739) ‘cough which is, or consists of whooping’ (Marchand 1969: 39). Here, too, the determinant is analysable as a deverbal noun with a more or less independent lexical status.

#### 5.5.4.1.4 Verb + Noun

Compound nouns with a verbal determinant appear to have become more productive since Old English. In Early Modern English they

show the same range of syntactic–semantic relations as V-*ing* + Noun compounds.

Verb + Subject: *chokeapple* ‘the apple chokes’ (because it is harsh and unpalatable), *draw-boy*, *driftwood*, *rattlesnake*, *sheargrass*, *watchdog*, *work-people*

Verb + Object: *pastime* ‘pass the time’, *skim-milk*, *treadwheel*

Verb + Adverbial: *peep-hole* ‘peep through the hole’, *wash-house*, *plaything* ‘play with a thing’, *spy-glass*, *stopcock*

Again some of the object and especially adverbial cases may be understood in terms of purpose – a *plaything* is ‘a thing for x to play with’ (Quirk *et al.* 1985: 1573). Sometimes it is not easy to tell whether in fact the determinants function as a noun rather than a verb. Hence *rattlesnake* could perhaps also be interpreted as a snake characterised by a rattling noise (cf. Koziol 1972: 66).

#### 5.5.4.1.5 Noun + Deverbal Noun

Compound nouns with zero-derived deverbal determinants go back to Old English, but most surviving coinages are post Middle English. The type appears to be most productive in the subject–verb relation, and the object relation is stronger than the adverbial. The object relation is the only one associated with compounds with the pronoun *self* as determinant in Early Modern English.

Subject + Verb: *daybreak* ‘the day breaks’, *eyewink*, *fleabite*, *heartbreak*, *night-fall*

Object + Verb: *bloodshed* ‘shed blood’, *leasehold*, *roll call*, *woodcut*, *self-command*, *self-control*, *self-esteem*, *self-murder*, *self-pity*

Adverbial + Verb: *daydream* ‘dream during the day’, *homework*, *table talk*

Compounds like *sheep walk* are semantically once removed from the above basic types as they denote the place where the activity of ‘sheep walking’ is taking place. There are also cases where the determinatum is fully lexicalised and does not have the functions typical of a verb (e.g. *footprint*, *inkstand*, *sidewalk*).

#### 5.5.4.1.6 Noun + V-*ing*

Compounding a noun and a verbal noun in *-ing* is a productive process since Old English times, but again many of the attested coinages are Middle English or later. The type produces abstract compounds referring to human activity. They are typically based on a verb–object or verb–adverbial relation. The verb–object relation is the more common of the two.



Subject–verb correspondences are exceptional. *Nose-bleeding* is attested in Early Modern English, and *cock-crowing* ‘dawn’ and *cock-fighting* go back to Middle English (Marchand 1969: 76).

Object + Verb: *book-keeping* ‘keep books’, *bull-baiting*, *deer-stealing*, *foxhunting*, *house-keeping*, *peace-offering*, *thanksgiving*, *wool-gathering*

Adverbial + Verb: *church-going* ‘go to church’, *heartburning*, *seafaring*, *night-angling* ‘angle at night’, *fly-fishing* ‘fish with a fly’, *handwriting*, *picture-writing*

#### 5.5.4.1.7 Noun + V-er

Compound nouns with a deverbal agent noun in *-er* as determinatum are well attested since Old English, and constitute a highly productive type in Middle English and Early Modern English. They are more frequently based on verb–object than verb–adverbial functions. The great majority of these nouns denote persons (but cf. *nut-cracker*).

Object + Verb: *book-keeper* ‘x keeps books’, *book-seller*, *fire-eater*, *gold-washer*, *hairdresser*, *image-maker*, *rat-catcher*, *shipbuilder*, *shop-keeper*, *story-teller*, *torch-bearer*

Adverbial + Verb: *church-goer*, *rope-dancer*, *sleep-walker*, *street-walker*, *day-sleeper*, *night-wanderer*

Since the sixteenth century, the agent noun *monger* (< OE *mangian* ‘to trade’) only forms disparaging nouns (*meritmonger*, *pardonmonger*, *whoremonger*). As it also occurs as an independent word, it does not count as a (semi-)suffix in Early Modern English (cf. Marchand 1969: 357).

#### 5.5.4.1.8 Particle + Noun compounds

Since Old English, particles functioning as both adverbs and prepositions have occurred as first members of noun compounds. In Early Modern English they comprise *after*, *by*, *forth*, *in*, *off*, *on*, *out*, *over*, *through*, *under* and *up*. Marchand (1969: 109) also includes *back* and *down* in this group. In most cases, particle determinants have locative senses and thus partly overlap with locative prefixes (see 5.5.2.2). Some also have abstract senses. *Over*, for instance, means ‘excessive’ in *overburden*, *overdose*, *overproportion*. Particle determinants occur with the full range of nominal determinata in Early Modern English:

Particle + Noun: *afterlife*, *afterthought*, *backhand*, *backwater*, *by-office*, *by-passage*, *inside*, *inwall*, *off-corn*, *out-patient*, *outpost*, *overcare*, *overgarment*, *through-passage*, *through-toll*, *underbelly*, *undergrowth*, *undersecretary*, *upland*, *upshot*

Particle + Deverbal Noun: *backfall*, *back-set*, *inlay*, *input*, *intake*, *off-cut*, *onset*, *outbreak*, *outfit*, *outlet*, *outset*

Particle + V-ing: *inbeing, ingathering, inlying, offscouring, offreckoning, upbringing*  
 Particle + V-er: *backslider, bystander, onlooker, onsetter, outlier, outrunner, underwriter, upriser*

Verb-based compound nouns correspond to structures consisting of a verb modified or complemented by a locative particle. Particle + Deverbal Noun denotes a specific instance, result, or place of action. In Early Modern English the type is more productive than exocentric noun compounds consisting of a verb and a particle such as *drawback* and *turnout*, which are generalised in late Modern English (see 5.5.4.2.2; Marchand 1969: 110). Deverbal agent nouns such as *onlooker* have the variant form Noun + Particle (*finder-out, looker-on, passer-by, setter-up*). Neither is very common in Early Modern English.

#### 5.5.4.2 Noun compounds: exocentric

It was pointed out above in 5.5.4 that not all compound words are endocentric. Marchand (1969: 13) distinguishes a separate class of pseudo-compound nouns of the type *redskin* and *pickpocket*, which have a compound determinant and a zero determinatum. I shall call them exocentric. These compounds are of two kinds, noun-based (bahuvrīhi formations; *redskin*) and verb-based (*pickpocket*). The noun-based or bahuvrīhi compounds can be related to the semantic strategy of metonymy: an entity is referred to by a compound that in fact denotes only a part or a characteristic of it (see 5.6.3.2 below). Most exocentric compounds, both noun- and verb-based, are personal nouns. Because they are mostly pejorative in meaning, they do not directly compete with suffixal agent nouns.

##### 5.5.4.2.1 Noun-based exocentric compounds

Bahuvrīhi compounds are exocentric because they have no overtly expressed determinatum. Although *redskin* is based on an Adjective + Noun compound of the attributive kind ('the skin is red'), it does not refer to skin but rather to a person being attributed the property of red skin. Bahuvrīhi compounds usually correspond to a possessive relation ('N1 (has) N2'; where N1 = x, and N2 = red skin). As in most cases no change of word-class is involved – *red skin* and *redskin* both have nominal heads – the traditional view of bahuvrīhis as compounds of a special kind is justified.

Bahuvrīhi compounds were weakly productive in Old English, and they were mainly used adjectivally. They gained ground in Early Modern English partly in the wake of deverbal personal nouns modelled on French and

partly because the older type had developed an adjectival byform (*redbreast* > *redbreasted*) thus reserving the short form for nominal functions. The most productive kind in Early Modern English are bahuvrīhi nouns based on attributive Adjective + Noun compounds. On the other hand, the Old English denominal type Numeral + Noun is hardly attested at all except in *one-berry* and *nine-holes*. Coinages based on Noun + Noun and Verb + Noun compounds denoting properties are rare. The latter kind is first attested in Early Modern English (Marchand 1969: 386–9).

Adjective + Noun: *blackhead*, *brazen-face*, *busybody*, *goldilocks*, *green-sleeves* ‘inconstant lady-love’, *flatnose*, *grey-coat*, *lightweight*, *longlegs*, *redskin*, *square-toes*, *whitehead*

Noun + Noun: *asshead*, *barrel-belly*, *blockhead*, *hunchback*

Verb + Noun: *crack-brain* ‘a crack-brained person’, *draggle-tail*, *leapfrog*, *shatterbrain*

#### 5.5.4.2.2 Verb-based exocentric compounds

There are two kinds of exocentric noun compound derived from verbs and verb phrases. The first kind, based on a verb–object relation, was modelled on French imperative compounds of the type *coupe-bourse* ‘cutpurse’, ‘purse snatcher’. It became productive in Middle English, denoting an agent performing the action expressed by the verb phrase. Most EModE personal noun coinages are colloquial and pejorative. They are used to refer to anything from criminals and slanderers to idlers and misers, as in *cut-throat*, *do-nothing*, *fill-belly*, *killjoy*, *knowlittle*, *lackwit*, *lickladle*, *picklock*, *pickpocket*, *rakehell*, *telltale*, *turncoat*, *spendthrift*, *spitfire*. Impersonal coinages include *breakwater*, *stopgap* and *turnstile*.

Derivations of the other kind consist of Verb + Particle combinations denoting either agent or action. Agent nouns began to appear in the sixteenth century, and were perhaps first connected with the Verb + Object type and thus with an imperative notion. EModE coinages, many of them colloquial and pejorative, include *go-between*, *pullback* ‘adversary’, *runabout*, *runaway* and *sneakup*. A number of them have since become obsolete (*fall-away* ‘apostate’, *go-before* ‘usher’, *hangby* ‘parasite’, *holdfast* ‘miser’, *lieby* ‘mistress’, and *starback* ‘deserter’; Marchand 1969: 382–3).

Deverbal nouns denoting action or the result of action may be considered conversions of phrasal or prepositional verbs in Early Modern English (but cf. the Present-Day English type *sit-in*, for which no lexicalised verb exists). The type is gaining momentum in the seventeenth century. The coinages are colloquial but not commonly derogatory in meaning (*drawback*, *go-down* ‘retreat’, *hop-about* ‘dance’, *Passover*, *put-off*, *pullback*, *setback*, *turnout*, *turnover*; Lindelöf 1937: 4–9).

## 5.5.4.3 Compound adjectives

## 5.5.4.3.1 Noun + Adjective

Noun and adjective combinations are formed on two basic patterns: ‘as adj. as N’/‘adj. like N’ (*sky-blue*; a hyponym of the adjective in question) and ‘adj. with respect to N’ (*seasick*). Both types are found in Old English, but most of the compounds in use today are first attested in the Modern English period. Some elements only became productive in the sixteenth and seventeenth centuries, including *dog* (*dog-cheap*, *dog-lean*, *dog-mad*, *dog-weary*) and *proof* (*fireproof*, *mosquito-proof*, *stormproof*, *waterproof*, *windproof*). Attestations of the N + adj. type are particularly frequent from the decades around 1600.

EModE coinages of the *sky-blue* kind, based on comparison, include *air-clear*, *day-bright*, *lifelong*, *silver-grey*, *skin-deep*, *star-bright* and *world-wide* ‘as wide as the world’. Instances like *seasick* are equally numerous. They usually display various adverbial relations: *air-tight*, *blood-guilty*, *brainsick*, *foot-loose*, *heart-sore*, *love-sick*, *snow-blind*. Compound adjectives with the pronoun *self* of this type include *self-conscious*, *self-complacent*, *self-dependent*, *self-destructive* and *self-sufficient*.

## 5.5.4.3.2 Noun + V-ing

In adjectives which are formed from a noun followed by a present participle the noun functions either as a direct object or as an adverbial modifier of the verb. The type was of only limited use in Old English, and the great majority of Present-Day English compounds date from the Modern English period. The following instances, which also include pronoun determinants, are first recorded in the EModE period:

Object + Verb: *all-seeing* ‘x sees all’, *all-knowing*, *heart-breaking*, *home-keeping*, *life-giving*, *painstaking*, *penny-pinching*, *self-boasting*, *self-denying*, *world-commanding*

Adverbial + Verb: *day-lasting* ‘x lasts a day’, *night-faring*, *night-shining*

## 5.5.4.3.3 Noun + V-ed

The most common type of compound adjective in Barber’s (1976: 192) material consists of a noun followed by a past participle. It is already attested in Old English. In Early Modern English and Present-Day English alike, it is very common where the noun has an agential or instrumental reading, but other adverbial functions also occur. The verb regularly has a passive interpretation. Early Modern English attestations of the type include *awe-struck* ‘struck by awe’, *frost-bitten*, *hand-made*, *ben-pecked*, *spell-bound*, *sun-dried*, *wind-shaken*; *death-doomed* ‘doomed to death’, *heart-struck*;

*forest-born* ‘born in a forest’, *heart-felt*, *heaven-sent*. In some few cases the compound adjective must be interpreted in terms of a quality based on a subject–(passive) verb relation (e.g. *crest-fallen* ‘with the crest fallen’, *heart-broken*, *tongue-tied*).

#### 5.5.4.3.4 Adjective + Adjective

Combinations of two adjectives are either copulative (dvandvas) or determinative. The latter type is first attested in Late Middle English, and it is not very productive in Early Modern English. It is used hyponymically, for instance, to indicate a shade of colour (*dark green*, *deep orange*, *light grey*, *pale pink*). Since most of these coinages are fully transparent semantically – in many cases their determinants are also modifiable (*very deep orange*) – and since they continue to be stressed like phrasal units in Present-Day English, they could alternatively be analysed as adjective phrases in Early Modern English.

The copulative type is extremely rare in Middle English, but is being revived in Early Modern English. Apart from nonce forms such as Shakespeare’s *fortunate-unhappy*, *heavy-thick*, *honest-true* and *proper-false*, however, ordinary everyday formations like *bittersweet* are rare. Hatcher (1951) cites early instances of the more technical use of the type from *Hamlet* (II.ii.377–8), where Polonius presents paradoxical divisions of drama into *pastoral-comical*, *historical-pastoral*, *tragical-historical* and *tragical-comical-historical-pastoral*. In the seventeenth century, the type is increasingly being associated with technical terminology, and the first part is often a combining form with *-o* (*historico-cabbalistical*, *medical-physical*, *physicomechanical*, *plane-convex*, *theologico-moral*). Early instances of ethnic compounds of this kind are *Gallo-Greek* 1601 and *Anglo-Saxon* 1610 (Hatcher 1951: 198).

#### 5.5.4.3.5 Adjective/Adverb + V-ing

From Old English on, compound adjectives are also formed with adjective or adverb determinants and present participle determinata. As with past participle determinata (see 5.5.4.3.6), the adverb is usually a zero form in Early Modern English. Present participle compounds are motivated by verb–adverbial, or copula–subject complement relations in active sentences. The adverbial usually indicates the manner or duration of the action expressed by the verb, while the adjective attributes a property to the subject of the sentence (*easy-going* ‘x goes easily’, *everliving*, *far-reaching*, *ill-looking* ‘x looks ill’, *high-sounding*, *high-flying*, *long-suffering*, *never-dying*, *quick-fading*, *swift-flowing*, *wild-staring*, *wide-spreading*).

## 5.5.4.3.6 Adjective/Adverb + V-ed

An adverbial determinant followed by a past participle usually indicates the manner or circumstances in which the action denoted by the verb is carried out (*far-fetched*, *well-educated*). Most of these compounds have a passive meaning. The type goes back to Old English and is highly productive in Middle and Early Modern English. Its EModE attestations include *deep-seated*, *far-removed*, *high-flown*, *home-made*, *home-spun*, *high-prized*, *ill-chosen*, *ill-grounded*, *late-begun*, *late-found*, *new-coined*, *new-laid*, *rough-hewn*, *thinly-settled*, *well-dressed* and *wide-spread*.

In some cases the determinant assumes a subject complement reading (*bare-gnawn*, *true-born*). Borderline cases like *nobly-minded* have a possessive reading ('x has a noble mind') just like denominal adjectives derived by the suffix *-ed* (see 5.5.3.3.1). The intensifier *all* 'fully', 'extremely' occurs in *all-admired*, *all-dreaded*, *all-honoured* and *all-praised*.

## 5.5.4.3.7 Particle + Adjective compounds

The same basic set of particles combines with adjectives as with nouns in Early Modern English (see 5.5.4.1.8 above). Participial compounds with particles correspond to a verb-modifier relation. The relation between a particle determinant and an adjective determinatum is usually one of intensification, as in *overbold* 'too bold' and *through-hot* 'very hot'.

Particle + Adjective: *overanxious*, *overcareful*, *over-confident*, *over-credulous*, *over-eager*, *over-fond*, *over-scrupulous*, *through-old*, *through-ripe*, *through-wet*

Particle + V-ing: *aftercoming*, *downlying*, *forthcoming*, *incoming*, *indrawing*, *onlook-ing*, *outgoing*, *outstanding*

Particle + V-ed: *afterborn*, *downcast*, *ingrown*, *inwrought*, *offcast*, *outbound*, *outcast*, *underdone*, *undersized*, *uprooted*, *upturned*

There also appear in Early Modern English pseudo-compound adjectives where the determinant follows the determinatum (e.g. *cast-off*, *fallen-off*, *grown-up*, *put-on*, *run-down*; Koziol 1972: 81). For lexicalised phrasal adjectives, see 5.5.4.5.

## 5.5.4.4 Compound verbs

There are basically two kinds of compound verb, forms combining a particle and a verb (*outdo*, *overwrite*, *underbid*), and derivations on a composite basis resulting from conversion or backformation (*snowball*, *spoonfeed*; cf. 5.5.5 and 5.5.6.1). Because they have zero-determinata, the latter are formally counted as pseudo-compounds by Marchand (1969: 100). Both kinds gain ground in Early Modern English.

## 5.5.4.4.1 Particle + Verb

Although the particles *out*, *over* and *under* all have concrete locative senses, in compound verbs they usually convey abstract notions. *Out* ('outdo in V-ing') first appears in the fifteenth century and becomes fully productive by 1600 (*outbabble*, *outbrag*, *outdo*, *outlast*, *outlive*, *outride*, *outsell*, *outrun*, *outwork*). Denominal conversion verbs also combine with *out-* in Early Modern English; the meaning here is 'to excel, surpass in respect of N' (*outgun*, *outnumber*, *outrival*, *outwit*, *outvote*). *Out* partly overlaps with *over* in cases like *out-sleep* and *outstay*. The notion of going beyond the limits of what is denoted by the impersonal object of the verb is also present in compounds like *outgrow*, *outsit* and *outwear*.

*Over*-compounds go back to Old English. The concrete sense of covering what is denoted by the (actual or implied) object of the verb continues in EModE coinages, as in *overcloud*, *overfilm*, *overfly*, *overglide*, *overmask*, *oversnow*, *overspan*, *oversweep* and *overwrite*. The abstract sense of disturbed balance 'upset' is found in cases like *overawe*, *overbear*, *overpower*, *overrule* and *overtop*. *Over* rivals *out* ('surpass in V-ing'), for example, in *overbid*, *overdo* and *overshine*. By 1600, *over* is also established in the sense 'to do beyond the proper limit, to excess' and freely combines with all verbs whose semantics allows this reading (*overact*, *overburden*, *overfeed*, *overindulge*, *overpay*, *overpeople*, *overrate*, *overtire*).

In Old English, *under* was used in compound verbs meaning 'below, beneath something (denoted by the object of the verb)'. This was often done in imitation of the Latin locative prefix *sub-*. The usage continued in Early Modern English (*underline*, *underscore*, *undersign*). It was not, however, until the seventeenth century that the sense prevalent in Present-Day English, 'below a fixed norm or standard', became fully productive (*under-act*, *underbid*, *underdo*, *underrate*, *undersell*, *undervalue*, *underwork*).

## 5.5.4.4.2 Pseudo-compound verbs

Few OE verbs derived from compound nouns survive the Middle English period, but the type regains ground from the sixteenth century onwards. Marchand (1969: 102) distinguishes two types of pseudo-compound verb derived by conversion from nominal compounds, Noun + Noun and Adjective + Noun conversions. The first type is the more common of the two in Early Modern English and produces verbs like *dovetail*, *earmark*, *hamstring*, *handcuff*, *honeycomb*, *nickname*, *pickpocket*, *ringfence*, *shipwreck*, *snowball* and *tiptoe*. The latter includes such coinages as *drynurse*, *roughcast* and *whitewash*.

Backderived verbs also begin to gain currency in the sixteenth century, but are on the whole fewer than conversions in Early Modern English.



Most of them can be related to agent nouns (*blood-suck* < *blood-sucker*), action nouns (*merrymake* < *merry-making*), and participial adjectives (*rough-bew* < *rough-bewn*). The following coinages also go back to Early Modern English: *bronbeat*, *cony-catch*, *double-die*, *eavesdrop*, *henpeck*, *housewarm*, *new-cast*, *new-create*, *stargaze*, *sooth-say*, *sunburn*, *tonguetie*, *winterfeed*.

There are some general considerations which may at least partly account for the relative infrequency of backderived verbs. Motivated backderivations are basically in competition with verb phrases (*merrymake* v. *make merry*), and the determinant of the compound corresponds to a complement of the verb at the syntactic level. In both Early Modern and Present-Day English, verb complements such as direct objects regularly come after the verb (Vx). Despite the fact that backderived verbs conform to the morphologically preferred order determinant–determinatum (xV), their close connection with the syntactic construction may constrain their overall productivity: people do not so much *bookread* or *taxpay* as *read books* and *pay taxes* (Marchand 1969: 105).

As we have seen above, the determinant–determinatum order is typical of Early Modern English determinative compounds of most kinds. Verb-based noun compounds of the type *pickpocket* (Vx) discussed in 5.5.4.2 remain a small minority. The majority processes follow the determinant–determinatum (modifier–head) order that is not only characteristic of Modern English compounding but morphology in general. The preferred syntactic and morphological orders hence differ, making Early Modern – like Present-Day – English a typologically mixed language.

#### 5.5.4.5 Phrasal lexicalisation

Cases where phrasal sequences of more than one word are reduced to one-word status fall between grammar and lexis. These multi-word items do not always have the grammatical integrity required of words as lexicographical units – phrasal verbs, for instance, may be discontinuous (*turn on the light* – *turn the light on*). Because of the lexicalisation aspect, these processes nonetheless merit separate discussion. Phrasal lexicalisation is often viewed as a particular kind of compounding, because no change of word-class takes place with phrasal verbs and most phrasal nouns (see e.g. Koziol 1972, Cannon 1987). On the other hand, those phrasal nouns, adjectives and adverbs that involve word-class change are sometimes analysed as minor instances of conversion (Quirk *et al.* 1985: 1530, 1563). Although I append phrasal lexicalisation to compounding, it is clear that these colloquial processes often defy strict categorisation in traditional lexicological terms.

## 5.5.4.5.1 Phrasal nouns

According to Koziol's (1972: 70) data, the most commonly attested type of phrasal noun in Early Modern English consists of a noun postmodified by a prepositional phrase. The second most common type is a sequence of two nouns. Koziol gives the following examples:

Noun + Prepositional Phrase: *bill of fare*, *cat-o'-nine-tails*, *commander-in-chief*, *dog-in-the-manger*, *Jack-in-the-box*, *Jack-of-all-trades*, *love-in-a-mist* (plant), *love-in-idleness* (plant), *man-of-war*, *matter of fact*, *mother of pearl*, *rule of thumb*, *stock-in-trade*, *will-o'-the-wisp*

Noun + Noun: *bread and butter*, *cup-and-ball*, *give-and-take*, *knife-and-fork* (plant)

Unlike ordinary compound nouns, many of these lexicalised phrases have the plural marker attached to the first noun rather than the second (*bills of fare*, *men-of-war*). There is also a great deal of vacillation, which in some cases continues to the present day. We find as many as three different variants for the plural of *son-in-law* in the quarto and folio editions of Shakespeare's *King Lear* (IV.vi.190), viz. *son-in-laws*, *sons-in-law* and *sons-in-laws* (Marchand 1969: 123).

Other kinds of phrasal noun also occur, including adjective phrases (*good-for-nothing*) and lexicalised clauses (*what-d'ye-call-'em*) converted to nouns. Clausal nouns in particular are often nonce formations, as in this passage describing a flatterer in Nicholas Udall's morality play *Respublica* (1553) (Koskenniemi 1962: 97).

What clawest thoue myne elbowe, pratinge merchaunt? walke,  
Ye flaterabundus youe, youe flyering clawbacke youe,  
Youe *the-Crowe-is-white* youe, youe *the swanne-is-blacke* youe,  
Youe *John-Holde-mry-stafe* youe, youe *what-is-the-clocke* youe.

(Udall *Respublica* I.iii.28–31)

## 5.5.4.5.2 Phrasal adjectives and adverbs

In Early Modern English lexicalised phrasal adjectives typically consist of a prepositional phrase (*out-of-date*, *out-of-fashion*, *out-of-the-way*, *under-age*) or a sequence of two conjoined adjectives (*cut-and-dried*, *deaf-and-dumb*; Koziol 1972: 81). Prepositional phrases may also lexicalise as adverbs, as in *aforetime*, *betweendecks*, *perhaps*, *underhand*, *upstairs/downstairs* and *withinside* (Koziol 1972: 85). In some cases it is indeed difficult to say whether a prepositional phrase is primarily lexicalised as an adverb or an adjective (e.g. *offhand*, *underground*, *uphill/downhill*). Further sources for adverbs are noun phrases (*sometimes*), prepositional phrases with adverbial heads (*erelong*, *forever*), and adverb phrases (*anyhow*, *somehow*; Raumolin-Brunberg 1991: 96, 105).

## 5.5.4.5.3 Phrasal verbs

Regular verb and particle (adverb, preposition) combinations are often treated in grammar rather than lexis because they do not always have the grammatical and semantic integrity of a single word. Even fully lexicalised phrasal verbs allow the particle to be removed from the verb. Much the same constraints apply in Present-Day English as those stated for Early Modern English by Michael Maittaire in *The English Grammar* (1712: 111):

The Particle, which compounds the verb by following it, does not always go next to the verb; but the Noun, which is governed by the verb, is often placed between; as *i keep in my breath* or *i keep my breath in*; . . . The Pronoun ever goes between: as *i keep him in*.

Semantically multi-word verbs range from fully transparent, non-lexicalised combinations (*go after* ‘to follow’) to semi-idiomatic (*break up*), where the verb maintains its meaning and the particle functions like a semi-productive affix (*up* ‘completion’), and highly idiomatic combinations (*bring up* ‘to rear’) without similar compositional motivation (Quirk *et al.* 1985: 1162–3).

Although phrasal verbs were becoming increasingly frequent in Middle English, it appears that idiomatic meanings did not begin to evolve until in later Middle English (Hiltunen 1983a: 148–9, Brinton 1988: 225–34). In Early Modern English the phrasal verb category grew steadily. On the basis of forty-six plays from the early Renaissance to the present day, Spasov (1966: 21) estimates that the share of phrasal verbs remains below ten per cent of the total of all verbs from his four Early Modern English subperiods, but does exceed the five per cent level from about 1600 onwards.

At the same time it is interesting to note that the most common verb and particle collocations appear to be the same in Early Modern and Present-Day English. Comparing the Early Modern English section of the Helsinki Corpus with the Lancaster–Oslo/Bergen Corpus of present-day written British English, Hiltunen (1994) found that, in both of them, the following were among the most frequent combinations: *go/take away*; *bring/come/go back*; *come/go/sit/lay down*; *cut/take off*; *come/find/go out*; and *bring/come/take up*. Among the frequent particles, *out* seems to have extended its domain most since Early Modern English, and *forth* to have receded most.

As today, the phrasal verb largely belongs to the colloquial idiom in Early Modern English. Kennedy (1920: 14) shows that in the 1611 King James Bible it is less frequent than in Elizabethan comedies, and is usually to be taken literally, as in *enter in*, *go on*, *pluck out*, *root up*. Concrete senses are also frequent in handbooks and fiction (Hiltunen 1994). This less idiomatic end

of the semantic continuum may be further illustrated by such cases – many of them cited by seventeenth- and eighteenth-century grammarians – as *bring in* v. *carry away*, *cast about*, *get up*, *go by* ('to go near'), *go back*, *go down* (e.g. to the cellar), *go over* ('to cross'), *pass over* and *put on* (e.g. clothes; Hiltunen 1983b). Some verbs had only a concrete sense; *come by* meant 'to come near' but not 'to acquire'.

What is already striking in Early Modern English is the polysemy of phrasal verbs. The more idiomatic senses can be illustrated by *bring up* ('to rear'), *cast up* ('to compute'), *fall out* ('to quarrel'), *give up* ('to abandon'), *find out* ('to discover'), *put off* ('to delay'), *put out* ('to extinguish'), *set in* ('to begin'), and *turn up* ('to make an appearance'). Some of these idiomatic senses have since then become obsolete. In Early Modern English *put away*, for example, could mean 'to dispel', 'abolish', and 'sell'; *figure out* 'to portray', and 'represent' (the sense 'to work out' is a later development).

### 5.5.5 Conversion

Conversion is a derivational process because it changes the word-class designation of a lexical item. Since it does not involve any overt determinatum, it is also called zero-derivation. As a derivational process conversion can be compared with suffixation (Marchand 1969: 359, Quirk *et al.* 1985: 1558):

	VERB		DEVERBAL NOUN
Suffixation	remove	→	removal (1597)
Conversion	remove	→	remove (1553)

The zero-derived noun is both functionally and morphologically equivalent to the suffixal. Both can be preceded by determiners, take the plural ending, and complement verbs and prepositions. English lexical items can in principle assume several different grammatical functions. The main limitation is that content words cannot readily become function words. Function words themselves are not so constrained, but adverbs, conjunctions, prepositions and pronouns are freely converted to nouns and verbs. In Early Modern English we find, for instance, *the ups and downs*, *the ins and outs*, *to near*, *to up* and *but me no buts* (for other retorts, see Randall 1989).

Where to draw the line between conversion and a syntactic process depends on one's theoretical framework. Understood in a broad sense, conversion could result from incongruent syntactic functions, ellipsis or semantic changes operating within one and the same word-class. Two marginal groups can be distinguished. The first is commonly called partial

conversion. Here a word of one word-class appears in a function characteristic of another. Typical instances of this kind are nouns that are used 'adjectivally' as subject complements and premodifiers of other nouns as, for instance, *copper*, *cotton* and *embryo* in post-Middle English (Koziol 1972: 281). Since cases like this do not take adjectival inflections, nor are they fully lexicalised as adjectives, it is not necessary to increase homonymy in the lexicon by recording them as zero-derived adjectives. Instead, we can analyse a case like *copper kettle* in syntactic terms as a noun premodified by another noun or, as the case may be, a compound noun (see 5.5.4.1, and Raumolin-Brunberg 1991: 95–6). Adjectives that are used as collective nouns, as in *the rich* and *the poor*, may similarly be considered partial conversions and analysed as adjectival heads of noun phrases (Rissanen, this volume; Quirk *et al.* 1985: 1559, 1562). Both kinds of partial conversion are excluded from the following discussion. However, in both categories there are cases that have become fully lexicalised in the course of time. EModE denominal adjectives of this kind include *cheap*, *commonplace* and *orange* (Koziol 1972: 282). Deadjectival nouns are discussed in 5.5.5.1.2 below.

The second marginal group that is sometimes subsumed under conversion consists of what may be called transfers of secondary word-class. They turn non-count nouns into count nouns (*cheese* v. *two cheeses*), non-gradable adjectives into gradable (*English* v. *very English*), and transitive verbs into intransitive (*x reads the book* v. *the book reads well*; Quirk *et al.* 1985: 1563–6). Of great syntactic and language-typological interest though these transfers may be, they are strictly speaking not the result of a word-formation process but rather a semantic change within one and the same word-class combined with syntactic modifications. In principle these changes can be related to metonymic transfers, which do not effect a word-class change (see 5.6.3.2).

It was noted in section 5.3.2 that there are very few formal constraints on conversion in Modern English. This does not mean that conversions should be semantically underspecified or vague. The process usually operates on one sense of a lexeme at a time. Which sense is lexicalised is selected on pragmatic grounds. When verbs are converted into nouns it is often done in order to name objects that are closely connected with the state, action or process denoted by the verb: *a rattle* is an instrument used to make a rattling noise (1519), and *a reprieve*, 'a warrant granting suspension of capital sentence' (1602), is derived from the verb *reprieve* in the sense of 'to suspend the execution of a condemned prisoner'.

According to the lexicographical evidence discussed in 5.3.1 above, conversion is the third-most frequent word-formation process in Early

Modern English. In Barber's (1976: 193) sample of the *OED*, the most common types are formations of verbs from nouns (*gossip, invoice, lump*), of nouns from adjectives (*ancient, invincible*), and nouns from verbs (*invite, laugh, scratch*). Marchand (1969: 364–5) notes that borrowing of cognate nouns and verbs such as *arm/to arm* and *rule/to rule* may have facilitated the process of conversion in Middle English.

There is evidence, however, that polysyllabic loan words begin to disfavour zero-derivation in Early Modern English. Biese (1941: 239) shows that from 1650 onwards suffix formations had got the upper hand of direct conversions in disyllabic and trisyllabic words borrowed from French and Latin. The following discussion of the Early Modern English developments concentrates on conversions to noun and verb. Deadjectival adverbs are touched upon as a minor category.

#### 5.5.5.1. Conversion to noun

The main sources of conversion nouns are verbs and adjectives. In most cases, zero-derived nouns share the stress patterns of their bases. Marchand (1969: 379) suggests a synchronic stress rule to account for the cases where nouns are distinguished from verbs by stress: 'whenever we find stress shifting word pairs, we are dealing with deverbal substantives'. He adds that the stress patterns of the underlying bases are retained by denominal verbs.

Diachronically the situation is less straightforward, as Pennanen (1971b: 36) points out. First, stress-shifting word pairs are not always derivationally related. They may be quite simply due to borrowing, in which case the chronological succession of the items varies, as with *augment* (V before N) and *absent* (adj./N before V). Secondly, a denominal verb does not always retain the stress pattern of its base (cf. *escort* noun 1579, verb 1708; *progress* noun 1432, verb 1590; *premise* noun 1374, verb 1526). So indicative though it is, stress alone cannot always resolve the issue of derivational directionality of conversions (see further Lass this volume: 3.6.2).

##### 5.5.5.1.1 Deverbal nouns

The process of converting verbs to nouns is restricted in Early Modern English in that conversion nouns are seldom derived from verbs formed with borrowed suffixes, notably *-ify* and *-ise*. Suffixal means are used in these derivations. By contrast, conversions from native verbs in *-le* and *-er* are common (e.g. *glimmer, glister, shudder, whisper, crinkle, grumble, juggle, prattle, wriggle*; Biese 1941: 266–8). Conversions of prefixed verbs to nouns also

appear to be more common than in Present-Day English (e.g. *betray, detain, dismiss, enjoy, pretend*; Biese 1941: 454–9, Konkol 1960: 190–1).

Early Modern English deverbal nouns typically nominalize the event, state or activity denoted by the verb. This predicational type appears to dominate over the other syntactic–semantic relations (Marchand 1969: 373–4). The ‘object of V’ relation is also quite common, while the ‘subject of V’ and adverbial relations are much rarer, especially the temporal one (‘time of V’). These various cases are illustrated by the following EModE attestations:

Predication: *contest, glide, grasp, hiss, laugh, push, ring, say, scream, shuffle, struggle, swim, twinkle, yawn*

Object of V: *award* (‘something that is awarded’), *brew, convert, cut, produce, quote, stew, tender*

Subject of V: *cheat* (‘someone that cheats’), *pry, sneak*

Place of V: *bend, dip* (‘slope’), *lounge*

Instrument of V: *goggles* (‘spectacles’), *purge, rattle*

Time of V: *spring*

#### 5.5.5.1.2 Deadjectival nouns

Adjective to noun conversion is generally explainable in terms of an adjective + noun phrase from which the noun has been ellipted. Rissanen (this volume 4.2.4) shows that in Early Modern English a great deal more variation was allowed in this respect than today. As pointed out above, zero-derived collective plurals like *the rich* that have no singular forms are on morphological grounds treated as instances of partial conversion.

Partial conversion may in the course of time lead to full lexicalisation. EModE deadjectival nouns fall morphologically into three groups. The first one consists of nouns that have a regular plural form, such as *Christian, fluid, German, human, inferior, liquid, mortal, Protestant, Republican* and *savage*. Items in the second group can appear in both singular and plural, but have no overt plural marking (*Japanese, Swiss, Chinese* and *Portuguese* could also take the plural marker in the seventeenth century). Members of the third group have regular plural forms but no singular (*ancients, classics, eatables, moderns*; see Koziol 1972: 282–3).

#### 5.5.5.2 Conversion to verb

Conversion verbs derive from nouns, adjectives and particles. Most of them are denominal in both Early Modern English and today. Conversions from suffixed nouns are not common. Marchand (1969: 373) suggests that, as many of the nominal suffixes derive nouns from verbs, it would be



contrary to reason to form such verbs as *arrival* and *guidance* when *arrive* and *guide* already exist. This also applies to deadjectival nouns such as *idleness*. Suffixed loan words are, however, more freely treated as monomorphemic units and converted to verbs (see 5.3.2; Biese 1941: 256–9). Zero-derivation of verbs from prefixed lexemes is commonly limited. Verbs derived from negative adjectives such as *unfit* ‘to make unfit’ (1611) may occur more frequently in Early Modern English than today, but most of them are short-lived (Biese 1941: 134–66).

#### 5.5.5.2.1 Denominal verbs

As with suffixal verbs, causation is the predominant semantic element in zero-derived verbs, both denominal and deadjectival. Following Marchand (1969: 368–71), we may consider them in terms of the syntactic–semantic relations of the verbal determinatum, or zero, and the nominal determinant. EModE attestations of denominal derivatives reflect different adverbial functions, including the locative (‘to put in/on N’) and the instrumental (‘to V with N’). Instances of the verb–object relation involving an effected object (‘to produce N’) are also common. An affected object is involved in ornative and privative conversions, which correspond to ‘to put N on something’ and ‘to remove N from something’, respectively. The verb–object complement relation (‘to convert x into N’) occurs, but more rarely than the other causative relations mentioned. The stative subject complement function (‘to be/act as N’) is typical of personal nouns.

Verb – adverbial, locative: *angle* (‘to ru – n into a corner’), *bottle*, *casket*, *channel*, *cloister*, *coffin*, *garrison*, *kennel*, *pillory*, *pocket*, *roost*, *strand*, *tub*,  
instrumental: *barge* (‘to journey by barge’), *chariot*, *gun*, *hand*, *ladle*, *oar*,  
*net*, *paw*, *pulley*, *scythe*, *trumpet*

Verb – Object: *commotion* (‘to cause commotion’), *epistle*, *fissure*, *gesture*,  
*inventory*, *lecture*, *paraphrase*, *parody*, *puncture*, *puppy*, *serenade*,  
ornative: *brick* (‘to put bricks on’, ‘to close up with brickwork’), *glove*,  
*index*, *label*, *lacquer*, *ledge*, *mask*, *nickname*, *pension*, *tinse*,  
privative: *bark* (‘to strip off the bark from a tree’), *core*, *fin*, *pelt*, *shell*, *skin*,  
*rind*

Verb – object complement: *bundle* (‘to make up into a bundle’), *group*, *lump*,  
*phrase*, *pulp*, *silence*, *total*

Verb – subject complement: *butcher*, *cavalier*, *mother*, *nurse*, *page*, *pilot*, *rival*,  
*sentinel*, *slave*, *umpire*, *usher*

Denominal verbs are commonly polysemous. We can easily find even semantic opposites, such as the ornative and privative senses of *skin*, ‘to furnish or cover with skin’ (1547) and ‘to strip or deprive of the skin’

(1591); for privative prefix formations, see 5.5.2.1.2. Processual and stative senses also co-occur. So the verb *brother* means both ‘to make a brother of’ (1573) and ‘to act as a brother’ (*circa* 1600) (Bladin 1911: 116; Konkol 1960: 91–3).

#### 5.5.5.2.2 Deadjectival verbs

The group of deadjectival verbs is much smaller in Early Modern English than the denominal one, although it includes a number of derivatives that have since become obsolete (e.g. *apparent* ‘to make manifest’, *apt*, *civil*, *fierce*, *happy*, *infallible*, *obtuse*, *uncertain*, *womanish*; Biese 1941: 134–66). Semantically deadjectival verbs correspond either to a transitive verb–object complement relation (‘to make adj.’) or to an intransitive verb–subject complement relation (‘to become adj.’). The first one is by far the more common. Both senses are possible in many cases in Early Modern English, including *bloat*, *lavish*, *lower*, *mellow*, *plump*, *shallow* and *sullen*.

Verb–object complement: *dirty* (‘to make dirty’), *empty*, *equal*, *fit*, *nimble*, *numb*, *obscure*, *parallel*, *secure*, *spruce*, *yellow*

Verb–subject complement: *idle* (‘to be idle’, ‘to move idly’), *lazy*, *mute*, *northern*, *shy*, *swift*

Deadjectival conversions often compete with *-en* suffixations, as in *slack* 1520 and *slacken* 1580 (see 5.5.3.5, and for Present-Day English, Quirk *et al.* 1985: 1562).

#### 5.5.5.2.3 Particle-derived verbs

A number of locative particles were also converted to verbs in Early Modern English. They include *about* ‘to change the course of a ship’, *down* ‘to bring down’, *forward*, *near*, *off*, *south*, *through* ‘to carry through’, and *under* ‘to cast down’. Interjections are perhaps a more common source for verbs. They occur in colloquial usage, and can usually be paraphrased as ‘to say x’, ‘to utter x’: *adien*, *gee-bo* (to a horse), *hem*, *humph*, *miaow*, *pish*, *pooh*, *shoo*, *tush*, *yea*, *zounds* ‘to exclaim “zounds”’ (Biese 1941: 178–214).

#### 5.5.5.3 Conversion to adverb

In his *Pamphlet for Grammar* (1586: 40) William Bullokar lists the principal means of forming adverbs in his day. They include the suffixes *-ly* and *-wise*, and the adverbial use of adjectives. Two groups of adverbs in particular are augmented by means of zero-derivation in Early Modern English, intensifiers and adverbs based on elementary adjectives.

Peters (1994) shows that the class of intensifiers gained an exceptionally large number of new members in the Early Modern English period. Quite a few of them were zero-derived from adjectives, including forms such as *ample*, *detestable*, *extreme*, *grievous*, *intolerable*, *surpassing* and *vehement*. Towards the end of the period, the suffixed *-ly* forms were gaining ground at the expense of many zero-forms such as *dreadful*, *exceeding*, *extraordinary* and *terrible* (Strang 1970: 139). This morphological regularisation did not, however, prevent such common zero-forms as *pretty* and *very* from becoming generalised in standard usage.

Suffixed and suffixless adverbs also continued to be derived from elementary adjectives denoting dimension, physical property, speed and value. New zero-formations attested in Early Modern English include *bad*, *blunt*, *cheap*, *dark*, *quiet*, *rough*, *shallow*, *tight* and *weak* (Nevalainen 1994). Despite any normative pressures in the eighteenth century, suffixless forms were often preserved in comparatives and superlatives (*slower*, *slowest*) and in participial compounds (*new-laid*, *rough-hewn*, *soft-spoken*).

#### 5.5.6 *Minor processes*

The figures in section 5.3.1 show that other Early Modern English word-formation processes are much less frequently attested than affixation, compounding and conversion. Three minor processes, backformation, clipping and blending, nevertheless merit a separate discussion in view of the more dominant position of ‘shortenings’ in Present-Day English (eighteen per cent of the data in Cannon 1987). Acronyms proper do not seem to occur in Early Modern English, but some instances of ‘alphabetisms’, which are pronounced as sequences of letters, have been documented (e.g. *a.m.* 1762 < Lat. *ante meridiem*, *M.A.* 1730 < *Master of Arts*; Wölcken 1957: 320; see also Rodriguez & Cannon 1994).

The Early Modern English record of reduplications also calls for a brief comment. Besides such simple cases of syllable doubling as *pooh-pooh*, *sing-sing* and *yap-yap*, they are commonly realised either by initial consonant change combined with rhyme (*claptrap*, *bocus-pocus*, *bumdrum*, *burly-burly*, *mumbo-jumbo*, *roh-poh*) or by vowel alternation (*bibble-babble*, *chitchat*, *dingdong*, *flipflop*, *knick-knack*, *shilly-shally*, *tittle-tattle*, *wishy-washy*, *zigzag*). Vowel alternation may similarly motivate non-reduplicative coinages. The most common pattern is /i/ – /a/ (Koziol 1972: 298–300, Marchand 1969: 429–39):

*clitter* 1528/ *clatter* OE; *dib* 1609/ *dab* 1300; *giggle* 1509/ *gaggle* 1399; *gripple* 1591/ *grapple* 1580; *biggle* 1633/ *haggle* 1583; *scribble* 1467/ *scrabble* 1537; *snip* 1586/ *snap* 1495

The number of formations combining rhyme and vowel alternation increases in the sixteenth century, but their productivity slackens in the latter half of the seventeenth. Marchand (1969: 439) attributes these changes to the popular and emotional character of these processes in the post-Old English period, and concludes that they are less likely when the linguistic and literary standards of society become rigid and conventional. As the above examples suggest, most reduplicatives imitate sounds or characterise alternating movements; they may also be disparaging or intensifying.

Neologisms could also be created by other means of sound imitation (*baugh* ‘to bark’, *clank*, *scranch* ‘to crunch’, *splash*), by misderivation (*do* < *ado*, misinterpreted as *a do*) and popular etymology (*ancient* ‘a flag, a standard-bearer’ < *ensign*; Barber 1976: 194–5; see 5.6.5).

#### 5.5.6.1 Backformation

Backformation is defined by Marchand (1969: 391) as derivation of words that are known to have been extracted from longer words which have the formal appearance of bimorphemic, composite signs. Thus the verb *peddle* (1532) is backderived from the noun *peddler* (1377). Pennanen (1966) distinguishes six productive patterns of backformation in English.<sup>9</sup> His statistics show that backformation cannot properly be spoken of before 1500. This is partly no doubt caused by the limitations of the material available, but may also to some extent reflect the large amount of non-integrated new lexis that came into Middle English (Pennanen 1966: 87–9; see also 5.4.4.2). All six types are productive in Early Modern English.

- (1) A verb is backformed from what is believed to be or really is an agent noun or an instrument noun  
*cobble* 1496 < *cobbler* 1362; *tipple* 1500 < *tippler* 1396; *soothsay* 1606 < *soothsayer* 1340; *scavenge* 1644 < *scavenger* 1530; *spectate* 1709 < *spectator* 1586; *vint* 1728 < *vintner* 1297
- (2) A verb is backformed from a real or supposed action noun  
*atone* 1555 < *atonement* 1513; *injure* 1583 < *injury* 1382; *grovel* 1593 < *grovelling* fourteenth century; *collide* 1621 < ? *collision* 1432–50; *negate* 1623 < *negation* 1530; *locate* 1652 < *location* 1592; *sidle* 1697 < *sidling* 1330; *legislate* 1719 < *legislation* 1655
- (3) A verb is backformed from an adjectival word which is taken to be a derivative from the verb (present or past participle)  
*sunburn* 1530 < *sunburnt* 1400; *speckle* 1570 < *speckled* 1400; *laze* 1592 < *lazy* 1549; *site* 1598 < *sited* 1455; *frostbite* 1611 < *frostbitten* 1593; *superannuate* 1649 < *superannuated* 1639; *collapse* 1732 < *collapsed* 1609

- (4) A noun is backformed from an adjective taken to be derived from it  
*must* 'mustiness' 1602 < *musty* 1530; *greed* 1609 < *greedy* OE; *landlock*  
 1627 < *landlocked* 1622; *finick* 'a finical person' 1706 < *finical* 1592; *hazy*  
 1706 < *hazy* 1625; *stupe* 'a stupid person' 1762 < *stupid* 1541
- (5) An adjective is backformed from an abstract noun, adverb or another  
 adjective, whose base it is taken to be  
*ginger* 'dainty' 1600 < *gingerly* 1519; *hydrotic* 'dropsical' 1631 < *hydropsy*  
 1300; *greensick* 1681 < *greensickness* 1583; *homesick* 1773 < *homesickness*  
 1756
- (6) A 'primary' noun is backformed from what is taken to be its derivative  
*soothsay* 'a true or wise saying' 1549 < *soothsayer* 1340/ *soothsaying* 1535;  
*symphone* 'one having great liking in harmony' 1572 < ? *symphony* 1290;  
*sciagraph* 'a diagram' 1656 < *sciagraphy* 1598; *septuagene* 'a septuagenarian'  
 1656 < *septuagenary* 1605

Backformations often have either a colloquial and humorous or a technical character. The process hence applies to both native and borrowed lexemes. Many of the simplex forms coined in Early Modern English have since become obsolescent, but composite forms have fared better (e.g. *browbeat* 1603, *eavesdrop* 1606, *housewarm* 1666 and *kidnap* 1682; Pennanen 1966: 146).

#### 5.5.6.2 Clipping

In colloquial language a polysyllabic word can be reduced, often to a single syllable, either by foreclipping (*cute* 1731 < *acute*) or backclipping (*miss* 1666 < *mistress*). The process by itself does not change the word-class or the meaning of the shortened item, but with time the item may be dissociated from its source and become lexicalised. In Middle English, shortening applied to a number of French loan words with an unstressed initial syllable (e.g. *sport* < OF *desport*). It is not perfectly clear whether the process of omitting unstressed initial syllables is the same as the (perhaps more conscious) omission of stressed initial elements. In any case, with native or naturalised lexemes the process of clipping is not properly established until the fifteenth century (Marchand 1969: 449).

An unstressed initial syllable was dropped from such native items as *alone* > *lone* 1530, *alive* > *live* 1542, *against* > *gainst* 1590 and *withdrawing-room* > *drawing-room* 1642. Stressed initial elements could similarly be lost: *perinwig* > *wig* 1675 (Koziol 1972: 302–3).

The more common type of clipping in both Early Modern English and today is backclipping, where the end of the word is discarded. In

the sixteenth century we get, for instance, *chap* < *chapman*, *coz* < *cousin*, *gent* < *gentleman*, *mas* < *master*; in the seventeenth, *brandy* < *brandywine*, *cit* < *citizen*, *hack* < *hackney*, *mob* < *mobile* (< *mobile vulgus*), *phiz* < *physiognomy*, *quack* < *quacksalver*, and *van* < *vanguard*; and in the eighteenth, *brig* < *brigantine*, *confab* < *confabulation*, *gin* < *geneva*, *hip*, *hyp* < *hypochondria*, *rep* < *reputation*. The same clipped form may represent two different lexemes. Thus *sub* stands for both *subordinate* 1696 and *subaltern* 1756 (Koziol 1972: 305–6).

### 5.5.6.3 Blending

Blending can be defined as compounding by means of merging two words or word-fractions (e.g. *luncheon* 1580 < *lunch* + *nuncheon*). Except for coinages based on sound symbolism, blending and word-manufacturing of this kind are less frequent in Early Modern than in Present-Day English. Especially with blends based on sound symbolism, the meanings of the fused words may be closely related; in some cases the process cannot be traced with any certainty (*splutter* 1677 < ? *sputter* + *splash*). Fewer problems arise with other blends.

As Cannon (1986: 737) points out, writers would consciously create blends for aesthetic or practical effect. Examples of this kind include Shakespeare's *rebutse* (< *rebuke* + *abuse*), Greene's *foolosophy* (< *fool* + *philosophy*) and *niniversity* (< *ninny* + *university*), and Swift's *tritcal* (*trite* + *critical*).

The EModE record of blends includes both playful nonce words and some more lasting coinages (Behr 1935, Koziol 1972: 43–7):

*divelination* 1591 < *devil* + *divination*; *lunch* 1591 < ? *hump*, *bump*, *lump* + *hunch*, *bunch*; *canton* 1594 < *canto* + *canzone*; *twirl* 1598 < *twist* + *whirl*; *blotch* 1604 < *blot* + *botch*; *clunch* 1628 < *clench* + *clutch*; *dumbfound* 1653 < *dumb* + *confound*; *comrogue* seventeenth century < *comrade* + *rogue*; *variety* seventeenth century < *rare* + *variety*; *inamoretta* 1767 < *inamorata* + *amoretta*

## 5.6 Semantic change

### 5.6.1 Concepts and issues

The consequences of semantic change are familiar enough. The generalisation and specialisation of meanings, their amelioration and pejoration, are universal. So are the basic mechanisms of semantic change: either word meanings are reanalysed in relation to language-external factors within the same conceptual field, or they are intentionally extended to new items in

another field. New senses are conventionalised not only because of the need to name something hitherto unnamed but also to encode attitudinal contrasts and register variants.

Shifts of meaning may take place over an extended period of time. So *nice* underwent a series of ameliorative changes from ‘foolish’ and ‘stupid’ in Middle English to ‘fastidious’, ‘precise’, and ‘fine’ in Early Modern English, and to ‘agreeable’ and ‘pleasing’ in the eighteenth century. *Silly*, by contrast, deteriorated from Old English ‘happy’ and ‘blessed’ to ‘simple’, ‘feeble-minded’ and ‘stupid’ in the sixteenth century.

Two cumulative effects are also worth bearing in mind. First, given that word meaning is the aspect least resistant to reinterpretation in language, the larger the lexicon, the more material there is for semantic change to operate on. Secondly, older words as a rule have larger semantic ranges than newly adopted words, which start out with one sense. The figures in Finkenstaedt & Wolff (1973: 108–10), based on the *SOED*, roughly indicate that, in Present-Day English, about forty per cent of the lexemes that date from the fifteenth century have only one sense, while some sixty per cent of the words that go back to the seventeenth century, and as many as ninety-eight per cent of those from the twentieth, are monosemous.

Faced with the dynamism and sheer complexity of semantic creativity, I shall content myself with an outline and illustration of the main strategies in Early Modern English. In a number of cases I shall have to shift the emphasis away from individual words to sets of semantically related lexemes. The following discussion is based on the traditional view of the way in which meanings are related to extralinguistic reality. A word symbolises a concept, which refers to an object or state of affairs in the external world (Lyons 1977: 175). The conceptual (descriptive, denotative) meaning thus mediates between its extralinguistic referent (set of referents, denotatum) and the linguistic symbol. As we shall see, this simplified model will need to be further enriched by such notions as connotative meaning, which is conveyed by the regular association of a word with a given register or context of use.

My main concern here is with changes in extralinguistic categorisation prompting a meaning change in a lexeme, on the one hand, and meaning transfers based on perceived similarities in the referent sets of two lexemes, on the other. Because the two may be intertwined in sense shifts, my polarisation is merely heuristic. In order to be able to compare semantic change with word-formation processes, particular attention will be paid to the regularities observed in meaning shifts.



### 5.6.2 *External motivation*

At its most delicate level, semantic reconstruction ultimately means reconstructing past societies with all their cultural and social ramifications. The three hundred years from the advent of printing to the American Declaration of Independence take us a long way from a static medieval agricultural society – through great diversification of economic, political and socio-cultural activities, including the worldwide contacts of the English language – to the dawn of modern industrial society. Important aspects of the world view changed: the medieval Great Chain of Being from God down to man and lifeless matter was abandoned in favour of a more mechanical universe with God as a remote First Cause. Also discarded was the Ptolemaic cosmology with the Earth as the centre of the universe. New science supplanted the doctrine of the four elements of earth, water, air and fire as the physical basis of all matter, including the four humours (melancholy, phlegm, blood, choler) in human physiology. Many of these changes culminated in the seventeenth century and gave rise to conceptual frameworks which subtly altered the meanings of such key words as *humour*, *element* and *science* itself, to name only a few (Barber 1976: 158–64).

#### 5.6.2.1 Specialisation

We may begin by looking at a change in progress. One of the many new scientific terms to come into English in the seventeenth century was *electricity*. In his *Dictionary* (1755), Samuel Johnson glosses the adjective *electric* as ‘attractive without magnetism; attractive by a peculiar property, supposed once to belong chiefly to amber’, and the noun *electricity* as ‘a property in some bodies, whereby, when rubbed so as to grow warm, they draw little bits of paper, or such like substances, to them’. Johnson’s comment on his own gloss is worth quoting in full because it reveals the on-going changes taking place in the extension of the term:

Such was the account given a few years ago of electricity; but the industry of the present age, first excited by the experiments of *Gray*, has discovered in electricity a multitude of philosophical wonders. Bodies electrified by a sphere of glass, turned nimbly round, not only emit flame, but may be fitted with such a quantity of the electrical vapour, as, if discharged at once upon a human body, would endanger life. The force of this vapour has hitherto appeared instantaneous, persons at both ends of a long chain seeming to be struck at once. The philosophers are now endeavouring to intercept the strokes of lightning.

Johnson's *philosophers* in this context refers to 'men deep in knowledge, either moral or natural'. *Philosophy* was still the general term used of human knowledge of all kinds, including 'the course of sciences read in the schools'.

*Science* came to English from Old French in the fourteenth century in the broad sense of '(certain) knowledge', which persisted into Early Modern English. *Insience* appeared in the sixteenth century in the sense of 'want of knowledge', 'ignorance'. *Science* was also used for acquaintance with or mastery of any department of learning. Cawdrey (1604) specifically defines *science* as 'knowledge, or skill'. In Early Modern English the term *the seven liberal sciences* was used synonymously with *the seven liberal arts* of the *Trivium* (Grammar, Logic, Rhetoric) and the *Quadrivium* (Arithmetic, Music, Geometry, Astronomy). The modern, narrower sense was introduced in the eighteenth century:

The word science, is usually applied to a whole body of regular or methodical observations or propositions . . . concerning any subject of speculation.  
(OED, s.v. *science*, 1725, Watts *Logic* II.ii.§9)

The even more specialised sense of 'natural and physical science' did not appear until the latter half of the nineteenth century, thus reflecting the increasing separation of the physical from the mental in the field of human learning.

*Physicke* was another one of Cawdrey's 'hard words', and he gives it the senses 'medicine, helping, or curing'. The word was also used in its wider sense of 'natural science, the knowledge of the phenomenal world'. In this sense it had been rivalled by the longer term *physics* since the late sixteenth century, and by the eighteenth century *physics* was established in the sense of 'natural science in general'. Locke still appears to have included in its scope the study of God and angels, but in the course of the eighteenth century it was limited to inorganic nature. Dr Johnson (1755) glosses *physick* as 'the science of healing', with the derived senses of 'medicines, remedies' and 'purge'. While *physician* is defined as 'one who professes the art of healing', *physical* retains a wider sense, 'relating to nature or to natural philosophy; not moral'.

The medieval sense of *element* referring to the four basic constituents of matter (earth, water, air, fire) is frequent in Early Modern English writings even after the doctrine itself had become outmoded. The denotatum of the term was modified in the eighteenth century, and would include such substances as spirit, salt, sulphur and oil. At that time the term was not yet used to refer to such well-known metals as gold, silver, lead, iron, tin, or any of the elements that were named in the seventeenth and eighteenth centuries, including zinc (1651), manganese (1676), cobalt (1728) and nickel (1755) (Savory 1967: 92).

Sense specialisation may also arise as a result of social changes. At the end of our period political events changed one sense of the administrative term *governor* from ‘administrator of a British colony’ to ‘elected head of a state of the Union’. Similarly, the Early Modern English sense of *king*, ‘absolute monarch’, has in Britain been redefined as ‘(figure)head of government’ (Hock 1986: 300). The old descriptive senses of both terms remain historically valid. In both cases the broad dictionary definitions of the terms may also remain unaltered: *governor* is generally glossed as ‘a person who controls any of certain types of organisation or place’ and *king* as ‘(the title of) the male ruler of a country, usually the son of a former ruler’ (see *Longman Dictionary of Contemporary English*, s.v. *governor*, *king*).

These examples show how words are assigned more specific senses in response to new discoveries, changing circumstances and the increasing diversity of human interests. New or revised concepts thus do not always acquire new names. Nor need all the earlier, well-established senses of a word always be affected by this type of reanalysis. *Element* has retained its earlier general sense of ‘raw material of which a thing is made’, and *inscience* is still the antonym of *science* in the sense of ‘knowledge’.

Specialisation may also be used to supply a new name for a previously named referent. This is extremely common in slang but much rarer in the standard language (Warren 1992: 42–5). Renaming typically arises from the need for a euphemism or wish to express an attitude towards the referent. The process is often resorted to in the vocabulary denoting sexual activity. Numerous Latinate words acquire these specialised senses in Early Modern English, including *seduce* 1560, *erection* 1594, *intimacy* 1676 and *orgasm* 1684 (Hughes 1988: 11).

#### 5.6.2.2 Generalisation

The interaction between specialist terms and ordinary, everyday vocabulary also works in the other direction: words are borrowed from specialist fields, such as law and medicine, and enter into common use. The process is apt to lead to meaning generalisations due to less narrowly understood denotata. The legal term *moiety* ‘a half, one of two equal parts’ (1444) acquired a more general sense ‘one of two parts into which something is divided’ in non-technical use towards the end of the sixteenth century. It could also appear contextually in the sense of ‘a small part’. In the same way religious words are often secularised in the course of time. It was the religious sense of *sermon* that gave rise to ‘a long or tedious discourse or harangue’ (1596). *Crusade* and *cult* acquired their figurative senses in the eighteenth century (Hughes 1988: 51).

The extension of a term may be metonymic or metaphorical. As pointed out above, the word *humour* ‘moisture’, ‘fluid’, was in Middle English employed in medical writings as a special generic term for the four cardinal fluids of the human body. The following definition of the common uses of the term in the Renaissance is given by Ben Jonson in his Introduction to *Every Man out of His Humour* (1600):

... so in euery humane bodie The choller, melancholy, flegme, and bloud,  
By reason that they flow continually In some one part, and are not continent,  
Receiue the name of Humors. Now thus farre It may by Metaphore  
apply it selfe Vnto the generall disposition, As when some one peculiar  
quality Doth so possesse a man, that it doth draw All his affects, his spirits,  
and his powers In their confluents all to runne one way, This may be truly  
sayd to be a Humor.

As Jonson mentions, the use of the term was extended to mean the ‘general disposition’, overwhelming characteristic of a person. This wider sense prevailed even after the term had been divested of its medical status in the seventeenth century, and thus lost its popular scientific motivation. The word now also acquired the specific senses of ‘that quality which excites amusement’, and ‘the faculty of perceiving what is ludicrous or amusing’. At the same time, some linguistic vestiges of the original meaning of *humour* as ‘a fluid’ remain in our medical terminology. Dirckx (1983: 67) points out that physicians still continue to speak of the aqueous and vitreous humours of the eye, humoral immunity, humoral products of tumors, and neurohumoral agents.

The generalisation of titles in Early Modern Britain was motivated partly by increased social mobility, partly by reasons of courtesy and prestige. The most thoroughgoing changes affected the titles of *Master* (*Mr*) and *Mistress* (*Mrs*) and the status names of *Lady* and *Gentleman*. With the exception of *Lady*, they were all properly used with reference to the lesser nobility of Tudor and Stuart England, including professional people. These ranks were distinguished from the greater nobility (Lords and Ladies), on the one hand, and from the lower ranks of yeomen and husbandmen (Goodmen and Goodwives), on the other. Among the lesser nobility, there was a common tendency for the wives of Baronets and Knights to be called by the courtesy title of *Lady* instead of *Dame*, while men were called *Sir*. An esquire or a plain Gentleman was called *Master*, and women of these ranks, both married and unmarried, had the title of *Mistress*. Although the hereditary gentry more than doubled during the Early Modern English period, their proportion remained at about five per cent of the total population (Laslett 1973: 36–9).

In the highly stratified Early Modern society people were expected to

acknowledge the social status of their addressees. A failure to do so would give offence and cause social embarrassment. Contemporary courtesy books clearly preferred to err on the side of caution:

For if wee meete with a man, we neuer sawe before: with whome, vppon some occasion, it behoues vs to talke: without examining wel his worthines, most commonly, that wee may not offend in to litle, we giue him to much, and call him *Gentleman*, and otherwhile *Sir*, althoughe he be but some *Souter* or *Barbar*, or other suche stuffe: and all bycause he is appareled neate, somewhat gentleman lyke.

(Giovanni della Casa, trans. R. Peterson, *Galateo or a Treatise of the Manners and Behaviours*, 1576: 43)

The title of *Master* was naturally extended to gentlemen who had earned their position by virtue of their office rather than by birth. Hugh Latimer, the Bishop of Worcester, was referred to as Master Latimer by his sixteenth-century contemporaries even though his father was a yeoman. Shakespeare's First Folio was entitled *Mr. William Shakespeares Comedies, Histories, & Tragedies* (1623). The poet's father had risen to the status of a country gentleman and had acquired a coat of arms. By this time, all gentlewomen were commonly referred to by the status name of *Ladies*, which was now spreading to the lower ranks. In Thomas Middleton's citizen comedy *A Chaste Maid in Cheapside* (1630) the wives of an apothecary and a sweet-meat maker are flattered when Sir Walter Whorehound elevates them to the rank of ladies (Barber 1976: 151–2).

This process radically expanded the denotata of titles. By the end of the EModE period *Mr* had become so common that in 1765 *The Monthly Review* wrote that it was 'equally claimed by the son of a peer, or a porter, an opulent merchant, or the master of a green-stall' (Tucker 1967: 160). In his *Falstaff* plays Shakespeare had already generalised the corresponding title of *Mistress* to all his female characters (Salmon 1967: 53). *Mrs* continued to be the abbreviated form used of both single and married women by the end of the EModE period, although the shortened form *Miss* also appeared as a title of (young) unmarried women.

### 5.6.3 Contextual inferencing

#### 5.6.3.1 Inferential shifts

As the case of titles illustrates, the denotatum of a lexeme may sometimes be felt to be vague or indeterminate, or may on purpose be treated as such for reasons of politeness. The case also shows how use may effectively change denotata. It is not uncommon that contextual features become criterial with

time, and restructure the semantic composition of a lexeme. The Middle English meaning of *average* was ‘the duty charged on goods’. A particular form of it was the expense or loss to owners arising from damage at sea to ship or cargo. The word came to apply to the equitable distribution of this expense or loss among the parties concerned (1598). It was this enriched sense that was later extended to the mathematical sense of ‘arithmetic mean’ (1735).

Similarly, the ME adjective *savoury* had the sense ‘pleasant tasting, agreeable’. The derived sense ‘having a piquant taste’, ‘not sweet’, is first attested in 1661. Finally, the Italian noun *umbrella* (< Lat. *umbra* ‘shade’) came to English in the early seventeenth century in its original sense ‘sunshade’. Its current sense was established by 1634. These examples, drawn from Waldron (1967: 143–4), illustrate how meaning shifts may arise when contextual co-occurrence features of a lexeme are inferred to be part of its semantic composition.

A new sense may arise from the conventional use of certain politeness strategies in interactive situations. When people wish to stress their cooperativeness and good intentions they often promise more than they can keep. Early Modern English institutionalised instances of this strategy are not hard to find. Adverbs such as *anon*, *by and by*, *directly* and *presently* all had the sense ‘at once’ before acquiring what the *OED* calls their blunted senses ‘soon’ and ‘shortly’. From the early fifteenth century onwards *presently* had been used to indicate exact time reference (‘at the very time’, ‘at once’ and ‘instantly, promptly’). From the mid-sixteenth century it developed the less precise readings ‘in a little while’, ‘before long’, ‘soon’, ‘shortly’. It is typical of inferential shifts of this kind that they proceed gradually. The *OED* remarks that the growth of the new sense of *presently* was so imperceptible that the early examples, especially before about 1650, are doubtful (Nevalainen 1992).

Incorporation of contextual and evaluative information may also change the expressive and register connotations of a lexeme. This readily leads to a change in its denotative meaning as well. We need only think of the adjectives *silly* and *nice* referred to above. There is no shortage of cases of this type. The following are listed by Barber (1967: 153) as illustrations of lexemes that have gained a connotation of disapproval since or in the course of the EModE period: *artful* (‘learned, skilful, artistic’), *addicted* (‘devoted, inclined, attached’), *coy* (‘shy, modest’), *cunning* (‘skill, dexterity, art’), *gaudy* (‘gay, ornate’), *mediocrity* (‘an average degree of ability’, ‘moderation, temperance’), *obsequious* (‘compliant, obedient’) and *ringleader* (‘leader, head’). On the other hand, the following have lost their pejorative sense since Early Modern English: *enthusiasm* (‘imagined divine inspiration’, ‘intemperate religious emotion’), *politician* (‘crafty schemer, intriguer’), *precise* (‘excessively scrupulous, puritanical’) and *shrewd* (‘malicious, hurtful, cunning’).

Connotative changes are typical of *nomina appellativa*. I shall use the case of *boor* to illustrate a typical path of development in more detail (see 5.6.4.4 for similar changes accompanying metaphoric extension). In Middle English *boor* (< OE *gebūr*) was a synonym of *peasant* meaning ‘a person living in the country’. From the sixteenth century onwards it began to be limited to ‘rustics, peasants with no refinement’. The modifiers that collocate with it in the *OED* examples include *dull-sprighted*, *paltry*, *rustic*, *peasant* and *rude*. *Boor* also developed the wider sense of ‘rude, unmannered person’ in Early Modern English, and thus became synonymous with *a lubber*, *clown* and *a rude fellow*. The first change was based on a negative contextual implication, the second was brought about by metaphoric transfer. Following Klepanski (1986: 75–6) we may describe the two shifts, respectively, as a component addition and a component loss in the lexical–semantic structure of the EModE lexeme *boor*. The first change added a pejorative meaning component (ILL-BRED, UNMANNERED) to its semantic structure, and the second suppressed a component expressing the social qualification (PEASANT). Both altered the denotative meaning of the lexeme. The process can be presented componentially as follows (Klepanski 1986: 77):

OE and ME *boor* ‘peasant, countryman’

[OBJECT]

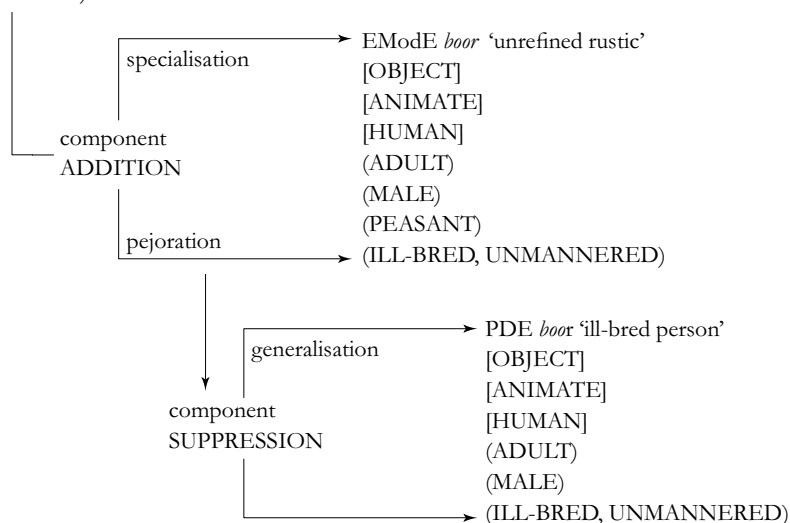
[ANIMATE]

[HUMAN]

(ADULT)

(MALE)

(PEASANT)





## 5.6.3.2 Metonymy

*Metonymy* ('name change') is a special kind of semantic transfer based on contextual inferencing. It is used to denote one category in terms of another which is inseparably associated with it. A part is typically transferred to represent the whole, as when *the crown* is used for 'the sovereign' or 'regal power' (1579), or *the bench* for 'the judges' collectively (1592). Metonymic change is of wide currency in both ordinary and specialist language. *Dish*, which since Old English has meant 'a broad, shallow vessel', became lexicalised in the sense of 'food ready for eating' (1526). *Chop* used to mean 'a piece chopped off', but in Early Modern English it was also transferred to the more specific sense of 'a slice of mutton or pork' (1640). In EModE parliamentary vocabulary *floor* was transferred to 'right of speaking', and *seat* to 'membership in Parliament' (1774). The Latin opening words of religious songs gave rise to the metonymic uses of *Magnificat* and *Te Deum*. *Magnificat* was generalised in the sense of 'a song of praise' (1614), and *Te Deum* came to denote any public utterance of praise to God (1679).

Even personal names are metonymically converted into common nouns. *Sandwich* (1762) derives from the name of the 4th Earl of Sandwich (1718–92), whose refreshment at the gaming-table was some slices of cold beef placed between slices of toast. *Derrick*, 'a machine for lifting and moving heavy weights', goes back to the surname of a noted hangman at Tyburn around 1600. By metonymy his name came to be used in the sense of 'gallows', and in the eighteenth century it was transferred to denote a lifting tackle (Waldron 1967: 189–96).

The above examples show the range of variation in metonymy: X and Y can be related by a variety of contextual associations, part for whole, container for contents, concrete to abstract and vice versa, and proper name for concept. We may also come across metonymic transfers in word-formation. Buhuvrihi compounds are a case in point (see 5.5.4.2). Compounds like *longlegs* and *redskin* are derived by reference to what is only part of the entity that they are meant to denote. The extension of these forms to refer to human beings is a metonymic process. It commonly conveys the speaker's humorous or depreciatory attitude.

Metonymic principles are at work when deverbal action nouns are used to refer to the result of the action (effected objects), as in *etching* and *savings*. Changes of secondary word-class, such as transfers of intransitive verbs into transitive, may also be considered broadly metonymic. They take place on the syntagmatic plane without effecting a word-class change. In Early

Modern English it is, for instance, more common for an intransitive verb to be turned into transitive than vice versa (see 5.5.5, and Rissanen, this volume, 4.4.2.1).

#### 5.6.4 *Metaphoric extension*

Recent research has rediscovered the extent to which metaphor is used in structuring and creating meanings not only in poetry and fiction but in the lexicon more generally. Metaphoric extension in the use of a word involves a perceived similarity between the denotata of two lexemes: X is like Y. When Rosalind states that ‘Love is merely a madness’ in *As You Like It* (III.ii.343) she is drawing a parallel between love and insanity – a metaphor that still flourishes in Present-Day English.<sup>10</sup>

In the course of time metaphors may be lexicalised, and may no longer be perceived as metaphorical (cf. *satellite*, below). Various metaphoric processes are used extremely productively in Early Modern English to create names for new concepts, and to multiply the names for old. Both activities typically increase polysemy, and the latter also adds to the number of synonyms in the lexicon.

The types of meaning that are produced by metaphoric means represent what Ullmann (1964: 201) calls ‘centres of attraction’; the interests and aspirations of the speech community, including the taboos of fear, delicacy and propriety. In this respect the metaphoric means of producing new meanings do not differ from other meaning changes or indeed from borrowing or regular word-formation processes. Metaphoric creativity may also not be quite so random as is commonly assumed. The ways in which people perceive similarities and differences are conditioned by properties of human conceptualisation, which Lakoff & Johnson (1980) suggest are traceable to human physiology and spatio-temporal orientation. This is particularly obvious in synaesthesia, meaning transfer from one sensory sphere to another. In the following, I shall discuss the results of the various metaphoric processes in Early Modern English pointing out both period characteristics and some more general, timeless trends.

##### 5.6.4.1 Physical similarity

Many metaphoric processes may be thought of as language-internal borrowing. This is notably the case with metaphors which transfer lexemes from one field of discourse to another on the basis of physical or functional similarity. As with foreign borrowing, areas of intense lexical growth

made extensive use of this strategy in Early Modern English, and a number of specialist terms were created in this way. The following scientific terms, for example, have remained in the language, but their sources, and hence their metaphoric connections, have mostly been lost (Savory 1967: 38):

<i>efflorescence</i>	1626	'a period or action of flowering'
	1667	'the loss of water in crystallisation'
<i>hilum</i>	1659	'a very small thing, a trifle'
	1753	'the attachment-scar of a seed'
<i>parasite</i>	1539	'one who eats at the table or at the expense of another'
	1727	'an organism living in or upon another'
<i>pollen</i>	1523	'fine flower or other powder'
	1760	'the male element of flowering plants'
<i>satellite</i>	1548	'an attendant upon a person of importance'
	1665	'a small or secondary planet which revolves around a larger one'

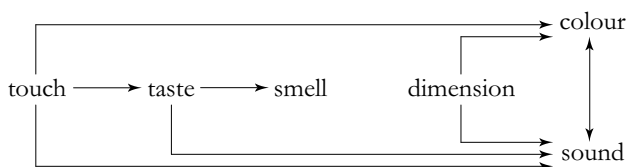
*Hilum* and *pollen* show how metaphoric extension may be based on similarity in shape or size between X and Y. This type is quite common in Early Modern English botanical nomenclature. The following plant names are drawn from *The Grete Herball* (1526): *bear's foot*, *goosebill* ('the rote of it is lyke a goos byll'), *goosefoot* ('because the sede spredeth forkewyse as a goos fote'), *hare's palace* ('For yf the hare come vnder it/ he is sure that no best can touche hym'), *king's crown*, *priest's hood* (Rydén 1984: 36, 44).

The classical revival of the Renaissance naturally inspired a wealth of metaphors. Proper names, for instance, were converted into common nouns to be used as lexicalised shorthand for familiar concepts that were usually expressed by phrasal means. Among them are the following: *Adonis* (1622) 'a handsome youth', *Atlas* (1589) 'one who supports or sustains a great burden', *Hercules* (1567) 'a man of prodigious strength', *Juno* (1606) 'a woman of stately beauty', 'a jealous woman', *Penelope* (1581) 'a chaste wife', and *Venus* (1579) 'a beautiful or attractive woman'.

The far-reaching influence of the Bible can be similarly illustrated: *Abigail* (1666) 'a lady's maid', *Goliath* (1591) 'a giant', *Magdalen(e)* (1697) 'a fallen woman reformed', *Nimrod* (1545–1697) 'a tyrant', *Pharaoh* (1630) also 'a tyrant', *Samson* (1565) 'a very strong man' and *Solomon* (1554) 'a wise person, sage' (Koziol 1967: 166–7). Most of these personal metaphors are based on a given characteristic shared by X and Y. On the other hand, as shown by *efflorescence*, *parasite* and *satellite*, above, metaphors may also derive from functional similarity, and be based on a scene rather than a single feature.

## 5.6.4.2 Synaesthesia

Another particular kind of metaphoric extension is involved in *synaesthesia*, where a lexeme is transferred from one sensory area to another. A synaesthetic process took place when the adjective *hot* was transferred from the area of touch ('having a high degree of heat') to that of taste ('spicy') in later Middle English, or *faint* was moved from colour ('lacking clearness or brightness') to sound ('barely audible') in Early Modern English. Williams (1976: 463) suggests that the process is quite regular diachronically: if an adjective transfers from its earliest sensory meaning to another sensory modality, it will do so according to the following scheme:



The scheme implies that a touch-word will transfer to taste, to colour or sound. Taste-words do not transfer to tactile words, but to the domains of smell and sound. Dimension-words, such as *big*, *deep* or *high*, transfer to the spheres of colour or sound, colour-words to sound, and sound-words to colour. Early Modern English provides a fair amount of support for the assumed regularity, but there are also a number of exceptions. The following transfers were recorded by Williams (1976: 475–6) on the basis of the *OED* and *MED* (A–L). Those instances that violate the suggested order are marked by asterisks.

TOUCH TO TASTE	coarse 1587, cold 1585, dry 1700, hard 1581, piquant 1645, pungent 1675*, smooth 1743
TOUCH TO SMELL	pungent 1668*
TOUCH TO COLOUR	cold 1706, crisp 1565, grave 1611, keen 1602, mild 1645
TOUCH TO SOUND	asper 1626, grave 1585, hard 1620, harsh 1530
TASTE TO COLOUR	brisk 1727*, mellow 1563*
TASTE TO SOUND	brisk 1660, mellow 1668
DIMENSION TO COLOUR	full 1657, thin 1655
DIMENSION TO SOUND	acute 1609, big 1581, flat 1591, hollow 1500, shallow 1626, thin 1660
COLOUR TO SOUND	faint 1660

Williams's model cannot account for meaning transfers from touch to dimension (*sharp* 1537, *smart* 1668), from taste to colour (*brisk* 1727, *mellow*

1563), from dimension to taste (*acute* 1620, *fat* 1609, *flat* 1607, *small* 1676), and from sound to taste (*loud* 1641, *sbrill* 1567).

The inaccuracies can be partly blamed on unreliable datings of secondary meanings in historical dictionaries, or even to an unprecedented degree of semantic creativity in the Early Modern English period, but neither explanation is entirely satisfactory. More plausibly, Lehrer (1985: 293) suggests that the whole problem arises from the influence of semantic fields on each other: if one or more items in one field are patterned in another field, then the other items also become available for extension to the second field. This would account for the extension of dimension adjectives to the domain of taste in wine terminology, which started with *high* and *thin* in Middle English, continued with *fat*, *flat* and *small* in Early Modern English, and has spread to most basic dimension-words in current usage, including *acute*, *big*, *deep*, *empty*, *even*, *full*, *hollow*, *little* and *thick* (294; see also Sweetser 1990: 23–48 for further discussion of metaphors of perception; Ogura and Wang 1995 for the role of word frequency in semantic change).

#### 5.6.4.3 Abstraction

Metaphoric extension is universally resorted to in reference to abstract categories, or when terms are created for denotata that are removed from direct human sense-experience. In his *An Essay Concerning Human Understanding* ([1690] 1700), John Locke made the observation that most English psychological terms are derived from the language of concrete objects and physical action ('sensible ideas'; see Waldron 1967: 168):

It may also lead us a little towards the Original of all our Notions and Knowledge, if we remark, how great a dependence our Words have on common sensible Ideas; and how those, which are made use of to stand for Actions and Notions quite removed from sense, have their rise from thence, and from obvious sensible Ideas are transferred to more abstruse significations, and made to stand for Ideas that come not under the cognizance of our senses: e.g. *to Imagine*, *Apprehend*, *Comprehend*, *Adhere*, *Conceive*, *Instil*, *Disgust*, *Disturbance*, *Tranquillity*, etc., are all Words taken from the Operations of sensible Things, and applied to certain Modes of Thinking.

(Locke, *An Essay Concerning Human Understanding* [Nidditch, ed. (1975) III i 403])

The verb *adhere* is a good example of the strong tendency. It was first recorded in 1597 in the sense of 'to cleave to a person or party', and its more abstract sense 'to cleave to an opinion, principle or method' was

attested in 1656. In the above passage, Locke himself uses a number of lexemes that etymologically count as metaphoric transfers, including *dependence* (< F, going back to Lat. ‘to hang down, be suspended’) and *stand for*, while his *sensible* (‘perceptible to the senses’) has undergone just the kind of change that he is describing.

Metaphoric extension may also give rise to metalinguistic meanings. They are used to express linguistic relations and to refer to linguistic events. The former can be illustrated by the rise of new conjunctive adverbs, such as *hence* (‘as a result’), and the latter by a number of new speech-act verbs. Many of these verbs are epistemic in that they express the speaker’s beliefs about the truth of the proposition. The following examples trace the paths of development of some of them (Traugott 1989: 43–5, 1990: 508–12). *Insist* is particularly noteworthy because it has developed two speech-act meanings, one directive (‘to demand that’) and the other assertive (‘to maintain that’).

<i>assume</i>	1420	‘to arrogate to oneself’, ‘adopt’
	1450	‘to suppose’ (in the sense of ‘imagine’)
	1714	‘to claim that something is the case’
<i>insist</i>	1590s	‘to stand on’, ‘dwell at length on’, ‘persevere’
	1676	‘to demand that’
	1768	‘to maintain that’
<i>observe</i>	ME	‘to pay practical attention to a rule’, ‘perceive by the senses’
	1559	‘to take scientific notice’
	1605	‘to remark that’

Traugott notes that in speech-act verbs the referent of the verb has been metaphorically transferred from the external described situation to the discourse situation. If the verb also develops a performative use, it will constitute the discourse situation, as in the case of *commit* (‘to pledge oneself to do X’).

<i>commit</i> :	fourteenth century	‘to give in trust’
	fifteenth century	‘to put’ (in prison), ‘do’ (something bad)
	eighteenth century	‘to pledge oneself to do X’

#### 5.6.4.4 Evaluation

The kinds of abstraction process described above occur regularly in metaphoric meaning change. Traugott (1990: 499) concludes that meanings based on the external described situation increasingly tend to become based on the internal (perceptual or cognitive or evaluative) situation. The

third or evaluative kind may involve either amelioration or pejoration. Pejoration is generally the more common of the two, and Early Modern English is no exception in this respect (see 5.6.3.1 above).

#### 5.6.4.4.1 Terms of abuse

The Early Modern English period is rich in (pseudo-)euphemistic terms of abuse. A growing stock of animal names was used with reference to women: *brach* ('bitch'), *cow* ('coarse, degraded woman'), *ben* (a humorous or low colloquial term for 'wife, woman, female'), *puss* (term of contempt), *sow* ('fat, clumsy, slovenly woman') and *vixen* ('ill-tempered woman'). *Pigeon* and *goose* further illustrate that animal metaphors are mostly culture-specific. At the end of the sixteenth century, *pigeon* could be used of either sex in the senses of 'a foolish person' or 'coward', as well as to denote 'a young woman, girl, sweetheart'. *Goose* did not only refer to a foolish person but spread metonymically from one of its local senses of 'venereal disease' (*Winchester goose*) to denote a prostitute carrying the disease (cf. Partridge 1968: 219).

There is also some evidence that semantically related items may develop quite similar evaluative meanings. *Goose*, *chicken* and *pigeon* all acquired the sense of 'a foolish person' in the sixteenth century. *Baboon* became a general term of abuse around 1500, thus paralleling the earlier development of *ape* ('a fool'). In his Bible translation (1526) Tyndale borrowed the French *viper* in its zoological and metaphorical senses creating a synonym for the Middle English *serpent*; *snake* followed suite, and acquired the pejorative sense of 'a treacherous person' in the late sixteenth century (Lehrer 1985). *Viper* reoccurs in the speeches of Sir Edward Coke, the Attorney General, against Sir Walter Raleigh at his trial in 1603:

Well, I will now make it appear to the World, that there never lived a viler  
Viper upon the face of the Earth than thou. (IHC] *State Trials* 216)

The well over fifty new Early Modern English terms of female abuse listed in Hughes (1991: 212–28) may be contrasted with the much fewer terms of endearment, including *coney*, *lamb* and *mouse*. The same imbalance is found by Koskeniemi (1962: 91) between all terms of endearment and abuse, male and female, in her study of English drama from 1550 to 1600. Hughes attributes it to such social factors as the Puritan Revolution, Restoration cynicism and Augustan austerity. As our access to the colloquial language of the period is fairly limited, however, the range and use of these terms is hard to reconstruct. Hence appeal to broad social notions can at best provide only a partial explanation of what looks like a striking case of semantic imbalance.



## 5.6.4.4.2 Intensifiers

Early Modern English significantly enriches the various adverbial means of expressing speaker attitude to what is being talked about. One of the adverbial categories to be remarkably augmented is boosters, which denote a high degree or a high point on a scale (e.g. *very* in *very well*). According to Peters (1994), the *OED* records as many as 210 new boosters introduced between 1500 and 1800. They include the following items first attested between 1590 and 1610: *ample*, *capitally*, *damnably*, *detestable*, *exquisitely*, *extreme*, *grievous*, *grossly*, *horribly*, *intolerable*, *pocky*, *spaciously*, *strenuously*, *surpassing*, *surpassing*, *terribly*, *tyrannically*, *uncountably*, *unutterably*, *vehement*, *villainous* and *violently*. As we can see, both zero-derivation and the regular *-ly* form are common in this category. The source domains for boosters consist of qualitative adverbs (*terribly*, *violently*), as well as dimensional (*highly*, *extremely*) and quantitative adverbs (*much*, *vastly*) and expletives (*damned*).

Some other very common scalar adverbs also develop in Early Modern English. *Just* ('exactly') becomes an exclusive scalar adverb synonymous with *merely* and *but*. *Even* ('exactly') acquires the additive sense current today: *In Warre, even the Conqueror is commonly a loser* (→ 'so certainly everyone else is'; *OED*, 1641, J. Jackson *True Evang. T.* III.209). The adverbs are related to the corresponding adjectives, *even* meaning 'flat', 'level', 'smooth', 'equal', and *just* meaning 'righteous'. We may trace some of the sense shifts undergone by *just* in order to gain a better idea of the rise of abstract meanings of this kind.

The form *just* was borrowed from French into later Middle English, and goes back to the Latin adjective *jūst(us)* and adverb *juste* (< *jūs* 'law'). The adjective had a number of related senses, including 'fair', 'legitimate', 'well-founded' and 'correct' as well as 'fitting', 'precise' and 'exact'. Traugott (1990: 504) points out that the development of the word in French and English crucially depends on the change of the basic adjectival senses 'fair', 'righteous' and 'legitimate' to 'fitting' and 'exact', 'precise'. This shift would appear to be based on the inference that whatever is 'just' is done in precisely the right way. Metaphoric abstraction hence motivates the adjective 'exact' and the derived adverb 'exactly', which appeared in English around 1400.

Unlike *even*, *just* does not become an additive adverb. It gains a new exclusive adverbial sense ('no more than', 'no other than') towards the end of the seventeenth century. The change appears to be inferential, *just* *x* ('no more and no less than *x*') becoming subjectively associated with contexts where *x* is not thought of as anything much. At this stage *just* often cooccurs with other exclusives (Nevalainen 1991: 151–4):

... Books of Physick: which the ill state of health he has fallen into, made more necessary to himself: and which qualifi'd him for an odd adventure, which I shall *but just* mention.

([HC] Gilbert Burnet *Some Passages of the Life and Death of John, Earl of Rochester* 1680: 27)

The history of *just* reveals the many layers of a complex semantic change. In this particular case, meanings related to honesty and fairness refer to the social situation, those denoting precision ('exactly') to the realm of human perception, while those to do with scalarity and exclusiveness ('merely') are largely based on the speaker's attitude. Metaphoric abstraction and subjective strengthening of meanings alternate in the process, and sometimes produce different results for similar inputs, such as 'exactly' (*just* v. *even*).

### 5.6.5 Linguistic motivation

In *An Essay Towards a Real Character* (1668, I), John Wilkins voices his concern over what he considers the defects of natural languages. He complains that both Latin and English have too many *equivocals*: 'so the word *Bill* signifies both a *Weapon*, a Bird's *Beak*, and a written *Scroul*: The word *Grave* signifies both *Sober*, and *Sepulcher*, and to *Carve*, &c.' Metaphors and stock phrases may cause ambiguity, and synonyms are tedious *superfluities*. It is linguistic anomalies of this kind that Wilkins sets out to remedy by devising his artificial language for the use of the scientific community. The 'real character' did not gain a large following, but Wilkins's concerns are commonly repeated (nor was he the first to draw attention to these issues). I shall devote the remainder of this section to them.

It is traditionally argued that the optimal lexicon would be one in which a lexeme has only one sense, and no two lexemes have the same phonological or morphological shape. Lexical developments would then be expected to be guided by this one-form–one-meaning principle. The issues that arise here are regulation of polysemy, differentiation of synonyms and avoidance of homonymy. In all three cases the argument in favour of linguistic conditioning should, however, be approached with great caution. We are at best dealing with tendencies, and the effects of linguistic conditioning, if they can be isolated at all, are closely connected with other aspects of meaning change.

Semantic change tends to increase polysemy. As we have seen, the older the word is, the more senses it is bound to have. Hence it is difficult to estimate the extent to which polysemy operates as a brake on semantic change. It would rather seem that factors such as the position of the lexeme and its

various senses in the lexical fields it enters are more decisive. The semantic changes undergone by *meat* illustrate the case. By Early Modern English, this ME word for ‘food’ had also acquired the more restricted sense of ‘meat’ that it has today. In one of its senses, the word had thus become its own subordinate term or hyponym. The two senses would inevitably occur in the same contexts, and could cause confusion. It may be assumed that it was partly because of this that the more general sense of *meat* was in the seventeenth century superseded by one of its synonyms, namely *food* (Görlach 1991: 203). The noun *wit* provides a more elaborate example of the same tendency. At the beginning of the Early Modern English period it had eight related senses, most of them going back to Old English or early Middle English (Barber 1976: 145–7):

- (1) ‘the seat of consciousness, the mind’
- (2) ‘the faculty of thinking and reasoning’
- (3) ‘the faculties of perception’
- (4) ‘right mind, sanity’
- (5) ‘great mental capacity, intellectual ability’
- (6) ‘a person of great intellectual ability, a genius’
- (7) ‘practical talent, constructive or mechanical ability’
- (8) ‘good judgement, discretion’

In the course of the Early Modern English period, the oldest four (1–4) were becoming archaic or restricted in use; so was the sense ‘practical talent’ (7). But the word also gained two new senses:

- (9) ‘apt, agile, or entertaining use of language’ (1542)
- (10) ‘a person of lively fancy, with the faculty of saying smart or brilliant things’ (1692)

The net result of these changes was that the lexeme did not in fact become much less polysemous, but only more specialised and biased towards the notion of ‘clever use of language’. As in the case of *meat*, the superordinate senses were lost.

Samuels (1972: 76) regards incompatibility of older and newer senses as the usual reason for meaning loss. This incompatibility may arise from pejoration, as in the case of *crafty*, which meant both ‘skilful’, ‘dexterous’ and ‘wily’, ‘cunning’ in Early Modern English, and *cunning* ‘learned’, ‘skilful’, which acquired the negative sense of ‘sly’ (1599). The new senses of a lexeme may also be associated with taboo. *Lewd* originally meant ‘lay’, ‘not in holy orders’ in Old English, and subsequently gained the pejorative senses ‘common, ‘low’; ‘ignorant’, ‘unlearned’; ‘bad’, ‘evil’; and ‘unchaste’.

Only a weak case can be made for incompatibility arising from the loss of information content with intensifiers such as *awfully*, which is related to the adjective *awful* meaning ‘awe-inspiring’. One need only look up a few cases like this to see that polysemy is in fact quite common (see all of 5.6.4.4). So ambiguity rarely arises if the different senses of a lexeme are associated with different lexicogrammatical environments.

Reduction in polysemy also reduces partial synonymy. For the better part of the Early Modern English period, *wit* had a number of partial synonyms, including *mind*, *intellect*, *intelligence*, *sense*, *conscience*, *ingenuity*, *genius*, *curiosity* (‘carefulness’, ‘(undue) attention to detail’). The case of *wit* is typical in that total synonymy is a rare phenomenon. What we frequently find is partial synonymy embedded in polysemy. The problem is further alleviated by the fact that conceptual synonyms usually differ with respect to their register connotations.

Borrowed lexis significantly increased conceptual synonymy in Early Modern English, but it was also connotatively marked for register. It is, on the other hand, worth bearing in mind that synonymy was commonly recognised as a stylistic device (known as *copy*) in an age when the legitimacy and sufficiency of the vernacular were a subject for debate. Multiple derivations from one base are a case in point in Early Modern English. The fact that so many neologisms were rejected may nevertheless be taken as an indication of an overabundance of synonyms. Certain early dictionaries, such as Cockeram’s (1623), went to extremes when striving to refine ‘vulgar’ words. Although there was no simple lexeme for it in the language, Cockeram’s coinage *bubulcitate*, for instance, was never generalised in the sense of ‘to cry like a cow-boy’.

Contextual inferencing may also lead to semantic divergence of synonyms. Thus *ghost* and *spirit* were largely interchangeable in Early Modern English but have diverged since. Even if no differentiation took place, several factors could distinguish synonyms in actual use. To begin with, they may differ in their frequency of occurrence. The adjectives *evil*, *ill* and *bad*, for example, show diachronic frequency fluctuation. Görlach (1991: 202) suggests that *evil* is the most common of the three in Middle English, *ill* in Early Modern English and *bad* in Present-Day English.

When *just* acquired the meaning ‘no more than’ in the seventeenth century, it was added to a stock of ten other adverbs that could have the semantic implication ‘no other than’, ‘no more than’: *alone*, *barely*, *but*, *exclusively*, *merely*, *only*, *purely*, *simply*, *singly* and *solely*. Of these, *but* and *only* were both extremely frequent (covering between themselves ninety-four per cent of the 2,840 instances in my Early Modern English corpus in

Nevalainen 1991). Except *alone*, the rest were rare. Some of them were functionally quite marginal (*singly*) or textually limited (*barely*), or both (*exclusively*); others, like *just*, were not fully established; yet others had recently fallen into disuse (*alone*). Even the quantitative prototypes had collocational restrictions: *only* was favoured with subjects and adverbials, and with definite entities (*only Mary was there*), and *but* was preferred with quantified entities and verbs and subject complements (*Mary is but a child*).

Morphological and phonological developments may bring about a third kind of overlap in the lexicon, namely similarity in form between two semantically unrelated words. Usually homonymy will cause little confusion across word-class boundaries. Within the same word-class problems may arise if the lexemes have similar syntactic and register distributions. Sometimes two items that are felt to be homonymous (although historically they may also be instances of polysemy) become formally separated. A number of such items were assigned different spellings in the eighteenth century, including *discreet* and *discrete*, *flower* and *flour*, *human* and *humane*, *mettle* and *metal* (Görlach 1991: 193).

It is hard to find much conclusive evidence of homonymy as a catalyst for semantic change. The case of *let* ‘allow’ and *let* ‘hinder’ is illuminating, and by no means atypical. As a result of a protracted process of phonetic change, the two verbs became indistinguishable in form by the mid-sixteenth century. The process of obsolescence of *let* ‘hinder’ appears to have been correspondingly gradual. Samuels (1972: 69) points out that, since late Middle English, it had been rivalled by a number of partial synonyms, including *restrain* (1340), *withstand* (1385), *binder* (1400), *accloy* (1430), *stop* (1440), *prohibit* (1523), *bar*, *debar* (c. 1550), *damp* (1550), *check* (1581), *impede* (1605), *obstruct* (1647) and *prevent* (after 1650). The *OED* suggests that the verb has been growing more archaic and obsolete in most constructions since 1600. Homonymic clashes like this need not then be remedied instantaneously. Overall, homonymy as a motive for obsolescence appears much more marginal than the other semantic relations considered.

On the other hand, similarity in form may sometimes lead to semantic convergence. Certain clusters of sounds may come to be interpreted as meaningful, and be reanalysed as some kind of semi-productive affixes. Samuels (1972: 54–5) illustrates this by considering two possible cases of phonaesthesia, /kl-/ ‘clinging, coagulation’ (e.g. *cling*, *claw*, *clutch*, *cleave*, *clay*, *clog*, *cloy*, *clutter*, *climb*), and /br-/ ‘vehemence’ (*break*, *bruise*, *brute*, *brawl*, *brandish*, *brag*). He suggests that the phonaesthemes best account for the following sixteenth-century changes:

<i>clog</i>	‘to fasten wood to’ (1398) → ‘to encumber by adhesion’ (1526)
<i>clasp</i>	‘to fasten’ (1386), ‘to enfold’ (1447) → ‘to grip by hand’ (1583)
<i>brazen</i>	‘of brass’ (OE) → ‘impudent’ (1573)
<i>bristle</i>	‘to stand up stiff’ (1480) → ‘to become indignant’ (1549)
<i>broil</i>	‘to burn’ (1375) → ‘to get angry’ (1561)

While weighing this kind of evidence, one should bear in mind that phonaesthemes are elusive, and easily lend themselves to multiple interpretations. So Marchand (1969: 407, 410) considers /br-/ primarily as a marker of unpleasant noise, as in *brabble* (1500) ‘brawl’ and *brash* (1573) ‘sickness arising from disorder of the alimentary canal’, ‘sudden dash of rain’. To Tournier (1985:146), by contrast the combination mainly suggests ‘breaking’. Marchand associates /kl-/ with sound (*clash* 1500, *clang* 1576, *click* 1581, *clank* 1614), Tournier with ‘gripping’ and ‘holding fast’.

The possible influence of sound symbolism apart, cases like *broil* are also good candidates for ‘ordinary’ sense developments such as metaphorisation (cf. *boil/burn with anger*). This brings us back to the complicated issue of retracing actual processes of change. They may arise from multiple motivation and be shaped by a number of factors over an extended period of time. The Early Modern English evidence that we have looked at suggests that linguistic motives never function as purely mechanical agents of change. Naturally enough, their effects can be shown to combine with other factors, such as contextual and register variation, semantic hierarchies in the lexicon and frequency of use.

## NOTES

1. I would like to express my thanks to all colleagues who have taken the time to read and comment on various aspects of this chapter, especially Norman Blake, David Burnley, Manfred Görlach, Dieter Kastovsky, Roger Lass, Helena Raumolin-Brunberg, Mark Shackleton, Gabriele Stein and Matti Rissanen.
2. There is no shortage of contemporary comments on lexical issues throughout the Early Modern English period. They range from Caxton’s prefaces and the sixteenth-century Inkhorn Controversy on learned borrowing (see 5.4.1), to the rich variety of topical arguments in eighteenth-century critical journals, prescriptive grammars and dictionaries (see Tucker 1967, Sundby, Bjørge & Haugland 1991).
3. It is worth noting that processes of word-formation in fact outnumber borrowing in Barber’s (1976: 167) 1,848-word sample of the *OED* covering the period 1500–1700. Barber finds that 1,223 of these lexemes were acquired by various word-formation processes, notably suffixation, and only the remaining

- 625 were loans. The difference between Barber and Wermser (1976) may be due to the smallness of Barber's sample, as well as the exclusion of *OED* subentries from the *CED*, on which Wermser's extensive statistics are based.
4. Individual speakers may occasionally coin words with affixes like *-th*, but it is not likely that these (often jocular) neologisms would pass into the general vocabulary of English. Examples of such individual productivity are *greenth* (Walpole 1723, G. Eliot 1786) and *illth* (Ruskin 1860, G. B. Shaw 1889; see Tournier 1985: 76–7, Bauer 1988: 60–5).
  5. The *OED* example of the verb *freedom* is from 1548: *the meane whermyth we be fredomed frome y<sup>e</sup> thraldome* (Gest Pr. Masse 107).
  6. Near-synonyms also multiply rapidly, sometimes to the extent of profusion. The Middle English inheritance of verbs meaning 'to free', for instance, consists of OE *free*, Old Scandinavian *lose* and *rid*, OF *acquit*, *clear*, *deliver*, *discharge*, *dispense*, *excuse*, *ransom*, *release*, *relieve*, *rescue* and *save*. The Early Modern English period enlarges it by adding the French-based *disembarrass*, *disencumber*, *disengage*, *disfranchise*, *exempt*; the Latin *absolve*, *emancipate*, *exonerate*, *extricate* and *liberate*, as well as the etymological hybrids *disburden*, *disentangle* and *disenthrall* (Scheler 1977: 96–7; see also Markus 1990: 263–5).
  7. Borrowing from Greek exceeded the five per cent level from the early seventeenth century to the first quarter of the eighteenth. The share of Italian loans remained below the five per cent level until the eighteenth century, when they multiplied, accounting for more than ten per cent of the total in the first decades of the eighteenth century. Both Spanish and Dutch borrowing remain below the five per cent level. There is a minor peak for Spanish at the beginning of the seventeenth century, and Dutch shows a higher rate of borrowing in the first part of the Early Modern English period than in the second (Wermser 1976: 45).
  8. The theoretical implications of postulating a category of 'conversion prefixes' are discussed in more detail in Kastovsky (1986b, 1992b). Basically, it would go against the general principle of English morphology, which (as opposed to syntax) is based on the sequence determinant/determinatum (modifier/head).
  9. In some cases it is difficult to establish with any certainty whether a correlation is in fact the result of backformation or independent borrowing. The issue becomes particularly tricky when the two forms involve morphophonemic alternation, as is often the case with verbs that are related to action nouns (cf. *collide* < ? *collision*). Here, as elsewhere, dictionary evidence cannot solve the problem, and the dates given should be taken as a necessary but by no means sufficient condition for the relation.
  10. It is often suggested that the evolution of the plain style diminished the role of metaphor as an integral feature of prose and poetry in the seventeenth century (Srigley 1988, Gotti 1992: 338). Whether such fluctuation can also be detected in the lexicon remains to be seen. Warren (1992: 126) finds that metaphor is the single most frequent semantic process leading to semantic change



in Present-Day English. In her dictionary data it is responsible for over forty per cent of the novel senses in both slang and standard English.

#### FURTHER READING

- 5.1 There is to date no comprehensive guide to Early Modern English lexis, but good overviews of many central issues can be found in Barber (1976, 2nd edn 1997) and Görlach (1991). Early Modern English lexis is also considered – often less systematically – in studies of individual authors or texts, and in general histories of the English language (see Rissanen this volume: further reading). General introductions to lexicological terminology are provided by a number of standard textbooks, such as Lyons (1977), Bauer (1983, 1988), Cruse (1986), and Lipka (1990).
- 5.2 The Early Modern English dictionary project is discussed in Schäfer (1989b). A modest step forward is the publication of the *Michigan Early Modern English Materials* in computer-readable form, but it cannot of course compensate for the lack of the dictionary proper (see Bailey *et al.* 1975). In many cases the information given in the *OED* can be supplemented by consulting the *Middle English Dictionary* (*MED*), the regular contributions to *Notes & Queries*, and separate collections of antedatings (e.g. Bailey 1978, Rynell 1987, Schäfer 1989a), many of them are also incorporated into the *New Shorter Oxford English Dictionary*. Lancashire's *Early Modern English Dictionaries Corpus* provides a useful computerised database of a number of contemporary Early Modern English dictionaries (Lancashire & Patterson 1997).

For contemporary Early Modern English dictionaries, one of the best is Starnes & Noyes (1991 [1946]). Stein (1985) provides a thorough discussion of early bilingual dictionaries before Cawdrey, and Schäfer (1989a) a survey of monolingual printed glossaries and dictionaries 1475–1640. For a recent assessment of Cawdrey, see also McConchie (1992). Branded words in Early Modern English dictionaries are surveyed by Osselton (1958), and the old-word tradition in more detail by Kerling (1979). McConchie (1997) discusses the sixteenth-century lexicographical record of English medical terminology. Norri (1992) and (1998) are two recent monograph-length treatments of the various strata of medical vocabulary between 1400 and 1550 and their sources, and Wright (1994) of the sources of London English. Glossaries of Shakespeare's lexis are supplied by Onions (1986[1911]) and Partridge (1968[1947]).

Besides the standard reference works, my illustrative material is drawn from primary texts, some of them available in the computer-readable Helsinki Corpus of English Texts (HC). For a general introduction to the Early Modern English section of the corpus, see Nevalainen & Raumolin-Brunberg (1993), and for the sources and coding conventions, Kytö (1996). My statistical information comes mostly from Finkenstaedt & Wolff (1973) and Wermser (1976), both based on the *CED*, which contains all the main entries in *The Shorter Oxford*

*English Dictionary* (SOED, 81,182 entries in all) plus some updates from the OED and other sources.

- 5.3 For general discussion of lexical productivity, see the relevant sections in Lyons (1977), Bauer (1983, 1988), Quirk *et al.* (1985 Appendix I), Kastovsky (1986a) and Lipka (1990). Tournier (1985) bases his PDE description on extensive corpus data. Bauer (1988), Matthews (1991) and Anderson (1992) compare and contrast inflectional and derivational morphology, including compounding, and also suggest morphological models that abolish any sharp distinction between the two.

Serjeantson (1961 [1935]: 5.4) provides a traditional textbook treatment of borrowing throughout the history of English, and Scheler (1977) a more recent overview. The role of translation in this process is explored by Blake (1992). Borrowing in Old and Middle English is discussed by Kastovsky (1992a) and Burnley (1992), respectively. Recent work on native and borrowed lexis in Middle English includes Dekeyser and Pauwels (1989) and Dalton-Puffer (1992); they consider, respectively, the lexical replacement of Old English vocabulary and the productivity of non-Germanic word-formation patterns in Middle English.

There are a number of German dissertations on Latinate loans in Early Modern English (e.g. Faltenbacher 1907, Ksoll 1933, Leidig 1941, Rösener 1907), but because of poor documentation the early ones are often not very reliable. The works by Reuter (1934, 1936) on Latin and Pennanen (1971a) on French are more systematic and still worth consulting. Colman (1995) compares borrowing from French and Latin at different times in relation to the size of the lexis as a whole, and so do Culpeper & Clapham (1996). Prins (1952) gives an extensive account of French influence on Middle English and Early Modern English phrasing. The phonological development of a group of French loans in Middle and Early Modern English is traced by Diensberg (1985). Meurman-Solin (1993: 191–5, 227–35) considers lexical borrowing in Older Scots. Well-documented surveys of attitudes to loan words and linguistic usage can be found in Jones (1953) for the Renaissance, and Tucker (1967) for the eighteenth century.

- 5.5 There is no full-length account of EModE word-formation available to supplement the information in standard textbooks (Barber 1976, Görlach 1991). Marchand (1969) still furnishes the single most comprehensive diachronic survey of English word-formation to date. Stein's (1973) bibliography of English word-formation up to the 1970s also includes diachronic studies. An excellent account of OE word-formation can be found in Kastovsky (1992a) and a more concise one of Middle English in Burnley (1992). Cognitive Grammar is applied to early ME affixation by Zbierska-Sawala (1993).

EModE word-formation is discussed in a number of studies on individual authors; for Shakespeare, see the essays in Salmon & Burness (1987) and Hussey (1992); for Jonson, Pennanen (1951); and for other Elizabethan playwrights, e.g.

Koskenniemi (1962). The new words in Boyle's texts are discussed in Gotti (1996). Comprehensive book-length accounts of the various word-formation processes that would cover the entire Early Modern English period are not numerous, but see Biese (1941) on conversion, Thun (1963) on reduplication and Pennanen (1966) on backformation.

My own discussion of EModE word-formation is cast within a framework of European structuralism and owes most to Marchand (1969), Quirk *et al.* (1985) and Kastovsky (1992a). The Early Modern English data are largely drawn from the *OED*, Marchand (1969), Koziol (1972), both based on the *OED*, and Jespersen (1942).

- 5.6 Traditional accounts of semantic change can be found in Ullmann (1964), Koziol (1967) and Waldron (1967). For a pragmatically oriented approach, see Sweetser (1990). The role of inferential features is also discussed by Lipka (1985). Both Barber (1976) and Görlach (1991) contain chapters on lexical change in Early Modern English. Hughes (1988) gives an account of the diachronic developments of a number of lexical fields, including taboo terms (for swearing, see also Hughes 1991). Central aspects of the Elizabethan world picture are discussed in Tillyard's (1943) classic work; more recent treatments of the topic include the two informative volumes by Thomas (1971, 1983).

Work on individual lexical items in Early Modern English includes Menner (1945) on *clever, fair, happy, nice, sad, silly* and *stout*; Erämetsä (1951) on *sentimental*; Rudskoger (1952) on *fair, foul, nice, proper* (1970) on *plain*; Knox (1961) on *irony* (including *banter* and *raillery*); and Tucker (1972) on *enthusiasm*. See also Lewis (1967 [1960]) for brief essays on *nature, sad, wit, free, sense, simple, conscience/conscious, world, life* and *I dare say*.