Functional motivations in the development of nominal and verbal gerunds in Middle and Early Modern English¹

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ABSTRACT

This paper examines the use of three gerund constructions in Middle and Early Modern English on the basis of corpus data covering the period 1250–1640. The constructions examined are verbal gerunds (*eating the apple*), bare nominal gerunds (*eating of the apple*) and definite nominal gerunds (*the eating of the apple*). It is argued that the success of verbal gerunds in the history of English can only be understood against the background of the interaction with their nominal counterparts. An analysis is offered of how the system of gerund constructions is functionally organised, comparing discourse-functional behaviour, distribution and internal syntax across the three gerund types. It is shown that verbal gerunds closely resemble bare nominal gerunds in terms of discourse-functional behaviour and distribution, but are syntactically more flexible. As a result, verbal gerunds could replace bare nominal gerunds, copying their function but adding syntactic flexibility. By contrast, definite nominal gerunds, being functionally distinct from the other two types, developed a number of specialised uses, which ensured their survival. These conclusions throw light on issues of functional motivation in the development of the English gerund. Historical change is seen to be grounded in synchronic functional organisation. At the same time, it is shown that the only existing explanation for the rise of verbal gerunds (attributing their success to their ability to combine with prepositions) can only be partly correct.

1 INTRODUCTION: THE ENGLISH GERUND

One of the intriguing features of English and a challenge for syntacticians as well as historical linguists is the English gerund. From a synchronic point of view, the gerund is best characterised as a (de)verbal form in *-ing* whose external syntactic behaviour is that of a noun, but whose internal syntax varies between that of a noun and that of a verb (Lees 1966; Ross 1973; Declerck 1991a; Langacker 1991; Pullum 1991; Heyvaert 2003, 2004, 2006; Hudson 2007: ch.4). On the one hand, the structure of which the gerund is the head can serve as prepositional complement or as an argument to a verb, and therefore has, roughly, the syntactic distribution of an ordinary NP. Thus, in (1a) *his worrying* functions as the subject of a copular clause, while in (1b) *resigning* is governed by the preposition *of*.²

- (1) (a) Wasn't his worrying proof that he was wrong? (CB)
 (b) That was good enough for George, and all thought of resigning was cast aside. (CB)

On the other, looking at how the gerund combines with its own arguments and modifiers, two types can be discerned. The nominal gerund is characterised by its ability to combine with adjectives and determiners, and by its common co-occurrence with *of*-phrases serving as the notional equivalent of verbal arguments. The verbal gerund, by contrast, can combine with adverbs, auxiliaries, ordinary objects and common-case subjects. Thus, while *mocking* in (2a) takes a possessive determiner (*his*), an adjective (*casual*) and an *of*-phrase equivalent to a direct object (*of the old left*), *visiting* in (2b) takes a

common-case subject (*them*), a verbal negator (*not*), a direct object (*you*) and an adverb (*anymore*).

(2) (a) Both his old comrades were irritated by his casual mocking of the old left
(CB)

(b) You're not so bothered about them not visiting you anymore. (CB)

In typological terms, the variation between the two types of gerund can be linked to the cross-linguistically attested continuum between action nominals and nominalised clauses (Comrie 1976; Comrie & Thompson 1985; Koptjevskaja-Tamm 1993). An action nominal, such as *refusal* in (3a), has as its head a 'lexically derived noun'. In contrast, a nominalised clause, such as the *that*-clause in (3b), contains 'no evidence in favour of viewing its head as a lexical noun' – in other words, in nominalised clauses the head is a verbal form and it is the clause as a whole that is nominalised (Comrie & Thompson 1985: 391–2).

(3) (a) Sir Edwin's refusal to communicate directly with his wife continued. (CB)

(b) the King of Thebes discovered that he had lived his life under a curse. (CB)

As for the English gerund, nominal gerunds can be situated closest to the action nominal end of the continuum, whereas verbal gerunds take a more intermediate position.

Assuming a historical perspective, the synchronic variation between nominal and verbal gerunds reflects diachronic change. Nominal gerunds existed well before verbal gerunds. The latter emerged only through a long drawn-out process involving the grad-

ual reconfiguration of the structure of a noun phrase into that of a non-finite clause. This process of verbalisation and the changes concomitant to it have already received due attention in the diachronic literature (Jespersen 1940: 108–50; Eienkel 1914; Dal 1952; Mustanoja 1960: 566–78; Visser 1963–73: 1165–1217; Emonds 1973; Tajima 1985, 1996, 1999; Donner 1986; Jack 1988; Houston 1989; Van der Wurff 1993; Fanego 1996, 1998, 2004; Miller 2002; Kranich 2006).³ The extant literature thus agrees on the following course of events. Old English morphology possessed a derivational mechanism that added *-ing* or *-ung* to verbal stems to create deverbal nominalisations – or gerunds, as illustrated in (4a). The behaviour of these Old English gerunds was noun-like in all respects. From Late Middle English onwards, however, gerunds with verbal features began slipping into the language. As (4b) shows, these mostly took the form of constructions with a non-genitive subject or object, and were especially used following prepositions. The process of verbalisation came into full swing in the Modern English period, when verbal gerunds became a truly indispensable part of English grammar. During this period the frequency of verbal gerunds rose dramatically, and, as shown in (4c), verbal gerunds spread beyond their predominantly prepositional use. In addition, as illustrated in (4d–e), the same period saw some further innovations in the internal syntax of the gerund, such as the introduction of passive and perfective gerunds, and the increased use of ‘hybrid’ gerunds, which combined nominal with verbal features. The latter have again disappeared in the course of the nineteenth century – with the notable exception of verbal gerunds with genitive subjects, as in (4f). The result of these various developments is the situation as it stands today.

- (4) (a) *ðurh ðæra sacerda blawunge toburston ða weallas.* (c1000, quoted from Visser 1963–73: 1165)
- ‘through the blowing of the priests, the walls broke down’
- (b) *Sain Jon was ... bisi In ordaining of priestes, and clerkes, And in casting kirc werkes* (c1300, quoted from Tajima 1985: 76)
- (c) *They come so to purpose, that hee can not refraine telling them.* (1561, quoted from Fanego 1996b: 38)
- (d) *... whose pillow she kissed a thousand times for having borne the print of that beloved head.* (1580–1, quoted from Tajima 1999: 269)
- (e) *which ... may very much contribute to ... the driving Barbarity out of our Streets.* (1711, quoted from Visser 1963–73: 1214)
- (f) *But there was no question of our taking the exam in it.* (CB)

The picture becomes more troubled when we turn from the superficial description of diachronic developments to the underlying causes. If there is anything on which the existing literature agrees, it is that the verbalisation of the gerund must result from a complex interaction between different factors. Roughly, two types of causes can be distinguished: mechanisms of change explaining where, when and how verbal gerunds first slipped into the language, and the driving forces that explain the success of the new form. Among the mechanisms accounting for the appearance of verbal gerunds, at least the following elements appear to have played their part. Superficial ambiguities sanctioning both nominal and verbal readings may have allowed reanalysis (Visser 1963–73: 1191; Jack 1988; Fanego 2004). Which gerund constructions first saw verbal features was then determined by the locus of reanalysis initially and, as the change spread, by a

‘hierarchy of relative nominality’ (Fanego 2004: 38). That is, verbal features appeared first in gerund constructions without overt determiner, later in constructions with a possessive determiner or genitive phrase serving as subject, and later still in gerund constructions introduced by an article (Fanego 2004). In addition, the emergence of verbal gerunds seems to have been marked by French and Latin influence (Donner 1986; Jack 1988; but see Jespersen 1940: 90; Miller 2002: 337–8; and especially Kranich 2006 for a critical view). And, there is the plausible but hard to verify role of present participles, whose formal identity with the gerund from Late Middle English onward must have given ample occasion for confusion between the two construction types (see Houston 1989 and more tentatively Fanego 1998), even if a direct role in the first appearance of verbal gerunds is unlikely (Jack 1988: 27).

None of this tells us why verbal gerunds were as successful as they were and managed to develop from a quirk of grammar into a major clause type. For the success of verbal gerunds, the literature provides only one explanation. Eienkel (1914) and Jack (1988) suggest that the reason for success lies in the failure of the English infinitive to combine with prepositions other than *to*, implying that the verbal gerund fills a syntactic gap. Jack writes:

[I]n its absence from use in prepositional phrases the infinitive lacked a syntactic property of nouns, and accordingly there was a gap in the range of syntactic patterns in which the infinitive functioned as a nominal form of the verb. The development of the gerund filled this gap, by providing a nominal form of the verb that could freely be used following prepositions; and, as Eienkel [...] argued, it seems

likely that the development of the gerund was either initiated or promoted by pressure to remove this syntactic gap. (1988: 61–2)

Although this view is certainly in line with the early association of verbal gerunds with prepositional uses, it is also problematic in at least two respects. A first shortcoming to Einkenkel and Jack's account is pointed out by Fanego (1996a; 2004). Fanego recognises that the inability of the infinitive to combine with prepositions created some kind of gap, but in her view this gap could be filled by nominal as well as verbal gerunds. Thus she states that:

[I]t seems likely that the great expansion in the use of prepositions in the course of the Middle English period [...] gave rise to a situation in which a form of the verb capable of being used prepositionally was often called for: the gerund may have served to fill this gap. But this process, as I see it, could have been independent of whether the gerund was syntactically nominal or verbal, for in sequences like *Wipouten doying of any harme* [...] or *in casting kirc werkes* [...] the advantage of the gerund over the infinitive does not depend on the nature of its object (i.e. *of*-phrase or noun phrase), but rather on its ability to occur in a syntactic position from which the infinitive was excluded. (2004: 16–7)

A second problem is what precisely is to be understood by the idea of 'pressure to remove a syntactic gap'? The notion of a gap leads straight into the thorny issue of the extent to which language change is driven by functional considerations. The careful position to take in the matter is to be sceptical (see, for example, Harris & Campbell 1995,

Croft 2000, Heine & Kuteva 2005, and more extremely, Lass 1998), but then again the possibility of functionally driven language change is not to be abandoned lightly (García 1999; Haspelmath 1999; Hawkins 2004). In this respect, the history of the gerund provides a relatively straightforward test-case for functional claims outside the realm of theoretical debate. In all likelihood, the pressures referred to by Einkenkel and Jack did not by themselves cause the verbalisation of the gerund, yet they may, on a functional view of language change, have provided the incentive to seize the opportunities that arose by fully exploiting verbal gerunds when they came along as the more or less accidental result of other factors. However, as long as the evidence is restricted to the finding that verbal gerunds most commonly occurred with prepositions, the notion of gap-filling will remain difficult to assess.

2 THE PRESENT APPROACH: GOALS AND METHODOLOGY

The purpose of this paper is to come to a better understanding of the factors that have furthered the use of verbal gerunds. The central assumption I will follow is that functional motivation for change is first and foremost to be sought in the functional organisation of synchronic usage. Consequently, in examining the factors that promoted the use of verbal gerunds, verbal gerunds should not be studied in isolation, but against the background of their interaction with nominal gerund constructions. The main questions in this investigation relate back to the problems emerging from the preceding discussion: Is there any indication that the gerund was used to fill a syntactic gap or, more generally, that the rise of verbal gerunds was somehow functionally motivated? And, if so, how did verbal gerunds relate to nominal gerunds in this? As I will show, the second

question can be answered conclusively, and gives us a number of important clues to answering the first.

To address these issues, corpus material has been investigated covering the emergence of verbal gerunds through the course of much of the Middle English period and into the Early Modern period. The primary corpus used is the *Helsinki Corpus* (HC), which has been searched for all forms ending in *-ing*, *-yng*, *-inge*, and *-ynge*. The periods covered are 1250–1350, 1350–1420 and 1420–1500 for Middle English, and 1500–1570 and 1570–1640 for Early Modern English. For the period 1500–1570, the data has been further extended with the supplements to the Helsinki Corpus (Penn1 and Penn2) found in the *Penn-Parsed Corpus of Early Modern English* (PPCEME). The data searched are summarised in Table 1, with numbers of words of running text given per sub-period and per source (based on Kytö 1996 and Kroch, Santorini and Delfs 2004). Additional examples have been drawn from other sources as well, for which see footnote 2 above.

[INSERT TABLE 1]

To come to grips with the rise of verbal gerunds, as well as with the relation of verbal to nominal gerund constructions, three main types of gerund construction have been distinguished, depending on the expression of the patient argument role and the determiner preceding the gerund. The three types are represented in (5):

- (5) (a) I shall teach him a lesson, for filching hens or cocks (1552–63, HC)
 (b) That we fall not into disordering of ourselves by anger. (1559, OED)

- (c) He defouleth the whole faith of his testimony, by the falsifying of one part.
(a1555, OED)

The gerund construction in (5a) is verbal: it has no overt determiner and has a genuine argument expressed by means of a noun phrase. The constructions in (5b–c), by contrast, are nominal: both have a notional argument expressed by means of an *of*-phrase. The two constructions still differ, however, in that (5b) has no overt determiner, whereas (5c) is marked by a definite article. These two types will be referred to here as bare and definite nominal gerunds respectively.⁴

Regarding the research questions, it will be shown that the three gerund types interacted in various ways, and that the issue of whether verbal gerunds filled a syntactic gap is therefore considerably more complex than might at first sight be expected. Not only verbal gerunds but also the two nominal types are historically associated with prepositional uses. The development of such uses, moreover, was phased, in that some combinations of a preposition with a gerund construction developed later than others. This means that the idea of verbal gerunds filling in for the infinitive with prepositions is an oversimplification, at once too narrow and too general. The idea is too narrow because the historical boom in prepositional uses is not exclusive to verbal gerund constructions (as hinted by Fanego 1996a, 2004). It is too general because, even if it is still plausible that the inability of the infinitive to combine with prepositions left room for the development of the prepositional combinations with gerunds, there is no evidence for functional pressure that promoted the use of gerunds with just any preposition.

Still, there is evidence for functional pressures in other respects. First, the three gerund constructions differentiated functionally among themselves in a number of ways:

the sets of prepositions that the three types associated with differed, the gerund constructions themselves differed in semantic and discourse-functional terms due to the presence or absence of a definite article, and they differed in terms of their internal syntactic flexibility due to their reliance on verbal or nominal means of expression. Second, where competition obtained, the winning variant appears to have been selected on functional grounds (cf. Haspelmath's (1999) notion of 'diachronic adaptation'). In particular, the historical loss of bare nominal gerunds may be functionally motivated by the fact that, discourse-functionally, bare nominal gerunds most closely resembled verbal gerunds, while in terms of internal syntactic flexibility verbal gerunds had the advantage over bare nominal gerunds. Third, all in all, the ultimate distribution of gerunds following prepositions is roughly complementary to that of infinitives, suggesting that the gap in the infinitive's syntagmatic options did co-determine the outcome of the development of the gerund. Thus, various historical developments in gerundial usage have resulted in a division of labour between nominal gerunds, verbal gerunds and infinitives that approximates to the ideal of the isomorphic principle, 'one form one meaning'.

The remainder of this paper is organised as follows. Section 3 sets out to describe in more detail what historical changes have in fact taken place, focusing not only on the emergence of verbal gerunds, but also on what happened to the nominal gerund constructions in the course of the late Middle and Early Modern periods. Section 4, which contains the bulk of the argument, digs more deeply into the precise relation between the different types of gerund constructions, showing in which ways they are functionally distinct and in which ways they are likely to overlap and compete. Section 5 then summarises the findings and reconsiders the central issue of whether – and if so, in what sense – developments in the gerund were steered by functional motivations.

3 THE BROADER PICTURE: DEVELOPMENTS IN VERBAL AND NOMINAL GERUNDS

Throughout the Middle and Early Modern periods, gerund constructions have been undergoing change in the form of shifting frequencies of use. The purpose of this section is to document the major shifts in usage, by comparing the three types of gerund construction, and to give a rough approximation of their distribution over different syntactic environments over time. Figure 1 charts the use of different gerund constructions over the five sub-periods of the corpus data, distinguishing uses with preceding preposition from uses without (i.e. oblique and non-oblique respectively) (see also Appendices A1 and A2).

[INSERT FIGURE 1]

To start from the familiar, as can be seen from Figure 1, verbal gerunds first appeared in the Middle English period and came to be associated with prepositional environments. The oldest period of the corpus data examined, 1250–1350, contains two unambiguously verbal instances, given here in (6a–b), and one reasonably convincing example, given in (6c).⁵ Note that the only example in which the verbal gerund follows a preposition is (6b), which is a direct translation of a Latin gerund form in the Vulgate Bible (*in custodiendo sermones tuos*, i.e. ‘in guarding your words’). This indicates that the association with prepositional uses need not go back to the earliest stages of the verbalisation of the gerund. However, as is further apparent, from the earliest sub-period onwards verbal gerunds become steadily more frequent, and whatever environment first

saw the use of verbal gerunds, it is clearly the prepositional uses that are responsible for the pattern's spectacular rise in frequency in subsequent periods.

- (6) (a) Ac þer ne is non zuo propre ase þis word / 'þet art.' þet zuo propreliche. zuo ssortliche. Zuo cleuiyndelyche. zuo sotilliche / þe names nemnep / ine zuo moche / ase understondinge him may strechche. (1340, HC)

'But there is no name so fitting as this expression, 'that is', which so fittingly, so concisely, so convincingly, so truly gives the name in as far as understanding him (i.e. God) may stretch.'

- (b) In what þynge amendeþ þe ʒenge man his waie in keping þy wordes? (c1350, HC)

'In which way does the young man correct his way of life? – In keeping your words.'

- (c) Þe heuen þat is edefied as cite, of wham takyng part is in þat ich þing. (c1350, HC)

'Heaven, which is built as a city, participation of which is in that same thing.'

Less familiar are the developments in nominal gerunds. Tajima (1985: 60–73) gives valuable figures but without relative frequencies and without distinctions between syntactic environments. As shown by Figure 1, bare nominal gerunds occur marginally before 1350; around the end of the fourteenth century their frequency increases dramatically, but the trend breaks off abruptly and from the fifteenth century onwards the pattern again recedes (to disappear almost completely later on; see Fanego 2004). Signifi-

cantly, the changes affecting bare nominal gerunds – in particular the surge in frequency after 1350 – are again specific to those uses where the gerund follows a preposition, other uses remaining fairly stable throughout. Two early examples are given in (7), illustrating both the oblique and non-oblique uses.

- (7) (a) For longing of þe nizttegale, Þis foweles murie singeþ. (?a1300, HC)
 ‘For longing for the nightingale, these birds sing happily.’
- (b) Hwan he was king, þer mouthe men se Þe moste ioie þat mouhte be Buttinge with sharpe speres, Skirming with taleuaces þat men beres, Wrastling with laddes, putting of ston, Harping and piping ful god won (c1300, HC)
 ‘When he was king, you could there see the greatest merriment possible: thrusting with sharp spears, fencing with shields carried by men, wrestling with young men, putting the stone, playing the harp and the pipe a good deal’

Definite gerunds, too, become more frequent in the course of the period examined. The increase is less abrupt than for bare nominal gerunds, continues throughout the Middle and Early Modern periods, and more or less parallels the rise of verbal gerunds. Although a simultaneous increase can be noted in non-oblique environments after 1500, the main environment of change is once more formed by the uses following prepositions. Two early examples are given in (8), again illustrating use in oblique and non-oblique environments.

- (8) (a) Ac huanne he heþ longe ymyned / and he heþ / alle his uelþes ykest out:
 þanne uint he pays / and reste / and solas / and blisse / zuo þet him þingþ þet
 al þe wordle by an helle to þe lokinge of þe ilke clyernesse / and of þe ilke
 pays: þet he uint ine his herte. (1340, HC)

‘And when he has long been digging and has cast out all his impurities, then he finds peace and rest and solace and bliss, so that he believes all the world to be a hell compared to the beholding of that same brightness and that same peace that he finds in his heart.’

- (b) Þe shewynge of þin wordes alizteþ me, & 3eueþ vnderstondyng to litel.
 (c1350, HC)

‘The revelation of your words enlightens me and gives understanding to the young.’

Taken together, the developments in the gerund show convincingly that prepositional environments were involved in all major changes affecting the gerund in the course of the Late Middle and Early Modern periods. However, since the frequencies of all three gerund types rose spectacularly, the original idea that prepositional environments promoted verbal gerunds (Einenkel 1914; Jack 1988) is either too specific or as yet insufficiently supported by the data. Indeed, if any gap-filling occurred, it seems on the basis of Figure 1 that Fanego (1996a, 2004) is basically correct in assuming that both nominal and verbal gerunds would qualify to substitute for the infinitive. This conclusion aside, the findings raise more questions than they answer. There is the issue of what happened to bare nominal gerunds, which represent the first gerund construction to rise in frequency but began dropping out of use again soon after. A related problem is

why no less than three types of gerund construction undergo such significant changes. Neither of these issues can be resolved on the basis of the description offered so far, which glosses over the variety of concrete uses to which the combination of a preposition and a gerund could in actual fact be put, and further ignores any potential differences between gerund constructions that might be significant to understanding the changes they underwent.

4 FUNCTIONAL DIFFERENTIATION

Having highlighted the broad similarity between the three gerund types – their historical association with prepositional environments – we may now turn to what distinguishes the three constructions. The focus is on the gerunds in oblique environments, since these are the constructions that undergo significant changes in the course of the period examined. Section 4.1 addresses in general terms the discourse-functional properties of the three gerund constructions, specifically focusing on the functioning of gerund constructions as NPs in discourse. Against this background, Section 4.2 then returns to the use of the gerund constructions with prepositions. It is first shown that different gerund constructions have collocational preferences in terms of the combinations they form with specific prepositions. These combinatorial patterns are then examined more closely, investigating how each prepositional pattern interacts with the discourse-functional properties of the distinct gerund constructions. Section 4.3, finally, examines the three gerund constructions from a different perspective, highlighting the differences brought about by the nominal or verbal syntax of gerund constructions. As the discussion will show, while there is a degree of overlap in the range of application of different gerund

constructions, the constructions also differ in important ways. A proper understanding of these differences is crucial to any evaluation of the major changes affecting the gerund in Middle and Early Modern English.

4.1 *Discourse-functional differences*

One important difference between gerund constructions relates to their functioning as NPs in discourse, with the presence or absence of a definite article serving as the primary distinctive feature. As argued by Heyvaert (2004, 2006) for Present-Day English, determiners with the gerund preserve their ordinary functioning. It would be surprising if anything else were the case in older stages of the language (De Smet *forthc.*). It may further be assumed for Late Middle and Early Modern English that the function of the definite article itself does not differ radically from its present-day function (as described, for instance, by Hawkins 1978 or Langacker 1991: 98). While this assumption clearly awaits further investigation, the historical differences that have so far been noted in reference grammars pertain to very specific lexico-grammatical environments and do not suggest any fundamental change in the function of the definite article (Raumolin-Brunberg 1991: 173–84; Fischer 1992: 219; Rissanen 1999: 191–5; see also the quantitative evidence in De Smet *forthc.*). In what follows, I will therefore examine in more detail how the use of the definite article interacts with the referential properties of different gerund constructions.

Let us start by observing that examples of gerund constructions with other determiners than *the* or *ZERO* indeed suggest that the determiner slot functions with gerunds much as it does with other noncount nouns. For instance, the gerund construction *a*

teching of anoþer þan it-self with the indefinite article *a* in (9a) marks an indefinite, non-specific instance of a type of situation in the same way as *a myrour* marks an indefinite, non-specific instance of a type of thing. Along similar lines, the gerund construction *this feyghtyng with that knyght* with proximal *this* in (9b) marks a specific situation that is construed by the speaker (Sir Lancelot) as immediately accessible to the addressee (the three cowardly knights) in the situation of discourse.

- (9) (a) 3if a foule spot be in þi bodily visage, þe i3e of þe same visage may not see
 þat spotte, ne wite wher it is, wiþ-outyn a myrour or a teching of anoþer þan
 it-self: ri3t so it is goostly. (?a1400, HC)
 ‘if a physical face has a stain, the eyes of that face cannot see that stain, nor
 know where it is without a mirror or a remark by another; just so it is with
 your spiritual face (i.e. the soul).’
- (b) and [sir Launcelot] sygh by the moonelyght three knyghtes com rydyng aftir
 that one man, and all three laysshynge on hym at onys with swerdys [...].
 ‘Truly,’ seyde sir Launcelot, ‘yondir one knyght shall I helpe [...].’ And
 therewith he toke his harneys and wente oute [...] downe to the four
 knyghtes. And than sir Launcelot seyde on hyght, ‘Turne you, knyghtis, unto
 me, and leve this feyghtyng with that knyght!’ (a1470, PPCME)

The working of the definite article is particularly easy to see in definitely marked gerund constructions without further internal modification, as in the examples in (10). As a marker of retrievability (cf. Hawkins 1978; Langacker 1991; Givón 1992), the definite article here signals that the addressee has mental access to the referent of a NP on the

basis of previous knowledge and/or the information given in the NP itself. The referent may be accessible through explicit mentioning in the previous discourse, as with *the reading* in (10b), or through an inferential relation and world knowledge, as with *þe falling* in (10a) (pushing a rider of his horse naturally involves the rider's falling), or *the prickynge* in (10c) (needles characteristically prick).

- (10) (a) Anoper launce in honde he hent – Aȝein þe prince of Tyre he went. He smoot hym þorouȝ þe breest þare, And out of sadel ouere croupe hym bare, And I sigge, for soþe þing, He braak his nek in þe fallyng. (?a1300, HC)
- ‘He seized another lance in his hande and went against the prince of Tyre. He pierced him through the breast there and pushed him out of the sadel and over the horse's back, And I sigh, for in truth, he broke his neck in the fall.’
- (b) And when he came to the ende, he began it afresh and read it ouer again. And in the reading he made no maner hast (1555, PPCEME)
- (c) Whether it were by fortune, or some other constellacion Sodenlye the neele [i.e. ‘needle’] Hodge found by the prickynge And drew it out of his bottocke where he felt it stickynge (c1553–63, PPCEME)

Although their behaviour is more intricate and varied than that of the gerund types in (9) and (10) above, definite nominal, bare nominal and verbal gerunds too can be seen to fulfil specific functions in discourse. Definite nominal gerunds, like the definitely marked gerunds in (10), can be used to refer to a specific event that is accessible to the addressee on the basis of previous discourse, as in (11a), or the situation of discourse, as in (11b).

- (11) (a) Bowȝes of dyuers trees hij kytten, And to her horses tales knyppen. To Darrie ward alle hij fareþ; Þe bowȝes þe dust heiȝe arereþ. Of þe draweyng of bowȝes and stykke þe eyre bicom trouble and þicke, Þat to Darries folk it ferde, Als on hem com þe myddelerde. (?a1300, HC)

‘They cut off twigs of many trees, and tied them to their horses’ tales. They all rode against Darius, and the twigs made the dust fly up high. Because of the drawing of the twigs and branches, the air became so troubled and thick with dust, that Darius’ men got frightened as though the whole world were coming upon them.’

- (b) My lorde the cause of the sendyng of this man in so great haste unto you, is, be cause that and [i.e. ‘both’] the Kynge’s majestie and you shall thynke it convenient to have hym to be brought to the Towre there to be more streyghtlye examyned and to be put to torture (1538, PPCEME)

At the same time, definite nominal gerunds can also rely on other strategies of identification than the anaphoric or exophoric ties illustrated in (10) and (11). In particular, definite nominal gerunds instantiate so-called reference point constructions (Langacker 2001: 35–6; Willemse 2005: 264–6), which provide mental access to one entity through another entity. In definite nominal gerunds, the entity identified or accessed is the event designated by the gerund, and the entity leading to identification or access – the reference point – is the event participant marked by the *of*-phrase. The relation between a reference point and the target of identification is one of ‘forward bridging’ (Willemse 2005, 2006). For example, because commissions can be granted,

the availability in discourse of a referential set of commissions in (12a) gives easy mental access to an event of granting. Similarly for (12b), because a dinner needs to be furnished, the presence of a referent dinner in discourse gives access to an event of furnishing.

- (12) (a) AN ACT FOR THE GRAUNTING FORTH OF CO~MYSSIONS FOR SEWERS (1488–91, HC)
- (b) The ij day of October was bered [i.e. ‘buried’] the nobull duke of Norffok at a plasse callyd Fremyngnam chyrche; and ther was a goodly hersse of wax as I have sene in thes days, with a dosen of banerrolles of ys progene, [...] and mony mornars, and a gret dolle [i.e. ‘lamentation’], and after gret dener. For the furnishing of which dinner were killed forty great oxen and a hundred sheep (1553–9, PPCEME)

While the definite nominal gerunds in (11) and (12) have specific referents that can be located in space and time, definite nominal gerunds can also be used generically, referring not to a specific instance of an event but to a kind of event. Normally, generic NPs are treated as proper names naming a commonly known kind, and as such they require no definite article in English (Carlson 1977; Davidse 1999; Heyvaert 2006). However, in a ‘generic text’ – i.e. a text whose participants interact on a generic rather than an episodic level – the ordinary mechanisms of referential tracking can be imposed on generic referents (Behrens 2005: 317–23). The example in (13) illustrates this point: *the drinking of wine* is used generically but can nevertheless receive definite marking because it is simultaneously an accessible participant in a (generic) text about wine and its

properties. Note, incidentally, that the same mechanism explains why *the drinking of wine* can also be tracked anaphorically by the pronoun *it* further down the discourse.

- (13) Plato in the .ij. booke de legibus, forbiddeth all children wine y^t are vnder .xij. houres old, for that inte~t y^t they should not be driuen therwith into madnesse, he suffreth them that are full growen in age, to vse it, bicause it is a remedie against y^e grieuousnesse of age, and driueth away sorowes, & swageth the hardnesse of maners, the age of springoldes [i.e. ‘youths’] or of growing children, is hote and full of muche bloude, contrarywise the olde age is colde, and wanteth bloud, therefore the drinking of wine is profitable for olde men, but to them that are in growing, it is exceeding hurtfull (1568, PPCEME)

This special character of generic texts interacts with the properties of definite nominal gerunds as reference point constructions. For instance, *þe takyng of þe nede* in (14a) marks an event of taking that is generic yet also accessible through its argument *þe nede*, which in turn functions as a participant in a generic text about sensuality. Arguably, the reference point construction may itself function as a minimal generic text:⁶ in (14b), the generic NP *the bredyng, chesinge, and kepyng, of them* does not figure in a larger generic text, but definite marking is justified by the relation of forward bridging between horses and the kinds of actions associated with them.⁷

- (14) (a) For þis same miȝt [i.e. sensuality] is it þat gruchiþ when þe body lackyþ þe needful þinges vnto it, and þat in þe takyng of þe nede stereþ us to take more þan nedīþ in fedying and forþeryng of oure lustys. (?a1400, HC)
- (b) In his [i.e. Virgil's] Georgikes lorde what pleasaunt varietie there is: the diuers graynes, herbes, and flowres that be there described, that, reding therin, hit semeth to a man to be in a delectable gardeine or paradise. [...] who, delitynge in good horsis, shall nat be therto more enflamed, reding there of the bredyng, chesinge, and kepyng, of them? (1531, PPCEME)

In contrast to definite nominal gerunds, bare nominal gerunds can be predicted to behave as uncount nouns without determiner. The expectation, then, is for bare nominal gerunds to be either generic or indefinite. Generic uses are illustrated by *dredyng of our Lord* in (15a), and *wryting of letteres* in (15b).

- (15) (a) His name is holy & dredeful, þe biginnyng of wisdom is dredyng of our Lord. (c1350)
- (b) Here regneth Artharxerses, þe vi kyng in Perse, [...] vndir whom Esdras repayred þe lawe þat was brent be hem of Chalde, wech Esdras broute in new maner of wryting of letteres, þat were more esy for to write and more esi for to pronounce (a1464, PPCME)

Purely indefinite readings appear to be more exceptional, yet in some contexts they provide a plausible interpretation of a given gerund construction. Thus, *grete hyndryng*

and anytysement of the same cite in (16a) and *great shooting of the guns* in (16b) each mark a specific but newly introduced situation.

- (16) (a) assessyng and levy was made amonge the sayde Bysshoppis tenants of ij dymes as a cite or a burgh by hym self, [...] and the money so assessed and made levy kepte and yet kepeth to the use of the said Bishop to grete hyndryng and anyntysement of the same cite (c1428, HC)
- (b) The ij day of January the king of Spain's ambassadors landed at Tower wharf. During whose landing there was great shooting of the guns. (1553–9, PPCEME)

More common, however – and especially typical of oblique uses – are bare nominal gerunds that are ambiguous or even indeterminate between a generic and an indefinite reading. Such instances conform to Behrens's (2005: 293) hypothesis that the distinction between a generic and a non-generic interpretation may in some environments have very low salience. For example, *heryng of holy bokys* and *heryng of holy sermownys* in (17a) can be conceived of as kinds of activities, generically construed means to the achievement of contemplation, but they may also refer to an indefinite homogeneous and unbounded series of occasions of hearing holy books and sermons. Similarly, *resceiuyng of yistes* in (17b) may have to be read as referring simply to a kind of activity deemed dangerous by the speaker, or to any indefinite non-specific instantiation of that kind of activity.

- (17) (a) Thus, thorw heryng of holy bokys & thorw heryng of holy sermownys, sche euyr encresyd in contemplacyon & holy meditacyon. (c1450, PPCME)
- (b) Firthermore I wolde thou were war of resceiuynge of yistes [i.e. ‘guests’] by way of hospitalite anempst wommen of deuocyon, religious or other, for ofte-sithes amonge gode ben medled badde (a1450, PPCME)

Next to generic and indefinite uses, whose occurrence is predictable from the nominal nature of the construction, bare nominal gerunds also engage in uses that are neither generic nor indefinite. Thus, *smytyng of Malcus here* in (18a) refers to a specific – and, it follows, non-generic – event that needs no introducing in the discourse, as it constitutes common knowledge to a fourteenth-century English audience. Along similar lines, *delyverynge off hym unto me* in (18b) is unlikely to have generic reference or, if specific, to introduce a new text participant; instead, it refers to a specific instance of an event with which the addressee can be supposed familiar.

- (18) (a) And here þese blynde heretykes wanton wyt as ydiotes, whan þei seyn þat Petur synnede not in smytyng of Malcus here (c1400, PPCME)
- ‘And here these blind heretics lack sense as idiots, when they say that Peter did not sin in cutting off Malcus’ ear’
- (b) These two off the garde declared unto mr. shreffe thatt they weare commaunded by the councele to delyver me unto hym, and he to sende me unto Newgate, saynge, “Syr, if it please yow we wyll carye hym thether.”
- [...] Then the shreffe sayde sharpely unto them, “Whatt! do you thynke that

I wyll nott do the councelles commaundementt? Yow are discharged by delyveryng off hym unto me.” (a1561, PPCEME)

Having specific reference, uses of the type in (18) resemble definite nominal gerunds with specific reference, yet they differ from the latter in being typically controlled. In each example the implied agent of the gerund form is identical to a participant in the matrix clause – the subject *Petur* in (18a) and the subject *Yow* in (18b).⁸ This restriction does not apply to definite nominal gerunds – witness the examples in (11) above or (19) below.

- (19) Nowe vppon the reporte made by the Lord Chauncelour and the other Lordes to the kinge of all their whole discourse had with Sir Thomas Moore, The kinge was so higlye offended with him, that he plainely told them he was fully determined that thaforesaid parliament bill should vndoubtedly proceede forth against him. To whom the Lord Chauncelour and the rest of the Lords saide that they perceaved the lordes of the vpper hous so precisely bente to heare him, in his owne defence, make awneswere himself, that if he were not put oute of the bill, it wold without faile be vtterlye an overthrow of all. But, for all this, needes wold the kinge haue his owne will therein; or els he said that at the passinge thereof, he wold be personally present himself. (1555, PPCEME)

The observed difference in control behaviour can be related to the function of the definite article (for a more detailed account, see De Smet forthc.). Because the definite

article signals that the referent of a NP can be construed on the basis of previous knowledge and/or the information given in the NP itself, the interpretation of the NP draws less heavily on the immediate linguistic context in which it is employed. If an interpreter is capable of construing a sufficiently accurate mental image of the event referred to simply by (re)activating information already available to him/her there is no need to recover additional information from the immediate linguistic environment through a control relationship. Thus, in (19) above the reader homes in on the referent of *the passinge thereof* by activating the commonsensical relation between a bill of parliament and its being passed, and by recalling whatever information is already available on the bill in question. This is sufficient for the reader to figure out that the implied agent of *passinge* is the parliament, without searching the gerund's matrix clause for a controller, which indeed there is not.

In contrast to this, referential identification of the events in bare nominal gerund constructions as in (18) above depends on the identification of a controller in the matrix clause. This use can be thought of as a syntacticised version of the way bare nominal gerunds (and bare abstract nouns) are normally interpreted in discourse. Specifically, examples as in (20) (and (17) above), which allow both a generic and an indefinite reading,⁹ tend to imply control on the indefinite reading. For example, *kepyng of þi body fro outrageous colde or hete* in (20a) can be interpreted generically as one of many kinds of *doynges*, and on this interpretation the gerund is non-controlled (cf. Heyvaert 2006); but if attributed an indefinite non-specific interpretation (meaning 'any future occasion of keeping your body from outrageous cold or heat'), the main clause subject *pou* takes up the function of controller. The same interpretative pattern is illustrated with *vndewe making, medlyng, or contrefetyng of Romeney* in (20b), while *gruching* in (20c) shows that

the observations extend to bare gerunds without *of*-argument.¹⁰ A possible explanation for this interpretative effect is that an indefinitely marked referent is construed as not previously accessible to the addressee, so that an interpreter, in assembling a maximally enriched representation of that referent, cannot but draw on the immediate syntactic relations in which the referential NP is found – a strategy that may be reinforced by a parallel speaker strategy of introducing a referent in the context of the other referents it is most saliently related to.

- (20) (a) For in alle þin oþer doyngeþ þou schalt haue discrecion, as in etyng & in drynkyng, & in slepyng, & in kepyng of þi body fro outrageous colde or hete, & in longe preiing or redyng, or in comounyng in speche wiþ þin euen Crysten. In alle þees schalt þou kepe discrecion, þat þei be nouþer to mochel ne to lityl. (?a1400, HC)
- (b) hit was late ordeynid & proclamyd, for the good & eese of al þe peple, þat no coupere, fre ne foreyn, ne none oþer man shold wipin þis Citee rase ne gumme [i.e. ‘add flavour’], or in eny other wyse medle with vndewe makyng, medlyng, or contrefetyng of Romeney [i.e. a sweet red wine] (1419, HC)
- (c) þat es godis wille, þat ye foliz yure ordir, and luue til yure prome, and do with-uten gruching þat yu es cumandid. (a1425, HC)
- ‘It is God’s will that you follow your vows, and love your neighbour, and do without complaining what you are ordered to do.’

The categories used to describe the functioning of bare and definite nominal gerund constructions, can be extended to the description of verbal gerunds. Doing so, the most relevant property of verbal gerunds is that they broadly resemble bare nominal gerunds. Like bare nominal gerunds, verbal gerunds can be used generically. For instance, *þis psalme seying* (with fronted object) in (21a) describes the kind of action that can be used to measure a particular length of time, while *making good common lawes for the hole Realme* and *obseruing priuate discipline* in (21b) are portrayed as the kinds of activities that can avert disaster.

- (21) (a) put hem togeder, and sette hem ouer the fyer, and lete hem sethen þe space of þis psalme seying, “Miserere mei, Deus.” (1470–1500, PPCME)
- (b) The remedie of this, doth not stand onelie, in making good common lawes for the hole Realme, but also, – and perchance cheiflie – in obseruing priuate discipline euerie man carefullie in his own house (1563–8, PPCME)

While purely indefinite examples are hard to come by, verbal gerunds do participate in the ambiguity patterns also found for bare nominal gerunds. Thus, *swech oper synnes vsyng* (with fronted object) in (22a) can be interpreted generically as one of various ways of breaking God’s commandments, but can also be read as indefinite and non-specific, referring to an unspecified set of occasions of sinning that inevitably meant the addressee’s breach of God’s commandments. Similarly, *using the same* in (22) can be taken to generically describe the kind of crime for which twenty marks is to be forfeited, or it can refer to any as yet unspecified instance of that crime.

- (22) (a) Þu brekyst þe comawndmentys of God thorw sweryng, lying, detraccyon, & bakbytyng, & swech oþer synnes vsyng. (c1450, PPCME)
- (b) And that noman undre the degre of an Erle were in his apparell any Furr of Sables or black Jenett~ upon payne to forfeit the same apparell And for using the same to forfeit for ev~y tyme so offending xx mark~. (1514–5, PPCEME)

Finally, verbal gerunds are also found in uses with specific reference, with the subject of the gerund obligatorily controlled by an element of the matrix clause. Indeed, this use is decidedly more prominent in verbal gerunds than in bare nominal gerunds, and accounts for the majority of instances of verbal gerunds in the corpus data. Examples are given in (23).

- (23) (a) And al be it so that it was greet peril to myne enemys to do me a vileynye in takynge vengeance upon me, yet tooken they noon heede of the peril, but fulfilleden hir wikked wyl and hir corage. (c1390, PPCME)
- (b) Plumton is now owner of it, a man of fair land: and lately augmentid by wedding the doughter and heir generale of the Babthorpes. (1535–43, PPCEME)

In conclusion, the three gerund constructions each have their own profile in terms of referential properties and the way they function in discourse. The major difference between gerund types stems from the presence or absence of a definite article, which sets apart definite nominal gerunds on the one hand from bare nominal and verbal ger-

unds on the other. The difference primarily manifests itself in definite gerunds with specific reference, which freely occur without an additional control relationship between the gerund and some participant in the matrix clause. In such uses, definite nominal gerunds draw on accessible knowledge on the part of the speaker for the identification of the event they refer to. Bare nominal and verbal gerunds have seemingly similar uses, but identification of their referent typically depends on a control relationship.

These differences apart, there is also a degree of overlap between the different gerund constructions, so that in a number of environments the three types could be used more or less interchangeably. This is particularly clear for bare nominal and verbal gerunds, whose functional potential appears nearly identical, even if in actual usage they diverge somewhat in the functions they preferentially fulfil. Further, all three gerund types can be used to express generic reference – albeit that in the case of definite nominal gerunds, this referential possibility is typically dependent on the generic character of the surrounding discourse. The corpus data testify to this functional overlap by showing occasional instances of variation between the gerund constructions used in parallel environments. Thus, (24a–b) illustrate variation between bare nominal and verbal gerunds; (24c) between bare nominal and definite nominal gerunds. In (24a), both gerunds belong to the controlled type; in (24b–c) the different gerunds are all generic. As will be shown in the following sections, both differences and similarities between gerund constructions have played their part in historical developments.

- (24) (a) Afterward, in getynge of youre richesces and in usynge hem, ye shul alwey
have thre thynges in youre herte (that is to seyn, oure Lord God, conscience,
and good name). (c1390, PPCME)

- (b) Now been ther generale signes of gentillesse, as eschewynge of vice and ribaudye and servage of synne, [...] and usynge vertu, curteisye, and clenness (c1390, PPCME)
- (c) But to knowyng of God þat is soþnesse, ne maiȝt þou not comen but þorw knowynge of þi-self [...]. To þe knowyng of þy-self maiȝt þou comen wiþ ofte þenkyng; to þe knowyng of God: wiþ clen contemplacion. (c1390, PPCME)

4.2 *Distributional differences*

A second dimension on which the three gerund types must be compared is their distribution over the set of available prepositions. In this spirit, Figures 2, 3 and 4 show the usage frequencies from 1350 to 1640 of the three gerund types in oblique environments, but this time differentiating between the six most common prepositions combining with gerunds: *in*, *for*, *of*, *by*, *to*, and *without* (see also Appendix A1). This further breaking down of the data is a reminder that the major shifts in frequency of the three gerund types, already discussed in Section 3, are in actual fact produced by the emergence and/or disappearance of a variety of more specific patterns, each with their own meaning and function. To come to a better understanding of the general changes affecting gerundial usage, it is therefore necessary to investigate the histories of the more specific combinations in which the different gerund constructions occur.

[INSERT FIGURES 2, 3 AND 4]

In interpreting Figures 2, 3 and 4, one must be aware of the fact that figures are sometimes distorted by the idiosyncrasies of a single text in the corpus, often through repetitious use of a single formulaic expression. This is most clearly the case for the frequency of definite nominal gerunds with *of* in the sub-period 1420–1500, where a single text (*The cyrurgie of Guy de Chauliac*) provides more than half of all instances for the period (typically in headings of the type *of þe wasshinge of butter*). To a lesser extent, the same text may also somewhat exaggerate the figures for verbal gerunds with *in* for the same period. Another clear case of misrepresentation involves the frequency of verbal and especially bare nominal gerunds with *for* in the sub-period 1500–1570. Here two texts provide a disproportionately high number of instances, again due to formulaic or semi-formulaic uses (the texts are *The diary of Henry Machyn* and the *Act agaynst wearing of costly apparrell*, which has been included in the PPCEME in two slightly different versions). With these qualifications in mind, it is possible to observe a number of tendencies in the data.

To begin with, it is evident from Figures 2 through 4 that the three gerund types have somewhat different collocational preferences and, from a diachronic point of view, have each followed a distinct course of development. Thus, verbal gerunds (Figure 2) strongly collocate with the preposition *in*, so much so that the initial increase of verbal gerunds is in fact largely due to the extension of this single pattern. Not until the Early Modern period do verbal gerunds spread to use with other prepositions and does the bias towards use with *in* disappear. The new prepositions verbal gerunds spread to are first *of*, then *for*, then *by* and *without*. With *to*, verbal gerunds remain almost entirely absent.

Bare nominal gerunds (Figure 3) show the same strong association with *in* as verbal gerunds, but other combinations too are relatively current from the start, most nota-

bly the combinations with *for* and *of*. The decline of bare nominal gerunds sets in after 1350 with the preposition *in*. With other prepositions – *of*, *by*, *for* and *to* – bare nominal gerunds are at this point still on the increase or at least stable. In these last environments, decay sets in first with *of* and *to* (after 1500), then also with *by*, and *for* (after 1570). The combination of a bare nominal gerund with *without* remains marginal and is, if anything, not on the increase after 1500.

Finally, the rise of definite nominal gerunds (Figure 4) is primarily due to use in combination with *for* and a number of prepositions outside the group of the most frequent six (most prominently, these include *after*, *before*, and *at* – see Appendix A2). A slight but steady increase with the preposition *in* further contributes to the rise of definite nominal gerunds. It is also worth noting that from 1420 onward, definite nominal gerunds are the gerund type most strongly associated with the preposition *to*. Usage with *by* is marginal but relatively stable throughout, and the same goes for *of*. Apart from a single instance in the sub-period 1500–1570, definite nominal gerunds do not combine at all with *without*.

While it is difficult to interpret these findings at face value, they already throw some light on the interaction between the three gerund types, as they are suggestive of areas of competition and of functional differentiation. In what follows, the interaction between gerund types is closely examined, focussing first on the rivalry between bare nominal and verbal gerunds (Section 4.2.1) and then turning to the status of definite nominal gerunds as a construction relatively isolated from the ongoing competition between the other two types (Section 4.2.2).

4.2.1 Bare nominal and verbal gerunds: the rivals

The data in Figures 2 and 3 are suggestive of competition between verbal and bare nominal gerunds, with the former ousting the latter. Most strikingly, the fact that the decline of bare nominal gerunds begins in the patterns with *in* puts obvious suspicion on the verbal gerund, which saw its initial rise mainly in uses with *in*. Less spectacular but equally telling is the competition in uses with *of* and *by*, where verbal gerunds may again carry responsibility for the decline of bare nominal gerunds, first with *of* after 1500, then with *by* after 1570. These findings are not entirely surprising, since a replacement of bare nominal by verbal gerunds is well in line with the overall discourse-functional similarity between the two types (see Section 4.1 above). However, the replacement hypothesis receives its strongest support from the fact that nearly all of the various uses of verbal gerunds – with *in* but also with *by*, *of*, *for* and *without* – have equivalents with bare nominal gerunds. This implies that replacement of bare nominal gerunds by verbal gerunds can be held responsible for the rise of verbal gerunds in general. In order to demonstrate this, it is essential to look more closely into each of the recurrent combinations of a preposition and a bare nominal or verbal gerund, so as to verify to what extent they fulfil similar functions.

Combinations of bare nominal or verbal gerunds with the preposition *in* can be seen to function similarly, despite certain usage preferences. Use of the pattern clusters between two extremes. On the one hand, gerunds with *in* can be used as adverbial adjuncts expressing a relation of manner, means or accompanying circumstance (and sometimes with a shade of purpose). Used in this function, the gerund is typically controlled, and it may refer to a specific event. The meaning of the preposition *in* here is relatively far removed from its original spatial sense, and replacement of the gerund by

an ordinary NP is difficult.¹¹ The examples in (25) show that the use is found both with bare nominal (25a, c) and verbal gerunds (25b–c).

- (25) (a) Neuerþeles, 3if I schal soplier sey, a soule is more bleendid in felyng of it for habundaunce of goostly li3t, þen for any derknes or wantyng of bodely li3tte. (?a1400, HC)
- (b) & the heremyte asked him what he was. And the monstre answerde him & seyde he was a dedly creature [...] & duelled in þo desertes in purchacynge his sustynance (c1400, PPCME)
- (c) whiche glory and reno~mee of name he [i.e. Joshua] obteyned in lyftyng his hondes & scute [i.e. ‘bolts’] in shotyng of sharpe & fyry arowes ayenst y^e cyte of hay [i.e. Ai] (?1495, HC)

On the other hand, gerunds with *in* also occur as obligatory adjuncts or prepositional complements with a number of predicates. In this function, the gerund is unambiguously generic, and can usually be replaced by an ordinary NP without affecting the meaning of *in* or upsetting the syntax of the clause as a whole. Examples are given in (26), with (26a–b) illustrating the pattern with a bare nominal gerund, and (26c) with a verbal gerund.

- (26) (a) But in translating of wordis equiuok, that is, that hath manie significacions vndur oo lettre, mai li3tli be pereil (a1397, HC)
- (b) For þe souerayne and þe Escencyalle Ioy es in þe lufe of Godd by hym-selfe and for hym-selfe, and þe secundarye es in comonyng [i.e. ‘meeting,

conferring with'] and byhaldynge of Aungells and gastely creaturs. (c1440, HC)

- (c) Onely they that be called beneficiall, and do use the vertue of beneficence, whiche consisteth in counsaylinge and helpinge other with any assistance in tyme of nede, shall alway finde coadiutours and supportours of their gentyll courage. (1531, PPCEME)

Between these two extremes, a substantial group of instances falls into an intermediary category. These can mostly be described as adjuncts of respect, specifying in which respect the situation of the matrix clause holds true or takes place (cf. Quirk et al. 1985: 483). Typically they are ambiguous between a controlled and a generic reading, and may alternatively lean closer to the group of adverbial clauses or to the group of prepositional complements. The pattern is illustrated in (27a–b) for bare nominal gerunds, and in (27c) for verbal gerunds.

- (27) (a) Here take hede [...] how worþy we schal holde hym by manere of his leuyng and of his techynge. He myȝte not be vicious þat spende so his witte and þouȝt in expouninge of holy writte. (a1387, PPCME)
- (b) it be ordeyned by the seid auctorite that yf defaulte be in the Constables of eny Cite Borough or Hundred in makyng of due serche after open p~clamacion made in this behalve, [...] that they and ev~y of theym being in suche defaulte forfeite to the King xx^{ti}s. (1488–91, HC)

- (c) one vertuous prelate dooth moche good in crystis chyrche / as well for his
owne vertue & zelose obedyence vnto the lawe of god: as in ledynge other
men to do the same (?1495, PPCME)

From the examples in (25)–(27) it is clear that considerable functional overlap existed between bare nominal and verbal gerunds in combination with the preposition *in*. This supports the idea that verbal gerunds ousted bare nominal gerunds in this environment. It should be pointed out, however, that replacement did not proceed evenly in the different uses found with *in*. As the above examples indicate, verbal gerunds with *in* first occurred in adverbials of means, manner and accompanying circumstance, only spreading to adjuncts of respect at the end of the Middle English period, and to clear prepositional complement uses after 1500.

The combinations of *by* and *without* with bare nominal or verbal gerunds present a less complicated but similar picture. The preposition *by* begins to combine with bare nominal gerunds after 1350 to express an adverbial relation of means. The bare nominal gerund at this point typically allows an indefinite reading with an implication of control, but also a generic reading, as shown in (28a). Verbal gerunds begin to appear with *by* around 1500 and then quickly become more frequent. Like bare nominal gerunds, the verbal gerunds with *by* allow a generic reading alongside a controlled one, as in (28b), but especially after 1570, the controlled reading can be the only interpretative option left, as in (28c). In any case, seeing that in combination with *by* bare nominal gerunds had no functions that verbal gerunds could not fulfil, replacement of one by the other is again plausible.

- (28) (a) & at þat selue tyme þe foure wardeyns schul chese opere foure newe for þe
 3eer comynge, be settyng of foure gerlaundes [i.e. ‘wreaths’] (1389, HC)
- (b) He hath then a busie worke I say, to bringe his flocke to a ryght fayth and
 then to confirme them in the same fayeth, Nowe castynge them downe with
 the lawe, and with threateninges of God for synne. [...] Nowe weedinge
 them, by, tellinge them their faultes, and makynge them forsake synne.
 (1549, PPCEME)
- (c) Sirra, quoth the Seruingman, you must come to my maister, you haue broken
 his Trunke all to peeces, by letting it fall. (1597, HC)

Used with *without*, bare nominal and verbal gerunds again show little or no differences. Both are typically used as controlled adverbial adjuncts expressing a relation of non-co-occurrence between the state of affairs in the main clause and the situation expressed by the gerund. Frequencies being low, the data do not directly reveal replacement of bare nominal by verbal gerunds (indeed, the oldest attested example with a verbal gerund precedes the earliest instance with a bare nominal gerund), but given the high currency in Middle English of *without* with gerunds having no modification, as in (29a), or having nominal modification, as in (29b), a nominal origin of the pattern is nevertheless plausible. The semantics of the pattern are constant, as the gerund constructions used are typically ambiguous or even indeterminate between an indefinite reading, with an implication of control, and a generic reading. This is illustrated for a bare nominal gerund with *without* in (29c), and for a verbal gerund in (29d). Note that the same semantic characterisation can be applied to (29a), and even to (29b), where the gerund, though certainly not generic, is clearly indefinite and similarly

suggestive of a control relationship between its implied agent and a participant of the matrix clause. Once more, the functional similarity between bare nominal and verbal gerunds with *without* is evident.¹²

- (29) (a) Yef sho haue whrepid ani of hir sistirs, [...] hastelike with-vten dwelliſyng sal sho falle to her fete and aske hir for-gifnes (a1425, PPCME)
- (b) After þe deth of Hesider, regnede xxxiiij Kynges, eche after opere, in pees; and wiþout eny longe tariſyng y shal tel ham alle, and how longe euery of ham regnede (c1400, PPCME)
- (c) to spened itt [i.e. worldly good] with-oute loue or vaynlikyng of itt, as reson askith, in worship of God, and helpe of thyne evyn cristyn. (c1440, HC)
- (d) þe Erl of Cornwaile & Igerne his wif setten alþer next þe kyng. and þe kyng saw þe fairenesse of þat lady [...]; and after, he made towarde here nyce semblant in lokyng and leiþhyng. so at þe laste þe Erl perseuede þe priue lokyng and Laughing, [...] and arose vp fram þe table al in wrap [...] and went þens [...], wiþouten takyng Leue of te Kyng. (c1400, PPCME)

Combinations with *of*, too, show functional similarity across the variation between bare nominal and verbal gerunds. As illustrated in (30), bare nominal gerunds with *of* can be used as postmodifier to a noun (as in (30a)), complement to a complex preposition (as in (30c, e)), or prepositional complement to a verb or verbal idiom (as in (30b, d)). Referentially, bare nominal gerunds with *of* are predominantly generic (see (30a–b)), but occasionally they allow an indefinite reading, with or without an implication of control by an element of the matrix clause (see (30c–d) and (30e) respectively).

- (30) (a) [He] cursed dredfulliche al þat dop aʒenst þat statute of worschippynge of holy ymages. (a1387, PPCME)
- (b) Jhesus hadde seid [i.e. ‘spoken’] of his deth; but thei gessiden, that he seide of slepyng of sleep. (c1395, PPCME)
- (c) No man take þe valew of III d. but if he pay, up peyn of lesing of a fynger, ne þe valew of VI d., up peyn of lesing of his hand (a1464, PPCME)
- (d) Thei were also accused of clipping of mony (a1464, PPCME)
- (e) And on þe same maner, wher anoper man wolde bid þee gader þi miʒtes & þi wittes holiche wiþ-inne þi-self, & worschip God þere – þof al he sey ful wel & ful trewly, ʒe! [...] – ʒit for feerde of disseite & bodely conceyuyng [i.e. ‘interpreting’] of his wordes, me list not byd þee do so. (?a1400, HC)

As they emerge, verbal gerunds with *of* map onto the uses of bare nominal gerunds, as illustrated in (31). In Middle English the first few verbal gerunds attested with *of* are generic and function as postmodifier to a noun or complement to a complex preposition. Later they also appear in the other environments and with non-generic reference. As the examples clearly show, the lexico-grammatical environments in which verbal gerunds with *of* appear are often identical to the environments in which bare nominal gerunds were used earlier.

- (31) (a) þat no maner persone, fre ne forein, be so hardy [...] to make, medle, or consent in any wyse, priue or appert, with any maner of brocage with-inne

þis Cite, vp peyne of inprisonement of ther bodyes tuelfmoneth and a day,
and makyng fyn to þe Chaumber (1418–9?, HC)

(b) sche knelyd on hyr knes þe tyme of tweyn Messys heryng (c1450, PPCME)

(c) Speake not of winnyng me: for it shall neuer be so. (1552–3, PPCEME)

(d) Thus lay the poore Draper a long time in prison, in which space his Wife
which before for dayntinesse would foule her fingers, nor turne her head
aside, for feare of hurting the set of her neckenger, was glad to goe about and
wash buckes at the Thames side, and to bee a chare-Woman in rich mens
houses (1619, HC)

It should be pointed out that verbal gerunds did not replicate the entire functional range of bare nominal gerunds following *of*. Specifically, in one use bare nominal gerunds with *of* are strikingly at odds with verbal gerunds or even with the bare nominal gerunds following other prepositions. As shown in (32), some bare nominal gerunds with *of* clearly cannot be generic nor indefinite, but neither can they receive a controlled interpretation. Instances of this kind could be interpreted as double reference point constructions where the definite marking of the intermediate reference point (the gerund) can be omitted because its role as text participant is less prominent than that of the primary reference point and the eventual target of identification (but see example (ii) in footnote 9 above, where this explanation cannot hold). In this use bare nominal gerunds have presumably been replaced by definite nominal gerunds rather than by verbal gerunds.

- (32) (a) EXAMINED vpon þe first article he seide at þe tyme of makyng of þe certificat þe which was sent vnto þe kyng his felawe and he were in difference and discorde (1424–6, HC)
- (b) This Robert began the priorie of blake chanons at Oseney by Oxford [...]. Sum write that this was the occasion of making of it. [An account follows of what moved Robert to build a monastery at the spot in question.]

With *for*, finally, verbal gerunds once more share their various uses with bare nominal gerunds. Both bare nominal and verbal gerunds can be used with *for* to form adjuncts of purpose, as in (33). Referentially, bare nominal and verbal gerunds with purposive *for* often allow a generic reading next to a controlled reading (though in (33c) the generic reading has become unlikely). Akin to these purpose adjuncts are noun complements as in (34), which carry the same purposive flavour, typically with generic reference.

- (33) (a) Preyer in it-self propirly is not elles bot a deuoute entent directe vnto God, for getyng of goodes & remowyng of yuelles. (?a1400, HC)
- (b) masons, and other worke menne call that patron [i.e. ‘model’], a *centre*, whereby they drawe the lines, for iust hewyng of stones for arches, vaultes, and chimneies (1551, PPCEME)
- (c) and certain of them were for this time thought meet to passe, and to be redd; other, for avoyding tediousnes, to be omitted (1550–2, PPCEME)

- (34) (a) The godlie counsels of *Salomon* and *Iesus* the sonne of *Sirach*, for sharpe kepinge in, and bridleinge of youth, are ment rather, for fatherlie correction, then masterlie beating (1563–8, PPCEME)
- (b) Sir Jhon Williams, who was committed to the Flete for disobeying a commaundment gevin to him for not paying any pensions without making my counsel prevy, upon his submission was deliverid out of prison. (1550–2, PPCEME)

Both bare nominal and verbal gerunds can also be used with *for* to form adjuncts of reason, specifying the causal motivation of the situation or event in the main clause, as shown in (35). The causal use is somewhat later to develop than the purposive use, appearing only marginally in Middle English, and at that point, only with bare nominal gerunds, but it is certainly current in the Early Modern period, when the pattern is found both with bare nominal and verbal gerunds. Mostly, gerunds in this use allow both a generic and an indefinite controlled reading (see (35a, c)), but a controlled reading without indefinite reference is possible as well (see (35b, d)).

- (35) (a) Þus fer inwards comyn many; bot for greetnes of pyne þat þei fele and for lackyng of counforte þei go bak in beholdyng of bodely þinges, sekyng fleschly counfortes wiþ-uten, for lackyng of goostly þat þei haue not ʒit deseruyd (?a1400, HC)
- (b) Than suffyrd sche schamys & repreuys for weryng of hir white clothys (c1450, PPCME)

- (c) The xiiij day of January ther was a man [...] hangyd, dran, and quartered, for conterffeytyng the quen's senett [i.e. 'signet']. (1553–9, PPCEME)
- (d) Thus when they are cursed of God, they shall curse one another, curse the Lord for condemning them, curse their sinnes for accusing them, curse their parents for begetting them, and curse themselues, because they cannot helpe themselues. (1591, HC)

Finally, there are some more marginal uses with *for*. Among others, these include adjuncts expressing an apprehensive relation, where *for* can be paraphrased by 'lest' or 'for fear of', and topic-shifting disjuncts, where *for* can be paraphrased by 'as to'. These too, however, appear to combine with bare nominal and verbal gerunds, as shown in (36) and (37) respectively.

- (36) (a) For worchipyng of þe crosse he seide þat body þat hing on þe crosse schuld be worchapid, and noþing but he. (a1464, PPCME)
 - (b) So ferforþ, þat neiþir of hem wole azeinseie oþere, for displesynge of eþer oþer in ony þing þat neþer of hem wole do, þouȝ it were fully deedli synne. (a1450, HC)
- 'To such an extent that neither of them is willing to contradict the other, for fear of displeasing each other with respect to anything that either one wants to do, even if it were plain deadly sin.'
- (37) (a) Nay, as for charming me, come hither if thou dare. (1552–3, PPCEME)
 - (b) I dare make none other comparison betwene them for offendinge the frendes of them both (1531, PPCEME)

The examples in (33)–(37) above all point to a high degree of functional similarity between bare nominal and verbal gerunds. Replacement of bare nominal gerunds by verbal gerunds is not unequivocal, however. Figure 5 shows the frequency of the two major patterns with *for* – purpose and reason adjuncts – for bare nominal and verbal gerunds over the period 1350–1640.¹³ Judging by their shifting frequencies, verbal gerunds are very likely to have replaced bare nominal gerunds with *for* as reason adjuncts, since the increase of one goes hand in hand with the decrease of the other. In the function of purpose adjuncts, however, the rise of verbal gerunds with *for* seems to have halted after 1570 and bare nominal gerunds remain relatively stable throughout the period examined. The hesitancy in the rise of verbal gerunds with purposive *for* may be due to competition with definite nominal gerunds in this environment or with the *to*-infinitive (see Section 4.2.2 below).

[INSERT FIGURE 5]

As the foregoing discussion has shown, the great majority of uses of the verbal gerund closely match uses of bare nominal gerunds. Thus, diachronically, the decrease of bare nominal gerunds in a number of environments matches an increase in the use of functionally equivalent verbal gerunds. This is most obvious for the different uses associated with the preposition *in*, but also applies to uses with *by* and *of*. Uses with *without* do not show an equally straightforward pattern of replacement, but it is nevertheless clear that *without* increasingly combined with verbal gerunds, while the functionally similar combination with a bare nominal gerund dwindled and disappeared. Combina-

tions with *for* also show functional similarity across bare nominal and verbal gerunds, and even though purpose adjuncts with *for* continue to favour bare nominal gerunds into the first half of the seventeenth century, reason adjuncts with *for* once more show a clear pattern of replacement.

In conclusion, the data again do not straightforwardly support the claim that verbal gerunds were promoted by use in prepositional environments. Firstly, Middle English usage of the verbal gerund is marked by the emergence of a single prepositional pattern – the combination with *in* – with any extensions to other environments occurring only sporadically. The claim that verbal gerunds preferred prepositional environments, then, is certainly an overgeneralisation, at least as far as the initial development of the pattern is concerned. Secondly, the data indicate that verbal gerunds did not really fill any functional gap (at least not in terms of their ability to combine with prepositions). If anything, verbal gerunds were primarily used to replace other gerund constructions – bare nominal gerunds, specifically – rather than to fill in for a construction that did not previously exist.

4.2.2 *Definite nominal gerunds: watching from the side?*

As the previous section focused on the interaction between bare nominal and verbal gerunds, an important question has been ignored: what has been the part played by definite nominal gerunds? Given the higher degree of functional differentiation between definite nominal gerunds on the one hand and bare nominal and verbal gerunds on the other (see Section 4.1 above), we might expect the use of definite nominal gerunds to be more indifferent to developments in the other two types. Indeed, it appears that definite

nominal gerunds have developed a number of uses of their own that are dependent on the special semantics of the definite article and, as a result, more or less unique when set against the use of bare nominal and verbal gerunds. This suggests that the relation between definite nominal gerunds on the one hand and bare nominal and verbal gerunds on the other is for the most part one of functional differentiation rather than competition.

The use that is most evidently specific to definite nominal gerunds is that of temporal adverbials situating an event or situation in the matrix clause with respect to a temporal landmark. As pointed out above, more than the other two gerund types, definite nominal gerunds tend to co-occur with prepositions other than the most frequent six. Most prominently, these include temporal prepositions such as *after*, *at*, *before*, *since* or *upon*. Definite nominal gerunds combine with these prepositions to express a temporal relation between the state of affairs in the main clause and some specific event that then serves as a temporal reference point vis-à-vis the state of affairs in the main clause. Definite nominal gerunds lend themselves well to this use due to the nature of the definite article, which marks an event as specific and accessible to the reader – and therefore ideally suited to serve as a temporal landmark in discourse. Consider the examples given in (38).

- (38) (a) Also telle hem how I am oute of preson, and what adventure befelle me at the getynge of this swerde. (a1470, HC)
- (b) in whiche book ben comprised briefly [...] the historical Actes & wonderful dedes syth the fyrst makyng of heuen & erth vnto the begynnyng of the regne of kyng edward the fourth (1477–84, HC)

- (c) if it shall appeare upon the measuring therof [...], that there is more Corne or graine loded to be transported into the parties beyonde the Sea [...], than it shalbe lefull [...] to cause the owner or conveyer therof unto the saide towne of Bristoll, to make sale of suche corne and graine (1542–3, PPCEME)

By contrast, being typically generic or indefinite, bare nominal gerunds – and verbal gerunds in their wake – do not favour use as temporal landmarks, which explains why bare nominal and verbal gerunds rarely co-occur with temporal prepositions in Middle and Early Modern English. Notice that, as repeatedly pointed out above, bare nominal and especially verbal gerunds can occasionally refer to a specific event without being necessarily indefinite, provided that the implied agent of the gerund is controlled by an element in the matrix clause. In such uses, the two gerund types do occasionally combine with members of the set of temporal prepositions, as shown in (39). As the use of controlled gerunds of this type became more current, they may have turned into a competitor for definite nominal gerunds. This, however, happened after the period under investigation.

- (39) (a) Upon viewing of wich thinges there was devised tow fortes to be made upon the entry of the haven (1550–2, PPCEME)
- (b) then, soone after, I tooke my Cotch and went to Linton, wher, I aftor salutinge my mother, praied, and so went to supper (1599–1601, HC)

A certain degree of functional differentiation is also apparent in combinations of definite nominal gerunds with the prepositions *of*, *by* and *in*. The semantic relations ex-

pressed by these prepositions are not strongly affected by the choice of gerund type, and it is true that, consequently, occasional examples show definite gerunds that closely correspond to uses with a bare nominal or verbal gerund. For example, in (40) the definite nominal gerund *the turnynge of thi will* is in fact coordinated with the functionally equivalent bare nominal gerund *with-drawynge of thyne herte fro luste*, both referring to a specific event whose implied agent is controlled by the subject of the matrix clause.

- (40) Grace and the goodenes of oure lorde Ihesu Criste that he hath shewed to the, – in with-drawynge of thyne herte fro luste and from likynges of worldely vanite, and vse of fleshly synnes and in the turnynge of thi will enterely to his seruyce and his plesaunce, – bryngith into my herte much mater to loue hym in his mercy. (c1440, HC)

However, in the majority of cases, the choice of a definite nominal gerund with *of*, *by* or *in* is, if not necessarily the only option available, at least clearly motivated by the functional properties of definite marking. This is most evident when the gerund refers to a specific non-controlled event, as in the examples in (41), where a bare nominal or verbal gerund is virtually ruled out. In the extreme case, a definite nominal gerund may even have the effect of blocking a controlled interpretation. This is illustrated in (42), where *inbreathing* would be readily – but mistakenly – interpreted as being controlled by the highly agentive subject of the matrix clause, if it were not for the definite article, which marks the referent of the gerund as accessible through the alternative strategy of drawing on shared knowledge (the common ‘inbreather’ of ill breaths is man and not the air).

- (41) (a) Charlys herynge of the subduynge of kynge Rycharde, sent into Engla~de two of his houshold knyghtys, requyrynge kynge Henrye the. iiiii. [...] to send home his doughter Isabell latelye maryed vnto kynge Rycharde (1516, PPCEME)
- (b) through most Counties of this Realme Horstealinge is growen so co~mon, as neither in Pastures or Closes nor hardlie in Stables the same are to be in safety from stealinge, whiche ensueth by the redye buyinge of the same, by Horscorsers and others in some open Fayres or Markett~ farr distant from the Owner, and withe suche speede as the Owner cannot by pursuete possiblie helpe the same (1588–9, HC)
- (42) A man cannot finde a better remedie than this triacle [i.e. ‘ointment’] against the pestilence, which being also as it were a wild beast, bred of y^e corruption of the ayre, leaping vpon men by the inbreathing of that ill breaths which destroyeth, wasteth, and maketh hauock not only of one man, but of whole tounes and Cities. (1568, PPCEME)

Sometimes the matrix clause provides a potential controller, but the event referred to by the gerund is also an accessible discourse participant that is highly prominent in the discourse. For example, in (43) *the churning thereof* is used in a text precisely about churning butter. It is a natural choice therefore to represent this action as retrievable through the definite strategy rather than the controlled strategy.

- (43) if you churne your butter in the heate of Sommer it shall not be amisse, if during the time of your churning you place your Churn in a paille of cold

water as deep as your Creame riseth in the Churne; and in the churning thereof let your stroakes goe slow, and be sure that your churne be cold when you put in your creame (1615, HC)

In yet other cases, the use of a definite gerund is simply triggered by coordination or structural parallelism with another definite NP. The motivation for definite marking, then, is the same for the gerund as for the coordinated or parallel NP. Thus, in (44), *the redyng of historyes* is construed parallel to *the experyence of aduerse fortune*, both being sources of insight in *wysedome and polycye*.

- (44) He is / and euer hath ben reputed the wysest / whiche by the experyence of aduerse fortune hath byholden and seen the noble Cytees / maners / and variaunt condycions of the people of many dyuerse Regyons / For in hym is presupposed the lore of wysedome and polycye [...] / yet he is more fortunat / and may be reputed as wyse [...] that may by the redyng of historyes conteynyng dyuerse customes Condycyons / lawes & / Actes of sondry nacions come vnto the knowleche of and vnderstandynge of the same wysedom and polycye (1477–84, HC)

All in all, it appears that the choice of definite nominal gerunds with *in*, *by* and *of* is motivated. This may explain why the use of these combinations – though marginal – remains stable throughout the period examined (see Figure 4), despite the rise of verbal gerunds with the same prepositions.

A further group of definite nominal gerunds – the largest group, in fact – is found with the preposition *for*. Regarding these, it is striking to see that while *for* can express a variety of semantic relations, it nearly always designates a purpose or goal when used with definite nominal gerunds. Accordingly, the diachronic rise of definite nominal gerunds with *for* is entirely due to use with purposive *for*. This strong bias is demonstrated in Figure 6, which compares the use of definite nominal gerunds with *for* as purpose adjuncts to their use as reason adjuncts.

[INSERT FIGURE 6]

The preference for purposive uses distinguishes definite nominal gerunds with *for* from bare nominal and verbal gerunds, which are much more commonly used with *for* to form reason adjuncts (see Figure 5 and the discussion in Section 4.2.1 above). Predictably, when a reason adjunct with *for* contains a definite gerund, the latter refers to a specific and accessible event, contrasting with bare nominal and verbal gerunds along the by now familiar lines. An example is given in (45).

- (45) after the sharpe and vehement contention, betwene him [i.e. Achilles] and Agamemnon, for the taking away of his concubine (1531, PPCEME)

More interesting are the purposive uses of *for*, where the choice between definite nominal gerunds on the one hand and bare nominal or verbal gerunds on the other appears to be organised differently. This is plausibly the one area where definite nominal gerunds have come closest to competing with bare nominal and verbal gerunds, and may in fact

have partly replaced the other two types. Nevertheless, definite nominal gerunds are not entirely equivalent to the other two types. Start by observing that purpose adjuncts typically denote events that are still to be realised and that, being more or less hypothetical, are not easily conceived of as having precise spatio-temporal coordinates. In purpose adjuncts, then, the definite article does not mark specificity and accessibility in the strictest possible sense. That is, accessibility lies not so much in the interpreter's ability to home in on a specific occurrence of a situation with fixed spatio-temporal coordinates, as in the construal of a situation as a 'common goal'. Basically, it is because a goal can be known and recognised as a goal among a larger group of people, that it can also be accessible as shared knowledge in the communicative setting of discourse.

In its most distinctive manifestation, a common goal has the following characteristics: first, it benefits others than those who strive to achieve it, and, as a consequence, it carries an aura of general importance; second, it exists as a goal prior to any actions taken to achieve it and continues to exist afterwards; and third, just as it is not directly linked to the intentions or desires of a single agent, a single agent is not capable of realising it, but merely contributes to its achievement. The definite nominal gerunds in (46) are used with *for* to express common goals that fully answer the description given. For example, *the edifynge of theyr bretherne* in (46a) is a goal whose validity is generally recognised, that benefits the *bretherne* more than the *ploughmen*, and that is presumably not achieved by the *ploughmen*'s efforts alone. Likewise, *the keepinge of our peace* in (46b) benefits an entire county, is an ever-continuing task, and constitutes a responsibility that is shared by a variety of people and which can even be transferred from one authority to another, as indeed happens in the example. The extreme case is presented by (46c): as a goal, *the disclosing of Nature* potentially entails the enlightenment of all

mankind, and certainly represents an ongoing process that feeds on all kinds of *inventions and experiments* without ever being wholly completed. In fact, the preposition *for* here could be said to mark an abstract benefactive rather than a goal.

- (46) (a) But they that wil be true ploughmen [i.e. preachers] muste worke faythfullye for Goddes sake, for the edifiynge of theyr bretherne. (1549, PPCEME)
- (b) And where as we at this time have written aswell to the sheriffe of that our shire [...] as also to the justices of our peace within our said shire [...], comaundinge and straitly chargeinge that as well the said sheriffe as the said justices endeavor them for the keepinge of our peace and entertainment of our subjectes in good quiet and restfullnes dureinge the time of our jorney into the partes beyond the sea (1520, PPCEME)
- (c) so assuredly the search and stirre to make gold hath brought to light a great number of good and fruitfull inuentions and experiments, as well for the disclosing of Nature; as for the vse of mans life. (1605, HC)

In other examples, definite nominal gerunds combine with *for* to express goals that approach the prototype of the common goal but do not possess all of its features. For example, a man's *keeping of his health* in (47a) is not a goal to which a great number of people contribute or from which anyone benefits more than the person whose health is concerned. Still, good health will be commonly recognised as a valid goal for any individual person, and is certainly a goal whose achievement cannot depend solely on the choice between *white wines* and *red and Clared wine*, but which requires continuous attention and care. A different set of features of a common goal is highlighted in (47b):

as a goal, *the achieving thereof* clearly originates from the personal agenda of one man, *this Cardinall*, but its achievement requires scheming and intrigue, inevitably involving others, and the action taken towards its achievement (casting doubt on the acceptability of another marital candidate) can contribute to success only indirectly.¹⁴

- (47) (a) Smal white wines scoure and driue out the vncleannesse of the bodie as much as it is possible to be done by them, and red and Clared wine stoppe and hold backe, and fill the bodie full of ill humors, now which are most profitable to be taken most commonly of a man for the keeping of his health (1568, PPCEME)
- (b) This Cardinall therefore [...] devised to allure the kinge [...] to cast fantasy to [i.e. ‘get enamoured of’] one of the Frenche kings Sisters: [...] And for the better atcheving thereof, requested Langland, Bishoppe of Lincolne, and ghostly father to the kinge, to put a scruple into his graces head, that itt was not lawfull for him to marry his brothers wife (1555, PPCEME)

The examples in (46)–(47) can be contrasted with bare nominal and verbal gerunds with purposive *for*, as in (48). Here, the goal designated by the gerund is immediately and exclusively linked to the desires and intentions of the controller in the matrix clause, and can be realised directly by the action described in the matrix clause (see also the examples in (33) above).

- (48) (a) I am in a greet angonye howe js best fore me to sywe to hym fore rehauyng off my place. Pat goode lorde woot full lytell how moche harme he doothe me, and how lytell goode ore worshyp it dothe hym. (1472, HC)
- (b) For besydes money, he looketh for meate and drinke for doinge his dame pleasure. (1567–8, PPCEME)

The contrast established between common goals and more direct or personal goals underscores the semantic impact of the definite article and implies that the choice between definite nominal gerunds and bare nominal or verbal gerunds is not arbitrary in the context of purposive *for*. Still, it is clear that conceptually the distinction may not be discrete (we can imagine intermediate cases), and that the choice of one variant over another may often be primarily a matter of construal (many goals might be presented as common goals if rhetorical purposes so demand). Especially in the Middle English period, bare nominal gerunds could combine with *for* to express goals that look suspiciously like common goals. Thus, *putting a-wey of þis opyn & sclanderouse deseyt* in (49a) can easily be conceived of as a common goal (and is in fact coordinated with a definite nominal gerund). Conversely, in the Early Modern data definite nominal gerunds occasionally occur with *for* to designate goals showing very few of the features of common goals. For instance, *the avoiding of singularity* in (49b) may be thought of as a personal goal that contributes little to general well-being.

- (49) (a) And noght only for exclusion & puttyng a-wey of þis opyn & sclanderouse deseyt, [...] but also for þe redy remevyng of grete multitude of such wyne, deceyuablych contrefetyd and medlid on þe other syde of þe see, and broght

hydir to selle, The peticion of þe Comons hath oftyn here-to-for requirid a couenable remedie (1419, HC)

- (b) This Lord Chauncelour, albeit he was to god and the world well known of notable vertue [...] yeat, for the avoiding of singularity, wold he appeare none otherwise then other men in his apparell and other behaviour. (1555, PPCEME)

This hints at a certain degree of competition between definite nominal gerunds on the one hand and bare nominal and verbal gerunds on the other. It must be pointed out, however, that this view is only weakly corroborated by the quantitative data. There is no decrease in bare nominal and verbal gerunds concomitant to the marked increase of definite nominal gerunds with purposive *for* (compare Figures 5 and 6 above). At the same time, compared to other environments, where the frequency of verbal gerunds continually increases for several centuries, it is remarkable that the rise of verbal gerunds with purposive *for* seems to peter out very soon after its inception. A blocking effect due to the use of definite nominal gerunds in the same environment is therefore not entirely inconceivable, but the blocking factor may also be the *to*-infinitive, which is also used to form purpose adjuncts, and more closely resembles bare nominal and verbal gerunds with *for* in being typically controlled and in expressing direct goals rather than common goals.

A few final words are in place concerning combinations of definite nominal gerunds with *to*. Of the three gerund types, it is definite nominal gerunds that most commonly combine with *to*, bare nominal gerunds being rare and verbal gerunds hardly occurring at all. In part, definite nominal gerunds are used with *to* just as with *for* to ex-

press a common goal. Thus, the definite nominal gerunds in (50) represent preconceived or pre-established, often socially relevant goals to which the action of the main clause more or less indirectly contributes. Note that as (50a) shows, common goals with *to* historically predate those with *for* and may therefore be thought of as a predecessor of the more frequent pattern.

- (50) (a) Also y bequeth to þ^e Mendynge of þ^e heye way be-twen Hillindon and Akton, xl.s. (1402, HC)
- (b) For if ye bryng it to passe, that the yomanry be not able [...] to mary their daughters to the auoidynge of whoredome, I say ye plucke saluation from the people and vtterly distroy the realme. (1549, PPCEME)

In other cases the combination of *to* with a definite nominal gerund functions more as a complement than as an adjunct, yet the sense of a commonly recognised goal is still eminent. A clear example is given in (51), where *the understanding of autors* and *the most swete and pleasant redinge of olde autours* are construed (within a generic text; see Section 4.1 above) as the ultimate gratification and actual goal of the strenuous process of learning grammar, and must therefore be thought of as the preset end-stage of grammar teaching.

- (51) Grammer beinge but an introduction to the understanding of autors, if it be made to longe or exquisite to the lerner, hit in a maner mortifieth his corage: And by that time he cometh to the most swete and pleasant redinge of olde

autours, the sparkes of feruent desire of lernynge is extincte with the burdome
of grammer [...]. (1531, PPCEME)

More marginally, definite nominal gerunds can also be used to specify a (typically undesirable) result, which is then presented as an accessible fact. An example is given in (52).

- (52) so great haboundaunce of cappes and hattes redy wrought and made have
been and daily be brought from the p~ties of beyond the See into this
Realme, and here have been and daylly bee uttred and sold [...] to the great
Idelnesse enpov~ysshynge and utter undoing of great multitude of the Kyngis
naturall subjectis (1511–2, PPCEME)

It is difficult to assess to what degree definite nominal gerunds with *to* competed with bare nominal gerunds. In resultative uses as in (52) above, definite nominal gerunds are likely to have replaced bare nominal gerunds (despite a slight semantic difference – compare (16a) above). Otherwise, replacement is doubtful. In the entire data set, only two bare nominal gerunds with *to* function as purpose adjuncts, which is hardly enough to speak of replacement. At best, competition may have blocked any growth of the pattern – though again the main blocking factor may in actual fact have been the *to*-infinitive rather than the definite nominal gerund. The most important remaining use of bare nominal gerunds with *to* is that of prepositional complement, especially in idiomatic combinations where the purposive sense of *to* is largely absent, as in the examples in (53a–b). Disregarding the occasional intrusion of a definite nominal gerund, bare

nominal gerunds appear to have survived in this use into Early Modern English – a fine illustration of which is the continued association of the idiom *fall to* with bare nominal gerunds up until the eighteenth century, as shown in (53c).

- (53) (a) Schynyng eyn [...] qwan thei be of amenabyt gretnes, moyste and schynyng, thei sygnyffye gret nobylnes and gret ymagynacionnys off wysdam, dysposycion also to wraethe and to drynkyng off wyne (c1450, HC)
- (b) And out they goe, in a fustian fume, into the backe syde, where was a great Axiltrye [i.e. ‘axle’], and there fell to pitching of the barre [i.e. a game involving a heavy piece of wood that the contenders throw as far as possible] (1567–8, PPCEME)
- (c) words could not vent half their rage; and they fell to pulling of caps, tearing of hair, and dragging the clothes off one another’s backs (1749, CLMETEV)

To summarise, definite nominal gerunds do not engage in competition to the same extent as do bare nominal and verbal gerunds. This is evident from their distribution over the set of prepositions. Definite nominal gerunds have specialised into two major uses – that of temporal landmarks with prepositions such as *after*, *at* and so forth, and that of purpose adjuncts designating a ‘common goal’ with the prepositions *for* and *to*. In the former use, competition with bare nominal or verbal gerunds is as good as non-existent, whereas in the latter use a certain degree of competition is possible but is only weakly apparent (if apparent at all) in the data. With other prepositions, definite nominal gerunds remain relatively marginal throughout the period examined. This is especially true for their use with the prepositions *without*, *by*, *for* (in its causal sense) and *to*

(in non-purposive prepositional complements) and, to a lesser extent, *of* and *in*. When definite gerunds are occasionally used with these prepositions, their use tends to be clearly motivated by the properties of the definite article. While it is not incorrect to state that definite nominal gerunds potentially overlap in use with other gerund types, they never become very current in such overlapping functions and at no point is there very straightforward quantitative evidence that definite nominal gerunds replaced or were replaced by another gerund type in any specific environment. All in all, then, definite nominal gerunds can be said to go their own way, more or less independently of the other two gerund types, specialising into their own distinct set of uses.

4.3 *Syntactic differences*

The preceding discussion has emphasised the similarity between bare nominal and verbal gerunds, which were in competition over the same environments, as opposed to definite nominal gerunds, which specialised into their own niche of language use. This implies that verbal gerunds did not fill a syntactic gap in any strong sense. The appearance of verbal gerunds did not bring about a dramatic innovation involving an entirely new set of expressive options suddenly available to users of English. Instead, the uses to which verbal gerunds were put were to a large extent established on or at least prefigured by the various uses of bare nominal gerunds. The question therefore remains what drove the spectacular increase of verbal gerunds that began in the Middle English period and continued into Modern English?

An answer to this problem is suggested by a final functional difference between the three gerund types. While from a discourse-functional and distributional point of

view verbal gerunds align themselves with bare nominal gerunds, they differ from the latter in terms of their internal syntax. This difference is reflected in the way the three gerund types are used, in that verbal gerunds display greater syntactic flexibility. That this is so is most obvious in later stages of the development of the gerund. For example, in Present-Day English, there is no nominal alternative to the auxiliary *being* in (54a), the object complement *responsible* in (54b), or the subject complement *a minimalist* in (54c).

- (54) (a) She showed no sign of being overwhelmed by the atmosphere of Schloss Langenbach. (CB)
- (b) Only by returning it to the peasantry, he argued, only by making farmers responsible for marketing their own produce, would it be possible to ensure regular food supplies. (CB)
- (c) I will have to get back to being a minimalist to retain such sanity as I have. (CB)

The syntactic configurations illustrated in (54) are attested only sparingly in the historical data. Nevertheless, the data show that from the very start the internal syntax of verbal gerunds was more flexible and more strongly favoured complex patterning than that of nominal gerunds – even when the syntactic potential of either construction type was in theory roughly identical.

This is demonstrated in Figures 7 and 8. Figure 7 collapses the different sub-periods of the corpus and categorises the three whole sets of verbal, bare nominal and definite gerunds into two distinct categories. The first category is that of ‘simple’ ger-

und constructions, which contain only a patient argument, either expressed as a bare NP (in the case of verbal gerunds) or as an *of*-phrase (in the case of nominal gerunds). The second category is that of ‘complex’ gerund constructions, which in addition to a patient argument contain some other modifier to the gerundial verb (e.g. an adjective, a prepositional phrase, a second non-subject argument and so on). The examples in (55) illustrate the distinction between simple and complex gerund constructions.

- (55) (a) they would not obey hym, but refused and defendid the~ by takyng sanctuarye (1556, PPCEME)
- (b) I praye you, my Lordes, be good vnto vs, and lette vs not bee molested for dischargyng our Consciencences truelye (1554, HC)

[INSERT FIGURE 7]

The same sub-categorisation is repeated in Figure 8, with the only difference that the set of complex gerund constructions has been reduced by only including those examples whose additional modifier is a prepositional phrase. The rationale for this reduction is that of all possible extra modifiers prepositional phrases are most likely to be acceptable in both nominal and verbal gerund constructions, as is illustrated in (56).¹⁵ In this way, Figure 8 indicates more reliably how simple and complex syntactic configurations correlate with the choice between nominal and verbal constructions.

- (56) (a) The Lord kepe me from doyng this thing vnto my maister yat is the lordes anointed. (1549, PPCEME)

- (b) Humfrey Boucher, base sunne to the late Lorde Berners, did much coste in translating of the priorie into a maner place (1535–43, PPCEME)
- (c) what with the shotte & gorynge [i.e. ‘stabbing’] of their horses with the sharpe stakes, they stumbelyd one vpon another [...], so y^t in a short whyle a great multytude of horse & men were layde vpon the grounde. (1516, PPCEME)

[INSERT FIGURE 8]

Figures 7 and 8 reveal a clear preference for verbal means of expression when the gerund construction’s internal syntax is more complex.¹⁶ This tendency is not merely the result of the greater syntactic potential of verbal gerunds. As Figure 8 shows, verbal means of expression are preferred in complex gerunds even when the nominal alternative is perfectly viable.

Interestingly, the observations in Figures 7 and 8 extend to another area of gerundial usage. The same skewed distribution between simple and complex environments is found in the relation between definite nominal gerunds and definite hybrid gerunds. As defined here, definite hybrid gerunds combine a definite article with a verbally expressed object argument, as illustrated in (57).¹⁷

- (57) (a) Now they proceed to the Reading the Proofs. (1600, HC)
- (b) First the childe is to be taught, how to call every letter, pronouncing each of them plainely, fully and distinctly; [...] More specially to bee carefull, for the

right pronouncing the five vowels, in the first place, as a, e, i, o, u. (1627, HC)

What is important for our purposes is that, as the examples in (57) indicate, definite hybrid gerunds shows the same variation between simple and complex internal syntax as other gerund types. Figure 9, then, gives the proportion of definite nominal and definite hybrid gerunds in simple and complex environments for the period 1570–1640 (see Appendix B). Only one sub-period is represented, because definite hybrid gerunds only began to gain some currency in the Early Modern period. The result is evident: the use of definite hybrid gerunds conforms to the tendency for complex syntax to associate with verbal means of expression.¹⁸

[INSERT FIGURE 9]

Taken together, Figures 7 through 9 hint at the possible functional motivations behind the rise of verbal gerunds (and, by extension, definite hybrid gerunds). Knowing that verbal gerunds grew proportionately more frequent over time, it can be deduced that the use of verbal gerunds has brought about an increase in the use of gerund constructions with more complex internal patterning (see also Appendix B). If we interpret this overall trend as the manifestation of an underlying functional motivation, the emergence of verbal gerunds can be seen as at least in part driven by the need for syntactically more versatile means of expression. Some interesting evidence in favour of this view comes from a diachronic shift in the proportion of simple to complex constructions in verbal gerunds. Figure 10 tracks the frequency of verbal gerunds with simple and

complex internal syntax, revealing that whereas the increase in verbal gerunds between 1500 and 1640 is felt in roughly equal measure in complex and in simple gerund constructions, the initial rise in the frequency of verbal gerunds between 1350 and 1500 seems to be mostly due to verbal gerunds with complex internal syntax.¹⁹ This suggests that the original impetus for the emergence of verbal gerunds may have lain in the drive for greater syntactic flexibility.

[INSERT FIGURE 10]

This is not all to it, however. Recall that the preference for verbal gerunds over nominal gerunds is not confined to complex syntactic configurations that can only be expressed verbally. It is clear that in all complex environments speakers prefer to code the patient of a gerund by means of a bare noun phrase rather than an *of*-phrase, regardless of whether a nominal alternative is available or not. As such, the tendencies observed in gerundial usage are reminiscent of Rohdenburg's (1996) 'cognitive complexity principle', which states that 'In the case of more or less explicit grammatical options the more explicit one(s) will tend to be favored in cognitively more complex environments' (1996: 151). Indeed, although Rohdenburg primarily associates explicitness with formal weight,²⁰ a number of arguments suggest that despite the greater formal weight of the *of*-phrase, bare noun phrases represent the more explicit option. First, given that in all clausal environments patient arguments are expressed by means of a bare noun phrase, the bare noun phrase is by far the more canonical way of coding the patient. Second, being a prepositional phrase, an *of*-phrase is less explicit in marking the difference in syntactic and semantic status between an argument and a non-argument – a dif-

ference that becomes increasingly relevant exactly in expressions that contain both arguments and non-arguments, and in which the difference between a prepositional phrase and a bare noun phrase can be seen as an iconic reflex of degrees of semantic ‘closeness’ to the action denoted by the verb. Third, *of*-phrases, unlike bare noun phrases, can be ambiguous between a patient interpretation and an agent interpretation (cf. Jespersen 1940: 102), as is illustrated in (58).

- (58) it shoulde bee harde for him to brynge his purpose to passe, without the gathering and great assemble of people and in maner of open warre (1514–8, PPCEME)

If the assumption is correct that bare noun phrases are more explicit than *of*-phrases in marking the patient of a verb, this has the important consequence that, compared to their nominal counterparts, verbal gerunds appear at once to offer a more economic (i.e. shorter) and a more iconic (i.e. more explicit) way of saying the same thing (cf. Haiman 1983). In other words, economic and iconic motivations converge in the verbal gerund, giving it a plausible functional advantage over its nominal competitors.

5 CONCLUSIONS

The history of the English gerund cannot be understood without a close understanding of the functioning of the entire system of gerund constructions. Use of the three major gerund types examined in this paper is organised along two major divisions. On the one hand, verbal gerunds – and definite hybrid gerunds – contrast with bare and definite

nominal gerunds in allowing greater syntactic flexibility (Section 4.3). On the other hand, bare nominal and verbal gerunds resemble each other in the way they function in discourse, as opposed to definite nominal gerunds (Section 4.1). These discourse-functional properties of gerund types interact with the concrete uses to which they are put, as is revealed by the distribution of the gerund types over the set of available prepositions. Definite nominal gerunds have specialised into a set of uses that are uniquely motivated by the semantic import of the definite article (Section 4.2.2). Bare nominal and verbal gerunds compete with one another over the same set of environments (Section 4.2.1).

Together, functional differentiation and overlap between the different gerund constructions can explain some of the historical developments witnessed in the use of the gerund. The competition between bare nominal and verbal gerunds, along with the greater syntactic flexibility of verbal gerunds, can account for the loss of bare nominal gerunds and the concomitant rise of verbal gerunds. In turn, the functional specialisation of definite nominal gerunds can account for the rise of definite nominal gerunds alongside verbal gerunds.

Regarding the question whether the gerund filled a syntactic gap, a nuanced answer must be formulated. It is not correct to say that verbal gerunds substituted for the infinitive in prepositional environments because they presented the only clausal structure that could combine with prepositions. The use of verbal gerunds is clearly anticipated by the use of bare nominal gerunds, and the rise of verbal gerunds consists more in a large-scale replacement of bare nominal gerunds than in the filling of a grammatical void. Still, developments in gerundial usage are not unmotivated from a functional perspective. First, there is the dramatic rise of bare nominal gerunds halfway through the

Middle English period, which, in speed and scope, is unparalleled by any later development in the gerund. This may reflect the fact that at that time the assumed prepositional gap was indeed still a gap. Second, there is the rise of verbal gerunds. Because the unique syntactic flexibility of the verbal gerund is likely to have played its part in furthering the construction, verbal gerunds too filled a kind of gap, in that they provided a more flexible means of expression, at once iconic and economic, in an area of grammar where it was hitherto unavailable. The gap, then, lay in internal rather than external syntax – that is, in internal syntactic flexibility rather than in external combinatorial potential.

In other ways, too, developments in the gerund are functionally motivated. We can see that gerund constructions only gained frequency in those areas where they somehow came in useful. This is best illustrated by definite nominal gerunds, which remained marginal in those uses where they could not sufficiently distinguish themselves from bare nominal or verbal gerunds, but prospered in uses where the semantic import of the definite article was most fully and uniquely felt. The result is a division of labour between the different constructions, largely following the isomorphic principle of ‘one meaning one form’.

Going one step further, it may be argued that a similar complementary relationship is maintained between the three gerund constructions and the infinitive. It is certainly reasonable to assume that the spectacular rise in gerundial usage in prepositional environments was possible only because of the absence of the infinitive in those environments. But effects may also be witnessed on a smaller scale. Particularly conspicuous is the absence of purpose adjuncts formed by *to* with a bare nominal or verbal gerunds and the somewhat half-hearted use of bare nominal and verbal gerunds with purposive *for*.

The reluctance of bare nominal and verbal gerunds to combine with purposive *to* and *for* may result from a blocking effect due to the use of definite nominal gerunds with the same prepositions. However, since the latter are typically employed to express common goals, it is more likely that any blocking effect results from the *to*-infinitive, whose purposive semantics and control behaviour more closely resemble that of bare nominal and verbal gerunds, than do the characteristics of purposive definite nominal gerunds.

In all these cases, functional motivation takes the form of motivated decisions made by language users on the basis of what synchronic grammar has to offer (García 1999; Haspelmath 1999; Hawkins 2004). That is, if a new form did not differ substantially from a more common older form, the older form has been maintained, but if a new form had a unique functional advantage, it has either come to replace or to complement the older form. In this respect, the history of the gerund indicates that functionally driven language change is in fact possible, provided that it is implemented through repeated motivated choices in synchronic usage.

APPENDIX A1

				1250–1350		1350–1420		1420–1500		1500–1570		1570–1640	
				AF	RF	AF	RF	AF	RF	AF	RF	AF	RF
VG	N-OBL			2	2.1	1	0.5	1	0.5	3	0.5	6	3.2
	OBL	in		1	1.0	9	4.9	31	14.5	111	19.5	40	21.1
		for	purp.					1	0.5	21	3.7	6	3.2
			reas.							35	6.1	11	5.8
			other							9	1.6	6	3.2
			TOTAL					1	0.5	65	11.4	23	12.1
		of				2	1.1	6	2.8	19	3.3	23	12.1
		by				2	1.1	1	0.5	35	6.1	44	23.2
		to								1	0.2	2	1.1
		without				1	0.5	1	0.5	14	2.5	6	3.2
		other				1	0.5	3	1.4	17	3.0	14	7.4
		TOTAL		1	1.0	15	8.1	43	20.1	262	46.0	152	80.1
BNG	N-OBL			6	6.2	10	5.4	19	8.9	24	4.2	6	3.2
	OBL	in		1	1.0	55	29.9	43	20.1	50	8.8	5	2.6
		for	purp.	1	1.0	11	6.0	10	4.7	32	5.6	11	5.8
			reas.	1	1.0	4	2.2	5	2.3	44	7.7	1	0.5
			other			4	2.2	6	2.8	14	2.5	1	0.5
			TOTAL	2	2.1	19	10.3	21	9.8	90	15.8	13	6.8
		of		1	1.0	13	7.1	17	7.9	35	6.1	3	1.6
		by				4	2.2	9	4.2	30	5.3	6	3.2
		to				2	1.1	8	3.7	5	0.9	2	1.1
		without				2	1.1	3	1.4	5	0.9	1	0.5
		other				8	4.3	5	2.3	17	3.0	3	1.6
		TOTAL		4	4.1	103	55.9	106	49.6	232	40.7	33	17.4
DNG	N-OBL			5	5.1	14	7.6	12	5.6	66	11.6	32	16.9
	OBL	in				2	1.1	5	2.3	28	4.9	13	6.8
		for	purp.			2	1.1	4	1.9	52	9.1	29	15.3
			reas.			1	0.5	2	0.9	6	1.1	1	0.5
			other							10	1.8	3	1.6
			TOTAL			3	1.6	6	2.8	68	11.9	33	17.4
		of		2	2.1	3	1.6	22	10.3	16	2.8	4	2.1
		by				5	2.7	3	1.4	12	2.1	3	1.6
		to		1	1.0	3	1.6	8	3.7	25	4.4	6	3.2
		without								1	0.2		
		other				6	3.3	11	5.1	42	7.4	25	13.2
		TOTAL		3	3.1	22	11.9	55	25.7	192	33.7	84	44.3

Verbal (VG), bare nominal (BNG) and definite nominal gerunds (DNG) in oblique (OBL) and non-oblique (N-OBL) environments and their distribution over different prepositions, with absolute (AF) and relative frequencies per 100,000 words (RF).

APPENDIX A2

	1350–1420			1420–1500			1500–1570			1570–1640		
	VG	BNG	DNG	VG	BNG	DNG	VG	BNG	DNG	VG	BNG	DNG
about									4	5		1
afore									1			
after				2			1	2	9	1		6
against							1	1	1		1	
as		1					1	2		1		3
at	1		3	1	1	6		1	5			5
before						1	1		6			
besides												2
contra									1			
for/concerning									2			
from		1					4	7	3	4	1	1
into		2	1									
lest										1		
of/for							2	1				1
on							1					
since						1			1			1
through					2							
to/for									1			
toward									1			
towards												1
unto			1		1	1						
upon								2	3			
with		4	1		1	2	6	1	4	2	1	4
TOTAL	1	8	6	3	5	11	17	17	42	14	3	25

Verbal (VG), bare nominal (BNG) and definite nominal gerunds (DNG) with other prepositions than the most frequent six (absolute frequencies).

APPENDIX B

			1350–1420		1420–1500		1500–1570		1570–1640		TOTAL	
			AF	%	AF	%	AF	%	AF	%	AF	%
VG	(i)	simple	10	66.7	18	41.9	154	58.8	93	61.2	275	58.3
		complex	5	33.3	25	58.1	108	41.2	59	38.8	197	41.7
		TOTAL	15	100.0	43	100.0	262	100.0	152	100.0	472	100.0
	(ii)	simple	10	71.4	18	56.3	154	70.0	93	72.7	275	69.8
		add. PP	4	28.6	14	43.8	66	30.0	35	27.3	119	30.2
		TOTAL	14	100.0	32	100.0	220	100.0	128	100.0	394	100.0
BNG	(i)	simple	85	82.5	91	85.8	196	84.5	26	78.8	398	84.0
		complex	18	17.5	15	14.2	36	15.5	7	21.2	76	16.0
		TOTAL	103	100.0	106	100.0	232	100.0	33	100.0	474	100.0
	(ii)	simple	85	90.4	91	91.9	196	92.9	26	83.9	398	91.5
		add. PP	9	9.6	8	8.1	15	7.1	5	16.1	37	8.5
		TOTAL	94	100.0	99	100.0	211	100.0	31	100.0	435	100.0
DNG	(i)	simple	19	86.4	47	85.5	154	80.2	69	82.1	289	81.9
		complex	3	13.6	8	14.5	38	19.8	15	17.9	64	18.1
		TOTAL	22	100.0	55	100.0	192	100.0	84	100.0	353	100.0
	(ii)	simple	19	95.0	47	95.9	154	91.1	69	94.5	289	92.9
		add. PP	1	5.0	2	4.1	15	8.9	4	5.5	22	7.1
		TOTAL	20	100.0	49	100.0	169	100.0	73	100.0	311	100.0
DHG	(i)	simple							5	45.5		
		complex							6	54.5		
		TOTAL							11	100.0		
	(ii)	simple							5	62.5		
		add. PP							3	37.5		
		TOTAL							8	100.0		

Verbal (VG), bare nominal (BNG), definite nominal (DNG) and definite hybrid gerunds (DHG) with (i) simple vs. complex syntax and (ii) simple syntax vs. with additional PP, in absolute frequencies (AF) and percentages (%).

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NOTES

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2. All corpus examples are accompanied by their approximate date (except for Present-Day examples), and by the source from which they have been taken. Sources used are the Collins Cobuild Corpus (CB), the Helsinki Corpus (HC), the Oxford English Dictionary (OED), the Penn-Helsinki Parsed Corpus of Middle English, Second Edition (PPCME), the Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME), and the Corpus of Late Modern English texts (CLMETEV).
3. Also, it is well known that this type of change is not uncommon cross-linguistically (Haspelmath 1989) and has occurred repeatedly in the history of Indo-European (Disterheft 1981; see Los 2005 on the prehistory of the English infinitive).
4. The focus on definite, bare and verbal gerunds as defined above implies a certain degree of idealisation of the data, as a number of constructions have been left out of consideration. Most importantly, I do not discuss gerunds introduced by a genitive NP or possessive pronoun (or, for that matter, a subject expressed by means of a bare NP). Other gerund constructions omitted from the discussion are those without at least one (notional) argument, the majority of which are in any case

ambiguous between nominal and verbal readings. Except in Section 4.3, hybrid gerunds have not been considered either. The latter form an inherently interesting category for the purposes of this paper, but are often too infrequent in the corpus data to allow for significant conclusions.

5. Example (6c) is translated from Latin. The Middle English text as well as the Latin original (*Jerusalem, quæ ædificatur ut civitas, cujus participatio ejus in idipsum*, i.e. ‘Jerusalem, which is built as a city, of which his participation is in the same’ (with thanks to Tine Swaenepoel for help with the translation)) are somewhat obscure, and the Middle English text does not appear to translate the Latin accurately. Still, assuming as is only reasonable that the Middle English form *takyng part* translates the Latin action nominal *participatio*, *takyng part* is a nominal in subject position with verbal force.
6. This is not a wild hypothesis: both generic texts and reference point constructions are linguistic manifestations of ‘scripts’ or ‘idealised cognitive models’, reflecting how the world is structured in the eyes of the language user (cf. Behrens 2005; Willemsse 2006)
7. Another special type of generic definite nominal gerund derives from the use of the adjectives true and right to modify the gerund phrase. Here the motivation of the definite article does not lie in the organisation of generic text, but in the fact that true or right highlight the referent’s status as the single appropriate type among a wider set of types. In much the same way as the use of a superlative can serve to singularise an instance among instances and thereby make it automatically accessible (e.g. *the fastest swimmer*), this singularity of a type among types appears to favour (redundant) accessibility marking on a generic referent. Con-

sider, as an example, *the arte of the righte measuringe of likeiammes* in (i) (as opposed to, e.g., *the arte of measuringe of likeiammes*).

- (i) By this Theoreme may you know the arte of the righte measuringe of likeiammes [i.e. ‘bodies’], as in my booke of measuring I wil more plainly declare. (1551, PPCEME)

8. The restriction is not absolute; for instance, (ii) presents an evident counterexample, unless the duke of Orleans, who was not present at the time of the incident described, is nevertheless construed as controller of *fyring*. Instances of this type are very rare.

- (ii) But were it of rechelesness or of some euyll dysposyd persone, fyre was put to the vesturis of the disguysers, the which anon was vpon suche a flame that no man there coulde quenche it [...]. In the which passetye he sent into dyuerse placys of Fraunce sundry accusasyons of the duke before slayen, that he ente~dyd to depose the kyng, and to take vpon hym the rule and gouernaunce of the realme [...] And also yt the sayde duke [...] was cause of fyring of the dysgusers garmentis before shewyd, to the ende to brynge the kyng in more daunger of sykenesse (1516, PPCEME)

9. The analysis of genericity by Declerck (1991b) may suggest that in case of ambiguity between a generic and a non-generic reading, the generic reading will by

Grice's maxim of quantity get the upper hand. Note, however, that Declerck's analysis primarily applies to NPs in subject position, whose interpretation as generic or non-generic can indeed affect the interpretation of the whole sentence as a statement with generic or merely episodic bearing (e.g. *the snake is dangerous*). Furthermore, in episodic sentences, non-subject NPs might even be preferentially interpreted as non-generic by the maxim of relevance (e.g. *the prince was involved in financial fraud*). It does not seem to be the case then that the indefinite reading of bare nominal gerunds is automatically the secondary option if a generic reading is also available.

10. Note that the association between indefiniteness and implied control is only a tendency. The clearest counter-examples are those where an *of*-phrase does not denote the patient but the agent of the gerund, as in (iii):

(iii) Scabbe [i.e. a skin disease] wol brede in þe necke. & on þe dok of þe taile riȝt as þe mangew [i.e. another skin disease]. [...] & of þe same cause þat þe mangew wol gendre so wol þis. of bi-standing bi a schabbed hors or bi gnappyng of an hors. (a1450, HC)

11. Accounting for the construction-specific semantics of *in*, it is more than likely that this use is in fact inspired by the French 'gérondif' with *en* 'in' and, to a lesser extent, the Latin 'gerundium'. The corresponding pattern in French is illustrated in (iv) (for a clearly Latin-based instance, see (6b) above).

- (iv) l'ancienne dame lui en tendra plait en le ramentevant et devisant les bons moz qu'elle lui aura ouÿ dire de l'amour qu'il a d'elle, (1405, quoted from Halmøy 2003: 27)

'The old lady will plead (his) cause with her in reminding (her) of him and talking about the fine words that she has heard him say about the love he feels for her.' (with thanks to Catharina Peersman for help with the translation)

12. Exceptionally, a bare nominal gerund introduced by without is not controlled by a participant in the matrix clause. An example is given in (v). This use appears to have disappeared along with the bare nominal gerund.

- (v) As 3if a lond wolde bere good corn wiþowte tylyng and donghyng þerof, it were but ydel to traueyle þerfore, whonne it encresuþ not þe fruyt. (c1400, HC)

13. Figure 5 is based on the HC and the PPCEME with the exclusion of the two texts showing disproportionate use of reason adjuncts with for (see the introduction to Section 4.2 above).
14. The function of the definite article does not always boil down to marking a common goal. Occasionally, the choice for the definite article appears to be prompted by other considerations. For example, the definite marking in *the perching and burlinge of Clothe* in (vi) is motivated by the reference point relation between cloth and the activities that constitute its processing.

(vi) in manye part~ of this Realme ys newly and lately devised erected buylded and used, certen Milles called Gigge Milles, for the perching and burlinge of Clothe, by reason whereof the true Draperie of this Realme ys wonderfullye empayred (1551–2, PPCEME)

15. Adverbials too can have a nominal alternative in the form of an adjective preceding the gerund. However, a good number of adverbials have no adjectival equivalent, and some adjectives used in a nominal gerund do not fulfil the function of a corresponding adverbial in a verbal gerund. The correspondence is not as complete therefore as that between prepositional phrases in nominal and verbal gerunds.
16. Subjecting the raw figures to a χ^2 -test, the difference between verbal gerunds and the two nominal gerund types is significant at $p < 0.001$.
17. This is a very narrow definition. In general, the mixture between nominal and verbal features that characterises definite hybrid gerunds can also take other forms. In some cases the definite article is missing, in others it is not the object that is expressed by verbal means but some other modifier. The only possible comparison in terms of simple vs. complex constructions is between definite nominal gerunds and definite hybrid gerunds with a verbally expressed object. Bare hybrid gerunds are complex by definition, as they contain at least one verbal and one nominal modifier, and the same applies to definite hybrid gerunds whose patient argument is expressed by means of an *of*-phrase.
18. The difference is significant at $p < 0.01$ (applying a χ^2 -test to the raw figures).

19. The proportion of simple to complex verbal gerunds between 1420 and 1500 differs significantly from that between 1500 and 1570 ($p < 0.01$, using a χ^2 -test). Due to the paucity of data, the difference between the sub-periods 1350–1420 and 1420–1500 does not reach the 0.05 threshold of statistical significance, but the probability that the difference is due to chance is still fairly low ($p < 0.1$, using a χ^2 -test).
20. As Rohdenburg states, however, ‘differences in grammatical explicitness may be achieved in many other ways’ (1996: 151).

		HC	PPCEME
Middle English	1250–1350	97.480	—
	1350–1420	184.230	—
	1420–1500	213.850	—
Early Modern English	1500–1570	190.160	379.441
	1570–1640	189.800	—

Table 1. *Data used.*

Figure 1. *Verbal gerunds (VG), bare nominal gerunds (BNG) and definite nominal gerunds (DNG) in oblique (obl) and non-oblique (n-obl) environments (frequencies per 100,000 words).*

Figure 2. *Prepositions with verbal gerunds (VG) (frequencies per 100,000 words).*

Figure 3. *Prepositions with bare nominal gerunds (BNG) (frequencies per 100,000 words).*

Figure 4. *Prepositions with definite nominal gerunds (DNG) (frequencies per 100,000 words).*

Figure 5. *Bare nominal (BNG) and verbal gerunds (VG) with for as purpose and reason adjuncts (frequencies per 100,000 words).*

Figure 6. *Definite nominal gerunds (DNG) with for as purpose and reason adjuncts (frequencies per 100,000 words).*

Figure 7. *Proportion of verbal (VG), bare nominal (BNG) and definite nominal gerunds (DNG) with simple and complex internal syntax.*

Figure 8. *Proportion of verbal (VG), bare nominal (BNG) and definite nominal gerunds (DNG) with simple syntax or with additional PP.*

Figure 9. *Proportion of definite nominal (DNG) and definite hybrid gerunds (DHG) with simple and complex internal syntax in 1570–1640.*

Figure 10. *Simple and complex verbal gerunds from 1350 to 1640 (frequencies per 100,000 words).*