English Language and Linguistics

http://journals.cambridge.org/ELL

Additional services for **English Language and Linguistics:**

Email alerts: <u>Click here</u> Subscriptions: <u>Click here</u> Commercial reprints: <u>Click here</u> Terms of use : <u>Click here</u>



Developments in argument linking in early Modern English gerund phrases

Teresa Fanego

English Language and Linguistics / Volume 2 / Issue 01 / May 1998, pp 87 - 119 DOI: 10.1017/S1360674300000708, Published online: 12 September 2008

Link to this article: http://journals.cambridge.org/abstract_S1360674300000708

How to cite this article:

Teresa Fanego (1998). Developments in argument linking in early Modern English gerund phrases. English Language and Linguistics, 2, pp 87-119 doi:10.1017/S1360674300000708

Request Permissions : Click here

CAMBRIDGE JOURNALS

Developments in argument linking in early Modern English gerund phrases¹

TERESA FANEGO University of Santiago de Compostela (Received 15 August 1997; revised 3 December 1997)

This paper discusses the internal structure of eModE gerund phrases, with special reference to the verbalization of subjects and objects in the course of the period. It is shown that the gerund's acquisition of common case subjects ('John looking at me') and of direct objects ('by seeing Jane') correlates with style, the new verbalized complements being recorded first in the more oral and informal registers. Attention is also paid to the influence of absolute participles on the replacement of PossPs ('John's looking at me') by NPs as subject arguments, and to the diffusion of direct objects across the various classes of gerunds. The mixed nomino-verbal properties exhibited by many gerundive nominals by the late seventeenth century are considered in detail, and an analysis is proposed which interprets them as determiner phrases (DPs) where the head D can select various categories of complements. Alongside this phrasal type of gerund, it is argued that a clausal one with fully verbal features must also be recognized as part of the grammar of eModE.

1 Introduction

This paper examines the surface realization of the arguments of gerunds² in early Modern English (henceforth: eModE). More specifically, my discussion will focus on constituents whose relation to the head gerund can be likened to that of a 'logical subject' or a 'logical object' in clause structure. Consider in this respect the italicized phrases in (1)-(2):

- (1) E1 1567 Harman A Caveat . . . for Commen Cursetors 72: Thus profitably he had consumed the daye, nothinge talking of his helping out of the walking Morte out of the myre. [Cf. 'he helped out the walking mort'.]
- (2) E3 1689–1690 Evelyn *Diary* 927: The whole nation now exceedingly alarm'd by *the French fleete* braving *our Coast* even to the very Thames mouth:

As is well known, the English gerund started its history as an abstract noun of action, but from Middle English (ME) onwards it gradually acquired a number of

Research for this paper was supported by a grant of the Spanish Ministry of Education and Science (DGICYT grant no. PB94-0619). I am also grateful to David Denison and Matti Rissanen for letting me have access to their forthcoming studies (see references), to Wim van der Wurff for supplying me with a copy of his 1997 paper on gerunds, and to two anonymous referees of this journal for a number of helpful criticisms and suggestions.

² Here as elsewhere (Fanego, 1996a, b) I apply the label 'gerund' to any *-ing* form having the same distribution as nouns or noun phrases, and thus capable of functioning as subject (*the shooting of starlings is forbidden*), object (*he enjoys playing practical jokes*), predicative (*his job was selling computers*), appositive (*his current research, investigating attitudes to racial stereotypes, takes up most of his time*) or prepositional complement (*he voiced his objections to their receiving an invitation*). In addition, gerunds can also function as complements to adjectives (*I am busy selling computers*).

verbal properties, such as the ability to: (a) govern an object or a predicative complement (e.g. 'I hate playing tennis', 'I don't like being ill'); (b) be modified by adverbs or adverbials restricted to co-occurring only with verbs (e.g. 'my quietly leaving before anyone noticed'); (c) show tense and voice distinctions (e.g. 'of having done it', 'the necessity of being loved'); (d) be negated by means of the VP-negating particle not (e.g. 'my not leaving'); and (e) take a subject in a case other than the genitive, as in (2) above. In Fanego (1996b) I took a preliminary look at the process of verbalization of the gerund as a whole; here I will consider in greater detail the development of subjects and objects. Other kinds of gerundial dependents (for instance, predicatives) are either poorly represented in the corpus and prove thus less amenable to quantitative analysis, or constitute less reliable evidence of verbalization because of their ability to modify both the verbal and nominal categories (as is the case with many adverbials; see Fanego, 1996b). Note, though, that I am not saying that I consider adverbial modification uninteresting or unimportant; on the contrary, I believe that the shift of the gerund from nominal to verbal may well have started with the acquisition in ME of adverbial dependents exclusive to the verbal category.

The discussion is organized as follows: section 2 provides a brief outline of the corpus on which this research has been based. Section 3, which is mainly descriptive, contains statistical information on the categories of phrase realizing the subject and object arguments of gerunds in eModE. The variables controlling the choice between those categories are examined in section 4. Section 5 argues that by the end of the eModE period a distinction has to be established between a clausal and a phrasal gerund, the gerund in earlier stages being of course exclusively a phrasal category (i.e. a NP). Finally, a summary of the main findings is given in section 6.

2 The corpus

Like Fanego (1996b), this study is based on the eModE section of the Helsinki Corpus of English Texts (see Kytö, 1996). The eModE section of the Helsinki Corpus (551,000 running words) is divided into three subperiods covering the years 1500–1570 (E1), 1570–1640 (E2) and 1640–1710 (E3). To ensure text type continuity and representativeness, all three subsections contain samples of the same fifteen genres,³ viz. Law, Handbooks, Science, Educational Treatises, Philosophy, Sermons, Trial Proceedings, History, Travelogue, Diaries, Biography, Fiction, Comedy, and Private and Official Letters (on the principles of compilation and other details, see Nevalainen & Raumolin-Brunberg, 1993). For this research, however, only eleven of these fifteen registers were examined, as indicated in table 1.

³ In addition, subsections E1 and E2, but not E3, contain excerpts from the Bible.

		<u> </u>	· · · ·	
	El	E2	E3	Total
Diaries	13,060	12,520	11,210	36,790
Private Letters	10,640	11,590	13,140	35,370
Fiction	11,550	12,490	12,040	36,080
Comedies	10,570	11,810	12,740	35,120
Travelogue	14,100	14,780	10,470	39,350
Law (Statutes)	11,790	11,780	13,180	36,750
Philosophy	9,890	6,880	8,820	25,590
Science	12,880	13,040	11,280	37,200
Handbooks	10,000	12,290	11,370	33,660
Trials	15,970	14,230	13,760	43,960
Sermons	9,470	10,300	12,470	32,240
TOTAL	129,920	131,710	130,480	392,110

 Table 1 Number of words analysed per genre and subperiod

Diaries, Private Letters, Fiction, Comedies, and Travelogue were chosen to represent the more informal and/or more private styles. 'Private' writings like family correspondence, diaries and travel books had their recognized models and formulas, but often show little literary ambition and were not usually written with publication in mind. Hence 'they were on the whole less amenable to standardization than most published texts' (Nevalainen & Raumolin-Brunberg, 1989: 97).

Since the start of corpus-based analyses, another dimension that has proved to be particularly interesting for the study of linguistic change is the difference between speech-based and written registers. Speech-based registers have their origin in speech, even though they are preserved in writing; they include transcriptions of actual speech such as court proceedings, and also fictional representations of speech, as in drama or fictional dialogue. Despite considerable differences in terms of formality between speech-based registers such as Trials on the one hand and Comedies on the other, their importance is that they both may help to ascertain whether a given structure originates in, or was typical of, spoken discourse. In addition, it is generally acknowledged that we can expect the more oral and less formal styles to be the first to display the diffusion of linguistic changes from below, in Labovian terms (1994: 78), that is, natural, spontaneous changes from 'below the level of social awareness', as opposed to more or less conscious changes towards the prestige model ('from above'); these latter, by contrast, are more apt to be recorded first in the more formal, public and official registers (see Nevalainen & Raumolin-Brunberg, 1989).

3 Surface realization of subject and object arguments⁴

3.1 Subject arguments (346 ex.)

In the corpus, the following classes of constituents can stand for the underlying subject of a gerund:

3.1.1 Possessive determiners (210 ex.)

Here are included possessive determiners like my, your, his, etc. (208 ex.) and also the relativizer whose (2 ex.):

- (3) E3 1675-1676 Boyle *Electricity* 18: [we] then brought the Electric, as soon as we could, to settle notwithstanding *its* hanging freely at the bottom of the string.
- (4) E3 *ibid.* 37: I proceeded to make trial with three or four Emralds, *whose* being true was not doubted, and found them all somewhat [. . .] endow'd with Electricity,

3.1.2 Other pronouns (2 ex.)

In gerund phrases there is now an increasing tendency for object pronouns to advance at the expense of possessives (see Denison, 1996: 288; Quirk, Greenbaum, Leech, & Svartvik, 1985: §§15.12, 16.42). This process, however, had barely started in eModE;⁵ according to Söderlind (1958: 172), nongenitive pronouns do not occur as gerundial subjects in John Dryden's prose, while in my corpus there are only two instances. One is (5) below; typically, the form involved is *it*, for, as Jespersen notes (*MEG* V: §9.7.1), '[t]he first oblique case to be used with *ing* instead of the possessive is *it*, which is found in isolated examples as early as the beginning of the eighteenth century'. Note the awkwardness of the construction, with the gerund clause displaced by left dislocation and resumed by a recapitulatory, pleonastic *it* serving as the actual grammatical subject of the sentence:

(5) E3 1666 Oxinden Letters (Elizabeth Oxinden) 309: I am really sorry my sister W: servant came noe more of the family of the Johnsones; *it coming to nothinge* it is looked one as my one [= 'own'] invention to draw the other one;

The other nonpossessive form filling the subject slot in a gerund phrase is the dummy *there*, which, according to Visser (§1104), is first found in this function in the second half of the seventeenth century. Being semantically empty, *there* does not qualify as an argument, but is nevertheless dealt with here in so far as it serves to anticipate the notional, extraposed subject of the gerund. As in example (5), the overall structure of the gerund clause strikes the reader as remarkably awkward, an issue to which I will return in section 4.2 below:

⁴ In Fanego (1996b), co-ordinate constructions involving gerunds were treated statistically as separate units; in other words, a sequence like *chasing and killing tigers* was counted as two gerund phrases, a procedure that was justified on the grounds that the focus of that paper was largely on the frequency of *-ing* nominals in eModE. In this research, my concern is the arguments themselves, hence it has seemed advisable to take into account only actual surface realizations of subjects and objects. In a co-ordinate example like the one above, therefore, *tigers* has been counted as one object.

⁵ For the rare occurrences of object pronouns as gerundial subjects in ME, see Tajima (1996).

(6) E3 1698 Fiennes Journeys 151: a mile off by a little village I descended a hill which made the prospect of the town still in view and much to advantage; its but two parishes; the Market Cross has a dyal and lanthorn on the top, and <u>there</u> being another house pretty close to it high built with such a tower and lanthorn also, with the two churches towers and some other buildings pretty good made it appear nobly at a distance;

3.1.3 Possessive phrases (51 ex.)

The total figure for phrases marked with the possessive clitic -'s is 58, but there are 4 examples with an objective reading which have been left for discussion in section 3.2.1, and 3 where the possessive phrase does not represent an argument of the gerund, but rather a peripheral adverbial of time, distance, or duration:

(7) E3 1676 Walton Compleat Angler 216: I begin to be weary; yesterdays hunting hangs still upon me. [See also c1535-1543 Leland Itinerary I, 148: 'a hole miles ryding'; 1630 Taylor Pennyles Pilgrimage 131.C2: 'a hundred and twenty houres breeding'.]

Within the subset of PossPs are included the indefinites no body's and any body's (1 ex. each; see (8) below). As shown by Raumolin-Brunberg (1994), in the course of eModE these and other related forms were evolving from their original status as noun phrases headed by a noun of general meaning (i.e. no body = 'no person') into indefinite pronouns. This process of grammaticalization, however, had probably not yet been completed by the end of the seventeenth century, hence my decision to include such forms, at least for the purposes of classification, in this section, rather than in 3.1.1 above. Formally, one indication of the noun phrase status of these compound forms in *-body* is their ability to take the possessive clitic -'s, which other pronouns do not (on any body Ving see section 3.1.4, example (14)):

(8) E3 1685 Lisle *Trial* IV, 122C1: LADY LISLE: My Lord, that which I have to say to it, is this: I knew of *no body's* coming to my House but Mr. Hicks [see also p. 122C2.]

3.1.4 Noun phrases (9 ex.)

Common case noun phrases representing the subject argument of a gerund occur in the following instances:

- (9) E1 1554 Throckmorton *Trial* I, 64.C2: no Exceptions were to be taken to them, but only for their upright Honesties, notwithstanding *the Attorney* prompting Sergeant Dier.
- (10) E1 *ibid.* I, 69.C1: touchyng *the Earl of Deuon* parting hence, and my going with him, and also concerning the matter of the Earle of Pembroke, I do aduow and say that Vaughan hath said untruly.
- (11) E2 1615 Markham Countrey Contentments 107: The best time for a Cow to calue in for the Dairie, is in the later ende of March, and all Aprill; for then grasse beginning to spring to its perfect goodnesse will occasion the greatest increase of milke that may be:
- (12) E3 1665 Hooke *Micrographia* 13.5, 211: it [= a louse] is troubled at nothing so much as at a man that scratches his head [. . .] that makes it oftentime sculk into some meaner and lower place, and run behind a mans back, though it go very

much against the hair; *which ill conditions of it* having made it better known then trusted, would exempt me from making any further description of it, did not my faithful [. . .] Microscope bring me other information of it.

- (13) E3 1666 Oxinden Letters (Elizabeth Oxinden) 308: I have used my utmost indeavour to get som [oysters] in order to your command but cannot posible get any as yet, they being so very rare, by reason *the seamen* being all prest, that there is none left to get them.
- (14) E3 1685 Lisle Trial IV, 120C1: MR DOWDING: we called almost half an hour before we got in; and had found two, and we came to my Lady; she said, she knew nothing of any body being in the House-
- (15) E3 1689–1690 Evelyn *Diary* 927: The whole nation now exceedingly alarm'd by *the French fleete* braving our Coast even to the very Thames mouth:
- (16) E3 1698 Fiennes Journeys 152: There are a great deale of Gentry which lives in town tho' there are no good houses [...] its a very dear place so much Company living in the town makes provision scarce and dear,
- (17) E3 1703 Haddock Correspondence (Richard Haddock, Sr.) 44: Your letter of the 17th Nov^r past, giveing me acc^t of the unhappy disaster of your ship being run ashore by a Dutch pilot [...] I rec^d 3 or 4 ds. after its date;

3.1.5 Ambiguous phrases (3 ex.)

In the following passages, the linguistic and/or situational context shows that the possessors are all in the plural number; since the use of the apostrophe as a case marker after the plural -(e)s morpheme (i.e. *bishops'*, *Spaniards'*) did not develop in written English until the eighteenth century (see Altenberg, 1982: 57–9), it is technically impossible to ascertain whether the italicized phrases below are intended as PossPs in the 'genitive' plural or as NPs in the common case.

- (18) E1 1554 Throckmorton *Trial* I, 70.C1: the matter importing the French King as it did, he thought the French King would work to hinder *the Spanyards* coming hither,
- (19) E3 1689-1690 Evelyn *Diary* 900: [. . .] people began to talke of *the Bishops* being cast out of the House:
- (20) E3 1676 Walton *Compleat Angler* 297: you are to throw into it [i.e. into the pond] in some certain place, either Grains or Blood mixt with Cow dung, or with Bran; or any Garbage, as Chicken guts or the like, and then some of your small sweet pellets with which you purpose to angle: and *these small pellets* being a few of them also thrown in as you are Angling will be the better.

3.1.6 Prepositional phrases (71 ex.)

There are in all 67 examples of *of*-phrases representing the subject argument of a gerund, plus 4 examples of phrases introduced by other prepositions (2 ex. with *with* and 2 with *by*). Illustrative instances follow here:

- (21) E3 1665 Hooke *Micrographia* 13.5, 212: The Thorax seem'd cas'd with another kind of substance then the belly, namely, with a thin transparent horny substance, which upon the fasting *of the Creature* did not grow flaccid;
- (22) E2 1588-1589 Statutes IV, 810: 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 [see also E2 1603-1604 Statutes IV, 859]

(23) E2 1592-1593 Statutes IV, 852: the great Mischiefes and Inconveniences that daylie growe and increase by reason of the pesteringe of Houses with div-se Famylies, [see also E1 1553-1559 Machyn Diary 45.]

On this use of *with*, see *OED With* prep. 37.b. 'Formerly used in many cases where *by* [...] is now the usual or only construction'. On *pester* see *OED Pester* v. 2.Obs. 'To obstruct or encumber (a place) by crowding; to crowd to excess.'

3.2 Object arguments (882 ex.)

3.2.1 Possessive determiners (12 ex.) and PossPs (4 ex.)

In contemporary usage, the possessor in structures involving *-ing* nominals invariably represents the subject argument (cf. *my going to London*). However, in earlier stages of English it was possible for the possessive form preceding the gerund to correspond to its object argument (see Jespersen, *MEG* V: §§9.2.2-4; Tajima, 1985: 42-5; Visser, §§1105-6), the gerund having then a passive interpretation, at least from the point of view of Present-day English speech feeling. Witness (24):

(24) E1 1534 More Letters 502: After the cause of my sending for, declared vnto me (wherof I some what merueyled in my minde, consideringe that they sent for no mo temporall men but me) I desired the sight of the othe, which they shewed me vnder the great seale.

Here the sequence *the cause of my sending for* might be glossed as 'the cause of sending for me', or, alternatively, as 'the cause of my being sent for'. This example is thus particularly noteworthy in that it shows that the object of a prepositional verb (*send for*) could apparently be extracted out of the PrepP and moved to preverbal position, as in a normal prepositional passive, but without any overt passive marking.

From late ME times, and particularly in the course of the sixteenth and seventeenth centuries, a formally passive gerund gradually came into use (see Fanego, 1996b: 129, 132). Prior to this, however, 'passival'⁶ gerunds like that in (24) were common; the following are other examples from the HC:

- (25) E3 1702 *Haddock Correspondence* (Richard Haddock, Sr.) 43: To morrow morning I intend to go to y^e Adm^{ty} and endeavor you may come into the River, if his R. Highness orders *your* cleaneing.
- (26) [E2 1612 Coverte A True and Almost Incredible Report 15: The naturall people of the Iland [...] seeme to bee louing and kind: for they made signes to me and others, at our first coming, to beware of our throats cutting: which then we tooke no heede or notice of,
- (27) E3 1689-1690 Evelyn Diary 901: E. of Notingham & about 20 Lords and many Bishops, entred their protests &c, but the Concurrence was greater against them -The Princesse hourely Expected: Forces sending to Ireland [i.e. 'forces being sent' / 'sending of forces'], that Kingdome being in great danger, by the E. of Tyrconnells Armie, & expectations from France:⁷

93

⁶ The label goes back to Visser (§1872), who applied it to the passival progressive type *the house is building.*

⁷ In Fanego (1996b: 108), I classified this example and also E1 1550-1552 Edward VI Diary 255

(28) E3 1698 Statutes 458: And be it further enacted by the Authority aforesaid That in case the Gaugers or Officers of Excise or any of them shall know or have cause to suspect any such Private or concealed Still Back or other Vessell Spiritts Low Wines Wash or other Materialls preparing [i.e. 'being prepared'] for Distillation to be sett up or kept . . .⁸

In the corpus, PossPs with an objective reading are marginal; apart from (26)-(28), there is one other example, namely E3 1685 Oates *Trial* IV, 84.C2 'I was sent for to *my Mother's* Burying'. Objective possessive pronouns are slightly more common, but their number decreases in the course of the period (12 ex. in all, 7 recorded in E1, 3 in E2 and 2 in E3). Ultimately, the restriction in contemporary English on the co-occurrence of objective genitives with *-ing* forms reflects the rigidification of SVO order: the subject normally precedes and the object follows the verb, an arrangement that has led since ME times to a preference for *of*-phrases to indicate an objective relation. In addition, the increased use of the passive gerund from the seventeenth century onwards must have made passival gerunds like those quoted above increasingly redundant.

3.2.2 Preverbal NP objects (9 ex.)

Formally, the examples adduced below differ from those discussed in the previous section in that the phrase preceding the *-ing* form is not marked for the genitive, but for the common case. These gerunds are thus verbal from a syntactic point of view, and represent a type with surface OV order which was comparatively frequent in ME (see Tajima, 1985: 45–60; Visser, §§1108 ff), but survives only marginally in eModE, as a result of the virtual disappearance of (S)OV order in all kinds of clauses and of its replacement by (S)VO. By E3, this kind of preverbal object is found only in set phrases like that in (31):

- (29) E1 1534 More Letters 509: I [...] put all in the handes of hym, for feare of whose displeasure for the saue garde of my soule stirred by mine owne conscience (without insectacion or reproch laieng to any other mans) I suffre and endure this trouble.
- (30) E2 1615 Markham Countrey Contentments 73: if your horse [...] ouer-reach too much, then you shall give it more libertie, and herein you shall finde that an inch

'Removing to Grenwich from Whestmuster', which occurs in a heading, as absolute gerunds, that is, gerunds which are not formally dependent on a higher matrix. This analysis is correct for the two quotations adduced below as (i) and (ii), since they admit of no other interpretation; however, I am no longer sure that the same is true of the Evelyn and Edward VI instances, since both might be 'clipped progressives', a type of incomplete progressive clause usually recorded in private journals and dramatic dialogue (for discussion see Denison, forthcoming: §3.3.3.6).

- (i) E3 1698 Fryer New Account of East India and Persia II, 177: Chap. II. Our setting forth from Gombroon, and leaving Lhor.
- (ii) E3 1707 Farquhar The Beaux Stratagem 62: In short, Madam (Shreeking without.) S'death! the Rogues are at work with the other Ladies.
- ⁸ Since the possessor nominals in (26)–(28) (respectively *our throats, Forces*, and [. . .] *Materialls*) are in the plural, they are ambiguous between a reading as PossPs (i.e. *Forces*) and as common case phrases. As already pointed out in 3.1.5, the use of the apostrophe to mark the genitive did not become general until the eighteenth century, hence either interpretation would be possible.

straightning, or *an inch* inlarging, will adde or abate at least halfe a foote in his full and direct stroake. And thus much touching the teaching of anie horse to amble [...]

(31) E3 1697 Vanbrugh *The Relapse* I, 57: YOUNG FASHION: Oons, give 'em good Words, Lory; we shall be shot here a *Fortune* catching.

For other examples see 1511–1512 Statutes III 28 (3 ex.), 1526 Mery Talys 31, and 1552–1563 Stevenson Gammer Gurtons Nedle 62.

3.2.3 Of-phrases (372 ex.) and noun phrases (485 ex.)

If we leave aside the rather special cases examined in 3.2.1-2, the usual realization of the object argument of a gerund is either as an *of*-phrase, as in (32), or as a NP, as in (33):⁹

- (32) E1 1568 Turner A New Boke ... of All Wines B3V: so farre are they [i.e. the new wines] fro \sim helping of men to digest their meates, that they are very hardly digested themselues,
- (33) E3 1673 Taylor Sermons 13: but of all these the noblest End is the multiplying children.
- 4 Factors conditioning the surface realization of subject and object arguments

From the evidence adduced in the previous section, it will be clear that an account of the internal structure of gerund phrases in eModE, and of its development across time, involves an analysis of the variables controlling the choice between the following classes of dependents:

- (a) PossPs vs of-phrases, as in Robin's going away vs the going away of Robin.
- (b) PossPs vs NPs, and possessive pronouns vs objective ones, as in by John's/his looking at me vs by John/ him looking at me.
- (c) NPs vs of-phrases as object arguments, as in by seeing Jane vs by seeing of Jane.

The first of these three sets of alternatives (variation between PossPs and *of*-phrases) is not strictly relevant to the issue of the verbalization of the gerund, but will nevertheless be discussed here in so far as it constitutes an important aspect of the grammar of nominal constructions in general, and of gerundial structures in particular.

4.1 PossPs vs of-phrases

As might have been expected, the variables controlling the choice between PossPs (Robin's going away) and of-phrases (the going away of Robin) as gerundial

95

⁹ The object of a gerund can also be a nominal clause, finite or nonfinite, as in E2 1597 Blundevile A Briefe Description 48R: 'the auntient Philosophers [...] were much troubled in seeking to know the measures of a Circle'. Previous analyses of the gerund usually interpret such cases as verbal gerunds (see Donner, 1986: 399; Tajima, 1985: 76-7, and note 52), though, strictly speaking, they are syntactically ambiguous, for noun clauses have served, at all stages of English, as complements of both nouns and verbs. Compare in this respect: (a) 1479 Surtees Misc. (1888) 37 'Be it knawen to all maner of men ... that Robert Elwalde is a trewe Ynglish man'; (b) a1470 Malory Wks. 710/7-8 'lattynge the to have knowlecche that the tenth day of May I was smytten uppon the olde wounde'. Throughout the discussion in section 4.3, where I examine the replacement of of-phrases by noun phrases in gerundial constructions, examples with clausal objects (11 in the corpus) have not been taken into consideration.

	+HUMAN	-HUMAN	
PossPs	48 (54%)	4 (13%)	
of-phrases	41 (46%)	26 (87%)	
TOTAL	89	30	

Table 2 PossPs vs of-phrases in relation to the lexical variable

arguments are largely in harmony with those identified by Altenberg in his now classic analysis (1982) of the genitive versus the *of*-construction in seventeenthcentury English. The discussion that follows is heavily indebted to this study, but has been restricted to just two of the factors outlined by Altenberg, namely the lexical and stylistic ones. The influence of the relational factor, that is, whether the possessor nominal is in a subjective or an objective relation to the head gerund, has already been examined in section 3 above (see especially 3.2.1). Finally, the relevance of syntactic and communicative factors like the weight and complexity of the possessor and the possessee, or the distribution of given and new information (see Altenberg, 1982: chapters 3 and 6; Quirk et al., 1985: §§17.44–5) is not easy to evaluate statistically, since in my data such factors can rarely be isolated from the lexical and stylistic variables discussed below.

4.1.1 Lexical factors

Altenberg (1982: 117 ff) found that the surface realization of the possessor nominal is closely connected with its degree of animateness. More specifically, 'GEN [= "genitive"] is preferred only with human individual nouns (66%). In all other cases OF is preferred, most dramatically with collective and inanimate nouns. Animal nouns occupy a middle position (44%)' (pp. 146–7). See also Raumolin-Brunberg (1991: 201, 263), who reached similar conclusions in her study of the noun phrase in Sir Thomas More. These findings are largely in keeping with the evidence from the corpus, where the absolute figures for [+/-HUMAN] possessor nominals and prepositional phrases are shown in table 2.10

As Deane (1992) and Taylor (1994a, b) have recently shown, this tendency of [+HUMAN] possessors to surface as PossPs, rather than as PrepPs, can be interpreted, ultimately, as 'a question of topic-focus alignment' (Taylor, 1994b: 218), in the sense that '[t]he more topical a possessor nominal, the more likely it is to appear in prenominal position, while less topical possessors tend to appear postnominally'.

¹⁰ The total of 52 PossPs in tables 2 and 3a includes the 51 subjective phrases mentioned in section 3.1.3 and one of the four objective phrases discussed in 3.2.1; on the other three objective phrases, see note 8. Also excluded from the total of 52 are the three PossPs representing adverbials of time, distance and duration quoted in 3.1.3; apart from the fact that these are not arguments and thus fall, strictly speaking, outside the scope of this paper, with this type of PossP there is virtually no choice of construction, since it lacks an *of*-paraphrase (see Altenberg, 1982: 224–6).

Both Deane and Taylor distinguish between *discourse conditioned topicality*, which is a function of context and depends largely on a nominal's 'givenness', i.e. the previous mention of its referent, and *inherent topicality*. This latter, Deane (1992: 194–9) argues, depends on factors like:

- (a) egocentricity, egocentric concepts being those that are learned with reference to the speaker and his immediate environment;
- (b) position in taxonomic hierarchy;
- (c) earliness of acquisition, early acquired concepts being mainly egocentric and basic level (see Rosch, Marvis, Gray, Johnson, & Boyes-Braem, 1976), such as the notions of the self and of other humans, things associated with the here and now, and physical objects that are clearly individuated.

As Taylor (1994b: 220) notes, these various factors 'conspire to render certain concepts more inherently topical than others. Most topical are the speaker and other participants in a speech situation, other named individuals, and indeed human beings in general.' On the contrary, nominals denoting entities that are non-animate are lowest in inherent topicality, hence they tend to surface as *of*-phrases in NP structure, unlike [+HUMAN] possessors, which are more often located in prenominal position.

Both these tendencies, as already noted, are well reflected in my data. In its turn, the second type of topicality referred to above, namely discourse conditioned topicality or givenness, accounts for the fact that in the corpus possessive pronouns (222 ex. in all; see sections 3.1.1 and 3.2.1) greatly outnumber PossPs. That possessor entities can be referred to by a minimal linguistic form, i.e. a pronoun, is symptomatic of the cognitive salience and given status of their referents (see Taylor, 1994a: 74).

4.1.2 Stylistic factors

According to Altenberg (1982: chapter 6), the form of the possessor phrase is also crucially determined by the style of the text, and, in particular, by the stylistic category of 'status'. This covers 'a whole range of factors related to contacts between people' (Crystal & Davy, 1969: 74), such as the contrasts between *private* (*informal*) vs *public* (*formal*), *personal* vs *impersonal*, and *intimate* (*familiar*) vs *distant* (*polite*).

In Altenberg's corpus the average score for genitive phrases is 69 per cent. The genres characterized by a personal, informal tone (travelogue, diary/correspondence and comedy) show the highest scores, respectively 92 per cent, 84.5 per cent, and 81 per cent, while essays (58.6 per cent) and religious writings (23.6 per cent) stand at the opposite end of the scale. In my data, the corpus mean for the genitive is much lower, namely 44 per cent (see table 3a), and thus approaches the average frequency of only 38 per cent reported by Raumolin-Brunberg in her study of the noun phrase in Sir Thomas More (1991: 262). This discrepancy between Altenberg's findings and mine is probably due to the difference in the size of our corpora, yet the influence of the status variable in my data for PossPs is also clear. Contrast in this respect their

97

	PossPs	of-phrases	TOTAL	
Diaries	12 (57%)	9	21	
Private Letters	12 (80%)	3	15	
Fiction	6 (46%)	7	13	
Comedies	2 (67%)	1	3	
Travelogue	3 (27%)	8	11	
Statutes	0 (0%)	8	8	
Philosophy	1 (33%)	2	3	
Science	2 (14%)	12	14	
Handbooks	3 (60%)	2	5	
Trials	8 (36%)	14	22	
Sermons	3 (75%)	1	4	
TOTAL	52 (44%)	67	119	

Table 3a Distribution of PossPs and of-phrases according to text type

	Table 3b	Distribution	of	+HUMAN	PossPs and of-phrases	
--	----------	--------------	----	--------	-----------------------	--

	PossPs	of-phrases	TOTAL	
Diaries	11 (65%)	6	17	
Private Letters	12 (86%)	2	14	
Fiction	5 (50%)	5	10	
Comedies	2 (67%)	1	3	
Travelogue	3 (37.5%)	5	8	
Statutes	0 (0%)	7	7	
Philosophy	1 (100%)	0	1	
Science	1 (100%)	0	1	
Handbooks	2 (67%)	1	3	
Trials	8 (38%)	13	21	
Sermons	3 (75%)	1	4	
TOTAL	48	41	89	

frequencies in Diaries (57 per cent) or Private Letters (80 per cent) with those in Statutes (0 per cent) and Science (14 per cent). The tendency for the possessor to surface as a PrepP is particularly strong in Statutes, to the extent that it overrides the influence of the lexical variable discussed in the previous section: seven of the possessor nominals in Statutes are [+HUMAN], yet they are nevertheless expressed prepositionally. In the case of Science, the low frequency (14 per cent) of PossPs can be directly related to the impersonal, objective style that characterizes scientific writings, both now (Biber & Finegan, 1997) and in eModE (Gotti, 1996: 27–8). Because of this tendency towards depersonalization, the subjects of gerunds in the Science samples in my corpus are almost always [-HUMAN] and [-ANIMATE], hence their unmarked location within the gerund phrase is after the gerund, in keeping with the principle of lexical conditioning outlined in 4.1.1. See example (21) above and (34) here: (34) E1 1548 Vicary Anatomie 33: Also the brayne hath this propertie, that it moueth and followeth the mouing of the Moone: for in the waxing of the Moone, the Brayne followeth vpwardes;

One of Altenberg's most interesting findings as regards stylistic conditioning is the marked tendency of religious, especially biblical prose to favour the *of*-construction, to the extent that 'the normal GEN preference with a human Mod [= Modifier] is frequently overruled' (1982: 299). This feature of religious writings cannot be observed in the sermons in my corpus, since the number of relevant examples recorded in this text type (see table 3a) is too low to be statistically significant.¹¹ However, the preference of religious prose for *of*-phrases can perhaps help explain their relatively high incidence in Fiction (7 ex. = 54 per cent, 5 of them with [+ HUMAN] reference) and Travelogue (8 ex. = 73 per cent, 5 with [+HUMAN] reference). In the case of Fiction, 3 out of the 5 [+HUMAN] *of*-phrases are used in a comic dialogue by Pepys where Quakers are satirized. This religious community was notorious for a number of linguistic peculiarities, their style of speech being in certain respects heavily indebted to biblical usage (see Görlach, 1991: 147). This probably accounts for the occurrence of the *of*-phrases in question, as illustrated in (35):

(35) E3 1684-1685 Pepys Penny Merriments 148: QUAKER: By yea and by nay, I charge thee to take patiently the refreshing of a Brother,¹² when the inward Light says yea.

MAID: O fie! Hast not thee declared among the Brethren, that it shall not be lawful for a Sister to defile her self?

A similar explanation might apply to Travelogue. Three of the 5 of-phrases with [+HUMAN] reference in this text type are recorded in Torkington's Narrative of the *Pilgrimage . . . to Jerusalem* (1517), a travel book where allusions to the Gospels are naturally very frequent (see (36) below). In keeping with his subject matter, there are many passages where Torkington seems to be striving to imitate the kind of rhythmic, dignified prose that became associated with English translations of the Bible from the Wycliffe-Purvey version of the late fourteenth century onwards; within this tradition of religious prose, as Altenberg notes (1982: 263), 'the marked OF preference was a significant linguistic feature'.

(36) E1 1517 Torkington 31: And thanne be the ledyng and conductyng of ower seyd gydes we decenddid in to the Vale of Josophat, but not the same wey we went owte warde [...] And a non we entred in att the forseyd gate, and on the left hande with

¹¹ In the three cases of PossPs recorded in Sermons the gerund is followed by heavy postmodification (e.g. E3 1679 Tillotson Sermons ii451: 'this natural Privilege of mens judging for themselves in a matter of so infinite concernment, as that of their eternal happiness'), which makes the realization of the subject argument as a PossP rather than as an of-phrase practically obligatory.

¹² As is well known, the PossP functions almost invariably as a definite determiner (compare *the girl's shoes/her shoes*); see Taylor (1994a: 74). In this example, therefore, the fact that the possessor of a *Brother* is indefinite is also relevant for its surfacing as a PrepP, rather than as a PossP. This impersonal style with which the Quaker refers to his own person seems to be intended by Pepys as yet another linguistic peculiarity of Quaker speech.

in the gate ys Probatica Piscina vnder the wale of the Temple of Salomon, in the whiche Place ower lord shewyd many Miraclis as it ys well knowen by the Gospell.

4.2 PossPs vs NPs

The replacement of PossPs by NPs, and of possessive pronouns by objective case ones, is one aspect of the gradual process of verbalization of the gerund. In eModE, such replacement was still only in its inception, as is clear from the evidence adduced in sections 3.1.2 and 3.1.4. Common case NPs in the corpus are in fact so few that conclusions regarding the variables controlling their choice versus that of a PossP can only be tentative. With this qualification, I would like to put forward a few suggestions about the way in which the acquisition by the English gerund of this verbal feature may have taken place.

With respect to Present-day English, it is fairly generally accepted that the occurrence of possessive forms in the subject slot of a gerund phrase correlates with degree of formality; as Quirk et al. note (1985: §§15.12, 16.42), 'the genitive is preferred if the item is a pronoun, the noun phrase has personal reference, and the style is formal'. Similarly, when the frequency of nongenitive NPs and pronouns first started to become significant in the course of the nineteenth century, their use was often recognized by observers as vulgar or colloquial (see Denison, forthcoming: §3.6.4.3). All this suggests that the development under discussion may have originated from below in Labovian terms (1994: 78; see also section 2 of this paper), i.e. not as a more or less conscious change towards the prestige model ('from above'), but rather as a natural, spontaneous change from below the level of social awareness. As such, it would tend to be first attested in writing in the more oral and less formal genres. And, indeed, the data from the Helsinki Corpus, though limited, appear to testify to this direction: a look at the 11 instances (or 12, if we add (20) in section 3.1.5, which may belong here too) of nongenitive NPs and pronouns recorded in my material as subject arguments (see sections 3.1.2 and 3.1.4 above) shows that 9 of them occur in text types satisfying the above description, namely Diaries (1 ex.), Private Letters (3 ex., 2 of them in a letter by Elizabeth Oxinden), Travelogue (2 ex., both in Celia Fiennes) and Trials (3 ex.). Interestingly enough, women, though poorly represented in the HC, are responsible for 4 of these cases.

A social basis for the shift from (by) John's looking at me to (by) John looking at me thus seems plausible. As regards its process of implementation, it was assisted by a number of linguistic factors. Those observable in my data can be summarized as follows:

(a) Phonotactic factors. In example (11), the selection of the common case form *grasse* ('grasse beginning to spring') can be explained on phonetic grounds, since, as Visser (§1101), Altenberg (1982: 45 ff) and others have noted, the genitive form was avoided after nouns ending in the fricatives ls, zl. In my material, *grasse* is the only possessor nominal exhibiting this feature.

(b) The extension of the common case to the subject of gerunds takes place earlier, too, with nonpronominal NPs (10 ex., versus only 2 involving pronouns, if ambiguous (20) can be included within the former category), and with [-HUMAN/-ANIMATE] nouns, in accordance 'with the tendency of the language to avoid the genitive in such cases', as Jespersen aptly notes (MEG V: §9.6.1; see also section 4.1.1 above). In this way we can partly account for the grasse example referred to above, and also for examples (17) and (20) ('of your ship being run ashore', 'these small pellets being . . . thrown in'), and (15)-(16), these involving the collective groups the French fleete ('by the French fleete braving our Coast') and so much Company ('so much Company living in the town'). Though collective nouns, as Altenberg (1982: 130) has shown, 'can be seen as having an intermediate or variable position on the semantic scale, sometimes approaching the animate, sometimes the inanimate pole', their behaviour in eModE is more often like that of [-ANIMATE] nominals, at least in terms of their readiness to accept, or reject, the possessive suffix. From section 4.1.1 above, where I discussed PossPs as subject arguments, it can be seen that the number of [-HUMAN] PossPs in the corpus, with only 4 tokens, is very small. This shows that, already in eModE, nonanimacy must be considered a powerful factor in favour of the common case, for it applies in 5 examples, that is, in more than half of the gerund phrases having subjects with a [-HUMAN] feature.

(c) The identity in both speech and writing of the common case and genitive of most plural nouns. As already noted in section 3.1.5, the apostrophe was not used as a case marker after the plural -(e)s morpheme until the eighteenth century (Altenberg, 1982), hence examples like (18) (*'the Spanyards* coming hither'), (19) (*'the Bishops* being cast out') and (20) (*'these small pellets* being . . .') must have 'contributed very strongly to strengthen the feeling that a common case might be used as the subject of a gerund' (Jespersen, MEG V: §9.4.2).¹³

(d) The unavailability or awkwardness of any genitive form for various sorts of complex NPs (see Visser, \$1101) accounts for the absence of the clitic -'s in example (12) ('which ill conditions of it having made it . . .').

(e) A fifth factor which may have also promoted the common case is the influence of absolute participles. As is well known, absolute constructions grew in popularity in the course of the eModE period with support from Latin analogues (see Rissanen, forthcoming: §6.2.3). In many of the genres represented in the HC they are very common, though they have now declined considerably in frequency (Denison, forthcoming: §3.6.6.6). Here follow a few examples from the period:

(37) E2 1603 Raleigh *Trial* I, 210.C1: The Lord Cobham being requir'd to subscribe to an Examination, there was shewed a Note under Sir Walter Raleigh's hand; the which when he had perus'd, he paus'd, and after brake forth into these Speeches:

¹³ The same applies to proper nouns ending in the fricatives *ls*, *zl*, of which there could be one instance in my data, namely E1 1568 Turner A New Boke . . . of All Wines D2V: 'And it is plaine, that banketting and much eating and drinking [. . .] giue the most part of the material cause vnto the stone, which thing may be easily proued by the authority of Aetius writing of the stone, in these wordes.'

- (38) E1 1554 Throckmorton *Trial* I, 69.C1: ... and so *Vaughan's Testimonie being credited*, may be the material Cause of my Condemnation, as the Jury may be induced by his Depositions to speak their Verdict,
- (39) E2 1630 Taylor *Pennyles Pilgrimage* 133.C1: At last they found that which they expected, which was Sea-cole, *they following the veine of the Mine*, did dig forward still:

Examples (38) and (39) illustrate a common eModE type, now obsolete, in which the subject of the superordinate verb (respectively *may be* and *did dig*) is deleted under identity with the subject of a preceding absolute, thus leading to a situation in which, as Kortmann notes (1991: 101), the subject of the nonfinite construction actually controls the matrix subject, rather than the other way round (see also Jespersen, *MEG* V: §6.2.2; Söderlind, 1958: §502; Visser, §1085). These and other participial constructions recorded in the sixteenth and seventeenth centuries thus bear a close surface resemblance to some of the gerunds under discussion. Witness the following examples, repeated here for convenience:

- (5) E3 1666 Oxinden Letters (Elizabeth Oxinden) 309: I am really sorry my sister W: servant came noe more of the family of the Johnsones; *it* coming to nothinge it is looked one as my one [= 'own'] invention to draw the other one;
- (11) E2 1615 Markham *Countrey Contentments* 107: The best time for a Cow to calue in for the Dairie, is in the later ende of March, and all Aprill; for then *grasse* beginning to spring to its perfect goodnesse will occasion the greatest increase of milke that may be:
- (12) E3 1665 Hooke Micrographia 13.5,211: it [= a louse] is troubled at nothing so much as at a man that scratches his head [. . .] that makes it oftentime sculk into some meaner and lower place, and run behind a mans back, though it go very much against the hair; which ill conditions of it having made it better known then trusted, would exempt me from making any further description of it, did not my faithful [. . .] Microscope bring me other information of it.
- (16) E3 1698 Fiennes Journeys 152: There are a great deale of Gentry which lives in town tho' there are no good houses [...] its a very dear place so much Company living in the town makes provision scarce and dear, however its a good excuse to raise the reckoning on strangers.

It could even be argued that some of these sequences are not really gerundial, but participial. However, it seems to me reasonably clear that, unlike in (38)–(39), the focus is not on an individual entity (i.e. *it, grasse, ill conditions,* or *so much Company*), but on the entire proposition functioning as subject of the higher verb; in other words, in (11) it is not grass that 'will occasion the greatest increase of milk', but rather the fact itself of grass being in 'its perfect goodness' in springtime. So also in (16), where it is the fact of there being so many people living in the town that is held responsible for the scarcity of food or provisions.

My suggestion, therefore, is that in gerund phrases one of the ways in which the replacement of possessive forms by common case ones took place was through the influence of participial constructions like those adduced above. As I see it, further support for this view can be found in facts of syntactic distribution. In other words, it is noteworthy that out of the 12 gerunds belonging to the type under discussion in

my data, 6, namely (5), (6), (11), (12), (16) and (20) (if this doubtful example can be included here; see section 3.1.5), are used as subjects. This proportion is exceptional if one bears in mind that, as I have demonstrated elsewhere (Fanego, 1996b), across time there is a constant trend for most gerunds to occur chiefly as prepositional objects (e.g. by John's looking at me), to the extent that subject gerunds in the HC represent only about 13.6 per cent.¹⁴ The comparatively high incidence of subject gerunds with a nongenitive NP as subject seems easy to explain, however, if we consider that the gerund in subject function has a much closer formal affinity with the absolute participles serving as a model for the change than the prepositional gerund; this affinity lies not just in the lack of an introductory preposition in the subject gerund and in the participial type illustrated in (38)-(39), but, more importantly, in the fact that they both precede their superordinate clause (unlike the prepositional gerund, which may occur in other positions; see examples (1), (2) and (3) in this paper). In view of this, we could expect the subject gerunds to be the first to acquire the verbal traits characteristic of the participle. The evidence from Dryden's prose usage also seems to confirm this hypothesis: Söderlind (1958: §§514, 516) records 12 instances of common case NPs in Dryden, 7 of which occur as arguments of gerunds used in the syntactic function subject, as against only 5 occurring with gerunds of the prepositional type.¹⁵

Summing up, I would argue that the replacement of PossPs ('John's looking at me') by NPs ('John looking at me') took place, at least in the case of some gerund phrases, 'obliquely', as a kind of minimal alteration of a pre-existing structure (the absolute participle, as described above). It is even conceivable that the language users responsible for some of the early instances of this type of verbal gerund may have produced them inadvertently, as a result of their inability to adequately handle some other syntactic sequence they had originally intended. The awkward, even faulty, syntax of some of my relevant examples (see especially (5), (6), (13) and (20))¹⁶ could support this view of the way in which the change proceeded. In addition, this 'unintentionality' hypothesis ties in well with some of the defining features of a linguistic change from below the level of social awareness, as outlined earlier in this section: through a good part of their development changes from below

¹⁴ This is the percentage for gerunds with both pre- and post-head dependents, as in *God's sending his only Son into the world* (see Fanego, 1996b: table 3), which is the type relevant to our discussion. With other types of gerunds (e.g. '*watching television* is OK') the score for the subject function is as low as 1.8 per cent.

¹⁵ In §516 and §518, where he gives the data for the prepositional gerunds, Söderlind lists 6 further instances where the nominal is either in the plural (e.g. of his homely Romans jesting at one another) or is a classical proper noun ending in *ls*, *zl* (e.g. for Cleomenes not accepting the favours of Cassandra). Since, as Söderlind himself acknowledges, 'the apostrophe alone is never used as a sign of genitive' in Dryden, these 6 cases are ambiguous between a reading as PossPs with a 'zero' genitive (i.e. of his homely Romans') or as common case NPs, and hence have been excluded from my count.

¹⁶ Note that in (20) the subject NP *these small pellets* is resumed later in the sentence by the anacoluthic *a few of them*: 'these small pellets being a few of them also thrown in as you are Angling will be the better'.

take place spontaneously, and 'no one notices them or talks about them' (Labov, 1994: 78).¹⁷

4.3 Of-phrases vs NPs as object arguments

In order to obtain an accurate picture of the verbalization of gerundial objects, a distinction has to be established between gerund phrases like (by) writing of it (henceforth referred to as Type A), in which the gerund is followed, but not preceded, by some dependent or dependents, and constructions like (by) his writing of it (henceforth Type B). In this second subtype, in which there are premodifiers of various classes (i.e. determiners, possessives, adjectives, etc.), verbalization takes place considerably later, as I have demonstrated elsewhere (Fanego, 1996b: 130 ff). The internal structure of the gerund phrase is therefore an important variable controlling the replacement of of-phrases by noun phrases; other variables also having an influence on the verbalization of the gerund's object will be examined in the remainder of this section.

Tables 4a and 4b show the surface realization of object arguments in gerunds of Types A and B respectively.¹⁸ The most obvious conclusion to be drawn from these two tables is that, as pointed out above, there is a considerable time lapse between both classes of gerund as regards the acquisition of direct objects: whereas with Type A objects are well represented already in E1 (43 per cent at this stage), with Type B they are practically nonexistent and do not become common until E3, though even then the number of of-phrases (= 48 per cent) remains high. To some extent, the fact that Type A gerunds begin to acquire direct objects already in ME times, rather than in eModE, is problematic for this research, because I lack evidence for the inception stage of the change. However, the available data suggest that the abandonment of of-phrases in favour of NP objects, just like the replacement of PossPs by common case NPs discussed in section 4.2, may have started with the more oral, less formal, and more private genres. This direction of change can better be observed if we compare the joint figures for the oral/informal text types (i.e. Diaries, Private Letters, Fiction, Comedy, Travelogue and Trials; see section 2 of this paper) with the percentages for the rest of the genres (see tables 5-7). In the case of these latter, I have provided statistics with and without Statutes (see tables 7 and 6, respectively);

¹⁷ Though some readers may find it difficult to combine the influence of a Latin structure (the absolute participle), usually characterized as prestigious, and change from below, it must be borne in mind that the label 'below' does not necessarily refer to position in the socioeconomic hierarchy; as Labov acknowledges (1994: 78), this type of change 'may be introduced by any social class'.

¹⁸ From the data for these two tables I have omitted 20 'asymmetric' gerunds, that is, gerunds usually occurring in the second of two coordinate clauses (e.g. 1599–1601 Hoby *Diary* 76 'after the hearing of the word and *receauinge the sacrementes*') which, for the reasons expounded in Fanego (1996b: 113–14), cannot readily be ascribed to either class A or class B. The breakdown for these 20 asymmetric gerunds is as follows: 3 ex. with NP object in E1 (2 in Trials, 1 in Travelogue), 2 ex. with NP object in E2 (1 in Diaries, 1 in Travelogue), 3 ex. with *of*-phrase in E2 Statutes, 12 ex. with NP object in E3 (3 in Diaries, 7 in Statutes, 2 in Travelogue).

		El	E2	E3
of-phrase	Diaries	6	1	3
	Private Letters	3	2	2
	Fiction	6	2	0
	Comedies	3	0	1
	Travelogue	5	0	1
	Statutes	23	11	3
	Philosophy	7	4	0
	Science	6	4	0
	Handbooks	7	2	2
	Trials	3	4	0
	Sermons	5	2	0
TOTAL		74 (57%)	32 (23%)	12 (5%)
NP	Diaries	5 (45.5%)	9 (90%)	27 (90%)
	Private Letters	4 (57%)	7 (78%)	17 (89.5%)
	Fiction	5 (45.5%)	11 (85%)	16 (100%)
	Comedies	2 (40%)	5 (100%)	14 (93%)
	Travelogue	0 (0%)	4 (100%)	8 (89%)
	Statutes	10 (30%)	9 (45%)	30 (91%)
	Philosophy	0 (0%)	7 (64%)	20 (100%)
	Science	4 (40%)	22 (85%)	36 (100%)
	Handbooks	2 (22%)	9 (82%)	35 (95%)
	Trials	14 (82%)	16 (80%)	8 (100%)
	Sermons	10 (67%)	7 (78%)	22 (100%)
TOTAL		56 (43%)	106 (77%)	233 (95%)

Table 4a Surface realization of object arguments (Type A gerunds)

this is by far the most conservative register, hence its inclusion could distort the overall picture for the other 'formal' text types. Basically, what these various tables show can be summarized as follows:

(a) As regards Type A gerunds, in E1 the proportion of NP objects is 54 per cent for the oral/informal registers and 39 per cent for the other genres (Statutes excluded). By E2, this difference has narrowed considerably, the respective proportions being now 85 per cent and 79 per cent. At this stage, NP objects have become the unmarked complement in *all kinds of register*, with the single exception of Statutes, where they still represent only 45 per cent (9 ex. out of 20; see table 4a). By E3, NP objects have almost wholly displaced *of*-phrases (= only 12 ex. out of 245), except in well-defined circumstances which, for lack of space, I cannot discuss in this paper. The grammaticalization or regularization of direct objects has progressed so far that even Statutes, with a ratio of 91 per cent (see table 4a), have caught up with the rest of the registers in this respect. It can be said, therefore, that only the verbal pattern (*by*) seeing Jane has a significant place in the grammar of late seventeenth-century English; not surprisingly, it is the only one to have survived into Present-day English, where its nominal variant (*by*) seeing of Jane is no longer available.

		El	E2	E3
of-phrase	Diaries	8	3	6
	Private Letters	7	2	4
	Fiction	4	5	0
	Comedies	0	4	3
	Travelogue	2	4	0
	Statutes	27	28	25
	Philosophy	3	5	2
	Science	2	19	4
	Handbooks	10	19	5
	Trials	23	10	0
	Sermons	7	3	7
TOTAL		93 (99%)	102 (90%)	56 (48%)
NP	Diaries	0	1 (25%)	16 (73%)
	Private Letters	0	2 (50%)	11 (73%)
	Fiction	0	0 (0%)	1 (100%)
	Comedies	0	1 (20%)	1 (25%)
	Travelogue	0	1 (20%)	3 (100%)
	Statutes	0	3 (10%)	10 (29%)
	Philosophy	0	0 (0%)	1 (33%)
	Science	0	1 (5%)	4 (50%)
	Handbooks	0	0 (0%)	7 (58%)
	Trials	1 (4%)	2 (17%)	2 (100%)
	Sermons	0	0 (0%)	5 (42%)
TOTAL		1 (1%)	11 (10%)	61 (52%)

Table 4b Surface realization of object arguments (Type B gerunds)

Table 5a Rate of verbalization of object arguments (Type A gerunds) in Diaries,Private Letters, Fiction, Comedy, Travelogue and Trials

	E1	E2	E3
of-phrase	26 (46%)	9 (15%)	7 (7%)
NP	30 (54%)	52 (85%)	90 (93%)
TOTAL	56	61	97

 Table 5b Rate of verbalization of object arguments (Type B gerunds) in Diaries,

 Private Letters, Fiction, Comedy, Travelogue and Trials

E1	E2	E3	
44 (98%)	28 (80%)	13 (28%)	
1 (2%)	7 (20%)	34 (72%)	
45	35	47	
	44 (98%) 1 (2%)	44 (98%) 28 (80%) 1 (2%) 7 (20%)	44 (98%) 28 (80%) 13 (28%) 1 (2%) 7 (20%) 34 (72%)

 Table 6a Rate of verbalization of object arguments (Type A gerunds) in Philosophy,

 Science, Handbooks and Sermons

	El	E2	E3
of-phrase	25 (61%)	12 (21%)	2 (2%)
NP	16 (39%)	45 (79%)	113 (98%)
TOTAL	41	57	115

 Table 6b
 Rate of verbalization of object arguments (Type B gerunds) in Philosophy,

 Science, Handbooks and Sermons

	El	E2	E3
of-phrase	22 (100%)	46 (98%)	18 (51%)
NP	0 (0%)	1 (2%)	17 (49%)
TOTAL	22	47	35

 Table 7a Rate of verbalization of object arguments (Type A gerunds) in Statutes,

 Philosophy, Science, Handbooks and Sermons

<u> </u>	E1	E2	E3	
	El	E2	ES	
of-phrase	48 (65%)	23 (30%)	5 (3%)	
NP	26 (35%)	54 (70%)	143 (97%)	
TOTAL	74	77	148	

 Table 7b Rate of verbalization of object arguments (Type B gerunds) in Statutes,

 Philosophy, Science, Handbooks and Sermons

	El	E2	E3
of-phrase	49 (100%)	74 (95%)	43 (61%)
NP	0 (0%)	4 (5%)	27 (39%)
TOTAL	49	78	70

(b) Turning to Type B gerunds, a look at table 4b confirms that the verbalization of the object had practically not yet started in E1: there is just one example of a NP object ('notwithstanding the Attorney prompting *Sergeant Dier*'; see (9) above), out of a total of 94 gerund phrases. Note that the gerund's subject is itself verbal, that is, it is one of the two common case NPs recorded in E1, both in *The Trial of Sir Nicholas Throckmorton* (1554), hence the selection of a NP as object in this example has no doubt been assisted by the verbal syntax of the construction as a whole (see further section 5 below). By E2, however, direct objects have become a real, if very

restricted, possibility: there are now 11 examples (= 10 per cent), as against 102 ofphrases. Despite these limited numbers, it seems clear that the oral/informal genres can be identified as the spearhead of the change, just as happened with gerunds of Type A; compare in this connection the percentages for NP (= 7 ex., or 20 per cent, out of 35) in Diaries, Private Letters, Fiction, Comedy, Travelogue and Trials (see table 5b), with those for the other five registers (4 ex., or 5 per cent, out of 78; see table 7b). The same applies to the third and last subperiod of eModE: direct objects now represent 72 per cent in the oral/informal genres,¹⁹ as opposed to only 49 per cent if Philosophy, Science, Handbooks and Sermons are considered together (see table 6b). Once again, the proportion of NP objects in Statutes is by far the lowest, namely 29 per cent (see table 4b).

(c) The development of Type B gerunds expounded under (b) provides a good example of *extension*. This, together with reanalysis and borrowing, is one of the three mechanisms of syntactic change recognized by Harris & Campbell (1995: 51, 97ff), who define it as a mechanism 'which results in changes in the surface manifestation of a pattern and which does not involve [unlike reanalysis. – T. F.] immediate or intrinsic modification of underlying structure' (ibid.: 51). Extension 'operates to change the syntax of a language by generalizing a rule' (ibid.: 97) and is systematic, in the sense that 'the environment into which a rule may be extended is restricted by the nature of the rule in the particular language. Observed extensions generalize to a natural class based on categories already relevant to the sphere in which the rule applied before it was extended' (ibid.: 101). In the case under discussion, the rule in question could be stated as (40):

(40) In the surface configuration [*Prep*] V-ing XP the unmarked realization of the object argument of a gerund is NP.

This rule, as noted in (a), effectively became part of the grammar of English by E2. From this moment, it was likely to be extended also to the gerunds of Type B, since these form, together with the gerunds of Type A, a natural class, namely the class of gerundial constructions in English (see Harris & Campbell, 1995: 101ff for discussion of the concept 'natural class'). The beginnings of this process of extension can be seen marginally already in E2, though, as might have been expected, the number of examples of the innovative pattern [*Prep*] X V-ing NP does not become significant until E3. At this stage, and as a result of the diffusion of direct objects from Type A to Type B, hybridization becomes a prominent feature of English gerunds of the latter type, as I have shown in Fanego (1996b); by hybridization I mean the various combinations of nominal and verbal features that can be observed in the italicized sequences in (41)-(42):

¹⁹ The high ratio of Type B gerunds with of-phrases in Comedies (3 ex., as against just one direct object; see table 4b) is only apparent; two of the nominal instances retain the preposition of because they are idiomatic expressions. See 1697 Vanbrugh The Relapse I, 61 'in the Poaching of an Egg' and I, 64 'in the catching up of a Garter' (i.e. 'in a moment').

- (41) E3 1666-1667 Pepys *Diary* 416: And among other things, I to my chamber and there to ticket a good part of my books, in order to the Numbring of them *-for my easy finding them to read*, as I have occasion.
- (42) E3 1698 Fiennes Journeys 146: Sir Robert Rich is a great supporter of them and contributed to the building the Meeting place,

Extension processes, as Harris & Campbell recognize (1995: 115ff), are one source of variation in language, since it is often the case that the rule which has been extended and the rule which formerly governed the new domain into which it has been extended coexist for a time. This is exactly the state of affairs we find with Type B gerunds in both E2 and E3: the older pattern [*Prep*] X V-ing of-phrase co-exists with the innovative pattern [*Prep*] X V-ing NP, a good example of such co-existence being the nominal and hybrid gerunds that Pepys employs in succession in (41) above. In this respect, eModE represents a transitional stage; during the eighteenth and nineteenth centuries gerunds of Type B continued to evolve, until eventually only some of the structures recorded in our period remained available in the language. This is an issue to which I return in the next section.

5 The internal structure of eModE gerund phrases

Present-day English verbal gerunds (or gerundive nominals, as they are often referred to in the literature) are usually recognized as true categorial hybrids, in that they combine a verbal complementation pattern and a clausal interpretation with a characteristically nominal distribution and, in the case of so-called POSS-*ing* gerundives, the presence of a subject marked for the genitive case. However, as a consequence of the developments outlined in the previous sections, eModE gerunds exhibit a much greater degree of hybridization and structural instability than their Present-day English counterparts. Thus, the following patterns are all represented in my seventeenth-century data:

(a) Nominal:

- (43) E3 1666-1667 Pepys Diary 313: and [we] fell to reading of the several Advices to a Painter,
- (44) E2 1603 Raleigh Trial 209.C2: I suspected his visiting of him:
- (45) E3 1679 Tillotson Sermons ii452: the unspeakable satisfaction and delight which is to be had in the doing of our duty,
- (46) E3 1665 Strype Letters 183: as far as I can understand, there is no escaping of it:

(b) Verbal:

- (47) E3 1666–1667 Pepys Diary 317: it ended in bidding them think more of it
- (48) E3 1689-90 Evelyn Diary 927: alarm'd by the French fleete braving our Coast

(c) Hybrids:

- (49) E2 1597 Shakespeare Merry Wives 54.C2: There is no hiding you in the house. [negative determiner + pronominal object]
- (50) E3 1666-1667 Pepys *Diary* 317: all the news is *the enemy's* landing 3000 men near Harwich, [PossP + NP object]

- (51) E3 1673 Taylor Sermons 13: the noblest End is the multiplying children. [definite determiner + NP object]
- (52) E3 1666-1667 Pepys *Diary* 416: for *my easy* finding *them* to read, [possessive determiner + adjective + pronominal object]
- (53) E3 1698-1699 Statutes VIII, 587: An Act for the more effectual preserveing the Kings Person and Government [definite determiner + adjective phrase + NP object]
- (54) E3 1676 Walton Compleat Angler 211: there is brave hunting this Waterdog in Cornwall. [adjective + NP object]²⁰
- (55) E3 1676 Walton Compleat Angler 213: the not keeping the Fence months for the preservation of fish, [definite determiner + VP-negating particle + NP object]
- (56) E3 1666-1667 Pepys *Diary* 414: He is of my mind, against having of eighths unnecessarily in composition. [of-phrase + adverb]
- (57) E3 1665 Hooke *Micrographia* 13.5, 45: either hammering, or filing, or otherwise *violently* rubbing *of Steel*, will presently make it so hot as to be able to burn ones fingers. [manner adverb + *of*-phrase]

Examples (47) and (49)–(54) arise from the generalization of direct objects at the expense of *of*-phrases, as discussed in section 4.3, while (55)–(57) illustrate the gerund's acquisition of adverbial modification to which I alluded at the beginning of this paper. Example (57) can be considered somewhat exceptional,²¹ since in my data the constituents following the gerund are verbalized much earlier than those preceding it, as might have been expected from the fact that the two classes of dependents most extensively affected by the process of verbalization, namely objects and adverb(ial)s, usually come in post-verbal position in English.

It is clear from the evidence just adduced that, as already noted by van der Wurff (1993, 1997), English gerunds in the Modern English period are characterized by a remarkable mixture of nominal and verbal properties. With the possible exception of present-day Dutch,²² other languages also having nominalizations which are categorially hybrids seem to exhibit a more systematic patterning in this respect. Thus, Spanish, Korean, Cuzco Quechua, Hebrew or Arabic (Hazout, 1995) are often adduced in the literature as examples of languages licensing nominalizations

- ²¹ An analogous example cited by both Visser (§1124) and van der Wurff (1997) is 1610 B. Jonson Alchemist (Everym. Libr.) IV, ii, p. 62 'The quickly doing of it, is the grace.'
- ²² On Dutch infinitives see, among others, Hoekstra (1986) and van der Wurff (1997). However, as van der Wurff acknowledges (footnote 5), not all scholars accept the idea that the Dutch infinitival nominalization 'really has a mixed character'.

²⁰ In eModE the -ly suffix in open class adverbs had not spread so widely as in Present-day English, and thus some adverbs and adjectives were alike, as aptly pointed out to me by one of the reviewers (see also Raumolin-Brunberg, 1991: 104, note 5). This complicates the analysis of (52)-(54) and similar examples. *Easy, brave*, and other items recorded in my data as gerundial premodifiers had adverbial uses in eModE (see the corresponding entries in the OED), but effectual, which is found in (53) and again in E3 Statutes (1695-1696: VII, 98) apparently did not, hence my decision to interpret all such forms as adjectival. Only adjectival were also musty 'ill humoured' and public, which occur in Dryden's Maiden Queen 426 ('somewhat better than musty marrying her') and in his Dedication to The Aeneis 176 ('then succeeds her public owning it'); compare this latter quotation with Dryden's Controversy with Stillingfleet 230 'his not publicly owning that he did so', where the presence of the verb-negating particle not has triggered the selection of the adverb publicly.

with particularly complex grammar, but in Spanish the infinitival nominalization, if we leave aside the presence of an initial definite article (el), is either completely nominal (el melodioso cantar de Teresa 'Teresa's melodious singing') or completely verbal (el cantar Teresa tan melodiosamente 'Teresa singing so melodiously'), but not both at the same time (see de Miguel, 1996, and references there). The same seems to be largely true of Korean (Yoon, 1996: 347-8) and Quechua (Lefebvre & Muysken, 1988: 23, 31-2, 59). Finally, Hebrew action nominalizations (Hazout, 1995: 361-5) come closer to the eModE gerund in that they combine unambiguously verbal features like manner adverbials and accusative marking on the object with nominal properties like the use of adjectives as modifiers of the head and the assignment of genitive case to the logical subject of the construction; however, unlike in eModE (see (52), (53), (54), (56) and (57) above), adverbs and adjectives are in complementary distribution as regards their position within the nominalized construction. In other words, as shown in (58), adjectives in Hebrew can follow the head but are excluded from final position, while adverbs do not occur after the head but are good in final position:

- (58) (a) ha-axila ha-menumeset Sel Dan et ha-uga the eating the polite Dan's (= free genitive) ACC the cake 'Dan's polite eating of the cake'
 - (b) axilat Dan et ha-uga *be-nimus* eating Dan's (= bound genitive) ACC the cake politely 'Dan's eating the cake politely'

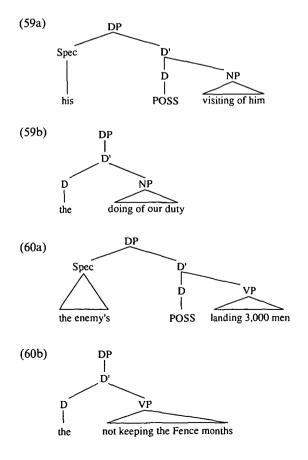
As Hazout (1995: 364) notes, '[t]he facts just observed indicate that the configuration underlying these constructions involves a distinction between a verbal domain, which allows the occurrence of adverbs and excludes adjectives, and, conversely, a nominal domain, which allows the occurrence of adjectives and excludes adverbs'. There is no evidence, however, that this comment can be applied to all of the English gerunds recorded in E3, to judge at least from the existence of examples like (52), (53), (54) and (57).

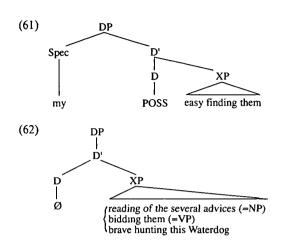
By contrast with this lack of any apparent system in the hybrid gerunds quoted under (c) above, it is remarkable that all my examples of the type represented by (48), with a common case NP as subject (see also sections 3.1.2 and 3.1.4, and the 12 instances of this class recorded in Dryden; cf. Söderlind, 1958: §§514, 516), should exhibit exclusively verbal properties, or could at least be interpreted as being exclusively verbal, as is the case with examples like (10) or (16), where the dependents of the gerund are adverbials of various kinds. This suggests, I think, that by the end of the eModE period (if not before) English had developed two distinct types of gerundial nominalization, as follows:

1. The clausal, or sentential, type illustrated in (48). This, like any other nominalization, shares the possibilities of occurrence (i.e. the distribution) of ordinary NPs, but has the internal syntax of a nonfinite clause. In this paper, I will not attempt to provide a structural representation for this kind of gerund, but this can be easily done in various ways; see, for instance, de Miguel (1996), whose proposal, within a GB framework, for the verbal infinitive in Spanish would also suit the English verbal gerund.

2. A phrasal type represented by all the other examples adduced earlier in this section (i.e. (43)-(47) and (49)-(57)). This phrasal gerund comprises, in its turn, a variety of structures which could be seen as forming a gradient from more to less nominal, and which reflect the gradual process of verbalization that had been affecting the English gerund since ME times. Though this is a topic on which more work is needed, provisionally I would hypothesize that these various structures can all be interpreted as DPs (= determiner phrases; see Abney, 1987; Ritter, 1991, 1992) differing in the kinds of specifiers and determiners they contain, and also, crucially, in the kind of complement selected by D. See in this connection (59)-(62).

Structures (59a-b), where D selects a NP, represent the purely nominal type inherited from Old English. This has survived basically unchanged into Present-day English, though there seem to be now much greater restrictions on the occurrence of nominal gerunds than existed in eModE; the nominalized gerund construction is usually felt to be too formal (cf. Declerck, 1991: 498), and tends to be replaced either by a verbal gerund or by a derived nominal with other endings besides *-ing*. Note in





this connection Joseph Emonds' observations (1973: 187) about preferred sequences like *achieving one's goals/the achievement of one's goals* versus less preferred ones like *the achieving of one's goals* (see also Fanego, 1996b: 120-1).

In (60a-b) the complement of D is fully verbal, whereas in (61) it exhibits a mixture of nomino-verbal properties. For the moment, I will not discuss what kind of category we need to postulate for the complements in these structures, though the former type (which I have provisionally labelled VP, following Abney's 1987 proposal for POSS-*ing* gerundives)²³ is of course much easier to account for than the latter.

Finally, (62) is the structural representation of examples like (43), (47), (54), (56), and (57), in which the head is the null determiner symbolized as \emptyset (see Radford, 1997: 151ff). In such cases, as shown in section 4.3, the unmarked pattern in E3 is clearly the verbal one (i.e. *in bidding them*), rather than the one with an *of*-phrase, in a ratio of about 95:5. Though I think that today surface *V-ing NP* is probably to be interpreted not as a phrasal gerund, but as a sentential one differing from structures like (48) (by the French fleete braving our Coast) only in the fact of having a null subject (i.e. PRO; see Cowper, 1995: 27ff and Haegeman, 1994: chapter 5 for this view of *V-ing NP* in Present-day English), this reanalysis of a formerly phrasal pattern as a clausal one cannot be assumed for eModE. As I see it, the status of *V-ing NP* as a phrasal complement of D seems to be supported, first, by the existence of the related nominal pattern *V-ing of-phrase*, with which it was in co-variation and constituted a kind of syntactic paradigm, second, by the possibility of coordinate structures like (63), which seem hard to explain except under a phrasal analysis:

²³ As pointed out by Pullum (1991: 788), one problem with Abney's analysis of POSS-*ing* constructions is that he needs an ad hoc rule stating that the complement of the type of determiner heading gerundive nominals is VP, rather than the expected NP (or NumP = 'Number Phrase', as assumed in recent GB theory; see Ritter, 1992).

(63) E3 1698 Fiennes Journeys 149: there is a great many Cerimonyes in the choice and swearing their major [= 'mayor'] they elect him the first of May and then prepare for his being sworne on Holly Thursday;

To close this section I would like to point out some of the chief developments which seem to have affected phrasal gerunds since eModE times.²⁴ One of the most obvious is the decrease in frequency of the nominal gerund (*his visiting of him*), to which I referred earlier in this section. Another is the loss of the pattern (*by*) writing of this book, which may have been assisted by the parallel loss sometime in late Modern English (see Denison, forthcoming: §3.3.3.5) of the nominal progressive exemplified in (64):

(64) E3 1666-1667 Pepys *Diary* 320: And this Gabriel Holmes did advise to have had two houses set on fire, one after another, that while they *were quenching of one*, they might be burning another.

Here the progressive form *were quenching* governs its object via the preposition *of*, thus closely resembling the gerundial structure under discussion. The formal and functional affinities between the gerund and the progressive in earlier stages of English are well known (see Denison, 1993, and references there; also Fanego 1996b), so it is conceivable that the eventual disappearance in late Modern English

(a) On the basis of work by Hoekstra (1986) and others, the 1993 paper argues that the English gerund construction was originally of mixed nominal and verbal character, that is, essentially [+V,+N]. Sometime during the late Modern English period there took place a split, from this mixed type [+V,+N] into two types, one nominal (i.e. [-V,+N]), as in *the stealing of the bike was noticed*, and the other verbal (i.e. [+V,-N]), as in *stealing the bike was noticed*, with concomitant loss of hybrid structures like *the stealing the bike* and so on. The reasons for the change were two independent developments that happened to take place in English during the seventeenth to nineteenth centuries, namely on the one hand the steady growth in the number of action nouns of the type *destruction, capture*, and *betrayal*, which would exert pressure on the more or less synonymous gerund to become fully nominal, and on the other hand the explosive increase in the use of the fully verbal progressive, which would provide pressure for the homophonous gerund to become verbal.

(b) In his 1997 study, van der Wurff departs from his earlier analysis to follow Yoon (1996). This accounts for English gerunds like John's singing the song by postulating a null nominalizing affix which is attached to a phrasal projection of the verb (i.e. essentially to VP); below this VP level, every constituent remains verbal (hence the direct object the song), whereas everything above will have nominal properties (hence the genitive case marking on John's). Van der Wurff adopts this idea of a null affix, but, as the syntax of gerunds in earlier English is considerably more complex than today, in order to account for hybrid sequences like the quickly doing of it (see above, note 21) he assumes a succession of null affixes which are attached at various levels of structure: the first affix is nominalizing, and yields the nominal object (of it); the second has a verbalizing effect, hence the manner adverbial quickly; the third is nominalizing once more, and explains the presence of the determiner the. One problem with this analysis is that, while most approaches to the syntax of nominalizations posit an abstract nominalizing element of some kind (i.e. a null affix in Yoon, 1996; a null determiner ING in Abney, 1987; an abstract nominalizer NOM in Hazout, 1995), which is needed to account for the fact that a gerund is a verb that has acquired some nominal properties, I cannot find much justification for the verbalizing affix proposed by van der Wurff.

²⁴ Some of these developments have been discussed by Koma (1980), who argues that they can be predicted in terms of Jackendoff's X-bar theory (1977) and his hypothesis about category-switching rules. More recently, van der Wurff has also approached this topic in two papers (1993, 1997) containing many valuable insights. His two proposals, which exhibit substantial differences, can be summarized as follows:

of whatever nominal characteristics the progressive still exhibited may have served to encourage the complete abandonment of a gerundial pattern which already in E3 was clearly marginal.

The grammar of the gerund in modern times has also been simplified by the loss of structures like (60b) and (61), which implies that hybridization below the X' level has come to be disallowed in contemporary usage. This is one of the ways in which Present-day English differs from a language like Spanish, where the definite article el can freely head verbal infinitives (e.g. 'el cantarlo tú'; see de Miguel, 1996).²⁵ Mixed nomino-verbal properties have thus become restricted in English to the assignment of genitive case to the gerund's notional subject, which in the structural representation proposed in (60a) surfaces as the specifier of the abstract possessive determiner POSS.²⁶ All other determiners are now ungrammatical, unless, of course, the gerund phrase is fully nominal, as in (59b) above. This restriction in the range of determiners probably did not take place 'catastrophically' but gradually, to judge at least from the fact that items like *this/that* ('this telling tales . . .') or *no* ('there's no mistaking that voice') are still felt to be marginally acceptable by some speakers (see Blevins, 1994: 12-13; Quirk et al., 1985: §§15.12, 15.14). Despite these considerable changes, it is clear that the drift of the English gerund from nominal to verbal is still going on, as is indicated by the increasing frequency with which possessive forms are currently being replaced by common case NPs and objective pronouns as subjects (see section 4.2).

6 Summary and conclusions

In this paper I have examined the internal structure of gerund phrases during the eModE period, with special reference to the surface realization of notional subjects and objects. The main findings can be summarized as follows:

1. As shown in section 4.1, the variables controlling the choice between PossPs ('Robin's going away') and of-phrases ('the going away of Robin') as gerundial arguments are largely in harmony with those identified by Altenberg in his study (1982) of the genitive versus the of-construction in seventeenth-century English. The main factors favouring the genitive in my corpus are: (a) relational; (b) stylistic; and (c) lexical. The relational factor accounts for the fact that, almost invariably, the PossP corresponds to the subject argument of the head gerund, though a few marginal cases of 'objective' genitives can still be found in my data (see in particular the passival examples quoted as (24)-(28)). In addition, the genitive is preferred in the more informal and personal styles (Diaries, Private Letters), whereas the of-

²⁶ For this analysis see Cowper (1995) and Ritter (1992); also Radford (1997: 448-9).

²⁵ This difference between English and Spanish usage is not easy to account for, as Yoon (1996: note 18) acknowledges. Another indication of how complex the analysis of nominalizations can prove is the fact that de Miguel (1996: note 5), in a paper full of valuable insights, has to admit that 'the categorial status and structural location' of the article *el* in Spanish verbal infinitives 'is an open question which requires further study'.

phrase clearly predominates in Statutes and Science. Finally, the surface realization of the possessor nominal is also closely connected with its degree of animateness: the genitive is favoured only by nominals which are [+HUMAN] and which, as a result, are also inherently topical (see Taylor, 1994a, b) and tend to be located in initial position before the gerund, rather than after it as an *of*-phrase.

2. The replacement of PossPs ('John's looking at me') by common case NPs ('John looking at me') as subject arguments of gerunds is only in its inception in eModE (see section 4.2), yet the fact that most of the few examples of NPs recorded in the HC occur in the more oral and informal genres suggests that this particular aspect of the process of verbalization of the gerund may have originated as a change from below, in Labovian terms (1994: 78). The implementation of the shift was assisted by linguistic factors like the identity in form of the common case and genitive of most plural nouns, which doubtlessly contributed to strengthen the feeling that a common case might be used as the subject of a gerund, or like the tendency to avoid the genitive form with [-HUMAN/-ANIMATE] nominals; in my data this latter was found to be a powerful variable in favour of NP. I have also argued that one of the ways in which the adoption of NP instead of PossP may have taken place was through the influence of (or perhaps simply through confusion with) absolute participles, especially those belonging to the obsolete type seen in (38), where the superordinate subject is deleted under identity with the subject of a preceding absolute:

(38) E1 1554 Throckmorton *Trial* I, 69.C1: . . . and so Vaughan's Testimonie being credited, Ø may be the material Cause of my Condemnation,

3. The verbalization of the object of the gerund is crucially determined by the type of gerund phrase involved (see section 4.3). As already shown in Fanego (1996b), Type A gerunds (e.g. by writing of it) are verbalized much earlier than those of Type B (e.g. by his writing of it). In both cases, however, the more oral and less formal genres can be identified as the spearhead of the change, as was also true of the shift from PossPs to common case NPs discussed in the previous paragraph.

4. By E2, direct objects, with a proportion of 77 per cent (see table 4a), have become the unmarked type of complement with gerunds of Type A. From this moment, objects start to be acquired also by gerunds of Type B, in a process that provides a good illustration of *extension*, as defined by Harris & Campbell (1995); that is, a mechanism of syntactic change that operates by generalizing a rule to a category (in our case, the gerunds of Type B) belonging to the same natural class as the category (the gerunds of Type A) for which the rule was relevant before it was extended. An important consequence of the diffusion of direct objects from Type A to Type B is that by E3 many gerunds of this latter type have become hybrids, that is, they exhibit a mixture of nomino-verbal properties (e.g. *the multiplying children | my easy finding them*); see sections 4.3 and 5.

5. As a result of the changes undergone by the gerund since ME times, it was argued in section 5 that, by the late seventeenth century, a distinction has to be established between two types of gerundive nominalizations: (a) a sentential type, which arises through the gerund's acquisition of a common case subject, as in 'by *the French fleete* braving our Coast'. This has the internal syntax of a nonfinite clause, and lacks any nominal properties, except the clause-external one of sharing the distribution of ordinary NPs, as is true of nominalizations in general;

(b) a phrasal type comprising a variety of structures ranging from more to less nominal. A unified account of these various structures was proposed, whereby they were interpreted as DPs (= determiner phrases) differing, basically, in the type of complement selected by D (NP, VP or a mixed nomino-verbal category; see (59)-(62)). When seen in this light, the chief difference between eModE usage and contemporary usage lies in the structural level at which hybridization is tolerated in each of these language stages: in eModE, unlike in PE, hybridization was possible below the X' level, as shown in (60b), (61) and (62), whereas in PE it has become restricted to the assignment of genitive case to [Spec, DP], as in POSS-*ing* gerundives like '*the enemy's* landing 3,000 men' (see (60a)).

6. Topics deserving further research are the reasons for the restriction in the range of gerundial constructions available today, and also for the important decrease in frequency of the nominal gerund (e.g. *the doing of our duty*; see (59)). As I see it, an answer to these questions will require a detailed investigation of usage during the crucial period 1700–1900, which is when many of the patterns available in eModE seem to have gone out of use.

Author's address: Departamento de Filoloxía Inglesa e Alemana Facultade de Filoloxía Universidade de Santiago de Compostela E-15704 Santiago de Compostela Spain

References

Abney, S. (1987). The English noun-phrase in its sentential aspect. PhD dissertation, MIT.

- Altenberg, B. (1982). The genitive v. the of-construction: a study of syntactic variation in 17th century English. Lund: CWK Gleerup.
- Biber, D. & E. Finegan (1997). Diachronic relations among speech-based and written registers in English. In Nevalainen, T. & L. Kahlas-Tarkka (eds.), To explain the present: studies in the changing English language in honour of Matti Rissanen. Helsinki: Société Néophilologique. 253-75.
- Blevins, J. P. (1994). A lexicalist analysis of gerundive nominals in English. *Australian Journal* of Linguistics 14: 1-38.
- Cowper, E. A. (1995). English participle constructions. *Canadian Journal of Linguistics* 40: 1-38.

Crystal, D. & D. Davy (1969). Investigating English style. London: Longman.

- Deane, P. (1992). *Grammar in mind and brain: explorations in cognitive syntax*. Berlin and New York: Mouton de Gruyter.
- Declerck, R. (1991). A comprehensive descriptive grammar of English. Tokyo: Kaitakusha.
- Denison, D. (1993). English historical syntax. London and New York: Longman.

- Denison, D. (1996). The case of the unmarked pronoun. In Britton, D. (ed.), English historical linguistics 1994. Amsterdam and Philadelphia: John Benjamins. 287-99.
- Denison, D. (forthcoming). Syntax. In Romaine, S. (ed.), The Cambridge history of the English language, vol. 4: 1776-present day. Cambridge: Cambridge University Press.
- Donner, M. (1986). The gerund in Middle English. English Studies 67: 394-400.
- Emonds, J. (1973). The derived nominals, gerunds, and participles in Chaucer's English. In Kachru, B. B. et al. (eds.), *Issues in linguistics: papers in honor of Henry and Renée Kahane*. Urbana, Chicago and London: University of Illinois Press. 185-98.
- Fanego, T. (1996a). The development of gerunds as objects of subject-control verbs in English (1400-1760). *Diachronica* 13: 29-62.
- Fanego, T. (1996b). The gerund in early Modern English: evidence from the Helsinki Corpus. *Folia Linguistica Historica* 17: 97–152.
- Görlach, M. (1991). Introduction to early Modern English. Cambridge: Cambridge University Press. [Originally published in German as Einführung ins Frühneuenglische. Heidelberg: Quelle & Meyer, 1978.]
- Gotti, M. (1996). Robert Boyle and the language of science. Milan: Guerini Scientifica.
- Haegeman, L. (1994). Introduction to Government and Binding theory. 2nd edn. Oxford, UK, and Cambridge, MA: Blackwell.
- Harris, A. C. & L. Campbell (1995). *Historical syntax in cross-linguistic perspective*. Cambridge: Cambridge University Press.
- Hazout, I. (1995). Action nominalizations and the lexicalist hypothesis. *Natural Language and Linguistic Theory* 13: 355–404.
- Hoekstra, T. (1986). Deverbalization and inheritance. Linguistics 24: 549-84.
- Jackendoff, R. S. (1977). X-bar syntax. Cambridge, MA: MIT Press.
- Jespersen, O. (1909-1949). A modern English grammar on historical principles. 7 vols. Copenhagen: Ejnar Munksgaard. [Reprinted, London: George Allen & Unwin, 1961, 1965, 1970.]
- Koma, O. (1980). Diachronic syntax of the gerund in English and the X-bar theory. *Studies in English Literature* (The English Literary Society of Japan) English Number. 59-76.
- Kortmann, B. (1991). Free adjuncts and absolutes in English: problems of control and interpretation. London and New York: Routledge.
- Kytö, M. (1996). Manual to the diachronic part of the Helsinki Corpus of English Texts: coding conventions and lists of source texts. 3rd edn. Helsinki: Department of English, University of Helsinki.
- Labov, W. (1994). *Principles of linguistic change*, vol. 1: *Internal factors*. Oxford, UK, and Cambridge, MA: Blackwell.
- Lefebvre, C. & P. Muysken (1988). *Mixed categories: nominalizations in Quechua*. Dordrecht, Boston and London: Kluwer.
- Miguel, E. de (1996). Nominal infinitives in Spanish: an aspectual constraint. *Canadian Journal of Linguistics* **41**: 29–53.
- Nevalainen, T. & H. Raumolin-Brunberg (1989). A corpus of early Modern Standard English in a socio-historical perspective. *Neuphilologische Mitteilungen* **90**: 67–111.
- Nevalainen, T. & H. Raumolin-Brunberg (1993). Early Modern British English. In Rissanen, M., M. Kytö, & M. Palander-Collin (eds.), *Early English in the computer age*. Berlin and New York: Mouton de Gruyter. 53-73.
- Pullum, G. K. (1991). English nominal gerund phrases as noun phrases with verb-phrase heads. *Linguistics* 29: 763–99.
- Quirk, R., S. Greenbaum, G. Leech, & J. Svartvik (1985). A comprehensive grammar of the English language. London: Longman.
- Radford, A. (1997). Syntactic theory and the structure of English: a minimalist approach. Cambridge: Cambridge University Press.

- Raumolin-Brunberg, H. (1991). The noun phrase in early sixteenth-century English: a study based on Sir Thomas More's writings. Helsinki: Société Néophilologique.
- Raumolin-Brunberg, H. (1994). The development of the compound pronouns in *-body* and *-one* in early Modern English. In Kastovsky, D. (ed.), *Studies in early Modern English*. Berlin and New York: Mouton de Gruyter. 301–24.
- Rissanen, M. (forthcoming). Syntax. In Lass, R. (ed.), The Cambridge history of the English language, vol. 3, 1476–1776. Cambridge: Cambridge University Press.
- Ritter, E. (1991). Two functional categories in Modern Hebrew noun phrases. In Rothstein, S. (ed.), *Syntax and Semantics 25, Perspectives on phrase structure: heads and licensing.* New York: Academic Press. 37–62.
- Ritter, E. (1992). Cross-linguistic evidence for number phrase. *Canadian Journal of Linguistics* **37**: 197–218.
- Rosch, E., C. Marvis, W. Gray, D. Johnson, & P. Boyes-Braem (1976). Basic objects in natural categories. *Cognitive Psychology* 7: 573-605.
- Söderlind, J. (1958). Verb syntax in John Dryden's prose, vol. 2. Uppsala: A.-B. Lundquist.
- Tajima, M. (1985). The syntactic development of the gerund in Middle English. Tokyo: Nan'un-do.
- Tajima, M. (1996). The common-/objective-case subject of the gerund in Middle English. Nowele 28/29: 569-78.
- Taylor, J. R. (1994a). Possessives and topicality. Functions of Language 1: 67-94.
- Taylor, J. R. (1994b). 'Subjective' and 'objective' readings of possessor nominals. *Cognitive Linguistics* 5: 201–42.
- Visser, F. Th. (1963–73). An historical syntax of the English language. 4 vols. Leiden: E. J. Brill.
- Wurff, W. van der (1993). Gerunds and their objects in the Modern English period. In van Marle, J. (ed.), *Historical linguistics 1991*. Amsterdam and Philadelphia: John Benjamins. 363-75.
- Wurff, W. van der (1997). Gerunds in the Modern English period: structure and change. History of English (Seoul) 3 (Special Issue for Professor Kim In-Sook). 163-96.
- Yoon, J. H. S. (1996). Nominal gerund phrases in English as phrasal zero derivations. Linguistics 34: 329-56.