Drift and the development of sentential complements in British and American English from 1700 to the present day

1. Introduction

Sentential complementation, i.e. the situation that arises when a subordinate clause functions as an argument with respect to a governing element or head, as in “I think that it is a good idea” or “To refuse her request would be unthinkable”, has been a prolific area of research for many years among English historical linguists; see, among others, Warner (1982), Fischer (1988, 1989, 1995), Fanego (1990, 1992, 1996a/b/c, 1997, 2004a/b, 2006), Rohdenburg (1995, 1996, 2006), Los (1998, 2005), Rudanko (1998, 1999, 2000), Miller (2002), Wagner (2002), Vosberg (2003a/b, 2004) or, more recently, De Smet (2004, 2005) and De Smet/Cuykens (2005). Many of these studies have focused on Old, Middle and Early Modern English, while comparatively little work has been done on Late Modern and Present-day English, the main exceptions being some of the publications by

1 Some of the material in this paper was originally prepared for a plenary lecture presented at the Second International Conference on the English Language in the Late Modern Period (LMC2), held at the University of Vigo in November 2004. I would like to thank the participants in the conference for helpful discussion and the conference organizers for kindly inviting me to speak at such an intellectually rewarding event. I am also grateful to an anonymous reviewer for valuable comments on an earlier version, and to the Autonomous Government of Galicia (grants nos. PGIDIT02PXIC20402PN and PGIDIT05PXIC20401PN) and the Spanish Ministry of Education and Science (grants nos. BFF2001-2914 and HUM2004-00940) for generous financial support.
Rohdenburg, Rudanko and Vosberg, and a series of papers by Mair (2002, 2003, 2006) where he discusses the changing patterns of complementation after verbs such as *begin, start, prevent* or *remember*. Mair is also one of the few scholars who have looked at developments taking place not just in British English, but also in American English, so that, on the whole, there is still considerable work to be done in the field. In what follows, therefore, I will offer a preliminary account of my ongoing research on this complex area of English grammar from 1700 to the present day.

The paper is organized as follows. Section 2 contains a brief account of the corpus. Section 3 gives an overview of English sentential complements and summarizes their development since Old English times (700-1100), with particular reference to the emergence of verbal gerunds. Sections 4 and 5 examine in greater detail the spread of subjectless gerunds (e.g. “I avoided *meeting Mary*”) to the subject and object slots, at the expense of both *to*-infinitives and *that*-clauses; the decision to exclude from the discussion gerunds with an overt subject, as in “I resented *them* going without me” or “Our finding ourselves in an awkward situation was unexpected”, is motivated by limitations of space and also by the fact that they are far less common than subjectless gerunds, both today and in earlier stages of English. Section 6 closes the paper and argues, in light of the evidence presented in the preceding sections, that the massive restructuring of the complement system that has taken place in modern times as a result of the rise of the verbal gerund in Late Middle English can be characterized as a *drift* (Sapir 1921), that is, a long-
term succession of changes tending in the same direction in a language or a set of related languages. In the case under discussion, the direction of the changes has been towards a greater functional specialization of the infinitive, which has largely come to be used in complementary distribution with the gerundive.

2. The corpus

To illustrate usage in Present-day English, examples have been drawn from FLOB and FROWN, the two one-million-word corpora of British and American English compiled at the University of Freiburg in the 1990s (see Mair 2002).4 Evidence for Late Modern English (1700-1900) is based on the Corpus of Late Modern British and American English Prose (COLMOBAENG, 1700-1879), a 1,170,000 word database comprising materials retrieved from several miscellaneous sources.5 At present the structure of the COLMOBAENG is as shown in Tables 1-3 (see also the Appendixes).6

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4 FLOB and FROWN are available in Hofland et al. (1999).
5 Apart from the Century of Prose Corpus, which contains British English of the years 1680-1780 (cf. Milic 1995), to date the only historical corpus covering the Late Modern period is ARCHER (A Representative Corpus of Historical English Registers; see Biber et al. 1994). But ARCHER is not easily accessible and, in addition, when I started work on the present research I realized that some of the sections in ARCHER might prove too small for my purposes, as it comprises only 1.7 million words for the time-span 1650-1990.
6 Quotations from the COLMOBAENG are prefaced by a header block containing the following identifying information: subperiod / date of publication / surname of author / title / page number / text category. Eg BrE1 1725 Haywood Fatal Secret, 217 [Fiction].
<table>
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<th>American English</th>
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<tr>
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Table 1. Range of periods and dialects examined.

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<td>Total words: 70,000</td>
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Table 2. Range of texts from British English: fiction vs nonfiction (word [w] totals).
Drift and the development of sentential complements

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</tr>
<tr>
<td>4 authors</td>
<td>8 authors</td>
<td></td>
<td>- Romance and Love Story</td>
</tr>
</tbody>
</table>

Total words: 50,000
Total words: 120,000
Total words: 200,000
Total words: 70,000

Table 3. Range of texts from American English: fiction vs nonfiction (word [w] totals).

The nonfiction samples in the first three subperiods of British English (BrE1-3) have been taken from Louis T. Milic’s Century of Prose Corpus (COPC; Milic 1995), and this has influenced the choice of nonfiction texts in the rest of the database. Thus, in the interest of comparability, no attempt was made to include in BrE4 (1850-1879) or in the several subperiods of American English records of town, court and church proceedings, or the unstudied writing of unlettered individuals, as none of these would have an equivalent in the COPC.

A second criterion guiding the selection of the American English texts was the exclusion of authors born outside the United States, though exceptions were made in the case of Charles Thomson (1729-1824), whose family migrated from Ireland in 1739, Hugh Henry Brackenridge (1748-1816), born near Campbelltown, Scotland, but brought up in Pennsylvania since he was five, Alexander Hamilton (1757-1804), who at the age of fifteen moved to New York from the West Indies island of Nevis, and John William Draper (1811-1882). Draper was born in Liverpool, England, and came to the United States in 1832; he was graduated at the medical department of the University of Pennsylvania in 1836 and in 1839 became professor of chemistry at
the University of the City of New York. It seems reasonable to assume that by 1874, the date of publication of *History of the Conflict between Religion and Science*, the only work by Draper included in my corpus, his writing style would have been representative of standard American usage.

Considerable efforts were also made to leave out all American works printed in Great Britain, since, as aptly pointed out by Kytö/Rissanen (1983: 476), “there is always the possibility of British interference on the printer’s side”. However, in view of the scarcity of materials published in America during AmE2 (1732-1759) I finally opted for including two texts printed in London, namely John Bartram’s *Observations* (1751) and Charles Thomson’s *An Enquiry* (1759); see Appendix 3 for details.

Though the focus of this paper is on Late Modern and Present-day English, linguistic change is gradual, hence reference is often made in the following pages to earlier periods in the history of English, and in particular to Early Modern English (1500-1700). Evidence on this has been retrieved primarily from the Corpus of Early English Correspondence Sampler (CEECS, 1418-1680; 450,000 words), the Early Modern English section of the Helsinki Corpus of English Texts (HC, 1500-1710; 551,000 words), the Lampeter Corpus of Early Modern English Tracts (1640-1740; 1,100,000 million words), and the Newdigate Newsletters (1673/4-1692; 750,000 words).7

3. The development of English sentential complements: an overview

If we leave aside interrogative complements (“I’m wondering *why I should go at all*”, “I doubt whether they knew”), five major types of

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7 All four corpora are available in Hofland et al. (1999).
complement clauses can be distinguished in English, as illustrated in (1)-(5):

(1) That/zero-declaratives:
   a. It is clear [that] he made a mistake.
   b. He knows [that] you are here.
(2) Bare infinitives:
   a. All I did was ask a question.
   b. We saw Kim leave the bank.
(3) To-infinitives with and without a subject:
   a. Max wanted to change his name.
   b. The best plan would be for them to go alone.
(4) -Ing participle clauses as complements of perception verbs:
   We saw Kim leaving the bank.
(5) Gerundive clauses with and without a subject:
   a. Inviting the twins was a bad mistake.
   b. I resented them/their going without me.

Types (1), (2), (3), and (4) have been on record from Old English, though all four types have undergone a number of important developments since then, as discussed in detail by Warner (1982), Fischer (1988, 1989, 1995), Rohdenburg (1995, 1996), Los (1998, 2005) or Miller (2002: 157-241), among others. Most of these developments, at any rate, had been completed, or were well under way, before the start of the Early Modern period (1500-1700).

By comparison with the other four complement types, gerundive clauses, as illustrated in (5), emerged considerably later in the language. As is well known, the -ing form in this type is not participial in origin, as in (4), but descends instead from an Old English derivational suffix which could be freely added to verb stems to form abstract nouns of action, as in OE spilling ‘destruction’ (< spillan ‘destroy’) or OE wending ‘turning’ (< wenden ‘turn’). Following common practice among historians of the English language, I will employ the label ‘nominal gerund’ to refer to this kind of noun and to its reflexes in PDE, as in “the exploring of the mountain took a long time”. The labels ‘verbal gerund’ or ‘gerundive clause’ will be applied to examples such as (5a) and (5b).

As will become apparent in section 5.2.2.2 below, an aspect of the grammar of the nominal gerund which is relevant to the present
research is that, for reasons not yet well understood, it tended to occur preferably after prepositions. This is clear in the light of Houston’s research (1989) on gerundial usage from the tenth to the seventeenth centuries and is also confirmed by Expósito’s work (1996: 173-180) on nominal gerunds in Chancery English c1400-1450: of the 135 nominal or partly nominal gerundial structures occurring in her 48,000-word corpus 81.50% were found after a preposition, 12.60% were objects and a further 5.90% subjects; see also Fanego (1996b: 122-123).

In Old and Middle English nominal gerunds behaved like any other noun and could therefore take nominal dependents of various kinds. The following examples illustrate their use with determiners (the, his) and with of-phrases serving as their notional objects:

(6) 1472-1488 Cely Letters, 94/5 [Tajima 1985: 68]:
"at the makyng of thys lettyr"
“at the [moment of] writing this letter / when writing this letter”
(7) c1385 Chaucer Troilus and Criseyde, V 1833 [Tajima 1985: 70]:
"And thus began his loving of Criseyde"
(8) c1300 (MS a1400) English Metrical Homilies, 112/2-4 [Tajima 1985: 76]:
"Saint John was […] bisi In ordaining of priests, and clerkes,"
“Saint John was […] busy ordaining priests and clerics”

As a result of very complex factors which I have discussed elsewhere (cf. Fanego 2004a), from Late Middle English (1300-1500) onwards nominal gerunds began to acquire verbal properties, a development that has ultimately led to the Present-day English situation, where gerunds have the ability to: a) govern an object or a predicative complement (eg “their following the child into England”, “I don’t like being ill”); b) be modified by adverbs or adverbials restricted to co-occurring only with verbs (eg “my quietly leaving before anyone noticed”); c) be negated by means of the VP-negating particle not (eg “my not leaving”); d) show tense and voice distinctions (eg “of having done it”, “the necessity of being loved”); and e) take a subject in a case other than the genitive (eg “I resented them going without me”).

Though, as noted above, the first instances of verbal gerunds can be dated back to Late Middle English, their spread across the grammar of English extended over a period of several centuries, with
some subtypes becoming possible much earlier than others. In the early stages, for instance, verbalization was largely restricted to prepositional environments (e.g., “I insisted on wearing a suit”), and was available only with those prepositional gerunds that lacked an explicit subject, as in (9), but not with the type exemplified by structures like (7) above (*his loving of Criseyde*), where *his* represents the notional subject of the following -ing form.

(9)  c1303 (MS a1400) *Handlyng Synne*, HS 408 [Tajima 1985: 76]:

*yn feblyng þe body with moche fastyng*

“in weakening the body by too much abstinence”

The prepositional type in (9) is thus the only verbal gerund which is found in significant numbers in Middle English (cf. Tajima 1985; Fanego 1996b, 2004a); all other gerundives develop basically within the Modern English period, and some of them have gained currency only very recently, as will become apparent in the remainder of this paper.

4. The spread of subjectless gerundives as objects

(“He enjoyed *playing practical jokes*”)  

As noted above, initially gerundives occurred almost exclusively after prepositions, as in (9) (“*yn feblyng þe body with moche fastyng*”). It is fairly generally accepted (Jack 1988; Anderson 1993; Fanego 1996b, 2004a; Miller 2002: Chapter 11) that the reason for this restriction was that prepositional contexts were the primary environment in which the

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8 The term ‘object’ is used here as a convenient, pre-theoretical, term for complement clauses filling the post-verbal slot also occupied by NP objects. However, as noted by Huddleston/Pullum (2002: 958, 1017-1022, 1206-1209) and others, most complement clauses are distributionally and syntactically very different from noun phrases, and hence cannot be satisfactorily analysed as prototypical objects, but rather as a different kind of complement (a catenative complement, in Huddleston/Pullum’s terminology).
gerundive was not blocked by the productive to-infinitive, as this was available in Old and Middle English in a variety of clausal functions, but could not occur after prepositions other than to.⁹

This first major difference in distribution between the infinitive and the gerundive was however unstable, because the nominal gerund, though itself closely associated with prepositional use (see section 3 above), could also occur in other clausal slots (Fanego 1996a: 38, 58; see also section 5.2.2.2). Gradually, therefore, verbal gerunds came to be licensed in functions other than that of prepositional objects, so that from the middle of the sixteenth century (Fanego 1996a) we come across scattered instances of verbal gerunds functioning as objects of verbs with which the understood subject of the complement clause is co-referential with the matrix subject and can hence be described as having a ‘controlled’ interpretation, as in Johni remembered PRO i seeing Bill, where we understand John to be the one who saw Bill (on the notion of control see further section 4.2 below). The earliest verbs of this kind to govern gerundives were verbs of avoidance (eg avoid, escape, forbear, refrain, etc.) and also egressives (eg blin ‘stop, cease’, cease).¹⁰ Subsequently, the use of verbal gerunds in object position spread to more and more classes of verbs, with the result that from the late seventeenth century onwards to-infinitives have been yielding ground to gerundives with a wide variety of verb classes, as will be more fully discussed below.

Table 4 reflects the profound quantitative changes that have taken place in this area of English grammar from the sixteenth century

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⁹ Some examples of prepositional infinitives can be found in Middle English, as discussed by Visser (1963-1973: §976) and Miller (2002: 367-368), but the type never really caught on.

¹⁰ In the relevant literature aspectual verbs are often analysed as raising verbs analogous to predicates such as appear or seem (eg “John seemed to like Mary”), with which the higher subject (John) has a raised, rather than a controlled, interpretation; see Huddleston/Pullum (2002: 1193, 1197, 1227-1228). Since the distinction between raising and control is of little relevance to the topic of this paper, it will not be taken into account in the rest of the discussion; in addition, it should be borne in mind that aspectuals, at least when used with agentive subjects as in “he began to open/opening all the cupboards”, also qualify as control verbs (see Perlmutter 1970; Brinton 1988: 62-64).
to the present day. The data in the first two columns is drawn from two samples of the Helsinki Corpus of English Texts comprising ten different genres, namely Diaries, Private Letters, Fiction, Comedies, Statutes, Philosophy, Science, Handbooks, Trials and Sermons (see for details Fanego 1996b: 100). The samples used for all other historical subperiods, whether of BrE or AmE, consist of 40,000 words of nonfiction and 80,000 words of fiction.

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Table 4. The spread of subjectless gerundives to object position in British and American English, based on a 953,880 word sample [in brackets: frequencies normalized per 10,000 words].

Notes:
The head verbs taking a subjectless gerundive complement in object position are the following:

a. EModE3: continue (2 ex.), do ‘complete, finish’ (OED do v.8), forbear (2 ex.), intend, leave off, neglect, omit, use (OED use v.7 “To make use of (some immaterial thing) as a means or instrument”; cf. 1699 Langford Plain and Full Instructions, Sample 2, 120: “Others for curiosity use grafting several kinds of Fruit on one Stock”). The earliest example of -ing in this period, with the head verb omit, dates back to 1662 (Oxinden Letters).

b. BrE1: avoid (3 ex.), cease, cannot choose ‘cannot help’ (OED choose v.5.a), escape (2 ex.), fear, cannot/could not forbear (9 ex.), leave ‘cease, desist from’ (OED leave v.10.a).

c. BrE3: attribute, avoid (4 ex.), cease, could not defend (1794-97 Holcroft HughTrevor, 93: “I could not defend having taken any part whatever in one of them”), escape, fear, finish, follow ‘come after in order of time, succeed’ (cf. 1778 Burney Evelina, 84: “I have long dreaded this meeting and its consequence; to claim you, seems naturally to follow acknowledging you.”), cannot/could not forbear (2 ex.), cannot/could not help (9 ex.), leave off ‘cease’, propose ‘put forward as a scheme or plan to be adopted’ (3 ex.; OED propose v.4.a), remember, cannot resist ‘cannot prevent’.
4.1. Qualitative changes

I showed in Fanego (1996a/c, 1997) that during the period 1400-1760 gerundives gradually replaced to-infinitives, either completely or in part, after a number of verb classes: avoidance (avoid, escape, forbear, refrain), declination (decline, deny ‘refuse to do’, fail, miss, neglect, omit, refuse), suffering and bearing (cannot/could not abide, bear), intention (intend), emotives (fear, hate, like, love), conatives (attempt), retrospectives (remember), aspectuals, etc. With regard to the process of implementation of the move from infinitival to gerundive complementation, I also showed that it was channelled through several gerund-promoting properties (Fanego 1996a: 57-59); those relevant to the present discussion are the following:
1) The type of verb: The earliest verbs to govern gerundives as objects were verbs of avoidance (*avoid, escape, forbear, refrain*, etc.) and also egressive aspectuals (*blin* ‘stop, cease’, *cease*);\(^{11}\) witness sequences such as 1561 *They come so to purpose, that hee can not refraine telling them*; 1601 *she never would blin telling how his grace sav’d*; c1380 *I cesse not doynge thankyngis* ‘I do not stop saying thanks’, etc.

The early association between *-ing* and these two verb classes may have been related to the original function of the English infinitive marker *to* as a preposition expressing purpose and direction towards (cf. Mustanoja 1960: 514; Los 2005: 27-28), a function which still accounts today for the specialization of *to*-infinitives in purposive clauses. It seems reasonable to hypothesize that when the gerundive became available as a new complement type in Late Middle English, it was felt to be an adequate alternative to the infinitive after verbs denoting non-realization of the complement event or negative intention and volition towards it, as is the case with both egressive and avoidance verbs.

2) Nearness in semantic space: The spread of gerundives in object position proceeded largely by diffusion across the lexicon or, as Croft (2000: 148, 154-156) would put it, ‘intraference’. Croft, working within the cognitive framework of Radical Construction Grammar (Croft 2001), formulates intraference in terms of “the establishment of connections between semantically closely related forms” (2000: 154), be these single words, inflections or constructions. Intraference is thus “[the] extension of a form to a function not previously associated with that form”, provided it shares “enough linguistic substance, in particular meaning” (p.148) with the form or construction normally used to express that function in the language in question.

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\(^{11}\) My earlier research (1996a, 1996c, 1997) on gerundives did not cover aspectuals; my observations here are based, therefore, on what can be inferred about their development from Visser’s data (1963-1973: §§1255-1311, 1790-1792). See also Mair (2002: 119-121), who dates to the late eighteenth century the first occurrences of the inchoative *begin* with a verbal gerund.
In the case of the gerund, nearness in semantic space can probably account, for instance, for the seventeenth- and eighteenth-century extension of -ing clauses from avoidance verbs (avoid, escape, forbear, etc.) to verbs in the declination class (decline, deny ‘refuse to do’, fail, miss, neglect, omit, refuse, etc.; see Fanego 1996a), as both these classes express negative volition and are negative implicative. In other words, anyone who asserts (10) or (11) commits himself to the view that the proposition encoded in the complement clause has not taken place or will not take place:

(10) 1627 Hayward Annals, 5: and thes alsoe were charged to forbeare treating of controversies in Religion

(11) 1697 Vanbrugh The Provok’d Wife (Mermaid), 3.2.69 [Visser 1963-1973: §1775]: He by his prerogative takes money where it is not his due; I by my privilege refuse paying it where I owe it.

Semantic similarity explains, too, the spread of gerundives from remember to other verbs of mental activity in the retrospective class (forget, recall, recollect, regret) and eventually to the conative try (eg “I tried switching on the lamp”). As is well known, the difference in time reference between the two readings of English remember is reflected in PDE in the choice of different types of complement; thus in:

(12) I remembered to do it.

the to-infinitive is selected to indicate “that the action or event takes place after (and as a result of) the mental process denoted by the verb” (Quirk et al. 1985: 1193), while the reverse is true in (13), where the gerundive construction is used retrospectively to refer “to a preceding event or occasion coming to mind at the time indicated by the main verb”:

12 Though by the eighteenth century gerunds had become common with a good many verbs of declination, several of them (eg decline, refuse) are now preferentially followed by an infinitive; see Fanego (1996a), Rudanko (1998: 72-73) and Wagner (2002: 56-63).

13 For the label ‘implicative’ see Karttunen (1971).
(13) I remembered doing it.

As discussed elsewhere (Fanego 1996c), in earlier English the contrast between the two readings of *remember* was expressed in a different way, namely through the use of a simple infinitive, when the reference was to the future, or a perfect one, when it was to the past:

(14) Shakespeare *King Lear* (Evans), 3.2.48 [Fanego 1996c: 75]: Since I was man, /Such sheets of fire, such bursts of horrid thunder, /Such groans of roaring wind and rain, I never /Remember to have heard.

However, from at least the seventeenth century onwards nominal gerunds, as in (15), came to be employed after retrospective *remember* as an alternative to the perfect infinitive; this was made possible by the fact that the gerund, because of its nominal character, was indifferent to time distinctions and could thus derive its time reference from the surrounding context, unlike the to-infinitive, which needed an explicit marker (the auxiliary *have*) to refer to past time. By the first half of the eighteenth century verbal gerunds in retrospective function had become common, with the result that in PDE they have completely ousted the perfect infinitive.

(15) Shakespeare *As You Like It* (Evans), 2.4.49-51 [Fanego 1996c: 75]: I remember when I was in love, I broke my sword upon a stone, and bid him take that for coming a-night to Jane Smile; and I remember the kissing of her batler and the cow’s dugs that her pretty chopp’d hands had milk’d; and I remember the wooing of a peascod instead of her,

(16) 1740 Lady Mary Wortley Montagu *Complete Letters* (Halsband), 354 [Fanego 1996c: 76]: I perfectly remember carrying back the Manuscript you mention and delivering it to Lord Oxford.

By far the most frequent predicate in the retrospective class is *remember* (cf. Wagner 2002: 77); once the gerund was regularly available with it to denote past time, it could then diffuse to other semantically related verbs such as *forget* (first recorded use followed by a retrospective gerund: 1823), *recollect* (1740; see Wagner 2002: 81), or *recall* (1929).
Though the opposition -ing/to with forget or remember\(^\text{14}\) is primarily one of tense (past vs future), it is clear that in most cases retrospective clauses like (16) above will refer to real events that have actually occurred; hence the -ing form may easily come to be interpreted as also signalling performance of the action, specially by contrast with the infinitive construction, since this, because of its future-time reference, necessarily implies potentiality or non-performance. It is no doubt this secondary association of -ing/to with performance vs non-performance that must have facilitated the diffusion of -ing complements to the conative try at some point during the nineteenth century (see Visser 1963-1973: §1780; Fanego 1997). Try does not belong in the class of retrospectives, but has features in common with remember, namely the fact that it too is polysemous, meaning either ‘put to the test’ (cf. (17)-(18)) or ‘make an effort’ (19), two readings which, like those of remember itself, differ in terms of performance versus potentiality, hence the alternation -ing/to could be exploited with try to mark that meaning contrast overtly.\(^\text{15}\)

(17) 1625 Bacon Ess., Innovations (Arb.), 527 [OED s.v. try v. 11.a]: It is good also, not to try Experiments in States.

(18) After everything else failed, he tried reciting the pledge of allegiance, but the child kept crying.

(19) He tried to recite the pledge of allegiance, but no sound came out.

3) The horror aequi principle: The principle of horror aequi, a term apparently coined by Brugmann (1909, 1917/1920), is defined by Rohdenburg (2003: 236) as “the widespread (and presumably universal) tendency to avoid the use of formally (near-)identical and (near-)adjacent grammatical elements or structures”. This tendency accounts, inter alia, for the restrictions on the use of two immediately

\(^{14}\) Recollect and recall can only be used retrospectively (eg “I can’t recall meeting her before”), and not with reference to the future.

\(^{15}\) It is worth noting that remember and try are each rendered by two separate lexemes in a language like Spanish: thus recordar ‘recollect, remember (doing something)’ contrasts with acordarse de ‘not to forget (to do something)’. English try, in turn, corresponds to Spanish tratar de ‘try to’ and probar a, ensayar ‘try Ving’.
successive to-infinitives or -ing forms, both in Present-day English and in earlier periods (see, for instance, Ross 1972; Bolinger 1979; Fanego 1996a, 1997; Rohdenburg 2003; Vosberg 2003: 315-322). In the early stages of the spread of the verbal gerund, its advance is most pronounced after the to-infinitive, in keeping with the horror aequi principle; horror aequi also serves to explain the choice of some unexpected -ing forms, as in for instance (20), where the conative attempt governs an -ing clause despite the strong preference of conatives for the infinitive pattern in all periods of the language (cf. Fanego 1996a, 1997; Huddleston/Pullum 2002: 1241; Egan 2003: 153, 409):

(20) 1724 Defoe Roxana (Abbey Classics), 88 [Fanego 1997: 65]: it was not safe for me to attempt doing him any good.

If we now go back to Table 4 above and consider the kinds of verbs taking gerundive complements in Late Modern and Present-day English, it will be seen that many of the changes since the eighteenth century have been of a distributional kind, permitting gerundives to further encroach on infinitival domains. Thus, by comparison with the period examined in Fanego (1996a, 1996c), namely 1400-1760, -ing complementation has become much more common with aspectuals of various classes (eg begin, cease, commence, finish, give up, go on, quit, start, stop, wind up, etc.; see Table 4 and Visser 1963-1973: §§1790-1793 for details). Gerundives have also continued to spread after verbs of intention: in addition to intend itself, which has been on record with an -ing form since about 1706 (cf. Fanego 1996a: 43), the corpus used in the present study contains examples of other intention verbs also employed in the same pattern, such as consider, contemplate, meditate or propose. The following are the earliest instances known to date of the last three verbs followed by an -ing form:

(21) COLMOBAENG AmE3 1797 Tyler Algerine Captive, 167 [Fiction]: To avoid starving, I again contemplated keeping a school. In that country, knowledge was viewed as a handicraft trade.
Gerundives have also extended to conatives, a class which strongly resisted that type of complement during the period 1400-1760; examples include the already mentioned try and risk (first recorded use with a gerundive: 1882; cf. Visser 1963-1973: §1781). In the same way, several emotive predicates that did not allow -ing clauses prior to the eighteenth century are regularly instanced in that pattern in my corpus for LModE and PDE; this is the case with enjoy, hate, like, love, (not) mind, and prefer.

Important as the above changes are, the most significant innovation taking place in the period under analysis is no doubt the diffusion of -ing complements to verbs such as facilitate, involve or suggest, which fall outside the group of subject-control predicates with which object gerunds first became available. This major complementation shift is discussed in the next section.

4.2. Subjectless gerundives with a non-controlled interpretation of the understood subject

Non-finite complement clauses without an overt subject may be interpreted as having an unspecified subject, or a subject identical to a particular NP in the matrix expression. Thus in (24) we understand John to be the one who travelled with Bill, while in (25) we understand it to be Kim who was to travel by bus. Following Chomsky (1981), it has become customary to use the term control to refer to these facts, that is, in both (24) and (25) the interpretation of the missing subject is said to be controlled by an antecedent in the matrix clause, respectively the matrix subject (John) and the matrix object (Kim). By contrast, in (26)-(27) there is nothing in the sentence itself to identify the traveller: the understood subject here could be the speaker, someone else, or a group including or excluding the speaker.
I will henceforth say that clauses of this type involve an unspecified or non-controlled interpretation of the missing subject (for discussion see Huddleston & Pullum 2002: 1193).

(24) John remembered [travelling with Bill].
(25) John persuaded Kim [to travel by bus].
(26) John advised [travelling by bus].
(27) It was necessary [to travel by bus].

In Old, Middle and Early Modern English it was possible for the intervening NP in infinitival structures such as (25) to remain implicit, either because the identity of its referent was generic or unimportant, or because it could be recovered from the context (see Visser 1963-1973: §§1195-1249; Warner 1982: 77-78; Mitchell 1985: II, 887). Present-day English, however, has largely lost the ability to have unspecified infinitival subjects, except after a few verbs such as help or hear:

(28) c1280 The Southern Passion (EETS), 1293 [Visser 1963-1973: §1217]:  
    He forbade to give Cesar […] any tribute.
(29) 1475 Caxton Jason, 34 b [Visser 1963-1973: §1207]: He commanded to saddle his hors.
(30) HC 1591 Smith Of Usurie, Sample 1, C1R: Christe expounding the commaundement which forbiddeth to steale, sayth, “lende freely”, shewing that Usurie, because she lendeth not freely, is a kinde of theft
(31) She helped (to) organize the party.

The gerund, being a noun, could also occur in the object slot in structures of this kind, as in (32) below. Note that the NP etynge of ham lacks an introductory determiner, as was often the case with abstract nominals in earlier stages of English (see also example (8) above and Fanego 2004a: 19-20):


In a pioneering study, Donner (1986) examined the -ing gerundial forms, whether nominal or verbal, quoted in the volumes of the
Middle English Dictionary running from A to O, and found that in the fifteenth century there are almost twice as many citations for gerunds as in the fourteenth. This apparent expansion in the use of gerunds has later been confirmed by my own research on Early Modern English (see in particular Fanego 1996b), where I showed that gerunds indeed become much more frequent in the course of time.\(^\text{16}\) This being the case, one could predict that they would gradually spread to those clausal positions where they could be functionally more useful; we have seen above (4.1), for instance, that the availability of the gerundive and the infinitive allowed for splits with verbs that admitted more than one semantic interpretation (eg remember, forget, try). In the same way, in the course of the modern period we find that the gerund tends to replace the infinitive in constructions such as those in (28)-(31), thus helping to establish an explicit distinction between complement clauses with controlled and non-controlled subjects. The corpus evidence on forbid, one of the verbs most commonly taking a non-finite clause lacking an explicit controller, is illustrative in this respect, as detailed in what follows.

Forbid is recorded in the infinitival pattern under discussion (see (28) above) from a very early stage (OED s.v. forbid v. 1.d). In the same sense, it can occur also with a that-clause (33) or in the passive voice, as in (34):

(33) 1297 R. Glouc. (1724), 496 [OED s.v. forbid v. 1.d]:
The king […] vorbed that me ne ssolde non of is lond sowe.
“The king […] forbade that anyone should sow his land”.

(34) HC 1591 Smith Of Usurie, Sample 1, C2R: Amaziah is forbidden to strengthen himself with the armyes of Israel, onely because Israel had offended God;

All three patterns are well represented in the Early Modern period, as shown by a computer search of the Corpus of Early English Correspondence Sampler (1418-1680), the Early Modern English section of the Helsinki Corpus of English Texts (1500-1710), the

\(^{16}\) Donner (1986: 398) attributes this rise in the frequency of gerunds to “their utility as a ready means of deriving a noun from any verb, notably the torrent of French verbs that had come into the language” in Middle English.
Drift and the development of sentential complements

Lampeter Corpus (1640-1740), and the Newdigate Newsletters (1673/4-1692). Also found in these four electronic corpora (2,851,000 words altogether) are 16 instances of *forbid* followed by a gerund. In eight of these, the -*ing* form is ambiguous between a nominal and a verbal reading, either because it is unmodified (eg HC 1694 Fox *Journal*: “Christ forbidd swearinge”; see further section 5.2.2.2 below) or else governs dependents that might occur readily in both NP or VP structure, as is the case in (35); in this example, the absence of a determiner introducing the gerund phrase cannot be taken as evidence supporting its analysis as a VP, for, as noted above, at this stage postmodified abstract nominals could occur with a zero article.

(35) CEECS 1585-1586 Correspondence of Robert Dudley, Earl of Leycester, Leycester to Walsyngham, February 15th: I find plainly, yf you hold your hand from lycenses, and forbid going to any other places eastward from Hamboro hetherward, and to the Haunces but only some suche nomber of clothes as heretofore ye have allowed them, that here wylbe a notable mart for them.

Six of the remaining -*ing* phrases following *forbid* are unambiguously nominal (cf. (36)), and two are categorically hybrid, that is, they are introduced by the definite article but govern direct objects:

(36) Lampet 1682 Pittis *An Old Way of Ending New Controversies*: to impede, or retard, the most glorious flourish of Gospel Truth, and forbid the spreading of the Christian Church,

(37) Lampet 1679 Jones *A Sermon of Antichrist*: Another Angel declaring the downfall of that Antichristian state. (Rev.14.8.) 3. An Angel forbidding the worshipping the beast or his image, and receiving his mark in his forehead, or in his hand,

(38) Newdigate 1679 December 18th: the ffrench […] are growne soc Insolent as to forbid the Carrying Provisions to Bazell upon paine of death

Occurrences of *forbid* in the COLMOBAENG are not very numerous, yet it is interesting to observe that while examples with a *that*-clause or in the kind of passive construction exemplified in (34) continue to be available, there are no longer any instances of *forbid* followed by an infinitive with implicit subject, as in (28) and (30) above. There is, however, one example where *forbid* takes an -*ing* complement:
The pattern of -ing complementation which can be commonly found with forbid in Early Modern English may well have served as the model for other verbs also capable of governing a complement with an unspecified subject. Of great interest in this respect is propose. This is recorded from the end of the fifteenth century in the sense ‘to put before one’s mind as something that one is going to do; to design, intend’ (OED s.v. propose v. 4.b), as in (40); in this use (henceforth referred to as PROPOSE1) propose governs a to-infinitive and qualifies as a subject-control verb, since the understood subject of the infinitive is co-referential with the matrix subject:

(40) HC 1480 Cely Letters, George Cely to Richard Cely, November 16th: The Frenche Kynge has fforneshed his garys ons appon the ffrontys all redy, etc. My lady proposythe to ly at Sent Tomers and the Frenche ambassett shall ly at Tyrwhyne ij lekys thens, etc.

According to the OED, from the middle of the seventeenth century propose came to be employed in the related meaning ‘to put forward as a scheme or plan to be adopted; to lay before another or others as something which one offers to do (with simple obj., obj. clause or inf.)’ (s.v. propose v. 4.a). In this sense (henceforth PROPOSE2) it was usually followed by a that-clause (eg Newdigate 1691 December 8th: “They alsoe propose that the soldiers that land in ye North from

17 Rohdenburg (1992, 2006) briefly discusses the replacement of to-infinitives by gerundives after advise, another verb taking a clause with a non-controlled subject (eg “She advised doing it in advance”). It is unlikely, however, that advise may have had the same influence on the long-term development of gerundives as forbid or propose, as it seems to have been less common than either of these two verbs: it occurs only twice with a nominal gerund in the Newdigate Newsletters and is not recorded in the Helsinki Corpus, the CEECS, the Lampeter Corpus and the COLMOBAENG. In Rohdenburg’s extensive corpus, which comprises Chadwyck-Healey’s Early English Prose Fiction (1518-1700) and Eighteenth-Century Fiction (1705-1780), object gerunds after advise are not found until the eighteenth century, and even then the number of examples – just two – is very small.
Ireland may be cloathed there”), or else occurred in the passive voice with an extraposed to-infinitive as subject (eg Newdigate 1676 May 3rd: “It was proposed to move the ffrench from the advantageous post they had taken”). Occasionally, it can also be found in two other less frequent patterns, namely, with a subjectless to-infinitive as its object (cf. (41)), or with an -ing complement; the latter occurs four times in the Newdigate Newsletters (750,000 words) and once in the Lampeter Corpus (1.1 million words). As was the case with the early instances of -ing complements after forbid, the gerunds following PROPOSE\(_2\) belong to several categorial types: (42) below is a hybrid, (43) is nominal and (44) is fully verbal. All three examples antedate by several decades the earliest recorded instances of the pattern PROPOSE\(_2\) V\_ing adduced in the OED (s.v. propose v. 4.a, quoting Defoe 1724) and Visser (1963-1973: §1783, same date):

(41) Lampeter 1676 Anon. An Answer to Two Letters, Concerning the East India Company: Suppose […] that the King, to compass the obtaining and carrying on of such a Trade for the General benefit of his Kingdom, without a Tax on his People, should propose to give and grant to all his Subjects […] certain Privilegedes and Immunities, and amongst others the sole enjoyment of the Trade of such places to them and theirs, excluding all others that should refuse to joyn therein. On such an Invitation and Proposal freely offered to all without exception, onely a certain number of Persons come in, Accept the Terms, and receive the Grant

(42) Newdigate 1676 January 20th: Yesterday wee had a dutch post all the Newes it Brought is […] That the Brandenburg Minister at the hague had proposed the formeing a Campe of 8000 men Neere Ruremond to Curbe the Garison of Maistricht and for that End the Electors of Brandenburg & Collogne the duke of Newburg & the states shall Each of them furnish 2000 men

(43) Lampeter 1697 Pollexfen England and East India Inconsistent in their Manufactures: And if the Author be of opinion that the Expence of Manufactured Goods from the India be so advantageous, and that Selling Cheap is the way to increase Consumption: Why hath he not proposed the opening of that Trade, that it may not be any longer a Monopoly, that those Goods may also Fall in Price?

18 This corpus contains two examples of the infinitival pattern.
Newdigate 1681 October 15th: Council on Thursday voted yt ye Sheriffs expences in avoiding paying ye 100 L fine shoud be defrayd out of ye chambr of Lond also sevll of ym made speeches yt it was a shame yt Strangrs should Come into ye bowells of ye City to Insure ye houses from fire & proposd insuring 'em at ye same rates as ye others & ye chambr of Lond to be ye fund

Data from the COLMOBAENG testify to the progress made by the gerund after PROPOSE2 since Early Modern English times: -ing complements, as in (45)-(46), are recorded in my corpus in ten cases, to-infinitives only in five. It seems likely that this rapid increase in the use of the gerund may have been motivated by the desire to keep apart the two different interpretations of propose, though it should be recalled that, as already noted in section 4.1 above, by the end of the eighteenth century gerundives had also spread to PROPOSE1 itself (cf. example (23)).

(45) COLMOBAENG BrE1 1725 Davys The Lady’s Tale, 137 [Fiction]: After Tea, and Wine, Vanzouch desir’d to go into the Gardens, which he did, and my Father with him; while the young Gentleman stay’d to entertain my Mother and I, but his company grew tedious and tiresome, which made me, for a little Variety, propose going into the Gardens too.

(46) COLMOBAENG BrE3 1778 Burney Evelina, 67 [Fiction]: I now feared what I had before wished, and, therefore, to avoid Lord Orville, I was obliged myself to propose going down another dance, though I was ready to sink with shame while I spoke.

In the course of the Late Modern period and the twentieth century, the gerund steadily consolidated itself as a very frequent option for the coding of non-finite object complements without a specific controller. Its use can be observed in the COLMOBAENG with verbs such as follow (in BrE3), entail and mention (in BrE4), authorize, include, justify and suggest (in BrE5), call (in AmE4), or call, facilitate, justify, mean and understand (in AmE5). A few relevant examples are

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19 These figures refer to the COLMOBAENG as a whole, unlike the figures in Table 4 above, which are based on a smaller sample. The -ing examples occur in British English fiction (8 ex., the earliest dating back to 1725; see quotation (45)) and in the Autobiography (1788-1789) of Benjamin Franklin (2 ex.); as regards the examples with an infinitive, 4 are found in fiction (2 ex. in BrE and 2 in AmE) and 1 in nonfiction (in AmE).
adduced below; note that in (47) the principle of *horror aequi*, as discussed earlier, has no doubt contributed to the selection of the form *acknowledging* after the preceding *to*-infinitive (see also (46) above):

(47) COLMOBAENG BrE3 1778 Burney Evelina, 84 [Fiction]: I have long dreaded this meeting and its consequence; to claim you, seems naturally to follow acknowledging you.

(48) COLMOBAENG BrE4 1861 Wood East Lynne, 33 [Fiction]: “I have been telling Barbara that a visit to London *entails bringing* gifts for friends”, returned Mr. Carlyle.

(49) COLMOBAENG BrE4 1851 Carlyle The Life of John Sterling, Chapter III [Nonfiction]: In fact the Sterling household was still fluctuating; the problem of a task for Edward Sterling’s powers, and of anchorage for his affairs in any sense, was restlessly struggling to solve itself, but was still a good way from being solved. Anthony, in revisiting these scenes with John in 1839, *mentions going* to the spot “where we used to stand with our Father, looking out for the arrival of the London mail.”

(50) FROWN 1992 General Fiction, K05 85: you *call being* the first college to admit blacks and women radical

(51) FROWN 1992 Science, J22 203: positive actions which should guide employers and member states in order to *facilitate providing* equal opportunity

(52) FROWN 1992 Press Reportage, A07 96: I cannot for the life of me *understand* mobilizing demonstrations and demonstrating against your own country

It is important to bear in mind that with some of these head verbs the spread of the gerund takes place at the expense of *that*-clauses or of NPs headed by a nominalization, rather than of *to*-infinitives, as was the case with *forbid* or *propose*. In other words, predicates like *entail*, *facilitate*, *include*, *justify*, *mean*, *mention*, *suggest* or *understand* have never governed infinitives, so it would be inaccurate to speak here of the replacement of one type of non-finite complement by another; instead, in an example like (52) above, we could hypothesize that the gerund has been resorted to as a convenient alternative to a *that*-clause with an indefinite subject (i.e. “I cannot [...] understand that *one* should mobilize”, etc.), while the gerunds in (50)-(51) can be assumed

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20 Huddleston/Pullum (2002: 1232) assign *mention* to a class of catenatives having “control by subject”, but this need not always be the case. In example (49) the overall context makes it clear that the unexpressed subject of the gerund includes both the speaker and his family.
to have replaced NPs such as “the fact that it is the first college” and “the provision of equal opportunity” respectively. Gerundives with unspecified subjects, once they had become well established as a complement type after *forbid, propose* and their analogues, could go on to be employed after any other verb capable of taking an object with the appropriate semantic characteristics. The result of this process is that, to a very large extent, the use of gerundives to encode complements with a non-controlled subject argument has now been grammaticalized, in the sense that it constitutes a highly predictable feature of the grammar of Present-day English.

5. Subjectless gerundives as preverbal (“Inviting your uncle was a bad mistake”) and extraposed (“It was of no use asking myself this question now”) subjects

5.1. Gerundives and extraposition

Old English *þæt*-clauses and *to*-infinitives, despite their similarities to ordinary NPs, lacked some of the basic characteristics of full-fledged nominals, such as the ability to be governed by prepositions (see Traugott 1992: 234; Los 2005: 9; and section 4 above) or to occur as preverbal subjects, as in PDE “That Jane came is true” and “To know the truth is essential” (see Mitchell 1985: I, 1537; Traugott 1992: 234-236, 244). From Middle English onwards both kinds of complement clause became available preverbally (cf. Warner 1982: 108; Fischer 1992: 334; Rissanen 1999: 282-283), but even today they are comparatively rare by comparison with their extraposed counterparts, as is

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21 I am using the term ‘grammaticalize’ in its very broad sense of “be/become part of grammar”, rather than in the more narrow and specific one where it refers to processes leading towards greater grammaticality of linguistic items; for the distinction see Himmelmann (2004: 25).

22 Some discussion of gerundives as complements of verbs of non-subject control can be found in Duffley/Joubert (1999: 258-260) and Egan (2003).
clear from analyses of contemporary usage by Mair (1990), Biber et al. (1999: 674-676) or Kaltenböck (2004), and from my own research based on FLOB and FROWN. See Tables 5 and 6 for some statistics.

<table>
<thead>
<tr>
<th>Wyclifite English (c1390) [60,000 w; based on Warner 1982]</th>
<th>Marlowe’s complete works (ca 1590-1600) [18,887 lines of prose and verse; based on Ando 1976]</th>
<th>4 Shakespearean plays [11,944 lines of prose and verse = ca 100,000 w; based on Fanego 1992]</th>
</tr>
</thead>
<tbody>
<tr>
<td>preposed</td>
<td>2 (2.8%)</td>
<td>14 (12.9%)</td>
</tr>
<tr>
<td>extraposed</td>
<td>70 (97.2%)</td>
<td>94 (87.1%)</td>
</tr>
<tr>
<td>Totals</td>
<td>72</td>
<td>108</td>
</tr>
</tbody>
</table>

Table 5. Frequencies of extraposed and non-extraposed subject infinitives in Middle and Early Modern English.

<table>
<thead>
<tr>
<th>BrE4 (1850-1879) [120,000 w]</th>
<th>AmE4 (1851-1879) [120,000 w]</th>
<th>BrE5 (1991) [60,000 w]</th>
<th>AmE5 (1992) [60,000 w]</th>
</tr>
</thead>
<tbody>
<tr>
<td>subjectless gerundives</td>
<td>0 / 1</td>
<td>12 / 1</td>
<td>22 / 2</td>
</tr>
<tr>
<td>subjectless to-infinitives</td>
<td>25 / 84</td>
<td>16 / 108</td>
<td>8 / 50</td>
</tr>
<tr>
<td>that-clauses</td>
<td>6 / 109</td>
<td>5 / 114</td>
<td>1 / 34</td>
</tr>
</tbody>
</table>

Table 6. Preverbal and extraposed sentential subjects in 19th- and 20th-century British and American English (figures for extraposed use appear to the right of the slash).

Since extraposition is essentially a property of clauses rather than of NPs (cf. Huddleston/Pullum 2002: 1407-1408),23 one could predict that in the role of extraposed subjects, as in quotations (53)-(56) below, gerundives, because of their nominal origin, would not be serious competitors to infinitives. That this prediction is indeed correct is shown by the evidence from my corpus: in the eighteenth century the frequency of extraposed gerundives is of less than one token per 100,000 words – only two examples occur in a 340,000 word sample of the COLMOBAENG –, and it remains very low throughout the nineteenth and twentieth centuries, as can be seen from Table 6,

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23 Extraposition of NPs is largely limited to structures of the type “It’s incredible the things they get up to”, where the matrix VP gives an exclamatory meaning and the NP concerned has the form the N + relative clause.
specially by comparison with the figures for extraposed infinitives over the same period. With regard to the twentieth century in particular, a recent study by Kaltenböck (2004) confirms that -ing extraposition continues to be rare today: he records only 48 extraposed gerundives in the one million word ICE-GB corpus, the British component of the International Corpus of English. Included in that figure are gerunds with an overt subject (e.g. “It was good his talking to your uncle”); though these extrapose much less readily than subjectless gerunds (cf. Huddleston/Pullum 2002: 1407), it seems likely that the actual number of extraposed subjectless -ing clauses in Kaltenböck’s corpus may be even lower than 48.

Also worthy of mention in connection with extraposed -ing subjects is that, as has been pointed out by other researchers (Quirk et al. 1985: 1393; Collins 1994: 12-13), it is not always clear whether they are to be interpreted as genuine cases of extraposition or rather as right-dislocated constituents, with *it* functioning as a referential pronoun referring cataphorically to the event expressed in the -ing clause; witness in this respect (55)-(56), which I counted as cases of extraposition, but might well involve right dislocation instead.24

Bearing in mind that right dislocation is found predominantly with noun phrases (Collins 1994: 12-13; Huddleston/Pullum 2002: 1411-1414), the syntactic indeterminacy between the extraposed and right-dislocated readings of many -ing subjects25 is further evidence of the nominal traits which gerundives have retained even into Present-day English.

24 Witness Quirk et al.’s (1985: 1393) remark on the sentence *It’s fun being a hostess*: “[t]he -ing clause often shows itself incompletely adapted to the extraposition construction, notably by being resistant to bearing the main information focus […] We might conclude from this that the participial clause has just as much affinity with a noun-phrase tag (e.g. *He’s a friend of mine, that man*) as with a genuine extraposed subject”.

25 This ambiguity is mostly restricted to written English, where the clue of intonation is lacking and the comma punctuation which normally sets apart right-dislocated constituents (e.g. “It was all very well, turning herself into the latter day answer to Ava Gardner”) may be absent too. In speech, extraposition and right dislocation would be distinct prosodically since, unlike the extraposed constituent, the dislocated constituent is almost invariably separated from the nucleus of the clause by an intonational boundary.
Turning now to the kinds of texts where extraposed gerundives tend to occur, their association with informal registers has often been noted in the literature dealing with extraposition in Present-day English. See in this connection Quirk et al. (1985: 1393), who claim that extraposition of -ing clauses is “uncommon outside informal speech”, or Collins (1994: 10), who found “in the spoken conversational data” all but one of the eight tokens of extraposed -ing clauses occurring in his corpus of 200,000 words of spoken and written Australian English. In the ICE-GB corpus, which has an equal share of spoken and written language, 58.3% of all extraposed -ing clauses occur in the spoken material (Kaltenböck 2004: 224). These findings are in agreement with my data from FLOB and FROWN – two of the extraposed -ing subjects occur in dialogue, another one is found in a direct speech quote (see (55)) and the fourth in the text category Humour (see (56)) –, and also with the historical evidence. Thus, the two eighteenth-century examples of -ing extraposition referred to at the beginning of this section occur in private correspondence (Chesterfield’s Letters, 1745-1748) and in fiction dialogue (Defoe’s Moll Flanders, 1722); the two recorded in a 240,000 word nineteenth-century sample (see Table (56)).
6 and quotations (53)-(54)) are found in fiction monologue and dialogue.

5.2. Preverbal subjectless gerundives (“Inviting your uncle was a bad mistake”): a preliminary overview

The nominal traits that render gerundives unfit for extraposed use could, by contrast, be expected to contribute to their increasing occurrence as preverbal subjects, at the expense of other types of sentential complements. And indeed, as will become apparent in the following pages, non-extraposed gerundives have been encroaching upon preverbal to-infinitives in recent times, and specifically from the nineteenth century. Prior to this, -ing clauses as non-extraposed subjects, as in (57)-(58) below, were very uncommon (see Table 7), probably as a result of processing difficulties having to do with the cognitive principle of ‘transparency’ (Rohdenburg 1995, 1996).26 This claims, essentially, that dependent clauses used in cognitively

26 The avoidance of gerundives preverbally can be related as well to the kind of structural factor which I have discussed in detail in Fanego (2004a). Following Timberlake’s hypothesis (1977: 157) that the actualization and generalization of syntactic change at the observable level of language use is systematic, in the sense that changes “will be actualized earlier for terms […] which are unmarked, or more natural, contexts for the change in question and later for terms which are marked, or less natural, contexts for the change”, I argued that the spread of gerundives proceeded largely according to a grammatical relations hierarchy, from peripheral adverbials and oblique complements (as in, respectively, “on hearing a cry, I dashed into the garden” and “I insisted on being given every detail”) to core complements internal to VP (i.e. objects, as in “I avoided meeting Mary”) to, eventually, external core complements, that is, subjects. Each of these clause constituents could be described as being progressively more marked with respect to the specific syntactic context – the clause slot following prepositions – where the verbal gerund originated, as predicted by Timberlake’s (1977) views on the factors constraining the directionality of actualization. This account of the diffusion of gerundives across the grammar of English does not contradict the above comments on subject gerundives and difficulties of cognitive processing: linguistic options which score high on the hierarchy of markedness are also cognitively more complex.
complex environments will tend to “make their sentential status more explicit” (Rohdenburg 1995: 368) by resorting to stronger grammatical marking. Thus, to exemplify with finite clauses, when these function as postverbal objects (eg “I think [that] it is a good idea”) the complementizer that may be absent, but becomes obligatory when the clause is a subject or otherwise precedes the matrix predicate, as in “That Jane came is true” or “That he really intended to cheat us I still can’t believe”, since it has then the essential role of signalling the start of a subordinate clause rather than a main clause. For much the same reason, bare infinitivals (eg “All I did was ask a question”) cannot occur as preverbal subjects, in other words, a sequence like “Know the truth is essential” is ungrammatical in English.

As I have discussed in detail elsewhere (Fanego 2004b, 2006), during the seventeenth and eighteenth centuries the lack of an overt complementizer analogous to that or to to introduce subject gerundives was often solved by resorting to a hybrid structure with an initial definite article:

An exception to this generalization are reversed versions of the specifying be construction containing the verb do in the internal complement, as in “Plead mitigating circumstances is all you can do”. See further Fanego (2004b: 323-324).
that if he were refused there, he should never get an Opportunity of applying to the young Lady, he chose to make the first Declaration to herself; the gaining her Affections being the material Point, he considered all others of little Consequence.

(61) COLMOBAENG AmE2 1754 Edwards Freedom of the Will, 355 [Nonfiction]: But the making the requisite distinction requires more care of reflection and thought than most men are used to.

(62) COLMOBAENG AmE3 1788-1789 Franklin Autobiography, 96 [Nonfiction]: These proverbs, which contained the wisdom of many ages and nations, I assembled and form’d into a connected discourse prefix’d to the Almanack of 1757, as the harangue of a wise old man to the people attending an auction. The bringing all these scatter’d counsels thus into a focus enabled them to make greater impression.

There are grounds to suggest (cf. Fanego 2004b) that the function of the in such instances was no longer to indicate definite reference, but rather to provide the following verbal gerund with an introductory element of some kind; in other words, the was basically a semantically empty grammatical marker or complementizer serving to license the -ing clause at a time when subjectless verbal gerunds in preverbal position were probably not yet fully acceptable.

The-hybrids in subject function were relatively common in the seventeenth and eighteenth centuries;28 thus in a 340,000 word sample

28 The majority of the-hybrids in my corpus occur as subjects – there are 21 examples in the complete British section (800,000 words) of the COLMOBAENG –, but they can also be found as objects, predicatives and appositives; see Fanego (2004b: 331-332) and examples (i)-(ii) below and (37)-(38) above. In all such cases, the function of the complementizer the appears to be the same, namely helping to clarify the immediate constituent structure. Prescriptive condemnation of hybrid gerunds, as discussed below, applied to all hybrids, and not just to those occurring in the subject slot.

(i) COLMOBAENG BrE2 1744 S. Fielding David Simple, 71: She certainly would soon have broke her Heart, had she known that all this Misery [...] was her own Fault; but as she thought it his Inconstancy, to his Generosity, in not telling her the Truth, she owed the avoiding that painful Reflection.
dating back to subperiods BrE1-3 (1700-1797) I recorded seven examples, as opposed to just six unintroduced subject gerundives (see Table 7). In the case of AmE2 (1732-1759; 50,000 words) the figures for the-hybrids and unintroduced gerundives were respectively three and one; in AmE3 (1774-1804; 120,000 words), seven and six. Yet despite the fact that in the eighteenth century hybrids were therefore a frequent option to code -ing subjects, by the second half of the nineteenth they had completely disappeared in American English – no examples occur in my material for AmE4 (1851-1879; 200,000 words) – and had declined in frequency in British English (only 2 ex. found in 200,000 words).29 Taking into account that, starting with Robert Lowth’s Short Introduction to English Grammar (1762: 111-114), hybrids were stigmatized and heavily condemned in grammar books of the time, both in Britain and on the other side of the Atlantic, I have suggested in earlier research (Fanego 2006) that normative pressures played a role in their loss. Whether this view is accepted or not – analysts are often sceptical about prescriptive grammars having an impact on language use (see, for instance, van der Wurff 1993; Beal 2004: 114, 123) –, it seems reasonable to assume that the disuse of hybrids must have facilitated the diffusion of unintroduced verbal gerunds to the subject slot (eg “Inviting your uncle was a bad mistake”), a clausal position in which they start to become more common, at least in American English, from the second half of the nineteenth century, as discussed in the next section.

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29 The decrease in the-hybrids in nineteenth century British English, whether as subjects or in other functions, was in fact more pronounced than these data suggest, as becomes clear if we compare the 32 and 35 instances found, respectively, in BrE1 (1700-1726; 200,000 words) and BrE2 (1732-1757; 200,000 words) with the 10 examples recorded in BrE4 (1850-1879; 200,000 words).
<table>
<thead>
<tr>
<th><strong>BRITISH ENGLISH</strong></th>
<th>HC EModE2 (1570-1640) [105,098 words]</th>
<th>HC EModE3 (1640-1710) [108,782 w]</th>
<th>BrE1 (1700-1726) [120,000 w]</th>
<th>BrE2 (1732-1757) [120,000 w]</th>
<th>BrE3 (1761-1797) [120,000 w]</th>
<th>BrE4 (1850-1879) [120,000 w]</th>
<th>BrE5 (1991) [70,000 w]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>gerundives</strong></td>
<td>1 (0.09)</td>
<td>3 (0.27)</td>
<td>1 (0.08)</td>
<td>2 (0.2)</td>
<td>3 (0.25)</td>
<td>0</td>
<td>24 (3.4)</td>
</tr>
<tr>
<td><strong>to-infinitives</strong></td>
<td>Shakespeare’s English [100,000 w of prose and verse; based on Fanego 1992]</td>
<td>not analysed</td>
<td>not analysed</td>
<td>12 (1.2)</td>
<td>30 (2.5)</td>
<td>25 (2.08)</td>
<td>8 (1.2)</td>
</tr>
<tr>
<td><strong>AMERICAN ENGLISH</strong></td>
<td>AmE2 (1732-1759) [48,000 words]</td>
<td>AmE3 (1774-1804) [120,000 words]</td>
<td>AmE4 (1851-1879) [120,000 w]</td>
<td>AmE5 (1992) [70,000 words]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>gerundives</strong></td>
<td>1 (0.2)</td>
<td>6 (0.5)</td>
<td>12 (1.0)</td>
<td>24 (3.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>to-infinitives</strong></td>
<td>23 (4.8)</td>
<td>26 (2.17)</td>
<td>16 (1.3)</td>
<td>2 (0.28)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Frequencies of subjectless gerundives and infinitives as preverbal subjects from Early Modern to Present-day English, based on a 1,201,880 word sample [in brackets: frequencies normalized per 10,000 words].
Notes on Table 7:

1. The figures for hybrid gerunds (the gaining her Affections) as subjects are the following: BrE1 = 2 ex.; BrE2 = 4 ex.; BrE3 = 1 ex.; BrE4 = 2 ex.; AmE2 = 3 ex.; AmE3 = 7 ex.; AmE4 = 0 ex.

2. In one of the six examples of gerundives recorded in AmE3 the gerund is left-dislocated and a recapitulatory it fills the subject slot. Cf. 1774 Woolman Journal, 306: “A ship at sea commonly sails all night, and the seamen take their watches four hours at a time. Rising to work in the night, it is not commonly pleasant in any case, but in dark rainy nights it is very disagreeable”.

3. The application of the chi-square test to the data for gerundives and infinitives in AmE3 and 4 yields the following results: chi-square = 4.1326; p is less than or equal to 0.05. The distribution is significant.

5.2.1 The spread of gerundives to preverbal subject position in Late Modern and Present-day English

Table 7 gives comparative figures for the development of preverbal gerunds and infinitives since about the late sixteenth century. As can be inferred from the empty cells in the table, I have not checked the frequencies of occurrence of both kinds of clause in all historical subperiods, yet it is clear that in earlier stages of the language preverbal to-infinitives were more common by far than gerundives. These appear to increase slightly already in AmE3 (1774-1804; 6 examples), but it is difficult to tell whether this increase has any statistical significance, as my data for AmE2 (1732-1759) are retrieved from a much smaller, less representative sample comprising only a few nonfictional texts (see Table 3). There can be no question, though, that coinciding with the second half of the nineteenth century preverbal to-infinitives (16 ex.) begin to yield ground to gerundives (12 ex.) in American English, a trend that is amply confirmed for both Present-day British and American English by the evidence from FLOB and FROWN, which show an almost complete reversal in the frequencies of gerunds and infinitives with respect to the earlier subperiods. Note, too, that in Present-day American English the process of replacement of non-extra posed subject infinitives (2 ex. only) by gerunds (24 ex.) seems to be more advanced than in British English (8 infinitives vs 24 gerunds); the same seems to be suggested by Duffley’s figures for the Brown and LOB corpora as discussed in the next paragraph.
The status of gerundives as the unmarked option to code preverbal sentential subjects in Contemporary English is also quite clear from recent research by Kaltenböck (2004): in the ICE-GB corpus, which consists of one million words of spoken and written British English produced between 1990 and 1993, he found 34 preverbal to-infinitives and 665 extraposed, as opposed to 128 preverbal gerunds and 48 extraposed. These figures seem particularly striking when compared to those reported in Duffley (2003: 335) for preverbal gerunds and infinitives in two corpora the same size of Kaltenböck’s, but comprising texts printed during the calendar year 1961, namely the Brown University Corpus of American English and the Lancaster/Oslo/Bergen Corpus of British English (LOB).\(^{30}\) in the Brown corpus there were 82 occurrences of -ing and 61 to-infinitives; in LOB 65 -ing and 67 to-infinitives.\(^{31}\) As indicated in Table 8, the application of the chi-square test shows that the differences between the two corpora of British English (LOB and ICE-GB) are statistically significant; in other words, preverbal gerundives have become much more common in British English over the last thirty years, an increase that cannot be ascribed simply to differences in the overall structure of those corpora or to the fact that the ICE-GB, unlike the LOB, contains spoken and written material. As is clear from my own research (see section 5.2.2.2 below) and from Kaltenböck (2004: 224, 226), the frequency of preverbal -ing clauses is not directly linked to the for-

\(^{30}\) It deserves mention that Duffley erroneously gives 1964 and 1978 as the dates of publication of the texts making up BROWN and LOB, but see respectively Francis/Kucera (1964) and Johansson et al. (1978).

\(^{31}\) Another study containing information on subject gerunds and infinitives in Contemporary English is Mair (1990: 84-92). In a large corpus (895,000 words) of British English dating back mostly to the 1960s and 1970s, he records 52 subjectless infinitives in preverbal position (p.22) and 80 preverbal gerunds, but this figure is not completely reliable, as he has included in the count (cf. p.245) examples such as “anchoring is impossible in deep water” or “banking is free”, despite the fact that there are no grounds for deciding whether these and other analogous sequences are verbal or nominal: unmodified abstract nouns do not take articles in Present-day English, hence “anchoring is impossible in deep water” is not necessarily more verbal than “entrance is free” or “education is important”. See further section 5.2.2.2 below.
mality-informality continuum; in fact, according to Kaltenböck, they are more common in written (62.5 per cent) than in spoken (37.5 per cent) English, so that if the ICE-GB contained only written texts the overall number of preverbal gerundives would probably be higher than 128. All this suggests, I believe, that before long non-extraposed to-infinitives will become even more marginal than at present, thus leaving gerundives as the only type of sentential complement generally available for preverbal use; in connection with this it should be recalled that non-extraposed that-clauses, though not directly in competition with either infinitives or gerundives, have always been very uncommon in English (see Table 6), to the extent that only 12 examples are recorded in the one-million-word ICE-GB.

<table>
<thead>
<tr>
<th></th>
<th>preverbal gerundives</th>
<th>preverbal to-infinitives</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROWN (1961)</td>
<td>82</td>
<td>61</td>
</tr>
<tr>
<td>LOB (1961)</td>
<td>65</td>
<td>67</td>
</tr>
<tr>
<td>ICE-GB (1990-1993)</td>
<td>128</td>
<td>34</td>
</tr>
</tbody>
</table>

Table 8. Gerundives and infinitives in subject position in three one-million-word corpora (after Duffley 2003 and Kaltenböck 2004). [BrE diachronic: p ≤ 0.001; the distribution is highly significant.]

The dramatic increase in the use of preverbal gerundives since the late nineteenth century may help to explain another interesting development which is going on in recent American English. As discussed at length in Hogan/Hogan (1998) and Fanego (2004b), sentences such as (63)-(64) are becoming frequent in American undergraduate writing, where they occur, on average, about 15 times per 100,000/125,000 words:

(63) *By trying to make his mother happy proved unlucky for the character Paul in this story.*

(64) *By simply taking an average of the survey responses on why customers purchased the product, would be to disregard the great extremes customers indicated.*

According to Hogan/Hogan (1998: 184, 201), these structures appear in appreciable numbers since the early 1980s, though examples can be found from about 1960. They have not yet made their way into
standard American usage and convey the same conceptual information expressed in standard English by the corresponding constructions without an initial by, as in (63b)-(64b) below, but differ from these in that the preposition – henceforth referred to as *impertinent by* – has been recruited to license the -ing subject. In the process, it has become desemanticized and has evolved from an element coding circumstantial meanings (i.e. ‘by means of’) into a semantically empty complementizer.

(63b)  *Trying to make his mother happy* proved unlucky for the character Paul in this story.

(64b)  *Simply taking an average of the survey responses on why customers purchased the product* would be to disregard the great extremes customers indicated.

I argued in Fanego (2004b) that impertinent by replicates the use of *the* found with eighteenth-century hybrid gerunds (*eg* “the gaining her Affections”; see section 5.2 above), and that both syntactic devices are manifestations of the cognitive principle of ‘transparency’ (Rohdenburg 1995, 1996) referred to earlier in this paper. *The*-hybrids came into use mostly from the second half of the seventeenth century, when the nominal system of gerundial complementation inherited from Old English was breaking down and verbal gerunds were beginning to spread outside their original prepositional environment to other clause functions; impertinent by-clauses, in turn, seem to have arisen coinciding with the widespread generalization of -ing subjects in American English. In both cases, the difficulties of language users to handle the novel structures probably prompted the resort to complement clauses with more explicit grammatical marking.

It seems appropriate to conclude this section by alluding briefly to a recent paper by Mair/Leech (2006) where they carefully document current changes in English syntax and the influence of American English on British English. This ‘Americanization’ of British English, to use Mair/Leech’s label, can also be seen at work in the area of sentential complementation, as shown by Mair’s analysis (2003) of the changing complementation patterns of *begin* and *start* in twentieth-century English, or by Rohdenburg’s (1996: 169) research on the omission of *in* from constructions following the verb *spend* (*eg*
“I spend a great deal of time in responding to her questions”), where
the use of the preposition was virtually obligatory until well into the
nineteenth century. Both developments were spearheaded by
American English,32 and the same seems to hold true for the specific
change, the increase in preverbal -ing subjects at the expense of to-
infinitives, that I have considered in this section.

5.2.2. Variables controlling the choice between gerundives and
infinitives in preverbal position

5.2.2.1. Earlier research

Research on sentential complementation in Present-day English has
attempted to define the semantic differences between the gerund and
the infinitive in terms of notions such as the following:

a) general scope or validity (for which the -ing form is used)
versus reference to a particular occasion (expressed by the infinitive);
see for instance Zandvoort (1975[1957]: 29) or Poutsma (1904: 622,
625), who contrasts He dreaded not engaging with the highest species
of his art with I dread to hear you speak.

b) factivity, or presupposition of the truth of the complement,
versus non-factivity; see among others Kiparsky/Kiparsky (1971: 347-
348) or Miller (2002: 347), who alludes to the split along factive/non-
factive lines between gerundives and infinitives, and dates to
sometime in the sixteenth century the loss of the infinitive’s “ability to
occur in factive contexts”.

c) closely related to (b) above, fulfilment of the action versus
potentiality, the infinitive being considered to denote “yet unrealized
activities” (Dixon 1984: 590) or to have a “bias towards potentiality
[that] tends to favour its use in hypothetical and nonfactual contexts”
(Quirk et al. 1985: 1191-1192, also 1062-1063), as in, for instance,
Brian would loathe to live in the country, as opposed to Brian loathed
living in the country. See also Jespersen (1940: 166) or Huddleston/
Pullum (2002: 1254-1255), who compare To have paid off the

32 Other complementation changes where American English is distinctly further
advanced than British English are discussed in Vosberg (2003b: 314-315) and
mortgage would have put us in a strong position with Paying off the mortgage has put us in a strong position.

Few of the above proposals have focused specifically on gerundive and infinitival subject clauses, and fewer still have been corpus-based. Three notable exceptions are Mair (1990), Egan (2003) and Duffley (2003), which are to date the main approaches to the topic under discussion. Starting with Egan (2003), the central concern of this long cognitive analysis is the semantics of to-infinitives and gerunds in object position; these are defined, respectively, as denoting “a situation viewed as a whole [and] profiled as the more likely of several alternatives in some domain”, and a “situation profiled as ongoing in some domain” (p.307). In order to check whether these characterizations can account for the distribution of infinitives and gerunds in other clause functions, Egan devotes a few pages (307-310) to their use as preverbal subjects. For this purpose he relies on a random sample of tokens of utterances downloaded from the British National Corpus containing 40 to-infinitives and 65 gerundives. By comparing the tense, aspect and modality of the matrix predicates governing each complement clause (see Table 9) he shows that the main difference between the two types of construction is “the incidence of their occurrence with predicators in the past/perfect” (p.308), as gerundives are governed much more frequently by predicates in the past tense (in 34% of all cases) than do infinitives (in only 10% of the examples). Within Egan’s framework the collocation of gerundives with past-tense matrices was predictable, as gerundives are argued to denote ongoing situations and these can be located at the same time as, before, and after the time of the main verb (eg “Writing a novel was/is/will be easy”), but the infinitive, by contrast, would not be expected to occur with past-tense predicates, since, as noted above, it is an “alternative-evoking form” which in its use as object is never found in “backward-looking complement constructions” (p.309). In view of the fact that subject infinitives can and do refer to events that took place prior to the time denoted by the higher verb, as is the case in (65), Egan concludes that “the substitution of -ing clauses for the to-infinitive [in such instances] would not result in any great change of meaning” (p.308) and that “there would appear to be rather less
form-function isomorphism with respect to the use of the form[s] in subject position” than in other positions (p.309).

(65) To live in such a castle meant demands on the purse. (Egan 2003: 308)

<table>
<thead>
<tr>
<th></th>
<th>present</th>
<th>past</th>
<th>present/past perfect</th>
<th>modal</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>to-infinitives</td>
<td>28 (70%)</td>
<td>4 (10%)</td>
<td>0</td>
<td>8 (20%)</td>
<td>40</td>
</tr>
<tr>
<td>gerundives</td>
<td>30 (46%)</td>
<td>17 (26%)</td>
<td>5 (8%)</td>
<td>13 (20%)</td>
<td>65</td>
</tr>
</tbody>
</table>

Table 9. Tense, aspect and mood/modality of matrix predicates with to-infinitive and -ing subjects in Contemporary English [from Egan 2003: 308].

Egan’s inconclusive findings regarding the differences between subject gerunds and infinitives are problematic for the cognitive linguistics creed that “every lexical and grammatical choice has semantic import” (Langacker 1999: 339). Similar difficulties beset another semantically-oriented approach to the topic, namely Duffley’s functional analysis (2003) of the 147 occurrences of the -ing form and 129 of the to-infinitive in the Brown University Corpus of American English and the Lancaster/Oslo/Bergen Corpus of British English (LOB), both of which comprise texts printed in 1961. As in the rest of his research on sentential complementation (1992, 1999, 2000, 2004, Duffley/Joubert 1999, Duffley/Tremblay 1994), Duffley follows a “meaning-motivated” approach (2003: 352) and proposes a number of subtle semantic distinctions which are, at best, vague, and sometimes plainly erroneous, as will become apparent below.33 After observing that corpus examples contradict the claims of earlier research on the semantics of the infinitive and -ing (see the opening paragraphs of this section), he puts forward as an “explanatory hypothesis” that “the -ing form and the to plus infinitive construction […] have an inherent meaning that preexists and is stored outside of any particular use that is made of them” (p.329). In the case of -ing, this inherent meaning is to “denote the total interiority of an event, produc[ing] an impression very close to that of a verbal noun. It evokes the event as a

33 For other inaccuracies in Duffley’s paper see footnote 30 above.
homogeneous whole made up of all the internal positions of the spatial support” (p.331).34 The to-infinitive, in turn,

is [...] similar to the gerundive -ing in that both evoke an event as a whole. What distinguishes them lies in the fact that whereas the -ing evokes the totality of what is involved in the event (i.e., an inside view), the to-infinitive phrase views an event from the outside, evoking the latter as the end point of a movement leading up to its actualization. In the case of the -ing, the actualization of the event is not at issue, but rather the event is seen in and for itself. (Duffley 2003: 333)

Duffley then goes on to apply these alleged meaning distinctions to the data retrieved from his corpora. Thus, he devotes one section (pp.345-348) to the variation between the gerund and the infinitive in “equative contexts”, that is, in sentences of the following form:

(66) Complimenting is lying. [gerund + gerund]
(67) To be different is to invite shame and doubt. [infinitive + infinitive]
(68) To teach a boy merely the nature of things would be giving him but a shallow conception of the universe. [infinitive + gerund]
(69) *Seeing her is to love her. [gerund + infinitive]

About the subtype in (66), Duffley notes that “the idea expressed is that of an identity between two actions: complimenting and lying are presented as being one and the same thing” (p.345). In other words,

the copular connection of two gerunds [...] can only evoke a relation of identity due to the gerund’s resemblance to a substantival noun: it evokes an event as an entity being equated with another entity and can therefore be compared to the sentence with two nouns Politics is trickery (p.346).

In the case of (67), infinitive + infinitive, Duffley, following Jespersen (1940: 168), observes that it denotes that “the second act or state is regarded as a necessary or immediate consequence of the first”. This, in his view,

34 Duffley’s account of -ing seems to be indebted to Langacker (1992: 306), who argues that -ing “focuses on the interior of the verbal process [and] imposes on that process a profile which comprises a series of component states but excludes both endpoints”.

falls in very nicely with the hypothesis proposed here concerning the meaning of the to-infinitive. In these uses, the significate of to is used to evoke the arrival at actualization (i.e., the occurrence) of the first event as the condition responsible for the occurrence of the second one; that is to say, the use of two infinitives evokes a relation between two comings-to-actualization. (p.346)

By contrast, the construction in (68), with infinitive + gerund,

resembles the gerund + gerund structure in that it never expresses the notion of consequence but always that of identity […] The absence of the consequential interpretation can be readily explained by our hypothesis: since the -ing does not evoke the coming to actualization of the second event but merely its nature, it can only denote an identification of the nature of the first event. (p.346)

Finally, given that the combination in (69), gerund + infinitive, is not attested in BROWN and LOB, Duffley concludes that it is unacceptable in English, and accounts for its avoidance on the basis of the awkward “shift in point of view from the entitative to the eventive” (p.346).

Apart from the fact that it is difficult to find any historical or synchronic justification for why -ing should denote “total interiority” and the to-infinitive “view an event from the outside, evoking the latter as the end point of a movement leading up to its actualization”, it does not require much searching to find examples which show that Duffley’s claims lack any factual basis (see further examples (94)-(97) below). Thus, despite his predictions about the unavailability in English of the gerund + infinitive pattern in (69), examples of this kind can easily be found in FROWN and FLOB, as is clear from (70) below; that they do not occur in Duffley’s material is probably just a reflection of the fact that gerundives in subject function are much more frequent today than in the texts making up BROWN and LOB, as these date back to 1961 and no longer represent current usage.
The strength of claims based on a right to reproduce depends on the way in which infertility is classified. If being infertile is to be ill, then overcoming it can more easily be said to be a state responsibility. The National Health Service Act 1977 creates a duty to provide services for the diagnosis and treatment of illness (section 3) and defines “illness” as “any injury or disability requiring medical or dental treatment or nursing” (section 128). Yet […] in the view of some […] “Infertility is a grief, not a disease. Those who suffer it are not in pain and are not ill”.

The rest of Duffley’s semantic analyses are equally unconvincing. Thus, irrespective of the varied interpretations he proposes for sentences (66)-(68), they are all examples of pseudo-equatives; these are structures in which both the subject and the internal complement are clausal, the matrix predicates are verbs like be, indicate, show or mean (see (71) below), and the construction as a whole denotes “what the situation described in the subject entails or necessarily involves” (Huddleston/Pullum 2002: 1256; see also Fanego 2004b), so that it can generally be paraphrased by means of an if … then construction, as in (71b):36

(70) FLOB 1991 Science, J50 102: The strength of claims based on a right to reproduce depends on the way in which infertility is classified. If being infertile is to be ill, then overcoming it can more easily be said to be a state responsibility. The National Health Service Act 1977 creates a duty to provide services for the diagnosis and treatment of illness (section 3) and defines “illness” as “any injury or disability requiring medical or dental treatment or nursing” (section 128). Yet […] in the view of some […] “Infertility is a grief, not a disease. Those who suffer it are not in pain and are not ill”.

(71) FLOB 1991 Humour, R04 159: Being got onto the guest list involves a fair amount of industry, including phone calls, general hustling, grovelling, pulling strokes or sheer bluff. Saying: “I’m a friend of Boy George”, can be effective. Possibly. Alternatively, being a Face will get you in. Being a Face means you are someone who gets regular mentions in the gossip columns of NME and Melody Maker,

(71b) If you are a Face, then you are someone who gets regular mentions in the gossip columns of NME and Melody Maker,

Where the higher verb is be, as in (66)-(68) and (70), pseudo-equatives look like genuine equative constructions, but differ from these in that they are not reversible, as aptly noted by Jespersen

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35 English grammars do not use a specific term to refer to this type of sentence; here and in Fanego (2004b) I have opted for ‘pseudo-equative’, an adaptation of Hernanz’s (1994) ‘pseudoequativo’, which she applies to Spanish infinitival structures such as Querer es poder, literally “To want to is to be able to” (i.e. “You can do it if you really try”).

36 In early generative treatments, pseudo-equatives were derived from conditional sentences; see Stockwell/Schachter/Partee (1973: 597-598).
Drift and the development of sentential complements

(1958[1924]: 154) with respect to both the patterns gerund + gerund (see (66) above) and infinitive + infinitive (see (67)):

In some idiomatic uses we may be inclined to take is as implying identity, e.g., “to see her is to love her”. “Seeing is believing”. But the identity is more apparent than real. It would be impossible to invert the terms, and the logical purport of the saying is merely this: seeing immediately leads to, or causes, love, or belief. Thus also: “To raise this question is to answer it”, etc.

The irreversibility of the terms is clear too in the case of the pseudo-equatives under discussion here; witness in this respect the ungrammatical or illogical sequences which result from inverting (66), (67) and (70) respectively: *Lying is complimenting, *To invite shame and doubt is to be different, *To be ill is being infertile. None of these examples denotes, therefore, a relation of identity, as argued by Duffley with regard to (66) or (68) above; but, by contrast, all of them are open to a consequential interpretation and hence accept finite paraphrases with an if-clause:

(66) Complimenting is lying.
(66b) If you compliment, then you lie.
(67) To be different is to invite shame and doubt.
(67b) If you are different, then you invite shame and doubt.
(70) Being infertile is to be ill.
(70b) If you are infertile, then you are ill.

The fact that these various pseudo-equative patterns behave alike both syntactically and semantically shows the futility of Duffley’s attempt to distinguish them by reference to the inherent meanings he proposes for the -ing form and the to-infinitive. His analysis suffers, in fact, from the same flaws exhibited by Egan (2003) and most other functional and cognitive research on sentential complementation (see Fanego 2004c for an overview), in that his claims regarding the existence of a systematic semantic distinction between gerundives and infinitives are made in advance, with the corpus examples being then interpreted in that light.

Unlike Egan (2003) and Duffley (2003), Mair (1990: 84-92) has a firm basis in the linguistic evidence retrieved from a large database (895,000 words) of spoken and written British English dating back to
the 1960s and 1970s. In the light of the 80 non-extraposed gerundives\(^{37}\) and 52 infinitives recorded in his corpus Mair concludes that the variables invoked by earlier research to account for the choice of gerunds and infinitives cannot explain their distribution in preverbal position, as both types of clause can convey either potential events or events that have actually taken place, and both can refer, too, to an action in general or to a particular occasion:

\begin{itemize}
  \item [(72)] _To do nothing_ would lead […] to the cathedral becoming a ruin. (Mair 1990: 37)
  \item [(73)] _to maintain and increase the grants from these bodies_ was one of the lesser known triumphs of recent years (Mair 1990: 86)
  \item [(74)] _Distributing cheap or free butter to European households_ would spoil the market for the farmers, (Mair 1990: 88)
  \item [(75)] _Seeing you at Spode that week end_ most certainly made my week end. (Mair 1990: 87)
\end{itemize}

Mair suggests instead that the preponderance of non-extraposed gerundives over infinitives has to do with information packaging and the marked status of infinitival non-extraposition. As already discussed in section 5.1 above, the preferred position in English for both subject infinitives and _that_-clauses has been, at all times, after the matrix predicate (eg “It is essential _to know the truth_”); typically, as shown by Mair (1990) and others, such extraposed clauses encode new information, in accordance with the so-called ‘information principle’, that is, the tendency for new information to come later in the sentence than given information. When absence of extraposition occurs, this implies, according to Mair (1990: 37-39), that the speaker or writer wishes to achieve one or both of the two following effects:\(^{38}\)

\(^{37}\) But note that the actual number of gerundives in Mair’s corpus is probably lower than this, for the reasons expounded in footnote 31 above.

\(^{38}\) In addition, absence of extraposition is obligatory in pseudo-equative constructions, that is, when the predicate contains another subordinate clause as complement, since this makes extraposition virtually impossible; consider, for instance the sequence _To present yourself at a person’s front door in the company of two known troublemakers is to invite civil proceedings on a summons of malicious trespass_, but not *_It is to invite civil proceedings on a summons of malicious trespass to present yourself at a person’s front door in*
a) appropriate distribution of given and new information within a single sentence if, for some reason or other, the clausal subject is discourse old rather than discourse new and conveys states-of-affairs which are in some sense retrievable from the preceding co(n)text.

b) strengthening of cohesion across sentences: non-extraposed subject clauses which contain anaphoric references to previous sentences serve as a cohesive link.

In such cases, as in example (76) from my own material, gerundives are “the most likely structural choice” (Mair 1990: 91) because of their greater frequency in preverbal position by comparison with infinitives; as Mair puts it (1990: 88), “it is extraposition, that is a positional factor, and not modality [TF: i.e. semantics], which is chiefly responsible for the distribution of infinitival and gerundial subject clauses in modern English”. Basically the same point is made by Huddleston & Pullum (2002: 1254), who note that “to a significant extent the difference between infinitival and gerund-participial is a matter of information packaging: end position tends to favour the infinitival while basic subject position tends to favour the gerund-participial”.

(76)  FROWN 1992 Science, J23 164: The existence of a large number of firms seeking profits from a common pool of consumers produces pressure for survival. Over time those firms that employ less efficient techniques lose profits to those that are more efficient. Losing profits eventually translates into extinction. As the competitive process continues, only those firms that use efficient techniques survive.

Mair’s account of the factors governing the choice between preverbal gerunds and infinitives in Present-day English seems convincing. However, since in earlier stages of the language gerundives in subject function were rarely used, the question I will try to answer in the next section is how the statistical tendency towards a complementary distribution of gerundive and infinitival subjects with regard to extraposition which is so prominent today was developed.

the company of two known troublemakers. According to Biber et al. (1999: 726-727) structures of this kind account for over 30 per cent of all non-extrapositions in English.
5.2.2.2. The corpus evidence

Turning then to the specific features displayed by preverbal infinitives and -ing clauses in the early stages of the process of replacement of the former by the latter, Kaltenböck (2004: 224-226) has shown for Present-day British English that non-extraposed gerundives occur more frequently in written (62.5 per cent) than in spoken (37.5 per cent) English, and that in the written register their occurrence is not directly linked to the formality-informality continuum, but rather associated to text types such as reportage and press editorials, which yield more than twice as many -ing clauses (3.0 and 4.0 occurrences per 10,000 words) as the average written text (1.3 occurrences). The samples used in my historical analysis are too limited to warrant reliable conclusions on whether the advance of the gerundive at the expense of the infinitive correlates with any register in particular, but its frequent use in Essays and Periodicals, as shown in Table 10, ties in well with Kaltenböck’s findings. In general, since non-extraposition takes the focus of information off the subject clause and makes the matrix predicate, i.e. the speaker’s/writer’s comment or evaluation, the main focus of the message (see in this connection quotations (77)-(81) below), one would expect non-extraposed clauses to occur more frequently in text categories expressing writer stance, such as newspaper editorials, essays and the like.
Drift and the development of sentential complements

<table>
<thead>
<tr>
<th></th>
<th>BrE1-4 (1700-1859)</th>
<th>AmE2-4 (1732-1879)</th>
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<tbody>
<tr>
<td></td>
<td>[300,000 w of fiction / 160,000 of nonfiction]</td>
<td>[160,000 w of fiction / 130,000 of nonfiction]</td>
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<tr>
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<td>Essays</td>
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<tr>
<td>Periodical essays</td>
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<td>2</td>
</tr>
<tr>
<td>Press reportage</td>
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<td>Science</td>
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<td>Travelogue</td>
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</tr>
<tr>
<td>Totals</td>
<td>15</td>
<td>29</td>
</tr>
</tbody>
</table>

Table 10. Non-extraposed gerundives (unintroduced + hybrid) in the COLMOBAENG text categories.\(^{39}\)

With respect to other variables mentioned in the literature (see section 5.2.2.1) as influencing the distribution of subject gerunds and infinitives, it is clear from my data that, as also shown by Mair (1990) for Present-day English, there is no significant difference between the gerund and the infinitive as to their capacity of expressing particularity or generality. No differences were found either in the tense or aspect of the matrices governing each of these types of clause, and both the infinitive and the gerund can be used to denote potential events (see (77)-(79)) and events that have actually taken place (see (80)-(81)). There might be some correlation, however, between the choice of an infinitive and the presence of a modal, in particular would, in the matrix, at least in American English, where infinitives occur in 12 out of the 13 sentences containing would in the higher predicate (see Tables 11-13 and quotations (77) and (78)); but since in the majority (9) of those 12 cases the infinitival clause is longer than the matrix clause, the use of the infinitive could also have to do with syntactic weight, as discussed further on. In British English, at any

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\(^{39}\) The label ‘Periodical essays’ refers to short pieces published in magazines such as *The Covent Garden Journal* (1752), *The London Magazine* (1732-1785) or *The Atlantic Monthly* (1857-), while ‘Essays’ subsumes longer works on subjects so diverse as philosophy, history or politics. ‘Press reportage’ is used for Meredith’s *Letters Written to the ‘Morning Post’ from the Seat of War in Italy* (1866).
rate, modal matrices governing preverbal gerundives are frequent (see (79)): they occur in 5 out of the 15 instances of preverbal gerundives recorded in BrE1-4, and in two cases the modal is would.

Examples (77)-(81) and Tables 11-13 reflect all these various aspects; note that the tables refer solely to American English, since it is in this dialect variety that the advance of gerundives is chiefly discernible during the period examined.

(77) COLMOBAENG AmE4 1856 Melville Bartleby, Part II [Fiction]: I slowly went downstairs and out into the street, and while walking round the block considered what I should next do in this unheard-of perplexity. Turn the man out by an actual thrusting I could not; to drive him away by calling him hard names would not do; calling in the police was an unpleasant idea; and yet, permit him to enjoy his cadaverous triumph over me -- this, too, I could not think of. What was to be done?

(78) COLMOBAENG AmE3 1804 Brackenridge Modern Chivalry, 49 [Fiction]: The Scripture has been well explained, and frequently preached over; every text and context examined, and passages illustrated […] Are there any new doctrines to discover? I should think it impossible. At any rate, I should conceive it unnecessary. There are enough in all conscience: The inventing more, would be like bringing timber to a wood, or coals to Newcastle.

(79) COLMOBAENG BrE3 1778 Walpole Life of Mr. Thomas Baker, 130/077-P19 [Nonfiction]: The sufferings of Charles I whose crimes were not of the magnitude of his son’s, had raised a spirit of enthusiasm in his partisans, and conjured up in their minds a profane idolatry of kings, that was inconsistent both with true religion and common sense; and had been extended even to genealogic succession- as if being born of a certain race could entitle any family to a right of violating with impunity all laws, both divine and human.

(80) COLMOBAENG AmE3 1797 Tyler The Algerine Captive, 71 [Fiction]: I found one of the larger boys sitting by the fire in my arm chair. I gently requested him to remove. He replied that he would, when he had warmed himself; “father finds wood, and not you”. To have my throne usurped, in the face of the whole school, shook my government to the centre. I immediately snatched my two foot rule, and laid it pretty smartly across his back.

(81) COLMOBAENG AmE3 1797 Foster The Coquette, 17 [Fiction]: Mrs. Richman: “What, my dear, is your opinion of our favorite Mr. Boyer?” Eliza: “Declaring him your favorite, madam, is sufficient to render me partial to him”.
Drift and the development of sentential complements

<table>
<thead>
<tr>
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<th>present</th>
<th>past</th>
<th>present/past</th>
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<td>0</td>
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<td>3</td>
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</table>

Table 11. Tense, aspect and mood/modality of matrix predicates governing preverbal infinitives and gerundives in AmE2 (1732-1759), based on a 50,000-word sample.

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<th>modal</th>
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</thead>
<tbody>
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<td>3</td>
<td>0</td>
<td>6 (3 ex. with would)</td>
<td>16</td>
</tr>
<tr>
<td>gerundives</td>
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<td>3</td>
<td>1</td>
<td>0</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 12. Tense, aspect and mood/modality of matrix predicates governing preverbal infinitives and gerundives in AmE3 (1774-1804), based on a 120,000-word sample.

The possibility that information packaging could account for the spread of gerundives to subject position is not confirmed by the corpus evidence either: preverbal infinitives and gerundives behave exactly alike in typically encoding given information and containing anaphoric references to prior discourse. We can illustrate this with examples (77)-(81) above, where I have underlined the trigger entity in the preceding context to which the subject clause is anaphorically and/or informationally linked.
<table>
<thead>
<tr>
<th></th>
<th>BrE1-4 [460,000 words]</th>
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<th>AmE3 [120,000 words]</th>
<th>AmE4 [120,000 words]</th>
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</thead>
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</tr>
<tr>
<td>to-infinitives</td>
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<td>not analysed</td>
<td>not analysed</td>
<td>12</td>
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<tr>
<td>gerundives</td>
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<td>5</td>
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<td>0</td>
</tr>
<tr>
<td>the-hybrids</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 14. Length of LModE preverbal subject clauses relative to matrix clauses.
In view of the inconclusive results yielded by the variables mentioned so far, I decided to check whether syntactic weight could have a bearing on the long-term replacement of preverbal infinitives by gerundives. That weight might be a factor was suggested by Kaltenböck’s finding (2004: 227-229) that in Present-day British English non-extraposed gerundives, with an average length of 6.9 words, are shorter than their matrix predicates (average length = 7.5 words), whereas non-extraposed infinitives (10.5 words) tend to be longer than their matrices (7.5 words). Kaltenböck does not seem to be aware of the implications of this statistical difference, but as will become clear in what follows, weight appears to have been the major factor in the spread of gerundives to preverbal subject position in modern times. Table 14 gives information on the length of Late Modern English preverbal infinitives and gerundives relative to their matrix clauses, and shows that at every stage gerundives were, on average, lighter than infinitives. Table 15, in turn, combines the totals for infinitives and unintroduced gerundives in AmE2-4 (1732-1879) and confirms that their distribution in terms of syntactic weight is statistically significant. Finally, examples (57)-(61) and (77)-(81) quoted earlier illustrate the clear contrast in length between both types of non-finite clause; note in particular (77), where a long subject infinitive and a short -ing clause occur in succession. It could be argued about this example that Melville’s change of clause type is motivated by stylistic considerations and the need for variety, but this would not explain why it is precisely the longer subject that is coded as an infinitive, and the shorter one as an -ing clause; an additional factor promoting the choice of an infinitive in the first sentence (“to drive him away by calling him hard names would not do”) could be the presence of would in the matrix predicate, though, as pointed out...

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40 Concerning the data in this table, note that sequences of two or more coordinated subject clauses, as in (i) below, have been counted as one clause.

(i) COLMOBAENG 1788 Hamilton The Federalist Papers, March 14th: And to take the senator of any State from his seat as senator, to place him in that of President of the Senate, would be to exchange, in regard to the State from which he came, a constant for a contingent vote.
above, I think further evidence is needed before we can establish a link between modals and use of the infinitive.

Such a link does not seem to be at work in Present-day English, to judge at least from the evidence provided by two 70,000 word samples from FLOB and FROWN (see also Egan 2003: 307-310 and Table 9 above). In FROWN the two matrix predicates containing a hypothetical modal form, namely would, selected -ing clauses as subjects (see (82)); in FLOB -ing clauses governed by modal matrices (5 ex., 3 with would and 2 with could) outnumbered infinitival clauses (2 ex., with would); see (83)-(84).

<table>
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<tr>
<th></th>
<th>AmE2-4 [1732-1879; 290,000 w]</th>
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<td></td>
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<tr>
<td>to-infinitives</td>
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<tr>
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<td>6</td>
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</table>

Table 15. Length of preverbal subject clauses relative to their matrix predicates in earlier American English. [p is ≤ 0.01; the distribution is very significant]

(82) FROWN 1992 Science, J44 142: Pound’s call was for a true “scientific jurisprudence” based on the use of experts to make the legal system more efficient. Making judges ‘scientists’ would instill in judges an expertise which would create a greater efficiency in the administration of justice.

(83) FLOB 1991 Mystery and Detective Fiction, L03 221: Charles felt heavily ballasted with Jam Roly-Poly as he walked out of the canteen. Spending much time round Delmoleen, he realised, would have a devastating effect on his waistline (though, actually, these days it was more a general area than a precise line).

(84) FLOB 1991 Press Reportage, A02 23: At the end of the first ballot, to go on and to win this battle by a small majority – I did not even think she would win it, I thought she would lose it – would have meant her authority was broken.

By contrast, my PDE data confirmed Kaltenböck’s (2004) finding that the form of the subject clause is sensitive to syntactic weight, as can be seen from Tables 16-17. Examples (84) above and (85)-(86) below illustrate some of the preverbal infinitivals recorded in my data; example (85) in particular, which can be replaced by a that-clause or a fact that-construction (i.e. “The fact that anyone should render men slavering idiots with an ankle made Ryder shake his head”) will serve as a reminder that infinitives did not lose “the ability to occur in
factive contexts” around the sixteenth century, as claimed by Miller (2002: 347).

<table>
<thead>
<tr>
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<tr>
<td>to-infinitives</td>
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Table 16. Length of preverbal subject clauses relative to their matrix predicates in Present-day British English. 41

<table>
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<td>gerundives</td>
<td>5</td>
<td>17</td>
<td>2</td>
<td>24</td>
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</tbody>
</table>

Table 17. Length of preverbal subject clauses relative to their matrix predicates in Present-day American English.

(85) FROWN 1992 Romance and Love Story, P09 162: He turned back to Grayson. The man was still staring at her, slavering like a dog over a bone that wouldn’t ever be his because other bigger dogs had staked claim. […] “Ah”, said Ryder, his voice a nice blend of irony and contempt. “Onward, Grayson. Pull your tongue back into your mouth, if you please. I see flies hovering”. Samuel Grayson managed it, not without some difficulty, for the woman in question was being helped down from her mare by a white man, and she’d just shown a glimpse of silk-covered ankle. To render men slavering idiots with an ankle made Ryder shake his head.

(86) FROWN 1992 Skills/Trades/Hobbies, E09 100: “I keep hearing that we’re not doing well because of me. We’re not doing well because we all have to try harder”, she said. “To blame all our problems on one thing is a real cop-out. Just like our economy, it runs in cycles”.

The question that remains to be considered before concluding this section is why length has come to play such a major role in determining the form of the subject clause. The answer to this, I believe, is rooted in the syntactic behaviour of the nominal gerund. I pointed out in section 3 that in Middle and Early Modern English nominal gerunds tended to occur preferably after prepositions; however, unmodified -ing nominals such as those adduced in (87)-

41 In this table I have excluded from the count one coordinated infinitive and one coordinated gerund.
(89) below have been relatively common in both subject and object position at all stages of English, as I have shown in earlier research (Fanego 1996a: 38, 58, 1996b: 116). Thus, in a 317,621 sample from the Early Modern English section of the Helsinki Corpus I recorded 16 instances of this kind functioning as subjects, which is by no means an inconsiderable number.42 In this use, gerunds exhibited the topical, anaphoric function that characterizes all preverbal subjects, whether clausal or nominal:

(87) HC 1591 Smith Of Usurie, Sample 1, B5V: First, they [the Jews] did lend vpon Vsurie to straungers; after they began to lend vpon Vsuirie to their brethren, and now there be no such Vsurers vpon earth as the Iewes which were forbidden to be Vsurers. Wher by you may see how the malice of man hath turned mercie into crueltie. For whereas lending was commaundered for the benefite of men, Vsuirie hath turned it to the vndoing of men:

(88) HC 1608 Armin A Nest of Ninnies, 10: […] to anger him throughly, one of the minstrels whispers a gentleman in the eare, and said, If it pleased him, hee would; whereat the gentleman laught. The knight demaunded the reason of his laughing. I pray you tell me (quoth hee) – for laughing could neuer come in a better time – the foole hath madded me.

(89) HC 1699 Langford Plain and Full Instructions to Raise All Sorts of Fruit-Trees that Prosper in England, Sample 1, 37: And lastly, if it should miscarry (as it seldom doth) it will be perceived by Midsummer, and the stock may be enoculated again the same year.

4. Where inoculating succeeds well, it is to be prefer’d before Graffing.

As long as the gerund remained a member of the category of nouns, these -ing forms would pattern with deverbal substantives like entrance ("entrance is free") or education ("education is important"); but with the acquisition of verbal syntax by the gerund, (87)-(89) and other analogous sequences became ambiguous between a nominal and a verbal analysis, as they still are in Present-day English (for discussion see Quirk et al. 1985: 1065). From this moment, it was

42 Table 3 in Fanego (1996b: 116), which is based on the same sample, gives 20 unmodified gerunds as subjects, but this figure includes a few examples of postposed subjects, as in "if there be required mundifying and clensing" (HC 1602 Clowes Treatise for the Artificiall Cure of Struma, 32).
only a matter of time before gerundives started to encroach upon preverbal infinitives.43

Studies on syntactic change have shown that its diffusion through the grammar is orderly and systematic, and tends to occur first in those environments which are “more natural contexts for the change” (Timberlake 1977: 157; see also Harris/Campbell 1995: 101), or where it is “least noticeable” or “least salient” (Warner 1982: 148-151; Naro/Lemle 1976). If we apply these parameters to the case under discussion, it is easy to see that, once unmodified -ing nominals had been reanalysed as VPs, the innovated analysis was likely to surface earlier in sentences containing short, simple VPs as preverbal subjects, as in (90)-(91) below, than in sentences with longer, more complex subjects, as in (92)-(93).

(90) HC 1699 Langford Plain and Full Instructions to Raise all Sorts of Fruit-Trees that Prosper in England, Sample 2, 114: Slitting the bark is an excellent additional help to most of the aforesaid evils, and also for bark-binding.

(91) COLMOBAENG BrE3 1777 Boswell Hypochondriack, 005/020-P01 [Nonfiction]: Men of the greatest parts and application are at times averse to labor for any continuance; and could they not employ their pens on lighter pieces, would at those times remain in a total inactivity. Writing such essays therefore may fill up the interstices of their lives, and occupy moments which would otherwise be lost.

43 The nominal pattern N_ of-phrase illustrated in examples (8) (“bisi In ordaining of priestes, and clerkes”) and (32) above (“men forbeden etynge of ham”) could also occur in preverbal position, as in (i), but was extremely infrequent: there is one example in Tajima’s (1985: 63) extensive collection of Middle English data, one (doubtful) instance in the 317,621 word sample from the Helsinki Corpus referred to above, and just two cases in the COLMOBAENG (1,170,000 words). It is unlikely, therefore, that this nominal type may have been the source of the gerundive in subject function.

(i) COLMOBAENG BrE1 1704 Evelyn Memoirs for his Grandson, 3H06 0032/075-P0: [...] storing it with timber trees, oak, ash and elm, frequent copses, which in few years will prove of incredible emolument and restore the name of Wotton, otherwise in danger to be lost and forgotten, planting of timber trees being in truth the only best and proper husbandry the estate is capable of.
To suppose that the sphere of the planet should by its own motion, if one may say so, sometimes roll forwards, sometimes roll backwards, and sometimes do neither the one nor the other, is contrary to all the natural propensities of the imagination.

To write the life of him who excelled all mankind in writing the lives of others, and who, whether we consider his extraordinary endowments, or his various works, has been equalled by few in any age, is an arduous, and may be reckoned in me a presumptuous task.

In addition, there can be little doubt that the association of the gerundive with light subjects can also be related to the cognitive principle of ‘transparency’, as defined earlier (section 5.2), since in structures involving an increased processing load, such as (92)-(93), the more explicit to-infinitive would tend to be preferred. In connection with this, it seems appropriate to conclude this section by quoting the three occurrences in BROWN and LOB of the verb require with a sentential subject; note the difference in length between the infinitive in (94) and the gerundives in (95)-(96), and also Duffley’s (2003) unsuccessful attempt, quoted as (97), to account in semantic terms for the choice of complement clause in these examples:

(94) BROWN 1961 Skills/Trades/Hobbies, E12 0100: Now, to add to the already unbelievable extremes found in one nation, we have the two new states of Hawaii and Alaska. To hope to cover just one region of this land and to enjoy all of its sights and events and, of course, to bring back pictures of your experiences, requires advance planning.

(95) BROWN 1961 Skills/Trades/Hobbies, E28 0360: Second, in a competitive market, the customer feels his weight and throws it around. Providing good customer service requires as thorough a marketing and general management planning job as the original selling of the product.

This refers only to occurrences of require in the present tense; I have not checked whether there are any examples of sentential subjects governed by require in tenses other than the present.
Drift and the development of sentential complements

(96) BROWN 1961 Belles Lettres/Biographies/Essays, G30 1620: ‘De Revolutionibus’ is not just a collection of facts and techniques. It is an organized system of these things. Solving astronomical problems requires, for Copernicus, not a random search of unrelated tables, but a regular employment of the rules defining the entire discipline.

(97) Although the to-infinitive could be substituted for the -ing in (56) and (57) [i.e. (95) and (96)] the -ing could not be substituted for the to-infinitive in (55) [i.e. (94)]. The impression of an event whose realization is very hard to achieve and may not even be guaranteed by respecting the requirement mentioned does not fit with the gerund. This can be explained by the fact that to can present the infinitive’s event as something aimed at but whose achievement remains prospective, an element of meaning that is absent from that of the -ing. In (56) and (57) [i.e. (95) and (96)], the gerund places more focus on what is involved in providing good customer service and solving astronomical problems, an impression that is consonant with the meaning of the gerund as defined above. (Duffley 2003: 341)

6. Summary and conclusions

English is unlike all other European languages in having two different types of non-finite sentential complement,45 one of which, the verbal gerund, arose in Middle English probably as a result of systemic pressure to develop a clausal pattern capable of following prepositions, as the infinitive was disallowed in that environment (see section 4 above, and Fanego 2004a for further discussion). As long as the gerundive continued to be restricted to prepositional contexts, it remained functionally different from the infinitive, but this distribution was unstable because the nominal gerund, though itself closely associated with prepositional use (see section 3), could also occur in other clausal slots; see, for instance, (87)-(89) above. From around the sixteenth century, therefore, the gerundive gradually

45 In most languages having two kinds of non-finite complement one of them is infinitival and the other a participial complement used with predicates of immediate perception; see Noonan (1985: 133-135).
gained ground at the expense of the infinitive in both object and subject position.

In object position (section 4) gerundives soon invaded the domain of the infinitive in the complements of negative implicatives (“I avoided meeting her”) and of many aspectuals, among other verb classes. With retrospectives like forget or remember the specialization of the gerundive to denote past time, as in (16) above (“I perfectly remember carrying back the Manuscript you mention and delivering it to Lord Oxford”), was largely a consequence of the fact that its nominal origin made it indifferent to time distinctions and enabled it to derive its time reference from the surrounding context, unlike the to-infinitive, which needed the support of the auxiliary have to refer to past time (eg “I never remember to have heard such groans of roaring wind”). From the eighteenth century the contrast between -ing/to in terms of tense (past versus future) was well established with retrospectives.

Retrospective clauses usually refer to events that have actually occurred, so that it is easy to interpret the opposition -ing/to as also signalling performance of the action versus potentiality. This, as suggested in 4.1, most probably accounts for the extension of -ing complements to the conative try, a polysemous verb with which the potentiality/performance distinction was relevant. On the model of try, other conative verbs (eg risk) have subsequently come to also govern -ing forms.

As discussed in 4.2, the availability of the gerundive was also exploited to establish a clearer contrast between object clauses with controlled (“I want to see Mary”) and non-controlled (“A visit to London entails bringing gifts for friends”) implicit subjects, the latter type of clause being now regularly encoded as a gerundive.

In subject position (section 5) the current distribution of the gerundive and the infinitive is intimately related to the nominal origin of the -ing form. This accounts, in the first place, for the oft-noted resistance of -ing clauses to be extraposed (section 5.1). By contrast, the nominal properties of gerundives have favoured their spread to preverbal subject position (section 5.2), a clausal slot where they have been gaining ground at the expense of infinitives since about the eighteenth century. This trend, which appears to have been spear-
headed by American English (see section 5.2.1 and Table 7), has now led to the complementary distribution of gerundives and infinitives with regard to extraposition, such that end position in the clause tends to favour infinitivals, while basic subject position overwhelmingly favours gerundives (see 5.2.2.1). Finally, section 5.2.2.2 showed that syntactic weight, and not semantics, was and still is the major factor controlling the process of replacement of preverbal infinitives by gerundives.

The present study has also shown the connection between the principle of transparency (Rohdenburg 1995, 1996) and some of the developments undergone by the English complement system in modern times, such as the emergence of two different complementizers – the in seventeenth and eighteenth-century English, by in some varieties of Contemporary American English (see respectively sections 5.2 and 5.2.1) – intended to make the subordinate status of the -ing clause more explicit. The fact that the preverbal to-infinitive has survived longer in sentences containing long, complex subjects (see section 5.2.2.2) can likewise be seen as another manifestation of the transparency principle.

By way of conclusion, we can now go back to the notion of drift with which this paper started. Sapir’s original definition (1921: 155) of this term is well known: “the unconscious selection on the part of […] speakers of those individual variations that are cumulative in some special direction”. More recently, the notion has received considerable attention in the literature (see, among others, Hawkins 1986, 2004: 166-167; Lass 1987; Andersen 1990, 2001; Ferguson 1996; Nevalainen/Raumolin-Brunberg 2000; Trudgill et al. 2000; Butters 2001; Kastovsky 2001) and has been applied to global or big system changes such as the movement of many Germanic languages from a relatively synthetic grammatical structure to a relatively analytic structure, or the creation of a category of modal verb in English, which in turn was instrumental in grammaticalizing the do-periphrasis. Unlike individual changes, “which run their course within the lifetimes of at most a few generations of speakers” (Andersen 1990: 1), global changes or drifts are long-lasting phenomena which may take several centuries, sometimes even millennia, to work their way through the community and the language. They comprise a
multiplicity of apparently separate changes that nevertheless share a common direction and “feed one another, reinforce one another, merge with one another […] it is as though the members of the speech community are opportunistic, that when the language offers a feature that can be modified in a direction that fits the drift an innovator may pick up on it and the community may go along with it” (Ferguson 1996: 194). As can be easily seen, this characterization accurately describes the long-range trend towards functional specialization that has marked the development of gerundives and infinitives since Middle English times, despite the seemingly random variation observable in the early stages of the spread of the gerundive.

Appendix 1. A Corpus of Late Modern British and American English Prose (COLMOBAENG)

The corpus comprises materials from the following sources:

a) electronic databases:

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPC</td>
<td>Century of Prose Corpus (Milic 1995).</td>
</tr>
<tr>
<td>Denison</td>
<td>A Corpus of Late Modern English Prose (Denison 1994).</td>
</tr>
<tr>
<td>EAF</td>
<td>Early American Fiction, Chadwyck-Healey.</td>
</tr>
<tr>
<td>ECF</td>
<td>Eighteenth-Century Fiction, Chadwyck-Healey.</td>
</tr>
<tr>
<td>GUT</td>
<td>Project Gutenberg.</td>
</tr>
<tr>
<td>NCF</td>
<td>Nineteenth-Century Fiction, Chadwyck-Healey.</td>
</tr>
<tr>
<td>UPenn</td>
<td>Online Books Page, University of Pennsylvania.</td>
</tr>
<tr>
<td>UVirg</td>
<td>Electronic Text Center, University of Virginia.</td>
</tr>
</tbody>
</table>

b) printed texts:


Drift and the development of sentential complements


Appendix 2. COLMOBAENG fiction texts

Unless otherwise indicated, all extracts have around 20,000 words and are taken from Chadwyck-Healey’s electronic text collections. Dates of publication are given after each title; birth-dates in brackets.

a. Subperiod BrE1 (1700-1726)

Anonymous. The Adventures of Lindamira, a Lady of Quality, 1702. [2,000 words]. COPC

Barker, Jane (1675-1743). The Amours of Bosvil and Galesia, 1719. [14,000 words]

Barker, Jane (1675-1743). Exilius: or, The Banish’d Roman, 1719. [6,300 words]

Davys, Mary (1674-1732). Familiar Letters Betwixt a Gentleman and a Lady, 1725. [13,110 words]

Davys, Mary (1674-1732). The Lady’s Tale, 1725. [7,240 words]

Defoe, Daniel (1660-1731). The Fortunes and Misfortunes of the Famous Moll Flanders, 1722.

Haywood, Eliza Fowler (1693?-1756). Fantomina: or, Love in a Maze, 1725. [11,900 words]

Haywood, Eliza Fowler (1693?-1756). The Fatal Secret: or, Constancy in Distress, 1725. [9,100 words]

Hearne, Mary (dates unknown). Lover’s Week, 1718. [2,000 words]. COPC

Manley, Mary de la Rivière (1663-1724). The Secret History of Queen Zarah and the Zarazians, 1705.


b. Subperiod BrE2 (1732-1757)


Coventry, Francis (died 1754). Pompey the Little, 1752. [2,000 words]. COPC

Fielding, Henry (1707-1754). A Journey from this World to the Next, 1743.


Fielding, Sarah (1710-1768). The Governess, 1749. [2,000 words]. COPC

Haywood, Eliza Fowler (1693?-1756). The History of Miss Betsy Thoughtless, 1751.

Richardson, Samuel (1689-1761). The History of Sir Charles Grandison, 1754.

c. Subperiod BrE3 (1761-1797)

Burney, Frances (1752-1840). *Evelina, or, a Young Lady’s Entrance into the World*, 1778.

Godwin, William (1756-1836). *Things as They Are; or, The Adventure of Caleb Williams*, 1794.


Jenner, Charles (dates unknown). *Chrysal or, The Adventures of a Guinea*, 1761. [2,000 words]. COPC

Johnstone, Charles (c1719-c1800). *Chrysal or, The Adventures of a Guinea*, 1761. [2,000 words]. COPC


d. Subperiod BrE4 (1850-1879)


Braddon, Mary Elizabeth (1837-1915). *Lady Audley’s Secret*, 1862. [2,000 words]


Gaskell, Elizabeth Cleghorn (1810-1865). *North and South*, 1855.[2,000 words]


Oliphant, Mrs. (Margaret) (1828-1897). *Salem Chapel: Chronicles of Carlingford*, 1863.


e. Subperiod AmE3 (1774-1804)


Foster, Hannah Webster (1759-1840). *The Coquette; or, The History of Eliza Wharton*, 1797.

Drift and the development of sentential complements

f. Subperiod AmE4 (1851-1879)

Bennett, Emerson (1822-1905). *Ellen Norbury; or, The Adventures of an Orphan*, 1855. [2,080 words]

Hawthorne, Nathaniel (1804-1864). *The House of the Seven Gables*, 1851.


Melville, Herman (1819-1891). *I and my Chimney*, 1856. [5,480 words] 
*Bartleby, the Scrivener*, 1856. [14,540 words]

Spofford, Harriet Prescott (1835-1921). *In a Cellar*, 1859. [8,250 words]


Appendix 3. COLMOBAENG nonfiction texts

a. Subperiod BrE1 (1700-1726)

8 extracts of 5,000 words each from Part A of the COPC (the texts by Addison 1710-1711, 1715-1716; Berkeley 1709, 1710; Defoe 1715, 1724; Steele 1705-1710, 1710-1711). 
18 extracts of 2,000 words each from Part B of the COPC, decades 3 and 4.

b. Subperiod BrE2 (1732-1757)

9 extracts of 5,000 words each from Part A of the COPC (the texts by Bolingbroke 1738; Chesterfield 1745-1748, 1753-1754; H. Fielding 1742, 1752; Hume 1739, 1741-1742; Smith 1750; Johnson 1751). The extracts by Smith and Johnson are shorter, about 2,500 words each.

18 extracts of 2,000 words each from Part B of the COPC; eight texts from decade 6 (Egmont 1739, Hales 1739, Holmes 1739, Lediard 1736, London Magazine 1736, Neal 1732, J. Richardson 1734, R. Walpole 1734), nine texts from decade 7, and one from decade 8 (Wood 1757).

c. Subperiod BrE3 (1761-1797)

8 extracts of 5,000 words each from Part A of the COPC (the texts by Boswell 1777-1779, 1791; Gibbon 1781, 1790; Johnson 1765-1771, 1775-1781; Walpole 1767, 1778).

18 extracts of 2,000 words each from Part B of the COPC, decades 9 and 10.
d. Subperiod BrE4 (1850-1879)

Arnold, Matthew (1822-1888). *The Study of Celtic Literature*, 1867. [5,000 words] GUT


Bagelhot, Walter (1826-1877). *Physics and Politics or Thoughts on the Application of the Principles of ‘Natural Selection’ and ‘Inheritance’ to Political Society*, 1869. [5,050 words] GUT


Carlyle, Thomas (1795-1881). *The Life of John Sterling*, 1851. [5,100 words] GUT


*Private Letters by John Richard Green and Lord and Lady Amberley*, 1861 and 1872. [5,000 words] Denison

Meredith, George (1828-1909). *Letters Written to the ‘Morning Post’ from the Seat of War in Italy*, 1866. [5,110 words] GUT


Ruskin, John (1819-1900). *Sesame and Lilies*, 1865. [5,060 words] GUT

e. Subperiod AmE2 (1732-1759)


Franklin, Benjamin (1706-1790). *Poor Richard’s Almanack*, 1733-1758. [5,900 words] UPenn

Franklin, Benjamin (1706-1790). *Proposals Relating to the Education of Youth in Pensilvania*, 1749. [2,483 words] UPenn
Drift and the development of sentential complements


Woolman, John (1720-1772). *Some Considerations on the Keeping of Negroes*, 1754. [4,731 words]

f. Subperiod AmE3 (1774-1804)


Jefferson, Thomas (1743-1826). *Notes on the State of Virginia*, 1781-1782. [5,000 words] UVirg


Woolman, John (1720-1772). *Journal*, 1774. [Chapter XI, written in 1772; 5,000 words] UVirg

g. Subperiod AmE4 (1851-1879)


Emerson, Ralph Waldo (1803-1882). *The Conduct of Life*, 1860. [6,010 words] UVirg

Emerson, Ralph Waldo (1803-1882). *Thoreau*, 1862. [4,544 words]

Fiske, John (1842-1901). *Spain and the Netherlands*, 1868. [5,040 words] UVirg


Holmes, Oliver Wendell (1809-1894). *The Autocrat of the Breakfast-Table*, 1858. [5,050 words] GUT


Motley, John Lothrop (1814-1877). *The Life and Death of John of Barneveld, Advocate of Holland with a View of the Primary Causes and Movements of the Thirty Years’ War*, 1874. [5,040 words] GUT

Several authors. *A group of private letters*, 1861-1867. [about 3,800 words] UVirg


Thoreau, Henry David (1817-1862). *The Correspondence of Henry David Thoreau*, 1851-1862. [Three letters from the years 1851 and 1862; 1,260 words.]

Thoreau, Henry David (1817-1862). *Walden, or Life in the Woods*, 1854. [5,040 words]

Twain, Mark (1835-1910). *Innocents Abroad*, 1869. [5,000 words]

Whitman, Walt (1819-1892). *Memoranda during the War*, 1875-1876. [5,100 words]

References


De Smet, Hendrik 2005. For... To-infinitives as Verbal Complements in Late Modern and Present-Day English: Between Motivation and Change. *Preprints van het Departement Linguistiek* (Katholieke Universiteit Leuven) 225.


Egan, Thomas 2003. *Distance and Direction: A Usage-Based Study of Infinitive and -Ing Complement Clauses in English*. Oslo: Unipub AS.

Teresa Fanego


Fischer, Olga 1995. The Distinction Between To and Bare Infinitival Complements in Late Middle English. Diachronica 12: 1-30.
Drift and the development of sentential complements


Vosberg, Uwe 2003b. The Role of Extractions and *Horror Aequi* in the Evolution of -Ing Complements in Modern English. In Rohdenburg / Mondorf (eds), 305-327.


