On the Turning Verbs into Nouns

MOL Thesis, ILLC

October 2001, Amsterdam

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Acknowledgements

This thesis has been a long and arduous process that could not have been completed without the support of numerous others. Alas, to give a expanded list would extend the length of this already weighty tome even further. So instead, I would first like to thank my advisor, Michiel van Lambalgen, for valued feedback and needed criticism, as well as encouraging me to pursue an area of inquiry I probably otherwise would not have done. More generally, I owe a huge debt of gratitude to the entire ILLC staff, teachers and students who have helped me grow a great deal both academically and personally during my time so far in Amsterdam. I expect that this relationship will continue to bear fruit in the upcoming years, and this thesis to be a beginning rather than a end to an already wonderful time. Finally I owe my sanity to my R75 flatmates who, despite my protestations, made me leave the house and the computer screen, and forced me to have a social life when I most needed it.

Introduction

This thesis began as something of an accident. While working on a dramatically different topic, I was exposed to some rather odd examples of nominalization from the 19th century that were rather confounding in their ungrammaticality. Idle curiosity got the better of me, and I became obsessed with the desire to know exactly what had happened, and how something that was almost painful to hear, was perfectly normal up until even the early 20th century, albeit probably only as an archaism. This entailed spending day upon day at the Bungehuis, combing through volumes upon volumes of data, doing literary detective work, trying to find some sort of leads that would magically explain the oddities I was encountering. Alas, this never quite happened, but I believe that now a great deal of light has been shed upon the subject, all the while bringing up perhaps as many questions as answers, and giving me a newfound appreciation for amazing variety and creativity in language use.

The topic of this thesis is an investigation into the diachronic status of nominalization in English, specifically on the evolution of the gerund, one of the most common forms used to express nominalization. Chapter 1, the prologue, is merely a brief summary of some basic syntactic and semantic facts about the gerund in Present Day English. It is mainly a summary of established work, and is included here to provide a jumping-off point and a stark contrast to the historical situation presented in Chapter 2. This chapter begins in the more murky realms of Old English, and traces the development of the gerund from then on through to the modern area. This is, by necessity, the densest of the chapters, and contains an overwhelming amount of data and statistics. While a bit daunting, this amount of data is necessary in order to get a feel for the language, especially as much of it is now out of the realm of intuition for even a contemporary, native speaker of English. And it is in this chapter that we first see theories regarding the development of the gerund – theories that try to account for the split of a gerund into the verbal and nominal versions that exist today. Houston (1989) seems to have the most likely candidate for an explanation, but while fairly solid on convincing statistical correlations and data, leaves the mechanism for how the change could have occurred unexplained.

Chapter 3 may seem to be a bit of a diversion, as it leaves the past and its hordes of diachronic data to examine the semantics of nominalization, especially as it relates to the use of nominalization in discourse. This is done largely informally and phenomenologically, and any formal results are banished to the footnotes. This does not indicate any anti-formal inclinations on my part, but rather the nature of the task at hand. Ultimately, while interesting and necessary for any explanation of the semantic phenomena, having to deal in depth with complex formal theories was not necessary for my purposes here. Instead, the semantic and pragmatic observation are there to illustrate use in discourse, and help provide more of a foundation to examine the semantic and discourse factors that may have influenced the development of the gerund, as well as influenced the rather drastic change in the history of its usage.

The final chapter is an attempt to put the earlier three chapters together, and look at language change in a broader framework. The beginning of the chapter, a look at a peculiar development in the progressive, while not directly related, is used to illustrate the numerous factors that need to be taken into account in order to explain language change. I have taken an account from Warner (1995) and attempted to flesh out some loose ends with detours into both socio-linguistics and pragmatics. After this, it is back to the evolution of the gerund, with one final detour into Cognitive or Constructive Grammar, as a possible way of giving a theoretical grounding and mechanism to Houston's intuitively appealing conjectures. Finally, we have a brief look at how the split into a verbal and nominal gerund affected the language, especially the way nominalization is used in Modern English.

As a final note, I would like to apologize for the density of the paper. By necessity, examining language changes involves a number of disparate areas. Interconnections are rife, and many of these are only given a passing examination, and not elaborated in the depth that they really deserve. My only defence in this is that to have examined everything in the depth and length I would have liked, would have made this already lengthy thesis even longer. With that said, on with the thesis.

Chapter 1

Prologue

Before moving back in history to examine the development of the English gerund, it is necessary to lay the groundwork for comparison by looking at important syntactic and semantics facts of nominalization in Present Day English (henceforth PDE). More specifically, we shall look at one of the more common nominalizations – the gerund. First we will look at the four classes of gerunds, as distinguished by Abney (1987), examining first the properties they all have in common and then look at various distinguishing syntactic features between the classes. Next, there will be a brief explication of a couple of different syntactic accounts (Abney and Pullum (1991)). Finally, we will see how some semantic facts of nominalization can effect the distribution (and a few other properties) of the various gerunds – this is drawn primarily from Vendler (1967, 1968) and Abney.

1.1 **Syntactic Data**

Abney (1987) distinguishes between four different classes of gerunds[1]:

a) Acc-ing: John singing the aria.
b) PRO-ing: singing the aria
c) Poss-ing: John's singing the aria.
d) Ing-of: John's singing of the aria.

The origins of the names are fairly obvious given that the subject of the gerund receives accusative case in Acc-ing and possessive in Poss-ing[2]. PRO-ing, as the gerund has no overt subject and receives obligatory control, as in "$John_1$ enjoyed PRO_1 reading the book". The name "ing-of" seems to speak for itself.

First off, we shall see the distributional properties that all four have in common – a distribution that is characteristic of NP's i.e. any distributional slot that an NP can appear in, a gerund can appear as well.[3] All four gerunds occur as subjects, direct objects, and prepositional objects[4].

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[1] It should be noted that there are numerous other uses of V + *ing*, including the progressive ("John is crossing the street"), participle ("John, being late for work, decided to take a cab") and as a nominal modifier ("That was a shocking film"). The first two of these constructions will come back to haunt us later.

[2] As will be seen shortly, this is not meant to imply that the possessive in Poss-ing gerunds is a "real genitive" like *John* in *John's car*.

[3] This isn't quite accurate, as seen in 1.3 (and first observed by Vendler), semantic distinctions do restrict the distribution of gerund types (a) – (c).

[4] Abney also gives other distribution positions such as topic position, cleft position, and subject of a sentence following a sentence-initial adverb such as 'perhaps'; however the above examples should suffice to illustrate the "NP-like" qualities of the various gerunds. Note that *for* and *that* clauses cannot appear as objects of preposition nor any of the other positions just mentioned. From Abney:

I learned about John('s) smoking stogies. (Acc-ing and Poss-ing)
**I learned about that John smokes stogies.* (*that*-clause)
**I learned about for John to smoke stogies.* (*for*-clause).

As subject:

(1) a. Y*our having broken the record* was a surprise
b. *Them trying to sing a song* was just too horrible.
c. *Singing arias properly* is difficult.
d. *John's singing of the aria* is not to be missed.

As object:

(2) a. The hunchback hated *a nice lady being hanged*
b. John enjoyed *reading the book*.
c. I disregarded *his insulting his opponent*.
d. We deplore *the killing of innocents*.

As object of preposition:

(3) a. Michael counted on *them finishing the book soon*.
b. Mary was obsessively afraid of *being ill*.
c. They didn't approve of *my leaving without a word*.
d. The football match ended with *the sending off of two players*.[5]

As far as their distribution goes, all four gerund types behave more or less the same[6]; however, types (a)-(c) do differ rather dramatically to (d) in regards to internal syntax, the former possessing internal syntactic properties of a verb phrase, and the latter possessing those of a noun phrase.[7] Therefore, when convenient, I will refer to Acc-ing, Poss-ing and PRO-ing as verbal gerunds, and Ing-of as the nominal gerund.

Verbal gerunds (if transitive) take a bare NP object, do not allow determiners or quantifiers, can be modified by 'not', allow auxiliaries for tense and voice, are modified by adverbs (not adjectives), and in the case of PRO-ing, a PRO subject is obligatory.

(4) a. John's finishing the book was surprising.
b. *The/Every/No reading the book was amusing.
c. Not reading the manual properly was the reason John lost a finger.
d. We were all thankful for John's having left the room.
e. John was unhappy with being so hated.
f. John's singing the song loudly offended many an eardrum.
g. *John's loud singing the song…
h. John enjoyed PRO reading the book.

On the other hand, Ing-of gerunds take PP complements (never bare direct objects), take any determiner or quantifier, do not take auxiliaries for tense and voice, , take preposed adjectives (not adverbs), and do not have a PRO subject.

(5) a. John's reading of the book was splendid.

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[5] 1a, 2a, 3a are from Reuland (1983), 1b, 2b, and 3b from Pullum.
[6] Distribution is not the only feature of external syntax. As we shall soon see variance occurs among the four gerunds in regards to agreement, pied-piping and scope. In these cases, Poss-ing and Acc-ing part company. Also note that there is a small class of verbal contexts in which only (d) types occur – this is discussed in section 1.3.
[7] By internal syntax, I merely mean the ability to be modified by adverbs or adjectives, to take determiners or quantifiers, control properties, etc. This contrasts with external syntax, which includes distribution in sentences, as well as agreement, scope and pied-piping.

b. The/Every/No reading of the book is followed by a drinks reception.
c. *The not reading of the book
d. *The having read of the book
e. *The being certain of the answer
f. John's loud singing of the song
g. *John's loudly singing of the song.
h. John enjoyed a reading of the book.

It also seems to be the case, in general, that not only do Ing-of nominals allow determiners or quantifiers, they, in fact, require them – Hence

(6) *John enjoyed reading of the book[8]

where the book in question is the object and not subject of John's reading (i.e. John is not reading a book review). However, this form still remains somewhat productive as can be seen from a quote from a recent L.A. Times article[9], which quotes a judge as saying:

(7) "There has been intentional withholding of documents and evidence in this case and . . . there's been intentional destruction of documents"

The above sentence actually seems better than it would be with the definite article and this might have to do with the 'there' construction, and we will see that the quantifier 'no' can also occur with verbal gerunds in a 'there' construction. But in normal circumstances, this form does seem to be rather ungrammatical. Imagine the judge had expressed his personal reaction to the situation:

(8) *I am utterly shocked by intentional withholding of documents in this case.

(9) I am utterly shocked by the intentional withholding of documents in this case.

I bring this seemingly marginal example up because these structures (that I will refer to for convenience as [DET-] Ing-of) come into play in the next chapter, when we see that historically, things were seemingly very different.

1.2 **Syntactic Analysis**

So we are left with a rather strange situation as to the syntactic status of the various nominals. Ing-of nominals are perhaps the most clear, given that both externally and internally they behave exactly like NP's, and the construction apparently involves a straightforward deverbal noun, akin to derived nominals in phrases like "the destruction of the

[8] Emonds (1973) in his study of Chaucer's gerund, notes that these type of ing-of nominals though productive in Chaucer are no longer grammatical, in his dialect at least. I think the ungrammaticality here may have something to do with a control conflict. There is no PRO-subject in ing-of nominals as seen with 5(h) where the agent of 'a reading of the book' could be anyone. But with no particle in front of the gerund as in (6), there may be an empty space that wants to be filled by PRO. Hence, a conflict. The idea is that determiners and the subject of the gerund occupy the same position, so to speak. Abney does note that we can have cases where PRO and determiners co-occur as in "There's no PRO fixing this boat now". But again, we have a 'there' construction.

[9] L.A. Times 11 July 2001, "Judge Rules Against MTA Contractor"

city"[10]. But the verbal gerunds are certainly more puzzling. They have the external distribution of a noun phrase, but internally they behave like verb phrases (or clauses). But it should be noted that even within the class of verbal gerunds, there are degrees of difference. Indeed, aside from the distribution facts, Acc-ing gerunds behave almost exactly like clauses (i.e. that-clauses, etc.), while Poss-ing gerunds are more of a mixed bag. This leads Reuland to classify the Acc-ing as a clause, while for Abney, its external distribution is enough for it to count as an NP (DP), with the clausal properties taken care of in the structure (more about this later). Anyway, it should be useful to point out a few differences between the Acc-ing and Poss-ing gerunds.[11] These examples all come from Abney.

Agreement: With Poss-ing, two conjoined gerunds trigger plural agreement on the verb (like NP's), but this is not so for conjoined clauses or Acc-ing.

(10) a. That John came and that Mary left bothers/*bother me.
b. John coming (so often) and Mary leaving (so often) bothers/*bother me.
c. John's coming and Mary's leaving *bothers/bother me.

Long Distance Binding: Long-distance binding of subjects is possible in noun phrases and Poss-ing gerunds, but not with clauses and Acc-ing gerunds[12].

(11) a. they thought that each other's giving up the ship was forgivable.
?*they thought that each other giving up the ship was forgivable

b. they thought that each other's desertion was forgivable.

c. ?*they thought that for each other to desert would be forgivable.

Pied-Piping: Again, where the gerunds contain *wh* subjects, whether or not they can front under pied-piping depends whether the gerund is Acc-ing or Poss-ing. And, of course, Poss-ing patterns with noun phrases, and Acc-ing with clauses.

(12) a. the man [whose flirting with your wife] you took such exception to
*the man [who flirting with you wife] you took such exception to

b. the man [whose opinions] you took such exception to

c. the man [(for) who to leave early] you would have preferred

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[10] Abney and Emonds do note a few oddities with Ing-of nominals, in which they pattern more like poss-ing gerunds than derived nominals. For example, they do not permit passive without passive morphology, and do not permit temporal subjects.

(1) Their carefully rebuilding the city
Their careful rebuilding of the city
Their careful reconstruction of the city

(2) Their renewing our contract this year
Their renewing of our contract this year
Their renewal of our contract this year

But

*The city's carefully rebuilding *t*
*The city's careful rebuilding *t*
The city's careful reconstruction

*This year's renewing our contract
*This year's renewing of our contract
This year's renewal of our contract

[11] Their seems to be no settled position on the status of PRO-ing, i.e. is it a derivative of Poss-ing, Acc-ing or both, depending on context? Abney also suggests it may have a different structure altogether (but leaves it at that). I will take the standard view and consider them to be a special case of either.

[12] I insert this bit for a bit of completeness in showing the differences between Poss-ing and Acc-ing. For myself, I am unsure of the grammaticality of either sentence in 11(a).

Abney gives a number of other syntactic differences (some of which are rather tenuous), but this should be enough to see that they need to be given slightly different syntactic structures to account for their slightly different properties. However, Hamm and van Lambalgen (2000), in giving a semantic account of nominalization claim that these syntactic differences have little impact on the semantics, and that there seems little semantic difference between the two types.[13] And indeed, it is quite plausible since "John's singing the song bothers me" and "John singing the song bothers me" seem to be synonymous. But it should be noted that there is an area in which there does seem to be a semantic difference – scope.

As with the above examples, Poss-ing gerunds (like noun phrases) can take wide scope, while Acc-ing gerunds strongly prefer narrow scope:

(13) a. John disapproves of everyone's taking a day off (wide scope OK)
b. John disapproves of everyone taking a day off (*wide scope)
c. John disapproves of everyone's happiness (wide scope OK)
d. John prefers everyone to take a day off (*wide scope)

So in 13(a) we get a reading where for *anyone* John disapproves of them taking a day off individually. Semi-formally we can see the wide scope as #x[Disapprove(John, take a day off(x)]. However, with 13(b), only narrow scope is possible, that is John disapproves of everyone taking a day off at the same time (a much more reasonable desire) – Disapprove(John, that #x(take a day off(x))).

Having given a fairly comprehensive account of the syntactic properties of the gerunds, it is now time to briefly examine some theoretical accounts (structures) of the various nominals. Abney accounts for the structure of all four gerunds in a modified version of X-Bar theory similar to Jackendoff's (1977)

Deverbalizing Rule Structure: $X^i \downarrow af - V^i$

where for Poss-ing gerunds we instantiate with X=N (category), i = 2 (bar level) and af = *-ing* (ing affix). This gives us the following structure (for *his performing the song*):

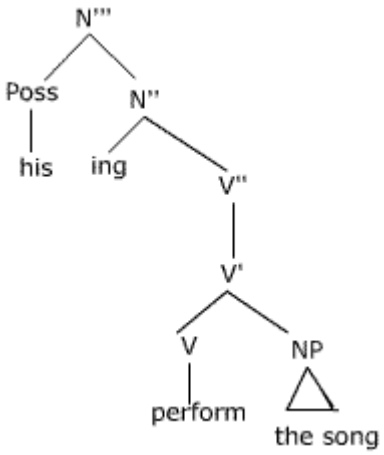
[13] They do bring up Reuland's example regarding distributional properties of gerunds with sentential adverds (like probably) vs. VP-adverbs. Reuland's claim is that Acc-ing can take sentential adverbs, whereas Poss-ing cannot (this would be a difference in a semantic analysis).

a. John probably being a spy, Bill though it wise to avoid him.
b. *John's probably being a spy made Bill think it wise to avoid him.

However, Abney points that Acc-ing gerunds do not take sentence adverbials when in argument position:

c. *I was grateful for John fortunately knowing the answer.

And as this data seems rather unclear, (a) and (b) are certainly not a big justification to treat the Poss-ing and Acc-ing gerunds different semantically.



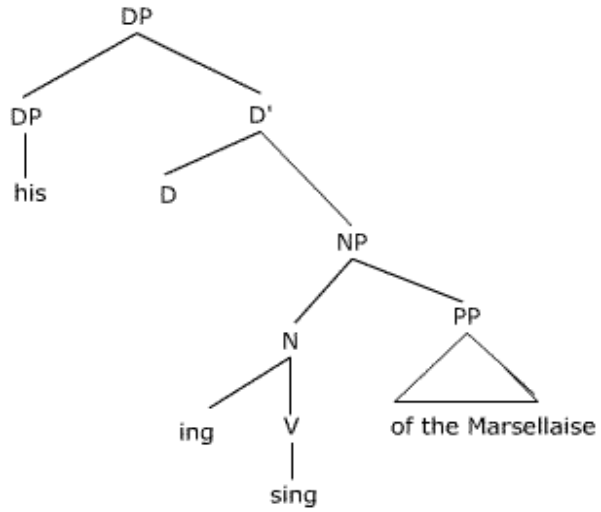
For the Poss-ing gerund, this manages to account for the occurrence of a genitive, the presence of a VP (which is needed for the internal verbal properties – V'' is a VP), the absence of a nominative subject, modals ("*John's canning fix the boat"), and sentence adverbials like 'probably' and 'perhaps', which are daughters of V'''(S) -- which is not present in the structure.[14]

Abney's version fully generalizes to all the gerunds and adopts his DP structure for the noun phrase. Again, it is the spot where the *–ing* is affixed[15] that determines the internal syntactic differences noted above (as all structures are DP's, the external distribution is taken care of). In all cases, the *–ing* affix converts a verbal projection into a nominal one, but has no syntax of its own. For example, in the Acc-ing example, the *–ing* affixes to the IP and turns it into a DP, thus substituting its [+N] into the IP, converting it into a DP. Now as there is no D' or D, there are no nominal features to the structure other that its external distribution. As the *–ing* attaches lower (first Poss-ing, then Ing-of), we get increasingly more nominal features. For example, the Poss-ing structure has a D (determiner) position. According to Abney, the determiner position is the site of person, number and gender features, and so this accounts for the differences between Poss-ing and Acc-ing in terms of agreement as seen in (10).[16] Note that in the Ing-of structure the *–ing* attaches to V^0, giving us an ordinary noun that takes determiner, quantifiers, etc. Here are examples of Ing-of and Poss-ing:

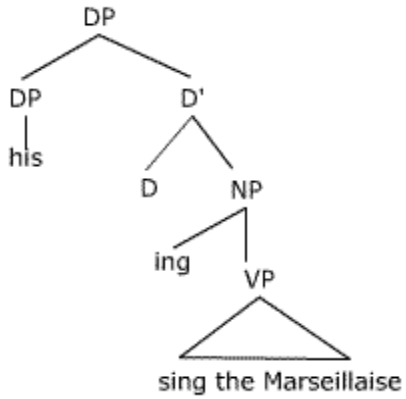
[14] Jackendoff also points out that his schema presents a nice account of the history of the gerund, the earliest forms being simple deverbal nouns like *writing* and *clothing*, and instantiating at X=N and i=0. Jackendoff speculates that over time, the attachment site of *–ing* moved up generating the more verbal gerunds. Abney points out a few difficulties with this and also that the possible affix at 1 level (i=1) doesn't precisely capture all the properties of the Ing-of nominal like it should.

[15] Note that the *–ing* can attach only to maximal projections (IP,VP,V^o) leaving only the 3 possiblities

[16] As this is not a paper devoted entirely to theoretical syntax, I am glossing over a number of issues here, including the rather complex (and controversial) morpho-syntactic mechanism in which the *–ing* attaches.



Ing-of



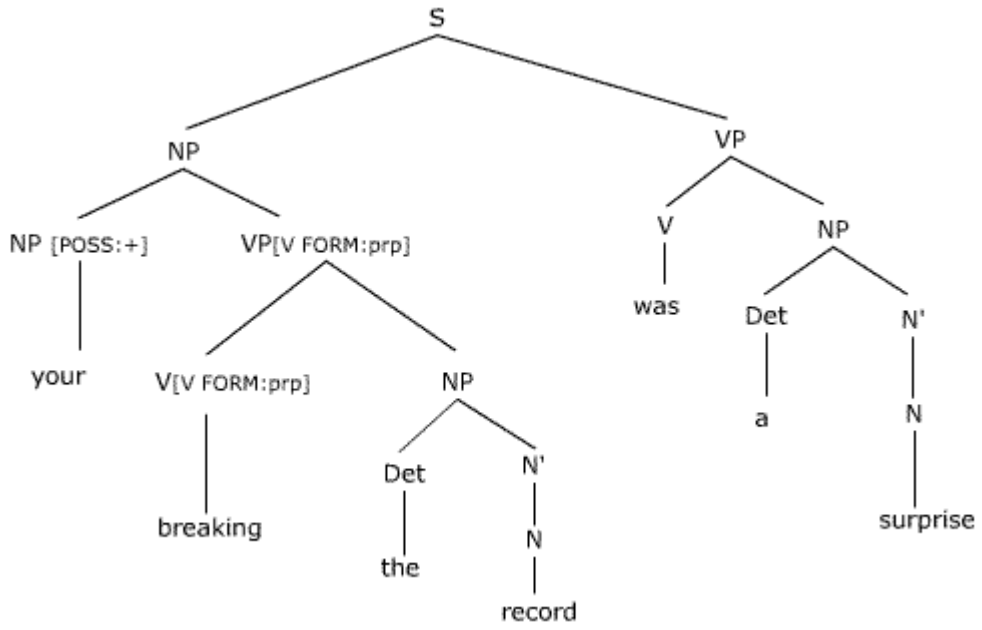
Poss-ing

Pullum gives a rather simple structure in GPSG for the Poss-ing gerund (simple in the sense that no recourse to 'affix hopping' or morphological transformation is called upon). He gives the following rule:

(14) N[BAR:2] ↓ (N[BAR:2], POSS:+]), H[VFORM:prp]

Note that bar level is treated as a feature of a category, and that H[VFORM:prp] (prp=present participle) means that the head of the noun phrase is [V:+, N:-], a violation of the head-

feature convention (HFC) in which the features of the head daughter are inherited from the features of its mother (in this case NP and so [V:-, N:+). However, as this is a default, and not a hard constraint, a VP as head of an NP is allowed.[17] Also note that in Pullum's analysis both the feature [VFORM: prp] and [POSS:+] (indicating that the subject of the gerund (NP) is possessive) are not the result of some sort of transformation or affix, but assumed to come out of the morphology of the grammar itself. Pullum's structure can be illustrated in the following tree:



[17] Indeed it seems that one of Pullum's primary motivations in writing the paper was to show the usefulness of have the convention as a default (while still remaining meaningful). It should be noted that while there is a feature difference in [V:-, N:+] to [V:+, N-] from mother to head daughter, the bar level, amongst other features, is passed down to the head [Bar:2], in compliance with the HFC.

1.3 **Semantic Observations**

Vendler (1967) distinguishes between two types of nominalization – Perfect and Imperfect nominals. Perfect nominals are a rather homogenous semantic class that contain just the Ing-of nominals and semantically appropriate derived nominals[18] such as "the destruction of the city." On the other hand, Imperfect nominals contain the rest of our four gerunds (Poss-ing, PRO-ing, Acc-ing) as well as a host of other syntactic constructions like that-clauses, infinitival complements, and a few others.

The different distribution patterns of Perfect and Imperfect nominals can be seen by their occurrence or lack thereof in what Vendler calls Narrow and Wide containers. Narrow containers are verbal contexts, which accept only Perfect nominals, whilst Wide containers can accept either. Wide containers are contexts such as *is unlikely, disturbed us, predicted*; Narrow containers include *occurred, was slow, was skilful.* (23) and (24) give examples of nominals in Wide and Narrow containers, respectively:

(23) a. John singing Karaoke surprised us.
b. The performance of the play was surprising.
c. The collapse of the Mid-East peace talks is depressing.
d. Reading *War and Peace* made John feel like an intellectual.
e. The singing of an encore is unlikely.

(24) a. The destruction of the bridge occurred last week.
b. The soprano's singing of the aria was too slow.
c *The soprano's singing the aria was too slow.
d. John's fixing of the sink was skilful.
e. *John's fixing the sink was skilful.

So while Perfect nominals are happy in either type of container, Imperfect nominals are only grammatical in a narrow container context. From this, it is quite easy to see a broad category distinction between the two types of nominals – events can be taken as the meaning of Perfect nominals, whilst facts or propositions can be taken as the meaning of Imperfect nominals[19].

Indeed, for the most part, we can see the gerundive Imperfect as more or less synonymous with *that-clauses* or infinitival complements. Thus "John singing Karaoke surprised us" basically means "That John sang Karaoke surprised us.", and "Singing the song is fun" just means "To sing the song is fun". And we can clearly see the event readings in (24), where, for example, in 24(a) we get a reading as to when the event of the destruction of the bridge occurred. And of course "That the bridge was destroyed occurred last week" is pure nonsense. In 24(d) we get a reading in which the way John fixed the sink was skilful, and so a reference to the event of John's fixing of the sink.

But then what of the situation where a Perfect nominal (something that denotes an event) occurs in a Wide container? According to Vendler, Perfect nominals in wide containers can be interpreted as imperfect. Thus:

(25) The collapse of the Germans is unlikely

[18] Semantically appropriate in the sense the derived noun is 'close enough' in meaning to the corresponding verb. For instance, a performance is an event where someone performs something; however, an encumbrance is no an event where someone encumbers something – it is a thing which encumbers.

[19] Abney calls these 'act' and 'fact' readings respectively

is taken to mean

(26) That the Germans will collapse is unlikely.[20]

In other words, in some cases the Perfect nominal is coerced into having an imperfect reading in the context of a Wide container. But it should be noted that some containers are wider than others. In the case of Wide containers like *is unlikely,* and *predicted* (as in "Nostradamus predicted the collapse of the Germans") there seems to be only an imperfect reading allowed. But take:

(27) The Soprano's performance of the aria was surprising

Here, there are two possible readings. One is the imperfect reading which is more or less equivalent to "That the Soprano performed the aria was surprising", perhaps in a case where she had previously swore never to sing it again. The second is where it is something about the performance itself that is surprising – perhaps she sang it while simultaneously riding a unicycle and juggling. Indeed, it seems that context will help determine whether we get an 'act' or 'fact' reading (or possibly both) in these extra-wide containers. For example, look at:

(28) The anti-globalisation demonstrations in Seattle, 1999 were surprising.
(29) The anti-globalisation demonstrations in Genoa, 2001 were surprising.

With (28) it is quite easy to get a 'fact' reading, because that there were large-scale demonstrations was quite surprising to most people. But by Genoa in 2001, one would have to be doing their best ostrich imitation to be surprised by the fact that there were large protests. Instead, it was the event itself that was surprising, (i.e. the scale of violence, police brutality, etc.) at least to some people.

Another interesting example of how context can affect readings comes from Abney in his discussion of N'-deletion (NP deletion for Abney) in gerunds. He notes:

(30) a. *John's fixing the sink was surprising, and Bill's [e] was more so.
b. John's fixing of the sink was skilful, and Bill's [e] was more so.

(31) a. John's fixing of the sink was skilful, and Bill's [e] was more so.
b. *John's fixing of the sink was surprising, and Bill's [e] was more so.

Now with (30) both sentences involve the ellipsis of an NP, but only the (b) sentence is grammatical. Abney contends that NP-deletion is possible only under 'act' readings. And since the Poss-ing gerund can only have a 'fact' reading, 30(a) is predicted to be ungrammatical. But then what about 31(b)? While it is an Ing-of nominal, it is ambiguous as to whether it has an 'act' or 'fact' reading. Since 30(b) is a Narrow container context[21], the nominal must have an 'act' reading, and NP deletion is possible with 'act' readings. In 31(b), the default reading does seem to be for a 'fact' reading, as one is more likely to assume that it was the fact that John did fix the sink was surprising. According to Abney, NP deletion is not possible with 'fact' readings, and so the lack of ellipsis is in fact unsurprising. But, an 'act' reading, where it would be the way the sink was fixed was surprising is possible with a little imagination. However, I invite the reader to imagine the admittedly bizarre situation, where John fixes the sink merely by putting all the parts on the floor and uttering

[20] I tend to think a little more is going on here, but will leave my reservations for a later chapter.
[21] Note that *is skilful*, does not seem to accept imperfect nominals so well. **John's fixing the sink was skilful*. So it is probably safe to put *is skilful* in the class of narrow containers. There may be some minor exceptions to this, as will be seen in the semantics chapter.

'Abracadabra'. Bill does this as well, but also conjures the plumbing parts out of midair. Now with this in mind, 31(b) seems perfectly fine, as we now have an 'act' or 'manner' reading.

So I think the lesson here is that it is a combination of context and lexical meaning/world knowledge that determines whether a Perfect nominal in an extra-wide container like *is surprising* gets either an 'act' or 'fact' reading. While the 'act' reading in (29) comes out quite naturally (because the manner of demonstrations or performances and the like are often surprising), John's fixing of the sink is, by default, probably unremarkable in the way it is done. Indeed, a rather ridiculous context needs to be constructed in order to make 31(b) sound grammatical.

Before concluding, one last difference between Perfect and Imperfect nominals should be noted -- intensionality vs. extensionality. Take the following examples from Parsons (1990):

(32) The beheading of the tallest spy occurred at noon.
(33) Mary predicted the beheading of the tallest spy.

Now assume it just so happens that the tallest spy is actually the king. Then (32) implies:

(34) The beheading of the king occurred at noon,

but, (33) does not imply

(35) Mary predicted the beheading of the king.[22]

So at first glance it seems that Narrow containers enforce extensionality, but wide containers do not; however, it seems more likely the case that it is the 'act' reading that forces extensionality and not the container per se – Narrow containers, only allowing 'act' readings, would then be a special case. Now in the case of (33), we have a container that, as noted earlier, only allows for 'fact' readings. But with a container like 'shocked the world', which allows both readings, it seems that extensionality is enforced for 'act'/event readings. Consider:

(36) The bombing of Hiroshima shocked the world.

Presumably, the default reading here is the event reading, it being the first use of an atomic bomb that was most shocking (i.e. not just that Hiroshima was bombed). Now, assume that Hiroshima was the fourth largest city in Japan at the time. Then certainly (36) implies

(37) The bombing of the fourth largest city in Japan shocked the world

as far as the 'act' reading goes -- an event by any other name will still shock as much. Of course the 'fact' reading of (37) does not go through on either reading of (36). So perhaps it is whether the interpretation of the Perfect nominal is as an event or propositional entity that determines the extensionality. If it is an event, then extensionality is enforced, if it is a fact, then we have an intensional context.

1.4 **Conclusion**

[22] It is interesting to imagine the situation where Mary knows that the king is the tallest spy. With this added assumption, does the implication of (35) go through? Suppose Mary utters something along the lines of "I foresee that the tallest spy will be beheaded tomorrow," but purposely leaves her secret information out. For herself, at least, (35) may be the case. Substitute 'believed' for 'predicted' and it certainly seems to go through.

In this brief prologue, we have seen some basic syntactic and semantic properties of gerunds. Syntactically, all four types of gerunds can be taken to be NP's because of their distribution. However, only the *ing*-of gerunds can be fully nominal, as the other three gerunds possess internal syntactic properties of verb phrases in their ability to be modified by adverbs, their lack of ability to take quantifiers and determiners, and the control properties for PRO-ing.[23] The syntactic differences between the verbal and nominal gerund seem to be exhibited semantically since the verbal and nominal gerunds belong to the classes of Imperfect and Perfect Nominals respectively. The 'fact' and 'act' readings that characterize the semantic differences between the Imperfect and Perfect Nominals can be taken to denote propositions/states of affairs and events[24]. Many syntactic and semantic subtleties have been excluded here, but I think this provides a firm foundation on which to examine the diachronic status of nominalization. We shall see a rather strange evolution of the gerund from its origins as a simple deverbalized noun with a resultative, concrete interpretation, such as *clothing* or *building*.

[23] The *John's* in the Poss-ing *John's singing the song* should not be taken to be a real genitive, and certainly not as a quantifier as it would in *John's house*. From Vendler:

John's house. (real genitive)
The house of John
John's singing the song (Poss-ing)
**The singing the song of John*.

[24] The relation between 'event' and 'act' is fairly tricky. As seen above, events can have 'act' readings in wide container contexts and certain narrow containers like 'is slow'. But how does this relate to the habitual 'act' readings such as in *John's singing of arias is invariably out of tune*. No specific event is implied here, but perhaps the *John's* quantifies over singing-aria events of John's and states something of them in a default way.

Chapter 2

But…

2.1 **Introduction**

In this chapter we shall look at various theories regarding the development of the gerund[25] starting with the standard account, which I will label the *conflation* theory, and then look at some contrary viewpoints from Tajima (1985) and Houston (1989). Both works lay doubts upon the conflation theory, Tajima's mostly from a copious typology of data, while Houston gives a more sophisticated theoretical account (as compared to the conflation theory) based on the function of the gerund in discourse. Following this, we will look at some rather strange syntactic anomalies that had a shelf life of a few hundred years before drifting into rather startling ungrammaticality. But first, however, a brief remark as to historical linguistic data and its significance needs to be made.

Any study of a historical linguistic nature runs into a singular problem – until the invention of a decent time machine is made, there is really no way of knowing exactly how people from all walks of life and social classes actually spoke. There are written records to be sure, but first, these only reflect the language of a rather small class of the population (especially in historical periods of low literacy rates), and second, it is debatable as to the how closely written language reflects the spoken language.[26] For a rather extreme thought experiment to illustrate the point, imagine linguists in the 25th century trying to reconstruct 20th century English. Advances in technology have made the playback of 20th century software such as analogue and digital recordings, video, and computer files impossible. So no spoken records of English are extant. Furthermore, most written material has vanished – no newspapers, no letters, no diaries and the like made the 500-year journey. In fact only a few novels, plays survived. They include those by authors such as the latter James Joyce (Ulysses, Finnegan's Wake), William Burroughs, Samuel Beckett (his French works too, to confound things further), and Ezra Pound. Now, could the evidence available, taken completely out of context, be sufficient to postulate an incredibly dramatic change in 20th century English? Of course not, while there certainly has been change in 20th English, and arguably the authors cited above may reflect that, they can definitely not be taken as indicating a standard English of any particular dialect[27].

To be sure, the actual historical situation is not nearly so bad – even going back to Old English,[28] there are a fair amount of written records. Certainly by eModE, there are

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[25] Here I mean the development of the verbal gerund, as the origin of the nominal gerund, which came first, seems to be a matter of little controversy. In this chapter, I will use the terms *gerund* and *verbal noun* synonymously to mean the original *ing* gerund. Nominal and verbal gerund will be used to refer to the modern distinctions in the last chapter – prior to at least the 16th century, as we shall see, this distinction cannot be made.

[26] Arguably, personal correspondence may be closer to spoken language than literature or poetry, but still, when looking at the occurrence of a given form, the frequency may be biased by the fact that only literary records survive; a certain frequency in literary texts does not necessarily correspond to the same frequency in the spoken language.

[27] And seeing their work against the context of 'standard' English is part of where the power and beauty of their very idiosyncratic language comes from. I do not use this example to indicate that their use of language (in linguistic and historical) is unworthy of study. My point is only to note that one would not want to construct something resembling 'standard' English with them.

[28] I am using the standard dating for Old English (OE), Middle English (ME), and Early Modern English (eModE)

increasing numbers of private letters, newspapers, legal and other public records as well as liturgical and fictional literature. By the Elizabethan era (c.a. 1600), literacy was also fairly high, and there is no poverty of historical record at all. And of course, the sheer variety of sources gives more merit to a claim that a specific form existed in the language, or that some sort of language change has occurred. Nevertheless, the historical data still needs to be taken in context. If we find an example of a certain syntactic form, but it only occurs in one author, then it is probably more likely that it is an idiosyncrasy and not a reflection of the language as a whole. We also find the same problem with translations into English from Latin and French. Is a certain occurrence of a form just a result of imitation of the source language? And if so, can we then say that the form then existed in English, or caused English to change? Given that pre-1600, literacy rates were rather low (and the majority of the population not exposed to these forms), it seems unlikely that a written translation, by itself, could be an indication of the status of English at the time, or even that it could cause a change in English itself. Another problem to be aware of is the status of the manuscripts. During the copying process, numerous changes might be made, and constructions seem in later copies may not have even existed in the author's original writing.[29] Finally, we must also be aware that, again given the low literacy rates, that any written record of the language, will at best be a record of the language of the small percentage of the population that could read and write.[30] With these caveats in mind, it is now time to look at the standard theory of the historical evolution of the English gerund.

2.2 **Standard Theory of the Emergence and Evolution of the Gerund**

It is now commonly held that the original gerunds, descended from simple deverbal nouns with endings in *ung/ing/unge/inge/ynge*. According to Poutsma, these would be analogues of modern day of pure nouns such as *paintings, buildings, clothing*, etc., in the sense of

(1) The buildings in the south side of the city are quite old.

(2) I really like the paintings you've done.

and should be distinguished from the nominalizations/gerunds which, as we saw in the last chapter, that are associated with actions and not merely the results[31] of an action, or a concrete thing such as *clothing*. Of course we do have gerunds in:

(3) The building of the subway was plagued by corruption and cost overruns.

OE: AD 700 – 1100
ME: AD 1100 – 1500
eModE: AD 1500 - 1700

[29] Emonds (1973) study of Chaucer's *Parson's Tale* in order to determine whether or not Chaucer's dialect contained a verbal gerund examines at least 100 different versions.
[30] Even public records -- which include depositions, testimony, and accusations of 'common' people -- were transcribed, and probably edited by literate civil servants (see *Everyday English*). Also it is also hard to rely on authors imitating the speech of lower status people (i.e. in dialogue, plays) as indicating an actual lower status dialect.
[31] This difference can also be seen in the derived nominals – *destruction* can be construed as the act of destroying, or simply the result, i.e. the smoking rubble.

(4) The painting of the picture was the final act of his life.

Anyway, this trend of *ung* endings extended to all weak verbs[32], then eventually to all verbs except for the modals (there has never been *canning*, *musting*, etc.) by the end of the 16th century. Here are some examples of OE gerunds (taken from Houston):

(5) gieddian -- to speak formally, with alliteration
gieddung -- saying

(6) lufianto -- love
lufung – act of loving

Now originally these gerunds only resembled the nominal gerund, i.e. they had none of the verbal characteristics of the modern verbal gerunds. Eventually, the gerund did acquire verbal properties, and a split of the verbal noun into the nominal and verbal gerund did take place, with conventional wisdom placing the split around 1450-1500 (the split first indicated by the gerund taking a bare direct object).[33] This, of course, brings up the question as to why this happened, i.e. how did something that was purely nominal begin to acquire verbal properties? As Houston notes, there are as many theories as there are authors who write about it, and include claims that it came about due to influence by Celtic, French, and Latin; however, there is one common main factor to all of them – the formal identity of the present participle and the gerund.

In OE, the present participle had endings in *ende/inde/ande*:

(7) *fremmann* to perform
fremmende performing

(8) *nerian* to save
neriende saving

(9) He waes *ehtende* cristenra mona
He was *persecuting* Christian men

(10) Tha waeron simbe binan Romebyrg wuniende.
Those [senators] were always within Rome dwelling[34]
Those [senators] were always dwelling within Rome.

(11) Swete lorde…Ich am *cominde* to thine feste (c1280, ex. from Poutsma)
Sweet lord…I am coming to thine feast

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[32] There is a strong/weak verb distinction in German philology that was significant in OE, but has no relevance for PDE. The difference is mainly in the inflectional behaviour – strong verbs differentiate between present and past tense by means of a change in the stem vowel, weak verbs mark the past tense by a suffix, usually *d* or *t*. Compare the strong OE verb SINGAN (to sing) which has 3rd person singular present *singeo* and 3rd person singular past *sang*, with the weak verb HAELAN (to heal) which has 3rd person singular present haelo, and 3rd person singular past *haeld*.

[33] These becomes a rather tricky area, some authors attribute a gerund to Chaucer's dialect – Emond's claims it doesn't, and tries to explain away some borderline cases. Chaucer died in 1400, and if he did have the verbal gerund (I am unsure), then this would support claims that the verbal gerund existed somewhat earlier, 1350 or so. Tajima has data that supports a much earlier date for the verbal gerund – this will be discussed shortly.

[34] (9) and (10) taken from David Denison's English Historical Syntax in context of analysing the OE progressive. I am using them here only to show the PP with the ende form.

Poutsma then describes a process of the levelling of the participle in South and Midlands dialects (which had the *inde* ending) first to *inne*. It is then claimed that this became conflated with the verbal noun ending in *inge* . And indeed, in the South and Midlands dialects the participial and verbal noun endings were identical by 1450 (Poutsma estimates the beginning of this process to be around 1200). Here are a couple of early examples of participles ending in *ynge/inge*.

(12) And how louynge he is to ech lif on londe and on water (c1400, *Piers Plowman)*

And how loving he is to each living-thing on land and on water

(13) Jhon was in desert *baptisynge* and *prechinge* the baptym of penaunce. (1380, Wyclif)

John was in the desert baptising, and preaching the baptism of penance.

So we now have a verbal noun and participle that sound indistinguishable (in the South, at least). The conflation theory then goes on to postulate that it was this phonetic formal identity between the participle and the gerund that caused the gerund to acquire verbal properties. The participle is verbal, and takes bare direct objects, passivizes, governs a predicative complement, etc:

(14) I recommand me hartly onto yow, *thankyng yow* of aull good brotherhood. (Cely Papers, late 1400's)

(15) Unto my brother George Cely merhcande of the estapell *being at Calles*. (Cely Papers)

And apparently, speakers of English got confused by phonetic identity, and the gerund started to take on the verbal properties of the present participle. Of course, the timing of the formal identity (ca. 1450) does fit in nicely with estimates of the beginning of the verbal gerund (ca 1350-1450), but some questions do remain.

First, while there was the formal identity of the present participle in the South and Midlands, even Poutsma admits that in the North and in Scotland, the distinction still remained. In fact, though it is beyond dispute that Scottish English had a verbal gerund by 1560, but still kept the old participle ending. These examples come from St. Andrews, Scotland court records involving accusations of blasphemy:

(16) Margaret murdow delatate for blashphemous sayings against the Sacrament of the body and Blude of Christ say*and* thir wordes in the oppin fische mercat…

(17) William petillok dwell*and* be este Thomas martynes Said the divell ane kirk will I gang to and the devil burn up the kirk… (kirk = church)

Labov (1989) notes that the formal identity may never have taken place in some dialects. In examining the socio-linguistic variable in PDE dialects between *workin'* and *working* he notes that where the former is spoken (weakened ending), it is used most in progressives and participles, rarely in gerunds, and least of all in deverbal nouns like *ceiling*. He takes this as evidence that the *workin'/working* alternation is not the result of the deletion of the underlying /g/, but rather a continuation of the distinction in some dialects between the participle and the gerund, and the *workin'* form comes from a reduction in the *inde* participle.

So, if the formal identity of the participle and gerund was responsible for the split of the gerund into a verbal and nominal one, then how did this happen in regions where the identity

never actually occurred? Furthermore, if we grant a formal phonetic identity, as Houston wonders, is it sufficient for "confusion between two grammatical categories, unless there were already some shared grammatical properties"? This possibility will be looked at later in this chapter. But first we will take a look at Tajima's survey of the gerund in Middle English, and a few surprising discoveries, including that the gerund may have begun to acquire verbal properties around 1300.

2.3 **Tajima's Survey of the Syntactic Development of the Gerund**

Recall from Chapter 1, the PDE typology as laid out by Abney. Up until the 19th century, the status of the gerund was quite different. Tajima examines the development of the gerund, primarily looking at the ME period as a crucial point, and offers up a typology of gerunds that existed during this time, including a number of types that while quite ungrammatical today, survived well into the Modern English period. While offering no theoretical explanation for the development of the verbal gerund himself, he does examine a far larger corpus than that of the classic historical grammarians such as Jespersen, Mustanoja or Visser.[35] Tajima also tries to go beyond the traditional way of determining whether or not the gerund had developed verbal characteristics, that is, looking mainly at direct objects or adverbial modification. He also looks at the gerund with a predicative complement ("Your *being so sick* forbids me to discuss the matter with you now"), as well as the gerund with common case, or what appear to be early examples of Acc-ing gerunds. However, the bulk of the data does involve the gerund with object construction, which Tajima breaks done in a very convenient typology:

I objective genitive + gerund: (the *kinges couroning*; Bevis, c1300)

II object + gerund: (be other *pennaunce doynge*; Rolle)

III gerund + *of*-adjunct: (the beginning of wysdome is *dredyng of our Lord*; Midland Prose Psalter, c1300)

IV determiner + gerund + *of*-adjunct: (Ye han wel herd of Theseus devyse in *the betraysynge of fayre Adrayne*; Chaucer, c. 1380)

V gerund + object: (In *baptising bath yong and ald* Men soght til him (Cursor Mundi, 1348)

VI determiner + gerund + object: (*The wythholding you from it* can doo yow no good; Caxton, c1481)

We shall now take a brief look at each type, followed by a nice statistical breakdown of the frequency of each type during the various parts of the Middle English period.

Type **I** is the typical OE gerund where the genitive or possessive is used as the object of the gerund. According to Visser, this was the common form in OE, only later to be replaced by the *of*-adjunct, and for example *the kinges couroning* would be supplanted by *the couroning of the king*. However, this type did continue in great frequency in ME with possessive pronouns rather than objective genitives:

[35] His bibliography of texts used is over 20 pages.

(18) he tolde hem of *his crucifying. Joseph of Arimathie*, ca. 1350

In Tajima's data, by the period 1450-1500, 95% of the Type **I** gerunds were of the possessive pronoun type, thus supporting Visser's conjecture. And it is interesting to note that in PDE, both

(19) a. the king's beheading
b. the beheading of the king

are possible, though the felicity seems to depend a great deal on the event in question, and the lexical item used. In the above case the default reading of (a) is the king is, in fact, the object of the beheading. But with, for example, "John's shooting", there is far more ambiguity – John could also be the agent of the shooting event, and it is also possible to have an imperfect manner reading. That is, it could be a reference to the quality of John's shooting ability and performance. I wonder if there is then a preference in this case for "the shooting of John" when John is the object. Assuming of course that it has a default object reading. It seems rather unsurprising, however, that the possessive pronoun type became so dominant. For example, "the beheading of him" sounds far worse than 19(b), and Type **IV** constructions such as these are far from frequent in modern English[36].

Type **II** is actually a rather complex construction that will not be looked at here in any depth. There are disputes are its origins (Old French, Old English, Old English participles) and as to what its syntactic status even is. For the most part it consists in Anglo-Saxon stock phrases like *vengeance-takyng*, *blod-letting*, *penance-doing* etc., and appear to be mere compound nominal forms. However, with others it is rather hard to tell, for example

(20) as fore that matere, Master Constantyn sewyd hym fore *feyth and trowth brekyng*
(Paston Letters, late 15th century)

Here it is unclear whether this is a nominal compound or whether *feyth and trowth* is actually a preposed direct object. However, the majority of these examples come from one author, Reginald Pecock, who, Tajima admits, is a rather idiosyncratic writer, who though he wrote in the mid-to-late 15th century, retained the subject-object-verb (SOV) word order, though (SVO) had by this time been established. For example, it seems that

(21) wi(th)oute cleer si(gh)t hauyng (Pecock)[37]

would now be written as *without having clear sight*, an example of a PRO-ing gerund. In fact Tajima notes that the Type **II** practically obsolescent by the end of the 15th century, and he speculates that it was supplanted by Type **V**, the ancestor of the modern verbal gerund. Strangely, though Tajima's data shows this form to be almost extinct by 1500, it still is used fairly regularly in PDE. There is much current talk about George Bush or Tony Blair being engaged in *coalition building*. In general these forms denote an activity (often in progress), and are often used as a stylistic alternative to the verbal form.[38]

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[36] It is quite easy to imagine 30's movie gangster talk where *ing-of* personal pronoun could still occur. The hit man corners his prey, and said prey asks what is going on. Answer: "Dis here is da moider of you!" And of course, a great event can be said to be *the making of him*.

[37] Please excuse the parentheses. The letters in parentheses are actually reconstruction of Old English runes that I have no font for.

[38] While we can have both *Building coalitions is difficult* and *Coalition building is difficult*, these aren't pure stylistic alternatives. When 'act' readings are required only the nominal form will do:
Bush's coalition building is authoritarian.
**Bush's building the coalition is authoritarian.* (where *authoritarian* modifies the way Bush builds coalitions, not the fact that Bush built the coalition).

Type **III** is what I referred to earlier as the [Det-] Ing-of gerund, and this will be treated in more detail later. But do note that it is as frequent as the standard Ing-of gerund (Type **IV**) as late as 1500, and was far more frequent prior to that.

Type **IV**, as just note, is our garden-variety Ing-of gerund, and only a few notes need to be made. First, it seems that the definite article 'the' is by far the most frequent determiner used. There are some cases of demonstratives and possessives, and other determiners such as 'a' 'no', 'all' and 'any'. All together they range in frequency from 15-20% of the totals of Type **IV** over the various time periods (after 1300). Tajima chooses to put constructions with adjectives, but no determiners in this class as well

(22) a. at *grete releuyng & comforthynge of (th)e men* (Rolle, 1349)
b. with *worthi taking o (th)e fode* (Cursor Mundi, 1325)

I am not certain as to whether these should belong to Type **III** or to Type **IV**. Adjectives are not at all determiners, and it might be better to consider examples like (22) to be instances of Type **III** with adjectival modification which, if Type **III** are nominal gerunds[39], is perfectly fine. Doing this would boost the frequency of Type **III**, given that the frequency of the adjective ing-of gerunds ranges from 4-26% of the total of Type **IV**'s in the various time periods. Strangely, there is a drop in frequency from the 1350 to 1500 that parallels the drop in frequency of the Type **III.**[40]

Type **V** is the ancestor of the verbal gerund, more specifically the PRO-ing one – types that appear to be Acc-ing are considered by Tajima as the type of gerund with subject, and in any case do not appear in near the frequency, even by the 1450-1500 time period that Type **V** does. Poss-ing gerunds do not seem to appear in Tajima's study, and indeed prior to 1450, most possessives with gerunds seem merely nominal (and would be put in Type **I**), though without an *of*-adjunct, and involve sort of stock phrases like 'the sonnes risyng' or 'the king's comyng'. However by the late 15th century, there are clear examples of Poss-ing gerunds in Visser:

(23) a. I thank yow of the grette cher that ye dydde me at *my last being* wytthe yow (Cely Papers, 1475)

b. Thenne were they bothe so ferre in sorrow brought, Be cause of *ther so sodenly departing* (Generides, 1450)

One thing to note in Tajima's data, is that he has examples of gerunds taking bare direct objects as early as 1300, at least 50 years or so before it had previously been thought that they appeared. But note that they do not occur in any great frequency prior to 1400, which does accord with the common wisdom. So then what about the early examples?

(24) a. Sain Jon was …bisi In ordaining of priestes, and clerkes, And in *casting kirc werkes* (English Homilies, ca. 1300)

b. Yn goyng to the deth, he shewed obedyens Yn *fulfyllyng his faders comundemens* (Robert Mannyng ca. 1303)
c. In *baptising bath yong and ald* Men soght til him (Cursor Mundi, 1348)

[39] Whether this is always the case will be discussed later
[40] However, there is a comparable drop in demonstratives and other determiners as well. By the 1450-1500 time period, the 'the' case accounts form 83.5% of the instances.

Between 1300-1350 we have 5.4% of gerunds of this type. Is this indeed enough to say that English had a verbal gerund at this time? It is rather unclear – Tajima lists all 23 examples from this period and they are all either religious verse, Latin translations or both. While the examples themselves seem beyond dispute, it seems dubious to say that the split into verbal and nominal gerund had actually taken place by this time. That is, to what extent would these works have affected spoken English? I have no answer to that, but would like to note by the 15th century, the form does appear in letters and other papers from Cely and others, which seems better evidence that by the late 15th century, at least, the verbal gerund really had begun entering the language. Before moving on, it is interesting to note that in 24(a) there is coordination of Type **III** and Type **V** gerunds. Also note, that perhaps contrary to Emonds, there is some evidence that Chaucer did have a verbal gerund.

(25) in getynge of your richesses and in *usynge him* (Chaucer, Clerkes Tale)

Again we have a rather strange coordination between **III** and **V**. It would be interesting to see the status of this sentence (i.e. a bare direct object after 'usynge') in the numerous editions and copies.

Type **VI** will also be looked at in more depth later, but we should note that Tajima's data has it appearing extremely rarely – even by the last time period in question, it only accounts for 1% of all gerunds. Oddly, Visser notes that after 1500, this type appeared with almost equal frequency to the regular Ing-of gerunds. This seems rather hard to believe given its extreme scarcity prior to 1500; however, both Jespersen and Visser give copious examples, indicating that at least there was some rise in frequency in early Modern English. This type remained productive well into the 19th century (in literature at least – Dickens being a prime example), but is quite ungrammatical today.

This about sums up the bulk of Tajima's data, leaving out his study of tense and voice distinctions, which aside from a couple of examples in the idiosyncratic Pecock, did not exist until well into the 16th century, and his look at Acc-ing gerunds, which like the early Poss-ing seem to exist mainly with gerunds like 'comyng', 'risyng' 'settyng', etc. Apparently, the Acc-ing gerund really doesn't appear much until the late 16th century and not with regularity until the late 18th century. For a useful comparison with Houston's data, and a look at the general trends in the evolution of the gerund, this table (taken from Tajima) provides a statistical breakdown by time period and type.[41]

[41] Given the relative poverty of data from the 1100-1300 time period, it is probably unwise to draw any conclusions regarding trends in frequency for that period.

	I	II	III	IV	V	VI	Total
1100-1200	12 (23.1)	9 (17.3)	23 (44.2)	8 (15.4)	0 (0)	0 (0)	54 (100%)
1200-1250	22 (51.2)	9 (20.9)	3 (7.0)	9 (20.90	0 (0)	0 (0)	43 (100%)
1250-1300	17 (26.6)	22 (34.4)	19 (29.7)	5 (7.8)	1 (1.5)	0 (0)	64 (100%)
1300-1350	82 (19.5)	51 (12.1)	160 (38.0)	103 (24.5)	23 (5.4)	2 (.5)	421 (100%)
1350-1400	35 (3.5)	60 (6.0)	595 (59.4)	250 (24.9)	59 (5.8)	4 (0.4)	1003 (100%)
1400-1450	82 (4.8)	227 (13.4)	717 (42.1)	414 (24.4)	253 (14.9)	7 (0.4)	1700 (100%)
1450-1500	74 (4.4)	102 (6.1)	562 (33.5)	594 (35.4)	328 (19.6)	17 (1.0)	1677 (100%)
Total	324 (6.5)	480 (9.7)	2079 (41.9)	1383 (27.9)	664 (13.4)	30 (0.6)	4960 (100%)

2.4 **Houston's Proposal**

Houston (1989), as mentioned before, begins her paper by questioning the conflation theory, noting first that the change in the participle ending form *nde* to *ing* was only completed by 1450 in the south of England and the Midlands. Moreover, she questions the possibility of a 'confusion' between two different grammatical categories, unless there were also some shared grammatical/syntactic properties. She cites data from Irwin (1967) that shows that verbal nouns occurred primarily as subjects, objects, objects of prepositions, and genitive complements to a lesser extent. Participles occurred mainly as nominal modifiers and marginally as parts of phrasal verbs. So as far as external syntactic distribution, there were only a few similarities between verbal nouns and present participles (and this remains so in PDE).

But Houston does not abandon the idea of the participles involvement in the evolution of the verbal noun altogether. Instead, she looks at the possibility of a shared discourse function between the two, and theorizes that it is this shared communicative function that caused the gerund to split into a nominal and verbal gerund. Her data does contrast rather sharply with Tajima's, as she only finds gerunds taking bare direct objects in any frequency by 1550, about 150 years later than Tajima, and 100 years after we see gerunds with direct objects appearing in letters and original English prose. I have no explanation for this rather large discrepancy, but as we shall see, a key part of her data (the percentage of these direct object gerunds that appear as objects of preposition) is consistent with Tajima.

Houston first divides up the occurrence of verbal nouns by syntactic position and contrasts whether they are found as subjects/direct objects or objects of prepositions.[42] Her data

[42] Houston labels these 'oblique' and I will continue this trend as it is briefer than 'object of preposition'. I am using the term 'verbal noun' to mean any gerund. 'Direct object gerunds' are gerunds that take a

ranging from the 10th to 17th centuries shows that from the 14th century on, at least 60% of all verbal nouns are found in oblique position. Now this does agree with Tajima, as his examples in all of his types have the gerund in oblique position in a fairly large majority of the instances. Houston then looks at what happened when the verbal noun began to take bare direct objects. It turns out that the first appearance of bare direct objects is with verbal nouns in the oblique position.

c1550	4% of sub/obj position with direct object	31% of oblique position with direct object
c1600	54% of sub/obj position with direct object	64% of oblique position with direct object
c1650	38% of sub/obj position with direct object	60% of oblique position with direct object

The first thing to note is the 50-year gap between when direct objects first appear in oblique contexts and when they really begin to appear in subject or object position[43]. And while Tajima does have direct object verbal nouns in rather high frequency appearing from 1400, it seems that every one of them he gives as examples also occur in oblique position. For example, he lists at least 25 examples for the 1450-1500 time period. None of them are in either subject or object position. So despite the disparities in the data, it does seem that indeed the first occurrences of verbal nouns taking bare direct objects did occur with the verbal noun in the oblique position.

Now there actually is a point to all this -- Houston claims that there are shared discourse functions between the oblique position verbal noun and the appositive participle. Then it might be the case that the shared discourse functions caused the gerund to acquire verbal properties. If this did happen, then one would expect to find bare direct objects with verbal nouns in oblique position before they appeared in subject or object position. And this is indeed the case. So we shall now have a brief look at the appositive participles and the shared discourse function between them and oblique verbal nouns.

According to Houston[44], appositive participles appear either before or after the matrix clause, or in clause-final position:

(26) *Going to preach*, H. Morley of my parish deliv'd mee a note of receipt of my procuration (Diary of Ralph Josselin)

(27) I recommand me hartly onto yow, *thankyng yow* of aull good brotherhood[45]. (Cely

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bare direct object (Type **V**) and are of course looked at as being the first hints of the development of the verbal gerund.

[43] Unfortunately her data is not quite as copious as Tajima's; for example the 4% for the time period 1550-1600 represents but one instance out of a total of just 24 verbal nouns found in sub/obj position at all. This may be the reason for the peak at 1600. For the 1650 time period, there are but 13 examples of verbal nouns in sub/obj context and 76 verbal nouns in total.

[44] I am not quite sure of this term. All my encounters with the term 'appositive' deal with clauses that merely re-identify the subject of the matrix clause such as "That man, the president of the corporation, is out to sack me." I looked at a number of university related www sites on English grammar, and never saw the appositive as a participle at all. Perhaps it is that the subject of the participial phrase is identical to a noun (usually the subject) of the matrix clause. Houston notes that this is not a feature shared by absolute participles, which have their own subject as in "John finally arriving, we all sat down to eat". And of course, Acc-ing and Poss-ing gerunds also share this feature, but as we saw earlier, they are not very frequent before 1600.

[45] Note that all data in this section of the chapter is taken from Houston.

Papers)

Like verbal gerunds the subject of the appositive participle exhibit the same sort of control properties. The subject of 'thankyng yow' in (27) is the subject of the matrix clause ('I'), and in (26), the subject of 'going to preach' is the speaker, presumably Ralph Josselin.[46] And as far as taking bare direct objects goes, she cites Callaway (1901) in noting that at least in Old English texts the appositives took direct objects in 56% of their instances in prose and 13% in poetry.[47]

She also draws on Callaway for her theory of similarity of discourse function. According to Callaway, appositive participles serve three different functions, attributive, adverbial and coordinate:

(28) Unto my brother George Cely merchande of the estapell *beyng at Calles*. (Cely Papers – attributive use)

(29) that lewide men (laymen), *seyinge akynge & swellynge* in a lyme that is wounded, leie therto a potage in maner maad of eerbis & Wynes…(Science of Cirurgie – adverbial[48])

That laymen, seeing aching and swelling in a limb that is wounded, lay thereto a potage in manner made of herbs and wines…

(30) The Quene removed on Wensday toward Norfolk, *taking Dr. Cesars in her way*. (Letters of John Chamberlain – coordinate)

Houston focuses on the adverbial function of participles, as this is the function shared by verbal nouns in oblique position (there was no adverbial function with verbal nouns in either subject or object position). Following Calloway, she distinguishes between several types of adverbial functions including manner/means, temporal, causal, and goal. Here are a few examples of participles and verbal nouns in some of the functions:

(31) Sir Samuel Baguel is lately slain there, *being stabd by Sir Laurence* (Letters of John Chamberlain – appositive, causal function

(32) God zelde yow for zoure labore for me for *gaderyng of my mony* (Paston Letters verbal noun – causal function)

(33) (He) set upon him as he was coming out of his coach, *wounding him in three or four places* (John Chamberlain – appositive, manner function)

(34) Wee are very vigerous in *asserting our Religion*[49]…(Essex Papers, late 1600's – verbal

[46] It is a rather odd sentence indeed. The main clue that equates 'mee' with the subject of 'going to preach' is the 'my parish'. Nonetheless, the participle is controlled by the matrix clause.

[47] Once again Latin rears its imperial head. In the OE period, according to Callaway, most writing that is in original English is poetry. Most of the prose consists in Latin translations. And again a Latin influence is cited for the reason that appositive participles taking direct objects. Callaway also notes that the strictly the Latin translation the higher the frequency of appositives taking direct objects.

[48] This is adverbial in the sense that the participle bears a temporal/causal relation to the matrix clause. That is, it is upon and because of seeing the wounded limb that the laymen decide to do their attempt at surgery. I assume, since this is a treatise on surgery and laymen are the subject, that it all goes drastically wrong.

noun, manner)

and for earlier direct object verbal nouns in an adverbial function, these are from Tajima:

(35) I schall aquytte you in *takyng dowble the payne* for your sake (Cely, manner?)

(36) By *breaking the bread* I knew his face (Chester Mystery Cycle, ca. 1400, causal)[50]

Finally, Houston presents data showing a fair amount of similarity in the percentage of both appositives and verbal nouns in an adverbial function. For all but the period 1650-1700 the percentage of oblique verbal nouns with an adverbial function is well over 70%. Aside from a strange dip in the period 1450-1500, the percentage of appositive participles with adverbial function is at least 50%. In all time periods, the percentage of subject or object verbal nouns with adverbial function is 0.

To sum up, there exists a similarity in discourse function between appositive participles and oblique verbal nouns, and evidence that when verbal nouns began taking direct objects, it was the oblique ones that took them first. Houston speculates that the common usage, some syntactic similarity (ability to appear clause-initial and clause-final), and functional similarity between the appositive participle and verbal noun could have contributed to increasing similarity between the participle and gerund, to the point where the gerund began to acquire verbal properties.[51]. And while this certainly has a good deal of intuitive plausibility, there is no broader theoretical mechanism to show how this would actually work. An attempt to explain how shared meaning and discourse function could affect syntax and usage will be made in a later chapter.

There is also the discrepancy in data to take into account. But assume Tajima's data is correct and that verbal nouns began taking direct objects in meaningful frequency by the period 1400-1450. This is not enough to show that a verbal gerund was necessarily in English by that time – at least not the verbal gerund as we know it. It is a gerund generally without a subject,[52] that only has an external distribution in oblique position. There are also only a few examples of the gerund with a predicative complement, and one or two odd cases of any voice distinction. So we certainly do not have the verbal gerund as we know it. So perhaps the end of the time period that Houston looks at (ca. 1500-1600) is actually the time when a real split does occur, and the previous 150 years or so only some kind of transitional stage. By 1600, the verbal noun begins to take direct objects in subject and object position. Moreover, we also now start seeing in much larger frequency what look to be Poss-ing and Acc-ing gerunds, and distinctions for tense and voice also become established.

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[49] This sentence is rather perplexing. Aside from spelling differences it is perfectly fine in modern English. And it seems that we do get an 'act' reading here. Any propositional paraphrase is pure garbage – "*We are vigorous to assert our religion", "We are very vigorous in that we assert our religion" is grammatical but does not capture the correct meaning. The only paraphrase I can find is "We are very vigorous in the *way* we assert our religion." However, in subject position or object, everything returns to normal: "Asserting our religion is our god-given right" has the predicted infinitival reading "To assert our religion is our god-given right." "We love asserting our religion" has the reading "We love to assert our religion". This raises the question of whether the line between act and fact readings for verbal gerunds might be a bit blurry.

[50] Note that with this gerund, the subject of the gerund is not the subject of the matrix clause, but the bearer of the object (the *his* in *his face*). Control is an extremely tricky area, and the context (Jesus breaks the bread at the Last Supper, mystical things happen) overrides the default.

[51] Houston does not hold that this was the sole reason, just that it was a contributing factor. In a footnote she also draw attention to the fact that issues of control may be involved. Given the odd status of the [Det-] Ing-of gerunds, there is most likely something to this.

[52] Tajima's examples of gerunds with subject seem mainly nominal, and there are no examples of an Acc-ing like gerund, i.e. with both subject and direct object.

Before the late 16th century, the gerund was neutral as to voice[53][54]

(37) A shootynge Gloue is chieflye for to save a mannes fingers from *hurtynge* (Aschams, 1545, = being hurt)

(38) The witnesses said they dared not to present the truth for drede of *murdrying*, and to myscheved in their own houses (Rolls of Parit, 1475, = being murdered)

(39) It please you to remember (remind) my maister at your best leiser, wheder his old promise shall stande as touching my *preferrying* to the Boreshed (*Paston Letters*, 1458, = being preferred)

But around the latter half of the 16th century the distinctions start appearing:

(40) Cloth'd with a pitchy cloud for *being seen* (Marlowe, 1587)

(41) to be styled the underhangman of his kingdom and hated for *being preferr'd* so well (Shakespeare, 1591)

and distinction for tense also came in:

(42) Want of consideration in *not having demanded thus much* (Sidney, 1580)

(43) Mine ears … Do burn themselves for *having so offended* (Shakespeare, 1592)

but nevertheless the voice-neutral construction seems to be variable well until the 19th century, and was even used in the same dialect as the passive form

(44) Excuse *his throwing into* the water (Shakespeare, 1598)

(45) devoting all His soul's strength to *their winning back* to peace. (Browning, 1833)

So perhaps, the period in question, 1500-1600, is not the time that verbal nouns began to acquire direct objects, as that seems to have started well before, but instead is the time that we begin to see a regular, productive construction of a verbal gerund, with the majority of features that are found in the verbal gerunds in Present Day English.

2.6 **Unresolved Oddities**

[53] Tajima does have a couple of examples from Ellis and Pecock (1417 and 1454, respectively), but these should probably be considered idiosyncratic.

[54] As will be seen in a later chapter, this distinction of voice did not happen in the progressive for another 200 years.

At this point it appears that there is a nice, unproblematic development of the verbal gerund starting in the 16th century, which accords somewhat well with Jackendoff's speculation (see Prologue) of the development of the verbal gerund involving a raising of the attachment site of the *ing*-affix over time.[55] But, as alluded to earlier, there are some rather perplexing constructions that are quite ungrammatical today, and seem to cast doubts upon the idea of any sort of smooth, logical evolution.

We will first look at Tajima's Type **III** gerunds (such as "At *reading of the letter*, he stared and stamped"), or what I have been calling [Det-] Ing-of gerunds. As can be seen in Tajima's data, this gerund became the predominant type in the 14th century, and by the end of the 15th century occurred just as frequently as the Ing-of's, and seem to appear quite often in oblique position (and would then thus need to be figured into Houston's theory). Now the interesting thing is that this Type is fairly ungrammatical in PDE except in some marginal contexts,[56] with control issues being perhaps are central reason as to why. For example, while (46) and (47) are both fine, (48) is not:

(46) He shocked us by telling a dirty joke.

(47) He shocked us by/with his/the telling of a dirty joke.

(48) *He shocked us by/with telling of a dirty joke.[57][58]

As can be seen with (46), the subject of a Poss-ing gerund ("his telling a dirty joke") can be deleted if the subject is co-referential with the matrix subject or object. But, as can be seen with (47) and (48), this does not happen with Ing-of gerunds. However, constructions such as (48), on the surface at least, were rather ubiquitous in Middle and Early Modern English, and continued well into the 19th century:

(49) a. Howr father and I wher incytted for *sleyng of an hartte*. (Cely Papers)
b. I thanke God & you of *sauyng of myn honour*. (Malory)
c. He finds that *bearing of them patiently* is the best way. (Pepys, 1664)
d. In *tracing of his history*, we discover little that is worthy of imitation (Murray, 1824, example in a grammatical textbook, used negatively)
e. We must cease *throwing of stones* at either saints or squirrels (Ruskin, 1874)

It is quite hard to make out what is going on here. On one hand, we have what appears to be obligatory control of the gerund – i.e. the (null) subject of the gerund is co-referential with the matrix subject, aside from (d), which is rather strange and might have a result reading (i.e. the finished tracing of his history), but this seems doubtful, and I suspect the only reading available is the imperfect ("tracing his history") reading. Of course on its own this

[55] Abney does note one glitch – the historical stage where auxiliaries are still not generated but particles and bare direct objects are. Without going into complex X-Bar theoretical details, this has the consequence that at the stage where auxiliaries are not generated, adjectives and specifiers like *many*, *three* would be permitted. And while there are a few examples of gerunds with adjectives and bare direct objects, the examples are not restricted to the time period (pre-1600) before auxiliaries are generated.
[56] There is an example in the prologue, and I have also seen examples of this type in newspaper headlines and some generics.
[57] Of course if the shocker is telling of the joke, in the sense of relating it, and not actually telling the joke (i.e. the *of*-adjunct is not marking a direct object), then this sentence is fine.
[58] Vendler (1968) notes this distinction in observing the genitive in Poss-ing gerunds is not a "real" genitive, as opposed the genitive in an Ing-of nominal, which behaves just like the genitive *John's* in *John's house.*

doesn't necessarily mean that this gerund had verbal properties (i.e. the sharing of control features with verbal gerunds). Note that with

(50) Smith was arrested for the brutal stabbing of Jones[59]

it is rather hard to imagine a situation where Smith is not the implicit subject of the assault (yet there is no obligatory PRO subject). And certainly with all of (49) save (d), the insertion of 'the' before the gerund changes nothing at all in the meaning. So, perhaps the sentences in (49) merely have a co-reference of subjects by context. And recall the distinction between:

(51) a. John enjoyed reading the book.
b. John enjoyed a(the) reading of the book.

With (a) we have mandatory control and John is the subject of *reading*, but with (b), this is not the case. I would say the default reading to the sentence is that the book was read by someone other than John, although there, perhaps, imaginable circumstances where John could be the subject of *reading*. But, I have found a number of quotes where sentences of the form of 51(b) do have the matrix subject being the agent of the *reading*:

(52) a. *at the reading of the letter*, he looked like a man of another world. (Marlowe, 1612)
b. I shook my Head twice or thrice *at the reading of it*. (*Spectator*, 1711)
c. [he] had a numerous Collection of old English Ballads, and took particular Pleasure in *the Reading of them*. (*Spectator*, 1711)[60]

So the interesting bit in these cases is that in PDE, this would be a rather odd construction to use to describe someone reading a letter themselves, and be quite marked if it was used. More will be said of this in a later chapter, but I suspect that there may be a sort of pragmatic blocking that is the cause of the oddity of sentences like those in (52) in PDE. Once the verbal gerund had been completely grammaticalized, 51(a) is certainly a better form to express the meaning **Enjoy [J, Read(J, a book)]** than 51(b), as no contextual coercion need be done.

Interestingly, in the case of the [Det-] Ing-of gerunds, I found no example in either Tajima or Visser, where the matrix subject is also not the implicit subject of the gerund, which does make one wonder if there is actually obligatory control here, giving this gerund verbal properties. Furthermore, Tajima has 69 examples of this form with adverbial modification for the time period 1300-1500, including:

(53) a. in *fulfillynge of the dedis of mercy bodily and gostely* (Rolle, 1349)
b. In *lernyng of the faith dylygently* (Bokenham, 1443)

While later examples of [Det-] from Visser and Jespersen do not show any adverbial modification, this does give one pause. Of course, in PDE, at least, nouns (or NP's) subcategorise for an *of*-adjunct direct object but verbs (or VP's) do not. And of course,

[59] Smith could have been arrested as an accessory to the stabbing, but then (50) would really be a bit misleading; it would be better to say "Smith was arrested in connection with the brutal stabbing of Jones".

[60] The Marlowe quote is from The Jew of Malta and relates the story of Ithamore, the Jew's erstwhile servant, reading a letter from a Countess with designs on Barrabas' money. The speaker is a Pilia-Borza, a servant of the countess, who relates his experience of seeing Ithamore read the letter. Strangely, when Ithamore describes Barrabas reading a letter, he uses the sentence, "At *reading of the letter*, he stared and stamped".

nouns (or NP's) cannot be modified by adverbs. This does need to be put in a bit of context, however. The 69 Type **III** gerunds represent well under 5% of the total Type **III** gerunds for that 200 year time period, and therefore any definite conclusions cannot be made on this alone.

But Visser does note another rather strange phenomena involving participles that began to occur in frequency in the 16th century, the same time period that Houston ascribes to the development of the verbal gerund:

(54) a. If anywhere I have them, 'tis by the sea side, *browsing of ivy* (Shakespeare)
b. Wenches…sitt in the shade *singing of ballads* (Letter of Dor. Osborne to W. Temple, 1648)
c. a dozen of them at work, we could not say *eating of him*, but *picking of his bones*, rather. (DeFoe, 1719)
d. I am a young beginner and am *building of a new shop* (Ben Jonson, 1610)
e. the first are plowing, while the last are *gathering of Manna*. (Montague, 1648)
f. A Company of waggish Boys were *watching of Frogs* at the side of a pond (Addison, 1711)

Here we have participial use[61] (a-c) and a 'progressive'[62] use (d-f) all with the present participle taking direct objects with *of*-adjuncts. Now these certainly were regular forms (that is quite commonly used for a few hundred years), and it is quite mysterious as to what is going on here syntactically. Visser does speculate that this might have come about because the semantic difference between the purely verbal forms (participles) and the [Det-] Ing-of nominals was so 'vaguely realized' that the participle began to take an *of*-adjunct. As we noted above, semantically the [Det-] gerunds seem to have very little nominal about them at all, and would in modern English all be written as verbal gerunds[63]. And if Visser is correct about the timing of this, then do we have an interesting possible connection. If shared meaning/discourse function between present participles and verbal nouns caused the verbal nouns to begin taking bare direct objects (and eventually split into the regular, productive verbal gerund), perhaps a sort of reverse influence also occurred. That is, the shared meaning/discourse function between [Det-] Ing-of gerunds and participles may have caused (for a time at least), participles to take direct objects with *of*-adjuncts. Of course, the question remains as to whether this became a 'regular' construction or was merely a fairly brief phenomenon of language use. Secondly, the connection with the 'progressive' with 'of' seems a bit more tenuous.[64] While there are semantic connections between the participle, progressive and gerund, there does not seem to be as tight a connection between the progressive and the verbal noun, as between the oblique use of the verbal noun and appositive participle.

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[61] Although there is no *be* auxiliary, 54(c) has a very progressive feeling to it.

[62] There is a great deal of debate regarding the development of the progressive in English – Visser calls early forms 'expanded form' to avoid positing a direct link between early instances of *BE + V*-Ing and the modern progressive. Connections with the preposition forms such as 'He was on hunting' are also posited, as well as attempts to trace it back all the way to OE usage. I put the term in scare quotes as to not prejudge anything. However, one can see that the meaning of (d-f) and perhaps (c) as well is certainly what one would associate with the progressive. For further details on all aspects of the development of the progressive see Denison (1993), where he goes through several different proposals. The passivisation of the progressive will be looked at in a later chapter.

[63] By semantically, here I merely mean that the [Det-] gerunds for the most part seem to mean nothing more than the corresponding verbal gerund. Take this bit from the Paston Letters: "lete my Lord beware of *writing of letters* for them"; this does not refer to any specific event (or manner), but rather seems semantically equivalent to the imperfect "Let my Lord beware of writing letters for them".

[64] Emonds (1973) speculates on a relationship between gerunds and the development of the progressive, but doesn't elaborate.

The Type **VI** gerunds are also a rather fascinating phenomenon. Again we have a rather interesting time coincidence – these gerunds did not appear in English in any significant frequency until the 16th century. Visser claims that after 1500, this form appeared in almost equal frequency as the ordinary Ing-of (Type **IV**) gerunds, and the choice between using one or the other largely a matter of style.[65] While there is no real statistical evidence to show that the Type **VI** was used in equal frequency, Visser does give hundreds of examples of the Type **VI** side by side with the Type **IV**, going well into the early 20th century. Visser also speculates that the decline of this construction was one of the few times that the prescriptive grammarians won a fight, and that constant condemnation starting in the late 18th century caused the form to die out. I remain agnostic on this point, but do agree with Pullum and others that at least by the 19th century, this form was rather archaic, and seems to be used primarily in literary contexts (Dickens being a main offender). Nevertheless, several hundred years of frequent use cannot be ascribed as being mere mistakes by ignorant language users (as the grammarians would have it), and this form needs to be paid attention to in connection with the evolution of the gerund. A few choice examples first:

(55) a. 1467, Paston: *The untrewe forging and contryvyng certayne testaments*…by naked wordes

b. 1596, Shakespeare: You need not fear *the having any of these lords*

c. 1672, Wycherley: Nothing grieves me like *the putting down my coach*!

d. 1686, Dryden: Here is a total subversion of the old church in England, and *the setting up a new*.

e. 1711, Steele: The Gentleman who writ this Play…appears to have been mis-led by *an unwary following the inimitable Shakespeare*

f. 1719, DeFoe: I began now seriously to reflect upon … how justly I was overtaken by the Judgment of Heaven for *my wicked leaving my Father's House*, and abandoning my Duty

g. 1719, DeFoe: my Thoughts being directed, by *a constant reading the Scripture*, and praying to God, to things of a higher Nature.

h. 1726, Swift: they would never consent to *the enslaving their country*

i. 1749, Fielding: When Mrs. Debora returned into the room, and was acquainted by her master with *the finding the little infant*, her consternation was greater than his had been.

j. 1839, Dickens: I am not disposed to maintain that *the being born* in a workhouse is in itself the most fortunate and enviable circumstance…

k. 1903, Sweet: In the second example 'he told them he had gone for a little walk and saw a donkey'] the pluperfect is…justified by the fact that *the going for a walk* preceded seeing the donkey, and it is used here because *the seeing the donkey* is the really important event.

[65] Indeed there are a number of examples of the two types appearing together in a coordinated context: "The great art of poets is either *the adorning and beautifying of truth*, or *the inventing pleasing and probable fictions*." (Dryden, 1674). And we have seen earlier examples of coordination with Type **III** and Type **V** gerunds as well.

l. 1904, Wilde: The industry necessary for *the making money* is also very demoralizing.

The above look to be the converse of the last case with [Det-], where it appeared that a verbal form took an *of*-adjunct to mark a direct object. Now we have what appears to be a nominal form (indicated by the determiner) that takes a bare direct object. More disturbingly, a number of these examples also contain preposed adjectives, strengthening the nominal character of the phrase, and making it even more ungrammatical to present day ears. However, before jumping to any conclusions of fairly large syntactic recategorization, the number of examples with preposed adjectives is fairly insignificant – I can find only 11 – two of them from one author, Defoe. Unless further research establishes that many more sentences of the form of 55 (f) and (g) are extant, there really is not enough data to justify any sort of conclusion. But, on the other hand, I could find but one example of a Type **VI** being modified by an adverb (and preposed at that):

(56) against the coercively repressing any opinion (Shelley, early 19th century)

which is from his poetical works – meaning the adverb may have been used for metrical reasons. Compare the adverbial use with a pure Ing-of gerund from Ben Jonson's The Alchemist

(57) To be reueng'd on this impetuous Face: *The quickly doing of it* is the grace.

While this may seem ungrammatical at first glance, in the context of the scene and for metrical reasons, it works better than any expression alternative. We are at the end of a scene with rapid-fire dialogue, a Spanish impersonator speaking fragmented Spanish, and all manner of language play and puns (Face is a character's name). While I haven't been able to locate the poem where (56) appears, I suspect that the adverb is used for similar reasons. So given that there a few examples of adjectives occurring and but a marginal one with adverbial modification, perhaps this is a purely nominal form, that takes bare direct objects for some reason or other.

To be sure the old grammarians[66] seemed to think this form was rather an abomination, and merely blamed it on people being unable to tell a verb and noun apart. Of course, one does marvel at the accusations that a form used over the course of hundreds of years by numerous speakers would all be the result of 'bad grammar'. And this is bad grammar that even the grammarians themselves could not agree on – 59(k) is a quote from Sweets, New English Grammar, and there also have a quote from J. Buchanan's A Regular English Syntax (1792)

(58) Comparison is *the Increasing or Decreasing the Quality* by degrees.

Now the question arises as to whether Visser is indeed correct – that is are the Type **VI** forms merely stylistic variants of Ing-of gerunds, and in spite of the fact that they take bare direct objects, are they still purely 'nominal' forms? The answer to this question may lie in the semantics[67]. Assuming the modern distinction that only Ing-of gerunds can have a perfect or event reading, do we have any examples of Type **VI** gerunds with perfect

[66] The interested reader should consult Murray and Lowth for some rather scathing comments.
[67] Cobbett (1833) is the first time I have found it said that Ing-of nominals have an 'act' reading. He uses this in a rather badly argued fashion, to condemn the Type **VI** gerunds.

readings? I have done a survey of a number of examples, in context, and can only report that there seems to be no conclusive answer.[68]

Starting with the Defoe quote in 55(f), we can already see how the distinction between perfect and imperfect becomes rather hard to discern. This is from an early bit of *Robinson Crusoe*, and details the narrator's reflections on what happened to him. Just before this passage, he describes the yearlong argument that he had with his parents in regards to going to sea. His father was unswervingly against the proposition, causing young Crusoe to disappear without a word. And it seems here that though the event of Crusoe leaving his father's house is implicitly referred to, we just have an imperfect reading – that he left his father's house wickedly was the cause of being overtaken by the Judgment of Heaven. Note also that the strange nominal is in coordination with a verbal gerund ("abandoning my Duty").

55(d) may be the most convincing case for an event reading. The Type **VI** is in coordination with a derived nominal, and would most likely be rewritten in modern English as "The setting up of a new one". I was unable to find the actual passage where this is, and it's being out of context makes it difficult to determine for certain whether there is a perfect or imperfect reading. Note that the passive version, "a new one being set up" might do just as well; but recall that during this period, the passive gerund was still fairly new, and not used with nearly the regularity it is today.

The Swift quote (55(h)) is also rather interesting, especially as it is now rewritten in some modern versions as "the enslaving of their country". It occurs in one of Swift's descriptions of one of the bizarre worlds that Gulliver travels to -- the full quote is as follows:

(59) The King would be the most absolute Prince in the Universe, if he could but prevail on a Ministry to join with him, but these having their Estates below on the Continent, and considering that the Office of a Favourite hath a very uncertain Tenure, would never consent to *the enslaving their Country*.

First note that substitution of the active verbal gerund "enslaving their Country" cannot work because of control issues[69] (this would have the ministers enslaving their own country, when they would really only be collaborators), and it does seem to be a reference to a possible, undesired event, i.e. the ministers would never consent to any event where their country is enslaved. However, the passive verbal gerund seems to have much the same meaning. Replacing "the enslaving their Country" with "their Country being enslaved" does seem to be more or less synonymous.

Again, the quote from Fielding (55(i)) is much the same – "the finding the little infant" certainly has the feeling of being an event, and removing the determiner does change the

[68] This may have to do with the rather strong possibility that the distinction between event and proposition (or state) is often hard to make, with the only really strong event reading occurring in narrow containers with temporal and geographical locatives like "occurred at noon" and so forth. As noted in the last chapter, these narrow containers seem used far less than wide ones. In the hundreds of examples from Visser and others, not one *Ing*-of nominal is in the context of a narrow container.

[69] It has been suggested that perhaps the sentence can be read as if the Ministers would be the ones doing the enslavement, and they would be consenting to their own behaviour. In modern English, this is impossible as one consents to someone else's behaviour only, although the person giving consent may be seen as either aiding or collaborating. For example, "I do not consent to my smoking cigarettes" is nonsense, but "I do not consent to your smoking cigarettes, and so I will not give you money to buy them" is perfectly acceptable. According to the OED, this is the standard usage going back to 1300 at least. OED defines it as: *Voluntary agreement to or acquiescence in what another proposes or desires*.

meaning because of control issues. But again, I invite the reader to replace the above with the passive verbal gerund "the little infant being found". This also seems fine, but perhaps not as nice as the replacement in the DeFoe quote (were I to rewrite this in modern English, I would most likely use the Ing-of version), and seems to be a slightly better bit in favour of a purely perfect reading. The question then arises as to whether one can be acquainted with an event. According to the OED, one may at least be acquainted with 'manner' readings. One entry for 'acquaint' – the transitive version – defines it as *To give (oneself or anyone) experimental knowledge of, or acquaintance with (a thing)*. And do note this from 1666:

(60) Fuller: I shall select thence some memorable items, to acquaint us with the general devotion of those days.

While the above is not a case of being acquainted with a specific event it does seem to be about being acquainted with the manner of devotion, and similarly, Debora may have been acquainted with the circumstances or way in which the young Tom Jones was found.

Now, the quote from Sweet (55(k)) is most fascinating, not least as it brings up the tantalizing question as to why donkeys seem to be so often used in linguistic examples (is this the first 'donkey' sentence?). More to the point at hand, exactly what does Sweet mean when he writes that "the seeing the donkey is the really important event."? Do we now have conclusive evidence that these rather strange nominalizations can have event readings? Again, this is not entirely conclusive. There is unfortunately no way of knowing whether Sweet's conception of 'event' was at all similar to a modern semantic notion.[70] Nevertheless, it still seems possible that Sweet is using the phrase to refer the event 'the sighting (seeing) of the donkey', and his lack of formal semantic training should not necessarily render his observation irrelevant.

And this may be a clue as to what is going on with these strange nominals. Perhaps, these are cases where the verbal gerund is being used as if it were purely nominal.[71] As we shall see in the next chapter, it appears that verbal gerunds can be used in modern English to obliquely refer to specific events – that is, while they may not denote an event themselves their use seems to place a corresponding event in the context of discourse[72]. So, if a phrase like 'seeing the donkey' is used as if it were nominal, then the occurrence of the determiner makes perfect sense. In fact, I think the use of 'the' is perhaps the most compelling evidence that these should be seen as nominal uses. I have yet to see any use of 'the' that is not in a nominal context.[73] Note, that most studies of this form seem to attribute the Type **VI** as a purely literary form. This may or may not be the case. Unlike our look at the beginnings of the verbal gerund, which had numerous quotes from letters in a colloquial register, I can find few examples of this form outside of literature. Now this might only be due to the fact that most of the examples come from Visser, who focuses primarily on literary texts. But we do have 55(a) from the *Paston Letters* and a couple of quotes cited by Houston from the *Verney*

[70] To be discussed in more detail in the next chapter.
[71] While the Type **VI** is in now way grammatical today, there are a few marginally productive forms in PDE that are syntactically ungrammatical, and may be an example of this phenomenon. See 2.6 for further elaboration.
[72] Another complication is that while phrases along the lines of "the destroying the city" are fairly commonplace, I've yet to see this happen with a derived nominal, i.e. "the destruction the city" never occurs. Could it be that it was the phrase *destroy the city* that was nominalized with *ing* and then used like an ordinary perfect nominal?
[73] See Silvana La Rana (1993) for an examination of 'the' in early modern English syntax, primarily in the Paston Letters as they are a nice example of the language in a colloquial, non-literary register. She notes that there was one a construction 'the which' as in "desiring to hear of your welfare…the which I pray God". But in all examples given, the 'which' is anaphoric to a noun or proper name, nothing verbal.

Papers (1649)[74]:

(61) a. Hee denies *the bringing the army* to London.
b. Resolved: That *the preferring some men,* and *displacing others*…is a cause of our evills.

1.6 **Present Day English Incongruities**

In looking at the history of the gerund, we have seen a number of forms that sprang up for a time, and eventually faded into ungrammaticality; however, there are still a number of, admittedly marginal, constructions that conform to current syntactic predictions, as they involve cases of verbal gerunds that are grammatical, but are predicted not to be.

(62) a. There's no enjoying life without thee.
b. This mixing business and pleasure is going to catch up with you.
c. This telling tales out of school has got to stop.
d. Any talking loudly on your part will be punished.[75]

Here we have examples of PRO-ing gerunds occurring with determiners, which, of course, is not allowed in PDE. It should be noted that they are all fairly marginal (though not ungrammatical), and certainly marked. However, aside from the 'this' cases I have seen no convincing explanation as to why the sentences can occur grammatically at all.

As for 'this', Pullum claims that the instances are quite special, and seem to be a case where the verbal gerund is used like it was an N' denoting a characteristic or repeated activity. And given (c) and (d), this certainly seems reasonable. He gives a nice example with *this exhibiting displeasure*:

(63) a. *Putting the two screen-test videos side by side, this exhibiting displeasure seems more convincing than that exhibiting displeasure

b. Putting the two screen-test videos side by side, this exhibition of displeasure seems more convincing than that exhibition of displeasure.

c. Considering the complete film careers of both of them, her exhibiting displeasure seems more convincing than his exhibiting displeasure.

So in 30(a), since the reading regards a particular occasion of behaviour, the 'this' is ungrammatical. And of course, 30(c) with a Poss-ing gerund used to refer to ongoing behaviour, we have a perfectly grammatical sentence.

However, while I agree that 'this' can only be used in rather special situations, I am not so convinced that it need be a characteristic or repeated activity. Imagine a situation where the speaker is in a café with a friend and his friend's friends, having met them for the first time, having a conversation. The new people are quite annoying, talking constantly and inanely – it is contagious and even spreads to the speaker. He pulls his friend aside and says,

[74] These are papers from a very high status family, consisting of Members of Parliament, generals, etc.
[75] 15a is from Ben Jonson and, though quite old, sounds the best to me out of any of the bunch. 15b and c are cited in Abney. 15d is attributed to Schachter (1976) by Pullum

(64) ?? I've got to get out of here. All this talking about trivia is giving me a headache[76].

This doesn't seem any worse than the above examples, and refers to a specific behaviour, not necessary a characteristic or repeated activity (speaker has just met these annoying people, and does not normally talk so incessantly himself). But we do have a very specific, presentational context, which may account for the marginality of the sentence.

Unfortunately, Pullum while citing both 15(a) and (d), does not attempt an explanation for the grammaticality of either of them. Abney, who also tries to explain away 'this', cites sentences akin to 15(a), but also leaves them unexplained. I, too, find them rather confounding and can give no satisfactory explanation. But the 'no' seems only to work with a verbal gerund in a 'there' construction, and a few other marginal cases.[77] Generally, as with sentences like the following, it is quite ungrammatical:

(65) *No fixing the boat would be done today.
(66) *No enjoying life is a summary of my sad existence.

The grammaticality of 15(d) is quite startling, and doesn't seem to work with the similar quantifiers like 'all'[78]:

(67) *All talking loudly on your part will be punished.

Perhaps there something analogous mass/count distinction is involved. For instance, with a mass or generic interpretation of *talking loudly*, one would merely use a quantifier-less verbal gerund, i.e. *Talking loudly is rude.* But with 15(d), we seem to have a situation where a verbal gerund is used for specific countable instances, and used as if it were in N'. Take a real N', like 'misbehaving child' and substitute it for the gerund 'talking loudly on your part':

(68) Any misbehaving child will be punished.

It really seems in the case of 15(d) that we have something that really means, perhaps, 'any instance of', where the 'talking loudly on your part' bit really just denotes any instance of that behaviour. Compare:

(22) *John would bristle at any talking loudly on their part.
(23) ?John would bristle at any/every instance of their talking loudly.

(69) is certainly out, and while I am not so sure about (70) it is certainly better than (69). And it is perhaps the implicit contextual use 62(d) – a warning or some such – that makes the occurrence of the determiner with the verbal gerund alright, as opposed to the indicative use in (69).

So, while there does not seem to be a satisfactory explanation for any sentences of the type in (62), it does seem safe to say that these are all quite marginal and marked examples,

[76] It should be noted that 'this' co-occuring with verbal gerunds rarely is found in written English; however, since I began doing research for this thesis, I have caught myself and others using it in some frequency in conversation. Strangely, I never even picked up on it before, but once I became aware of its possibility, I begin hearing it quite regularly.
[77] For instance, restrictions can be stated using 'no' with a gerund, as in 'no hunting deer allowed', which seem like reasonable text for a sign. Of course, this may just be a case of an elided 'there is' construction, as in 'there is no hunting deer allowed'.
[78] This is in no way to imply that 'all' and 'any' are synonymous; 'any' will often have a reading as 'each' or even 'some' as in: "If any student comes, then they will have pay the admission fee." or "Did any students attend the meeting?"

whose justification most likely lies in the domain of language use, and perhaps in the close semantic link between verbal and nominal gerunds.

1.7 **Conclusion**

Up to now we have gone though the syntax and some semantic facts of Present Day English nominalization, and seen how things were quite different once, at least syntactically. Forms that would now be considered 'startlingly ungrammatical'[79] have come in and out of existence, and even forms that are predicted by current syntactic theory to be ungrammatical at least have a degree of marginal usage. We have also seen a couple of attempted explanations as to how the mixed form of the verbal gerund came into existence – first the 'conflation theory' that postulates a confusion between participles and gerunds once the participle began to take an *ing* suffix, and then Houston's attempt to strengthen this with a notion that shared discourse function may have had something to do with the split of the verbal noun into a verbal and nominal gerund. But while the statistical correlations she brings up are rather striking, there is still no explanation as to why shared discourse function should have had the effect that is postulated to have. The final chapter will focus on language change explanations in a more general way, and in the final part I will attempt 'the building a bridge' between discourse function, semantics/pragmatics and the change in question. But first, a deeper look into the semantics and function of nominalization in discourse is needed.

[79] This is Pullums description of the Type **VI**, especially those with preposed adjectives.

Chapter 3

Semantics/Pragmatics

In this chapter we shall look at some semantic and pragmatic phenomena relating to nominalization, especially as they relate to discourse. I will argue that ultimately the standard distinction between proposition/state of affairs and event denotation is a bit too stark, and certain mixed readings do seem to occur. Furthermore, in the context of certain verb classes, the verbal gerund class of imperfect nominals seem to behave in rather strange ways, differentiating them semantically from the related *that*-clauses and infinitival complements[80]. Finally, I will focus some attention on coercion (of perfect to imperfect) and how previous formalizations of nominalization leave a lot to be desired in this respect. Please note that formalism will be kept to a bare minimum, and most of the observations or explanations will be of a more phenomenological nature.[81] Ultimately, however, the aim of this chapter is to present an intuitive semantic/pragmatic grounding for the possible influence of discourse function and semantics in regard to the syntactic change in the gerund.

3.1 **Act vs. Fact – Exactly When Does This Distinction Need to be Made Explicit?**

Recall from the 1st chapter the basic, intuitive distinction between the perfect and imperfect in terms of 'act' and 'fact' readings. Only perfect nominals can have act readings, but both perfect and imperfect nominals can have fact readings. Thus:

(1) a. John fixing the sink was surprising (*fact*)
b. John's fixing of the sink was surprising. (*fact*, but on a stretched context, *act* as well)
c. John's fixing of the sink was skilful. (*act*)
d. *John('s) fixing the sink was skilful. (only an *act* reading is available)

In the above scenario, the fact readings can be paraphrased something along the lines of *the fact that John fixed the sink was surprising*. John could be lazy or mechanically inept and the fact that did fix the sink was surprising. In the act reading, it is the manner in which John fixed the sink that was either skilful or surprising. Of course it is rather hard to imagine (but not impossible) a situation where the fact that John fixed the sink was in any way skilful, and since imperfect nominals cannot have act readings, (d) is predicted to have a '*'.[82]

But aside from the 'act', 'fact' axis, there is also another axis to be considered – specific vs. generic. Note that this 'fixing the sink' situation can be seen in both the imperfect and perfect contexts to be 'specific'. One instance of a sink being fixed by John is referred to, and can

[80] Recall that imperfect nominals technically incorporate the verbal gerunds as well as numerous other constructions. As we shall see, there may be much more flexibility in the interpretation of a verbal gerund as opposed to either infinitives of clauses.
[81] The reader is invited to see the formal complementary accounts of Chiercia and Turner (1988) and Hamm and van Lambalgen (2000) as well as the semi-formal accounts of Zucchi (1993).
[82] Trolling around Internet message boards, I've found a few uses of Acc-Ing gerunds with manner readings. In an *EastEnders* message board, someone referring to the authenticity of a fight scene between sisters: 'Zoe smacking Kat around was so realistic…" as a reference to the manner in which the fight was portrayed, not the fact that Zoe hit Kat. This sounds fine to me, but I don't exactly know why a manner reading works here, but not in most other cases. Perhaps there is a sort of ellipsis, and it can be seen as "The scene of Zoe smacking…".

be referenced in either a perfect or imperfect way depending on what one wants to express. Thus:

(2) a. Singing arias is fun.
b. John singing arias is a frightening concept.
c. John's singing of arias is utterly dreadful.
d. John singing arias is a frightening concept. *It [the singing] is completely out of tune.
e. John's singing of arias is rather frightening. It [the singing] is completely out of tune.

Here, all the readings are generic to a large extent[83]. 2(a) has the equivalent paraphrase *to sing arias is fun* and merely applies the property of fun to the generic 'activity' of singing arias – no specific singing of an aria is implied. In fact it has a rather default, normative flavour to it, as can be contrasted with *Every singing of an aria is fun*. One could argue against the latter sentence by appealing to one instance where singing an aria was completely unenjoyable. But with 2(a), one could then reply that in general, at least, to sing arias is fun. Moving on, we get two more generic readings, but contrasted by the act/fact distinction. In 2(b), no specific *singing* event is implied, but again we get a property reading to the effect that *John singing an aria (generically) has the property that it is frightening*. But with 2(c) we get something a bit different. Here the singing itself is referred to – it is the way that John sings arias that is dreadful. Of course (c) can be seen as an explanation for (b), but the act/fact distinction is still in effect here. But with (c), the reading is still generic, and no actual singing of an aria by John is talked about, but rather a property of his singing in general.[84] With (d) and (e) we get a nice illustration of the opacity of the imperfect. The 'it' in (d) cannot refer to the singing, but only the entire phrase *John singing arias*. Witness:

(3) John singing arias is a frightening concept. It would cause fearless men to cower in terror.

But, in (e) any aspect of the singing can be talked about because the singing itself can be referred to. This looks very similar to the phenomenon of N-bar deletion, where only in an 'act' reading can the gerundive part (here it would be *singing of arias*) be deleted in a coordinated context. In this case, since the *singing of arias* bit is as much an N-bar as *dog* is

[83] With (a) we have the paradigm case of Chierchia & Turner's nominalization. The generic *singing arias* and *to sing arias* are nominalized from predicates to objects by a nominalization operation. Thus from the predicate *sing* (x, arias) we get an object **sing** (x, arias) that can then appear in argument position. This is done using Feferman's type free calculus (also used by Hamm and van Lambalgen) which has the nice advantages of allowing self-predication, as well as handling intensionality properly, Note that of verbals, only infinitives and gerunds can undergo this nominalization process, yielding *being nice is nice* and *to be nice is nice*, but not **is nice is nice*. It also has the advantage of getting rid of type-shifting, since a gerund like *having fun* is an object on par with *John's dog*, the predicate *is nice* can be of the same type when applied to either argument.

[84] If we assume that Ing-of nominals denote events (or if coerced, *states of affairs* or something else propositional), it becomes interesting to ponder exactly what the perfect nominal in (c) denotes. If it is an event or events then do we interpret (c) as universal quantification over events that are *singings of arias by John*? If so, the normative flavour is lost, as it seems correct to say that (c) could still be true if one or twice John sang an aria in tune. But even if we interpret (c) with some sort of default quantification that says that enough of John's singing of arias are dreadfully bad, does this quite get the meaning? Suppose a bloodthirsty mercenary remarks upon his job, saying "The pay's bad, but I love all the destruction," does this mean that of the majority of destruction events he has witnessed, that he loves them? Or rather, it is something about the activity of destruction – the smells, the screams, the chaos – that he loves? It seems that manner and event readings need to be distinguished fairly subtly, despite their interrelation.

in *John's dog*, it can be referred to by a pronoun. And like the case of N-bar deletion[85], this should not be seen as only a syntactic phenomenon, but that it lies at the heart of the act/fact distinction. This will be seen in the next section when we see some interesting things that happen in discourse situations.

More generally, it seems profitable to posit a sort of two dimensional axis upon which nominalizations can lie, with the two vertices being perfect/imperfect and specific/generic, with the above examples all lying in slightly different parts of the graph – for example the extreme end of the imperfect-generic quadrant would be populated by such sentences as 2(a)[86], while the perfect/specific end would contain such nominalizations as *The destruction of Hiroshima occurred in 1945*. Furthermore, on the generic end we seem to have two slightly different notions of 'activity'[87], depending on whether the nominal is perfect or imperfect. On the imperfect side, the activity in question is referred to, but its internal qualities are not as easily accessible, as witnessed by the contrast between 5(d) and (e). So two axes need to be kept in mind – generic/specific and perfect/imperfect. The notion of activity seems to lie on the generic end, but whether a perfect or imperfect nominal is used accounts for the difference in focus on that activity. Thus *John singing arias* and *John's singing of arias* both constitute activities. The difference lies then in what can be talked about vis a vis the activity in question. With the imperfect version, the activity can be predicated with any number of properties, but properties 'internal' to the activity itself are out of bounds. With the perfect version, the activity itself is open for prediction, i.e. John's singing is out of tune, or too loud, etc.[88] A parallelism happens on the specific end of things as well – both *John singing the song yesterday* and *John's singing of the song yesterday* 'refer' to a singing event that happened yesterday. Again, the perfect/imperfect distinction holds as far as what can be predicated. However, some rather interesting things seem to happen in the context of discourse that seem to indicate that readings of nominalization can exist all along the imperfect/perfect axis – indeed, at times the readings can be rather muddled.[89]

3.2 **Nominalization in Discourse**

[85] Recall that with a fact reading we still get: **John's fixing of the sink was surprising, but Bill's was more so*.

[86] It seems that it is the imperfect/generics that are often least amenable to be expressed by *ing*-of nominals. For instance *The singing of arias is fun* or *The reading of books is intellectually stimulating* are both fairly awkward. Less so, however is something like *The killing of innocents is wrong* – perhaps a 'killing' context gives rise to the thought of specific *killing* events more so than either *singing* or *reading*.

[87] For what it's worth, while consulting with native speakers, I came upon a fair amount who preferred the generic verbal gerund over the infinitive, as the gerund better expressed 'motion' or 'activity'.

[88] With this example, it seems that the distinction between perfect and imperfect is split along the syntactic form. I find it very hard to get a coerced reading with the perfect. Using *John's singing of arias is never a good thing* to refer to the paraphrase *for John to sing arias is never a good thing* is rather odd. The imperfect version seems much more preferable. With the specific version, the contrast is not so stark, and it is much easier to get a coerced reading for *John's singing of an aria yesterday was surprising*.

[89] This brings up the still open question as to whether there might be a sort of sliding scale from perfect to imperfect or whether there is in fact a third entity that is both event and state of affairs or something else entirely.

We will begin this section by looking at a fair amount of data in mini-discourse form. I take the second sentences to be felicitous if they 'fit' in the context of the discourse, that is, assuming that the first sentence updates the initial context, does the continuation actually make sense. First off are some variations of imperfect nominalizations, with a look at how focus and intonation can seemingly alter the proposition expressed:

(4) Oswald ('s) shooting Kennedy surprised me.

This obviously has only 'fact' readings, but a number of slightly different ones, depending on stress (I will indicate stress (focus) by *italics*).

(5) Oswald ('s) *shooting* Kennedy surprised me. I knew he hated the president, but I thought he would just yell at him.

Here the fact of Oswald shooting Kennedy (as opposed to his doing something else) is a surprise to the speaker.

(6) *Oswald* ('s) shooting Kennedy surprised me. He was a communist. I thought it would be a John Bircher that did it.

The John Birch Society is a notoriously right-wing organization that was much more prominent in the 1960's. Anyway, it is the fact that it was Oswald who'd done it (perhaps speaker figured that *someone* would shoot JFK) that is the surprise.

(7) Oswald ('s) shooting *Kennedy* surprised me. He told me that he would shoot J. Edgar Hoover.

Here it is the fact of *whom* Oswald ended up shooting that is the surprise.

This is, of course, just a small sampling of the various propositional readings of the nominals based on differences in context or intonation, and depending on one's imagination, numerous more are possible.

Interestingly that while most of the above readings seem to work the same with the *Ing*-of version – *Oswald's shooting of Kennedy*, I have problems getting an equivalent reading of (5).

(8) *Oswald's* shooting of Kennedy surprised me. ??I knew he hated the president, but I thought he would just yell at him.

Instead, the most likely reading of the first part of (8) seems to be that there have been a fair number of shootings of Kennedy, and for some reason Oswald's one was surprising. However, as would be expected, readings unavailable with an imperfect nominal, do become possible when the perfect nominal version is used.

(9) a. Oswald's shooting of Kennedy surprised me. He told me that he would use a crossbow, but he ended up using a rifle instead.

b. Oswald's shooting Kennedy surprised me. *He told me that he would use a crossbow, but he ended up using a rifle instead.

Here the infamous 'manner' reading comes back to haunt us. With (9), it is the way in which Oswald shot JFK that is focussed upon – unsurprisingly the opacity of the imperfect nominal in 9(b) makes the continuation infelicitous. So with the imperfect nominal, we can talk about

various aspects of the corresponding event (JFK's assassination), even to the point the shooting itself becomes an issue (see (5)), but the gerund, *shooting Kennedy* is, in a sense, inaccessible in a way that it is not with the perfect nominal. With the above, this seems to be the case as both using a crossbow or a rifle can be seen as different ways of shooting. Even taking *shooting* out of the context doesn't quite remedy the situation.

(10) a. Oswald('s) killing Kennedy surprised me. *He told me that he would use a crossbow, but he ending up using a rifle instead.

b. Oswald's killing of Kennedy surprised me. He told me that he would use a crossbow, but he ending up using a rifle instead.

c. Oswald ('s) shooting Kennedy surprised me. I thought he was going to strangle him.

d. Oswald ('s) killing Kennedy surprised me. *I thought he was going to strangle him (not shoot him).

Strangely, while it is certainly reasonable to hold that crossbows and rifles are different ways of shooting, in the context of 10(a) they are also taken as different ways of killing, and so work just fine in 10(b), where the way in which the killing was done is accessible in the discourse. Notice the difference between 10(c) and (d). As strangulation is not a way of shooting someone, the continuation is felicitous, and again, since strangulation will be conceived as a method of killing someone.

But this is not to say that manner can never be referred after the context is updated with an imperfect nominal. Take the following sentences, with a standard propositional reading of the imperfect as *that Oswald shot Kennedy was surprising*.

(11) Oswald shooting Kennedy surprised me. *It was right on target, which I thought was impossible.

Once again, *shooting well* can be conceived as a possible way of shooting, and so the continuation is not felicitous. But, take the conspiratorial view of the event as propounded in numerous books, movies, etc. Suppose the speaker has this in mind, and that what is surprising is that Oswald would have been able to shoot Kennedy, since the position, timing, etc. made this outcome well nigh impossible. With this in mind, (11) makes much more sense, and the 'being able to' reading in a sense allows us to take about the manner of the activity referred to by the imperfect nominal. Whether one gets the standard imperfect reading or this hybrid 'being able to' reading seems largely an interplay of context, world knowledge and the lexicon.

(12) a. John shooting a bull's eye was impressive. He's blind, but he shot it by echolocation.

b. John washing the dishes was surprising. ??He turned on the water, added soap, and just did it.

c. John washing the dishes was surprising. He's normally such a lazy, sloppy man.

Shooting a bull's eye is something that is inherently difficult, and a continuation with a reference to the way it is done is unproblematic. On the other hand, washing dishes is rather mundane and inherently simple, making a 'manage to' reading far less likely.[90]

Manner readings can also be snuck into the discourse after specific, imperfect nominals. Imagine a situation where John, a tenor, has recently undergone throat surgery. Against doctors orders he decides to give an impromptu performance for his friends.

(13) a. John singing an aria yesterday was surprising. I didn't think he would recover so fast.
b. John singing an aria yesterday was surprising. *It was very beautiful.
c. John's singing of an aria yesterday was surprising. It was very beautiful.

So far this all accords with expectations, the perfect nominal *John's singing of an aria* allows the pronoun 'it' to be anaphoric and be an argument for a predicate as to the manner of the singing in question. However, notice what happens when a discourse particle is inserted, breaking up the continuation.

(14) John singing an aria yesterday was surprising. Still, it was very beautiful.[91]

What seems to be happening with (14) is that while the event denoted by 13(c) is not semantically denoted, it is nevertheless available in the discourse context. What is needed to refer to it is some kind of break in the discourse continuation (here accomplished by a particle). Notice that 13(c) and (14) do have slightly different readings. With 13(c), what is surprising is that John sang so beautifully after throat surgery, while with (14) what is surprising is that he sang at all. But after the first sentence of (14) is uttered in the given context, the actual event of John's singing is now available. The particle *still* serves as a sort of trigger, telling the listener that the focus has changed slightly (from the fact that John sang to the event itself), and the continuation is now felicitous. The moral to be drawn from this, I think, is that while specific imperfect nominals may indeed not denote events, they nevertheless 'presuppose' a related event that can then be referred to in discourse, further muddying the distinction between event and fact, manner and proposition. But before looking deeper into the interrelation between manner and fact readings (and how this may affect coercion of perfect nominals), I would like to show a few cases of verb classes where the verbal gerunds have quite strange readings, and the analogy with other imperfect nominals seems to break down. Alas, I have no explanation for exactly why this happens, but it is worth pointing out nevertheless.

[90] Stranger still is that the perfect nominal *John's shooting of a bulls eye* is rather awkward in the above sentence, as in *John's shooting of a bull's eye was impressive* (or surprising, shocking, etc). Because of the nature of the act, it seems that an imperfect nominal is enough to get a sort of manner reading.

[91] Of course, the actual particle used doesn't matter so much – *but, nevertheless, and it was also*, etc. all seem to work fine. What is important is that the direct continuation after the sentence with the imperfect nominal is broken, which seems to allow for much more freedom in the way the discourse is continued. I suppose a shrugging of shoulders accompanied by an inarticulate grunt would do just as well

3.3 **Heretical Readings of Imperfect Nominals**

Take the following scenario: I have a good friend, Mary. Out of the blue she disappears without a trace. I am saddened and also rather confused as to what happened. At this point, all I can really say about the situation is that:

(15) I understand that Mary left Amsterdam suddenly.

Not content to leave a mystery lie, I decide to do a little detective work and discover that Mary had inadvertently gotten herself deeply involved with the mafia. In fear of her life, she left Amsterdam without a trace. Now, with some amount of relief – still sad, but at least not completely confounded anymore – I can exclaim:

(16) Ah, now I understand Mary leaving Amsterdam so suddenly.

Notice that (16) is in no way synonymous with (15). The nominal *Mary leaving Amsterdam so suddenly* is not equivalent to a proposition or *that*-clause at all, but instead seems to be the denotation of an embedded *why* question, and more or less synonymous with:

(17) Ah, now I understand why Mary left Amsterdam so suddenly.

How this would be represented formally, I have no clue, as I've yet to see a decent semantic account of *why* questions. More interesting is the phenomena that when *understand* is combined with a verbal gerund it no longer selects for propositions[92] but for the denotations of *why* questions.

Verbs of 'recollection' also seem to have a strange effect on verbal gerunds.

(18) I remember Mary swimming across the English Channel

certainly has a reading that implies

(19) I remember that Mary swam across the English Channel

but, this does not completely exhaust the sentence. Instead, we can get the same sort of reading the would happen with the derived nominal:

(20) I remember Mary's swim across the English Channel

The main point, with (18), but not (19) there seems to be a direct reference to a remembered event. To utter (18) or (20), it is arguable that one would actually have had to witness the event in some way – in person, on television, radio, etc. For (19) to be felicitous, one only need to have heard that once upon a time Mary had a successful swim. For example, suppose I have read somewhere that Mary swan the Channel in 1947, and am at an elegant dinner party. In the midst of a witty anecdote, I wish to allude to this information – in this case, only (19) will do. Certainly, one could continue (18) directly with a detailed description

[92] *Understand* can select for a number of denotations: propositions, things, ideas, and why questions. "I understand the theory of relativity, finally" or "I just can't understand John". Interestingly, if the progressive is used, then we are back to an imperfect reading, akin to an infinitive: "I understand Mary is leaving town tomorrow", "I understand that Mary is to leave town tomorrow."

of the swimming event as one's own recollection. Note also, that (18) has the default flavour of the progressive in certain aspectual classes. With an activity, such as:

(21) I remember John pushing a cart

the implication is that John has pushed a cart; but with an accomplishment like that in (18), one could imagine a scenario where Mary indeed did not make it all the way across, but was stung to death by jellyfish 50 km. from Dover. This is not a possible reading for (19), as the implication is that Mary indeed made it across the English Channel in one piece. This is normal behaviour for verbal gerunds – with:

(22) Mary swimming across the English Channel was quite unexpected

there is no doubt that Mary was successful,[93] and to continue with "too bad she died half-way through" is infelicitous.

Ultimately these phenomena may be connected to the class of verbs of perception. As noted by Emonds and others,[94] rather strange things happen in the context of verbs of perception. Similar to the case with (18), something akin to a progressive reading happens to gerunds in perception contexts.

(23) I saw John crossing the street. Unfortunately, *he* didn't see the lorry heading straight towards him.

If, indeed, the recollection in the first case is the recollection of perceptual experience, then the strange reading may be a result of what happens with verbs of perception, though this only moves the problem into an investigation of verbs of perception.

3.4 **Coercion**

Recall the observation first made by Vendler that often when a perfect nominal is used in a wide container, it is coerced into having an imperfect reading. The stock examples being:

(24) a. The collapse of the Germans occurred in 1945. (perfect)
b. The collapse of the Germans is unlikely. (imperfect)

where 24(b) really has the meaning *that the Germans will collapse is unlikely*.[95] Hamm and van Lambalgen (2000) utilize this observation by dividing the class of wide and narrow containers into having separate selection properties. Wide containers select for sets of *fluents* (or propositional functions defined on those sets), while narrow containers select for

[93] Otherwise, one would say "Mary attempting to cross the Channel was unexpected. And rather stupid, as she should have known she'd never make it."
[94] See Higginbotham (1983) for detail on verbs of perception and perceptual reports.
[95] I'm not sure that I buy this completely. Certainly 24(b) entails the *that*-clause reading, but there may be a bit more to it than that. From a current historical perspective, should one utter, "The collapse of the Germans seemed highly unlikely, but nevertheless it happened", it seems that though there is an imperfect aspect, the actual event of the German's collapse is being referred to, at least obliquely. This may be just another example of an imperfect use allowing the corresponding event into the discourse, but I am not sure.

event tokens.[96] Different selection properties for narrow and wide containers account for the distribution facts of imperfect nominals, in the sense that since the narrow container, *occurred at noon* selects for event tokens, put a term that denotes a fluent leads to a term mismatch, and thus predicts correctly:

(25) *John singing *Hare Krishna* occurred at noon.

In the case of 24(b), the event type denoted by *the collapse of the Germans* is then 'coerced' into having an imperfect reading by defining a canonical fluent by nominalizing the event token
Happens [Collapse of Germans, t] via the Feferman calculus.[97] This all works rather well, and if we stick to examples like in (24) it seems all rather unproblematic, as *is unlikely* does seem to only select for imperfect readings. However, with many other wide containers there do seem to be reasons to think that they select for both perfect and imperfect readings. Take a slight variant on Parsons' example from Chapter 1. Again suppose that the King just happens to be the tallest and the public is eagerly awaiting the beheading of said spy, only to find out that the proverbial fish does indeed rot from the head. Then both,

(26) a. The beheading of the king was shocking
b. The beheading of the tallest spy was not shocking.

can be true, given that the sentences at least imply the *that*-clause interpretation, i.e. that it was the king being beheaded was shocking, but the tallest spy being beheaded was not shocking in the least. But now imagine the beheading, the event itself, was quite a gruesome affair. An incompetent executioner forgot to sharpen the blade of the guillotine and it ended up being a rather bloody mess. In this context, on a manner reading, a speaker can only felicitously utter 26(a) if he would also be prepared to accept that the manner of the beheading of the tallest spy was also shocking – recall at this point that the king's secret identity has been revealed. But at the same time, the fact that the king was beheaded might still have been shocking, even if the beheading of the tallest spy was not.[98]

But if perfect nominals are always coerced into a canonical fluent when used as arguments of wide containers, the 'eventive' reading of 26(a) cannot be accounted for. Therefore, some

[96] *Fluents* are their semantic denotation for imperfect nominals (save the habitual ones that occur in *Mary practiced eating apples*), while *event types* are the denotation of perfect nominals. In the Event Calculus there is a *Happens* predicate that when applied to an *event type* yields an *event token*. Without delving into the complex formal theory, think of fluents as half-open intervals on the reals (to be viewed as instants of time) of the form (a, b], where a is the instant where an event starts the fluent and b is the instant of the stopping event. Essentially we can think of fluents as functions from truth-values to time points. Thus the imperfect nominal *John singing Happy Birthday* would consist of all the intervals where John is singing Happy Birthday. The initiating and terminating events would be whatever caused the singing to start and stop. Event types are derivative of fluents in the sense that they are defined as the sets of time points that are initiate or terminate the fluents. One nice thing about this is that the strong interrelation between the imperfect nominals and corresponding events is coded into the model.

[97] One nice convenience of the nominalization process in their paper is that intensionality is taken care of. For example, even if the King happens to be the smallest spy, the fluents coerced from event tokens in *The beheading of the King* and *The beheading of the smallest spy* will be distinct terms. Note also that imperfect nominals work the same way, but that extensionality on event types is enforced by an axiom, and so if the beheading of the King occurred at noon, then of course the smallest spy lost his head at precisely the same instant.

[98] This is, admittedly, a rather contrived example, but I think it makes the point. Should this have been an actual situation, it is doubtful that one would say the apparently contradictory *The beheading of the tallest spy was both shocking and not shocking*. Rather, in order to differentiate the imperfect and perfect aspects: *The tallest spy being beheading was not at all shocking, but the beheading itself – oh my!*

modification need be made, and a coercion strategy must be developed.[99] The first thing that must be done is to make a more fine-grained differentiation between the wide containers.[100] For example, *predicted* and *is unlikely* and similar wide containers seem to only select for propositional readings.[101] On the other hand, emotive and reactive predicates like *is surprising, shocking, made me ill,* and the like can have either a event or propositional reading. So perhaps the concept of container should be expanded to include narrow, wide, and extra-wide containers, the latter being those that can not only take imperfect and perfect nominals, but can also select for either a perfect or imperfect reading. More research would need to be done to determine whether these three container distinctions can be described generally in terms of verbal classes, or whether they must be specified in the lexicon at an individual level.

The second, and trickier part, is to develop a processing strategy that can determine for perfect nominals in extra-wide containers, whether there is an event or propositional reading. As seen in the Prologue, this can sometimes be completely determined by context, where the (b) sentence of

(27) a. The anti-globalisation demonstrations in Seattle, 1999 were shocking.
b. The anti-globalisation demonstrations in Genoa, 2001 were shocking.

almost certainly has an event reading, as the fact that there were demonstrations in Genoa could only be shocking to someone who has been living a planet several light years away for a number of years, and has yet to receive any television feeds or other information from 1999. However, 27(a) does seem underdetermined, and even in historical context either an imperfect or perfect reading (and perhaps both) is still possible. One rather simplistic way of determining exactly which reading is denoted would be to ask a speaker of 27(a) exactly what was shocking. Should she reply, "I thought social activism in the U.S. was dead," then it is most likely an imperfect reading. But should she reply, "I really didn't think they would be smashing the windows of banks, McDonalds and the Gap," then it is certainly an event reading.

Another possible method is to look how a sentence is used in a broader discourse. As demonstrated before, imperfect readings seem to be opaque as far as reference to anything about the activity denoted by the gerund.[102] So the perfect nominal in 13(c) must be

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[99] This is not at all devastating for Hamm and van Lambalgen (2000). One need only change the denotation of wide containers to allow them to select for event types and tokens (generic activity or specific event). The only difficulty is then to establish which of the wide containers can select for events and develop a processing strategy to determine whether a given perfect nominal is to be interpreted as a fluent (or set of them) or as an event. Note also that while Hamm and van Lambalgen (2000) does not account for imperfect generics such as *singing songs*, this is quite easy to remedy. A result in Hamm and van Lambalgen (2001) shows that each fluent uniquely corresponds to a finite set of intervals. One only needs a function that associates a given fluent to a pair consisting of the fluent and the finite set of intervals. This parallels the event type, event token distinction.

[100] Just as imperfect nominals are a more heterogeneous grouping than the perfects, wide containers also seem far more varied and productive. For the most part narrow containers can be seen indeed as quite a narrow class, consisting mainly of temporal and geographic locatives (i.e. *occurred at noon, happened in the courtyard*) and sometimes manner modifiers such as *was slow,* or *was skilful*, although the manner modifiers may indeed be able to take imperfect nominals as arguments in certain cases. I am not quite certain, but *Shooting a bulls eye is skilful* seems OK. Of course, we do have a 'manage to' reading in this case which may have something to do with it.

[101] Propositional may not exactly be the right term. As Zucchi (1993) argues, a state of affairs may be a better way of describing it. I am making no assumptions by using the term 'propositional' and only mean it to refer to an imperfect reading.

[102] I have been toying with the idea of 'sub-fluents'. For instance if *John shooting* denotes all the intervals of time points where John is engaged in shooting, then *John shooting with a gun* or *John shooting with a crossbow* would be subsets of the set of fluents generated by *John shooting*.

interpreted as an event, since the continuation makes explicit reference to the manner of John's singing. But had the continuation used a discourse particle to break things up, then there is a strong possibility that the reading of the nominal is imperfect and 13(c) would have the same meaning as 13(b), i.e. that John sang so soon after surgery was surprising, and furthermore, his singing was beautiful (in spite of the recent operation).[103] Note that because manner references are still possible in discourse even if only imperfect nominals are used, we need some sort of concept of direct, local continuation[104], as there is a reference to a subfluent (see footnote 20) in (14) after a sentence with an imperfect is used. But since the discourse flow is broken up by the particle, it is unproblematic.

3.5 **Conclusion**

In the previous two chapters we first observed some basic syntactic and semantic facts about nominalization in Present Day English, as well as how things have changed a great deal with time, and that even in PDE some rather strange oddities still exist. In this brief chapter, I tried to show that perhaps the imperfect/perfect distinction is not quite so cut and dried as previously assumed. Indeed, there is a great deal of flexibility in using imperfect nominals, and they can be used, at least implicitly, in situations that refer to an event or the manner of an activity. Ultimately, the majority of these phenomenological observations would benefit from formal rigor; unfortunately, this is not the place to do so here, although I would like to pursue this in the future. The not fully worked out theory given here, especially as in regard to the *use* of nominalization has been presented as it contrasts rather strongly with diachronic usage, indicating that semantic factors may have contributed to changes in language use.[105] For example, it seems that despite the possibility of coercion, the use of perfect *ing*-of nominals is now often restricted to cases where a direct, local reference to event or manner is needed, as is always the case with narrow containers. I will ultimately argue that this is a result of the changes described in the preceding chapter, and that imperfect nominals have taken up much of the work formerly done by *ing*-of nominals, and that *ing*-of nominals have become much more marked in interpretation than was the case even one or two hundred years ago. But first, the explanations behind language change

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Similarly, *John singing beautifully* would be a sub-fluent of *John singing*. It seems that there can be no direct discourse continuation of a sentence containing an imperfect reading (including a coerced perfect nominal) that is a 'reference' to a sub-fluent of the fluent generated by the nominal. Witness 13(b), where the (disallowed) continuation refers to the way John sang, essentially a sub-fluent of *John singing* (this is not fully worked out and I don't know how the temporal locative, temporal locative *yesterday* figures in). But when the continuation is broken up by a discourse particle, the singing event implicit in the context from the utterance of the first part of 13(b) is accessible.

[103] In actual use my feelings for the language would actually preclude something like this happening. I would almost exclusively use 13(b) to express this reading. My own feeling for *ing*-of perfect nominals is that attention is almost always focussed on the activity or event, and some internal properties of it. Thus I can conceive of few circumstances where I would say "John's singing of the aria yesterday was surprising" if I only meant to say that John sang an aria yesterday was surprising. The *ing*-of nominal seems to put attention on the singing itself, but I would not complete rule out the imperfect interpretation. Again, this may be my own dialect, but the same does not hold for derived nominals and should I wish to express the imperfect reading of 27(a), I would use exactly that language.

[104] There might be a way to take inspiration from Asher and Lascarides (1999) theory of discourse relations. Perhaps the continuations in question can be considered as elaboration or explanation. Back to the singing example we have explanations as to why the nominal in the first sentence is surprising, whether because he is just recovering from throat surgery, or that he sang beautifully. The particle blocks the next sentence from being interpreted directly as an explanation, but rather an additional observation.

[105] I have in mind, iconicity, blocking effects and economy factors here.

need to be described in more detail, and applied to the case at hand. This is the next chapter.

Chapter 4

Language Change

4.1 **Introduction**

As seen in the previous chapter, the passage of time has brought about a fair amount of change in the grammaticalisation of the English gerund. A change in which a purely nominal form splits into a form that is simultaneously has both verbal and nominal features – something that seems to exist only in English (in comparison to the other Germanic languages). We have also looked at a couple of explanations for this change – first at the conflation theory, which leaves quite a lot left unexplained, and then at Houston's speculation, which fleshes out the phonetic/morphological change of present participles and gerunds with shared discourse/semantic function. What's missing here, however, is a mechanism that justifies the sort of change in which language use of certain syntactic forms with a similar semantics can actually bring about a new syntactic construction into the language. I will try to rectify this somewhat here, as well as explore the further effects in English brought about by this split into a verbal and nominal gerund. First, however, we will look at language change in a more general light, before turning to a rather spectacular example from Warner (1995), which documents some rather startling changes in the closely related progressive, and *be* in general.

The first thing to note about any theory of language change is that it cannot be required to be predictive. That is, there is really no way to look at the state of English or Dutch in the year 2001, and then predict exactly how either English or Dutch will be spoken two hundred years from now[106]. A hypothetical Roman linguist situated in Britannia around 400 A.D. would most likely think that the majority of inhabitants in 1500 A.D. would probably speak some variant of the strange Celtic languages spoken by the local 'savages'. He would have no way of knowing that a few hundred years later, the island would be overrun by Germanic tribes speaking a west Germanic language. And he would also not be able to foresee that the invasion and settlement of Vikings in the northeast would in turn cause this now prevalent west Germanic language to lose inflection and morphological case marking, thus contributing to increased use of prepositions and the development of a canonical Subject-Verb-Object word order. Or that this 'creolised' language would also experience rather dramatic changes in the lexicon because the newly installed French nobility needed some way of communicating with the native peasants[107].

History, assuming Hegel was wrong, is contingent. Language change being a product of history is therefore also contingent. And this is the case even given the strong assumption that the language faculty (Universal Grammar) is a biological/mental organ situated in the brain/mind. That is, even if a finite number of parameter settings determine an individual's grammar and sentence generation, exactly how and why these parameters are set are nevertheless a product of contingent historical factors. Japanese and English differ in a fair amount of parameter settings (for instance English is Verb-Object, Japanese, Object-Verb). But there is no necessary reason that 200 million or so people in an island cluster off the eastern coast of China and Russia should speak a language we call 'Japanese', and people in a variety of places such as Britain, North America, Australia, parts of Africa and the Caribbean all speak various versions of a language we call 'English'.

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[106] If indeed the languages exist at all. I remember reading an interview with a former Dutch education minister who was convinced that in 100 or so years Dutch would no longer exist, having been fully replaced by English. This is most likely an overreaction.

[107] This rather brief description of the development of modern English is not meant to be perfectly accurate and complete (many details have been left out), but rather to illustrate the contingency of language change in general.

So if a theory of language change cannot be purely predictive, can it still be something more than merely a nice description of morphological, phonetic, and syntactic changes? Ideally, at least, a theory of language change should be explanatory. That is, given a host of surface changes, we should be able to attribute them to a root cause or causes. Once the contingent factors are taken into account, one would then hope that a theory of language change can be explanatory as to what happened; that is, given a host of unpredictable, contingent changes and a given linguistic system, there should be 'predictiveness' as to the changes that did take place. Take the rather simplified explanation for the change in English word order given above. It starts with a variety of contingent historical and social changes. But now look what happens when inflection and morphological case is lost. Given that the primary function of language is communication, and that the agent/patient (and indirect object) distinction is rather important for clear communicative purposes, it seems reasonable to assume that the language will develop some other way to mark case. In English this manifested itself in increased preposition use and a more fixed word order – and so the rather dramatic switch in word order can be explained by the prior loss of morphological case. So given the levelling that happened on theway to middle English (probably as a result of the Viking settlements), the switch to a fixed SVO word order should then be expected by a theory of language change. What is not predictable are the historical contingencies that brought about the levelling of inflection. Now the above illustrated change has a good deal of 'reasonableness' about it. Once the contingent and morphological facts are known, one would expect English to change in some way or other to compensate for the lack of case marking. But other times, a small, seemingly innocuous change can bring about 'catastrophic' changes[108] in the language. For instance a change in one parameter will affect surface forms (the class of sentences generated), and in turn this change in surface form can percolate through the language and cause various other changes until a new equilibrium is reached.

Warner (1995) attempts to show how a social change in the language caused a small parameter setting to change, which then culminated in the final step of the grammaticalisation of the modern English progressive, as well as a variety of other, at first seemingly unrelated changes, in a logical, comprehensive framework. I will attempt to supplement this syntactic change with a look more socially based language change explanations from Labov and the Milroys to explain how these changes actually spread through English society. This examination of the evolution of the passive progressive may seem a bit of a digression, and it is to a certain extent. However, this rather small change in

[108] For a nice summary of catastrophe theory and language change see Lightfoot (1991). Catastrophe theory was first developed by the French mathematician René Thom to model discontinuous change such as the point where water turns into ice. It was further applied to various fields such as economic and social systems – for instance small changes in economic inputs can change an economy's GDP quite dramatically (this example from Casti (1994)). Assuming that the various economic inputs (interest rates, consumer spending, money supply) all contribute to determining a particular point in the state space of the economy. So we can envisage a surface of points where the GDP can be depending on the various inputs. Normally, if the inputs change slightly, there is a corresponding slight change in the level of GDP. But sometimes, there is a discontinuous shift to an entirely new region of the surface. This happens when there is more than one fixed point that the system is attracted to, and we get rather rapid change, followed by the setting of a new equilibrium (imagine an 'S' curve). This collection of inputs that causes a discontinuous change is called a 'catastrophe' point.

Kauffman (1995) has a nice example of a sandpile on a table, which has small amounts of sand added to it at a constant rate. Most of the time there will be small avalanches, but occasionally a grain of sand identical to those that were only causing small avalanches, will cause a rather large avalanche to occur. And while in general we can predict that more small avalanches will occur than large ones, there is no way to tell in advance exactly what a particular grain of sand being added to the pile will do.

I believe that it was actually Thom who first suggested that this model could be applied to language change, and for the purposes here I will not go into any of the mathematics involved, but only take it to be a metaphor. In language as well, as small change in input can give rise to some rather dramatic, unpredictable changes.

the early 19th century serves as an excellent example of how to look at language change, as syntax, semantics, pragmatics, and social interaction all play a part, and this seems to be the case for language change in general. Furthermore, the evolution of the progressive, in general, is related to the evolution of the gerund, and certainly puzzles remaining regarding the use of a passive or active progressive also apply to questions of use of the passive or active gerund.

4.2 **Warner and the Passivisation of the Progressive:**

Prior to the late 18th century, sentences such as

(1) The house is being built

were ungrammatical, and do not appear in written records at least, aside from a few marginal examples.[109] To get something approximating the sense of a sentence like (1), a speaker could use explicit passive marking or explicit progressive marking, but not both:

(2) I went to see if any play was acted (Pepys, 1662) – passive, no progressive

(3) a. The house is building -- progressive, no passive
b. Whilst the Anthem was singing I was conducted by the Virger to the Pulpit (Woodorde, 1784)

By 1769, we can see the beginning of something resembling the progressive passive

(4) There is a good opera of Pugniani's now being acted. (Mrs. Harris in *Lett. 1st Ld. Malmesbury*)

With (4) having the sense, in contrast to (2), that the opera is still being performed – not necessarily literally at the time of speech, but in the more general sense that the opera is still running. But the paradigm case of the emergence of the progressive passive comes from 1795, and is from the writer Robert Southey in a personal letter:

(5) …like a fellow whose uttermost upper grinder *is being torn out* by the roots by a mutton fisted barber. (Southey, *Life & Correspondence)*

In keeping with the theme of personal correspondence, the majority of the early examples on record also come from letters or diaries (for the most part from other writers who were acquainted with Southey) and took a bit of time to appear in public print. According to Visser, the writer Macaulay never used the progressive passive in his literary works, but did use it occasionally in his correspondence.[110] Visser also illustrates at how ill-received this new form was among the established literary community and grammarians, who lashed at it and its users with a venom that one would think would be reserved for the most brutal criminals.

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[109] From Pepys (1667): "thinking to see some cockfighting, but it was just being done; and therefore back again": While there is a [copula + *being*] combination, the sense of *being done* seems resultative and not durative, that is at the temporal reference point the cockfighting had been finished, and was not still going on.

[110] See Visser (sec. 2158) for a nice history of this form, as well as numerous quotes from literary magazines, grammarians, etc. decrying the blasphemy of the progressive passive. Visser also makes another rather curious remark. He speculates that British authors had become familiar with Dutch and/or German and felt the lack of an equivalent English form to 'het huis wordt gebouwd' or 'das Haus wird gebaut'. Interestingly, the OE *weordan*, the equivalent of the Dutch *worden*, seems not to have survived into Middle English.

Hall, in his book, Modern English (1837), speaks of it as "an outrage upon English idiom, to be detested, abhorred, execrated, and given over to six thousand penny-paper editors." And as much as a century after its introduction, it was still abhorred and execrated by some, but by that time seems to have become a quite regular construction.

One of the main arguments against the progressive passive was that it was entirely unnecessary; a sentence like (1) was never really ambiguous at all. That is, it would only be used when there was no doubt that the noun was the patient of the progressive and not the agent. Thus, we all know that houses do not build themselves or anything else, and so the only reading of (1) is that the house is indeed being built by someone[111]. And going over the numerous examples in Visser and Jespersen this does seem generally to be the case. Thus, 'supper is preparing', a ceremony 'was performing', etc. But I have found a few examples that casts doubt upon this a bit:

(6) a. his native country, where his children *were breeding* (DeFoe, 1719)

b. A slave of his, a vicious ill-conditioned fellow, but that had the precepts of philosophy often ringing in his ears, having for some offence of his, been stript, by Plutarch's command, whilst he [the slave] *was whipping* muttered at first that he did not deserve it… (Montaigne, translated by Cotton, said to be 'a masterpiece of idiomatic English', 1670)[112]

However, one might be able to justify the sentences in (6) on some sort of pragmatic grounds – children do not breed (young ones at least) and slaves are whipped and do not whip, unless they are de Sade characters. Nevertheless, this form still does exist in English in many cases and uses such as 'the play is showing', 'the cake is baking', 'the plot is hatching' are perfectly acceptable, even if 'the supper is preparing' or 'the house is building' are quite bizarre – this issue will be looked at after an examination of Warner's (1995) rather startling explanation for the development of the real passive progressive ('the house is being built').

Warner's thesis is that a socio-linguistic change in the early 18th century triggered a number of changes in English grammar,[113] changes that are rather remarkable, as they seem to have little or nothing to do with the initial change in question. But before revealing exactly what the social change is, we will first take a brief look at a few of the other changes that Warner claims are connected with the change in the progressive.

VP-Ellipsis: In general, VP ellipsis is insensitive to morphology, and in a coordinated sentence the VP that is elided need not be of the same inflectional form as the initial VP. Thus:

(7) a. If John comes, then Mary will too. [sc. will come too]
b. Mary went to Paris, but John didn't [sc. go to Paris]

but:

(8) a. *If Mary was here yesterday, then John will today.

[111] Recall that before the gerund developed a verbal form and began to passivize, there certainly was agent/patient ambiguity.

[112] The quote in parentheses is from Richard Grant White (1871) who attributes sentences having the same form as (1) as being related to the old form "He was a-hunting of a hare" and the like. Somehow the preposition (which could also be 'in' or 'on' was dropped causing confusion.

[113] Warner models this in terms of HPSG, so it is more accurate to say that the social change had a 'catastrophic' effect on the lexicon, lexical redundancy rules, and the inheritance hierarchy for auxiliaries. Indeed, it seems a prime motivation for Warner here is to show that HPSG can be a useful framework to handle language change.

b. If Mary was here yesterday, then John will be here today.
c. *If Kim was angry at Bill, then John certainly will.
d. If Kim was angry at Bill, then John certainly will be.

In (7) there is a retrieval of a 'sloppy' identity that disregards the contribution of tense. Thus if the antecedent of 7(a) is analysed as [tense + V] (or VP), the V(or VP) element can still be retrieved, disregarding tense. And note with 7(b) that this retrieval works even with an irregular verb like *to go*. But as we can see from (8), this doesn't work at all for *be*, and seems to suggest that *be* may not be part of the general verbal paradigm. That is, it seems to suggest that *was* is analysed like an ordinary verb, [past + *be*], but instead is a completely separate lexical item. However until the early 19th century, this was not the case – Warner gives a couple of examples from Austen (many more examples can be found in Visser (sec.1752):

(9) a. I wish our opinions were the same. But in time they will (sc. be the same) (Emma, 1816)
b. 'And lady Middleton, is she angry?'
'I cannot suppose it possible that she should.' (sc. be angry) (Sense and Sensibility, 1811)

Both sentences in (9) are ungrammatical in modern English, and at the very least need the 'be' at the retrieval site to be grammatical, i.e. 'I cannot suppose it possible that she should be' is perfectly grammatical, and the 'angry' bit still understood as ellipsis. So, in comparison to the data in (7) and (8), it seems that prior to the 19th century *be* behaved more like an ordinary (albeit morphologically irregular) verb.

Double –Ing: Warner argues that in modern English, *being* is subcategorised to not permit an *–ing* complement, but again until the early 19th century, this was perfectly fine:

(10) a. *Being going to the opera tonight, I rented a tuxedo.
b. As I am going to the opera tonight, I rented a tuxedo.

(11) a. Two large wax candles were also set on another table, the ladies being going to cards (DeFoe, 1726)
b. …he being now going to end all with the Queene… (Pepys, 1661)
c. …and exclaimed quite as much as was necessary, (or, being acting a part, perhaps rather more,) at the conduct of the Churchills, in keeping him away. (Austen, 1816)

Again, this is evidence of some sort of change with 'forms' of *to be*. Finally,[114] note that only finite forms of *be* can be followed by *to* + infinitive complements, and only *been* can occur with a directional prepositional phrase:

(12) a. Mary was to go on a holiday, but she had too much work to do.
b. *Mary will be to go on a holiday, if her workload allows it.
c. Mary thinks she has been to the moon.
d. *Mary thinks she was to the moon.

[114] These are not all of the changes Warner connects to the initial socio-linguistic trigger. *Have* (as auxiliary) also went under numerous changes as well (*is having* started appearing), but this needs a slightly different and rather complex argument, which I choose to ignore for the purposes here.

And once again, this is something that changed in the early 19th century:

(13) a. You will be to visit me in prison with a basket of provisions (Austen, 1814)
b. I was this morning to buy silk. (Goldsmith, 1762)

Warner concludes from the above that in the PDE lexicon BE is entered as a series of morphosyntactic categories, all with different subcategorizations[115]. In fact, there is no productive inflectional relationship between the various forms of BE – we can view them all as distinct, frozen, lexical items. Thus *been* has its own special subcategorization properties that allows it to occur with a directional prepositional phrase, as is the case of the restriction of *is to* to finites (i.e. **be to leave*). The lack of VP ellipsis can also be explained by this non-productivity, as ellipsis is only allowed when it is ellipsis of an identical form as in:

(14) If Mary will be here, then John will too. (sc. be here).

And as to the passive progressive, Warner postulates that *being* underwent a feature change in the 18th century. Prior to this point, Warner supposes that English grammar formed a progressive passive participle with ordinary verbs as in 'the supper is preparing'. It was a grammatically distinct from the active progressive participle ('Mary is preparing the supper') in its subcategorisation, but is specified for the same features: [+PRD, +ING, etc.]. The progressive passive participle is then replaced by *being* + nonprogressive passive participle (i.e. 'The supper is being prepared'). If this is the case (the obsolescence of 'preparing' and the like as a passive), then a rather interesting puzzle arises. We shall examine this in a subsequent section.

Before the 18th century *being* could not be used as a predicate (like an ordinary verb like *loved* or some adjectives like *tall*), and thus *is being* would not be allowed – the HPSG notation for this is [-PRD] and [+PRD]. Warner treats all non-progressive *ing* forms as non-predicational [-PRD], and progressive *ing* forms as predicational [+PRD]. Thus if *being* (along with all auxiliaries) was [-PRD], then there could be no progressive *being*.[116] This in turn, could also explain the loss of double *–ing* forms as seen in (11).

There is a point in time when language learners enter all forms of BE individually in the lexicon,[117] losing, along with all auxiliaries and modals, their regular inflectional properties, now only associated with full verbs. The individual specification of *being* can now override the auxiliary default of [-PRD] and be used as if it were [+PRD], and hence *is being* is born. Now according to Warner, the progressive *being* will still retain the subcategorisation properties of the original, non-progressive *being* (and of non-progressive participles in general), occurring with a full range of predicative phrases, including VP's with passive and progressive participles.[118] This is the situation with the first language learners in the new paradigm. Warner then imagines the output of these learners, which will be the primary linguistic data of the next generation. He presumes that this new generation would not have heard many double *–ing* progressive forms like *is being singing* due to the rather redundant

[115] For example *was* will be entered into the lexicon with the information that it is 3rd person, singular, past finite indicative (along with its own subcategorisation properties). But there is no productive relationship *was:be* that we have with *loved:love* or even the irregular *went:go*.
[116] It is a bit more complex than this. *–Ing* forms can be either [+PRD] or [-PRD]. Since there was still a productive relationship of *being* to *be*, *being* would be analysed as [*be* + *-ing*] and have the properties of both. As *be* was an auxiliary, it would be [-PRD]; hence we get a non-progressive *being* as the default. Warner contends that with the frozen lexicalisation of *being*, there is an individual specification for [+PRD] that can override the default that auxiliaries are [-PRD].
[117] The reason for this will be explained shortly.
[118] And this was the case for the passive gerund as far back as the 16th century. Thus in "Being killed is unpleasant", *being* takes the predicative phrase 'killed'. If the progressive *being* can also take predicative complements then 'John is being killed' is fine.

semantics. Therefore, a subcategorisation for *being* that doesn't allow an *–ing* complement is established.[119]

So we can see a paradigm shift for *be* that affects a whole host of phenomena, including the development of the passive progressive. But this obviously brings up the question as to why the paradigm changed in the first place. The partial answer may lie in a seemingly innocuous social change[120].

By the beginning of the 18th century *thou* and *thee* were lost from informal spoken English. Therefore, the final link between modals and ordinary verbs as to inflection is lost. Notice that without

(15) a. Thou canst
b. Thou wilst
c. Thou shouldest
d. Thou shalt.

modals completely lack inflection. By this time modals had already lost tense (**canned*, **musted*), an *ing*-form, and other verbal properties (this started in the 16th century). So with the loss of the 2nd person familiar, modals ceased to have any properties of verbal morphology, and consequently children then abduced a grammar where verbal morphology and morphosyntax no longer applied to auxiliaries (modals, *be*, *have*). And since the verbal morphology/morphosyntax no longer applied to auxiliaries, both *be* and *have* came to be lexically specified.

Warner gives an, admittedly speculative, parameter[121] and corresponding markedness constraint to account for the reanalysis of auxiliaries.

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[119] This point hinges on the assumption that the learner acquires *being* [+PRD] before [-PRD] participial clauses like those in (11), which Warner claims is a rather marked construction, that a child would encounter rather late and rarely. Hunting through Visser, Jespersen, and Poutsma, I can find only a few examples of this form, and perhaps the instances a language learner might encounter would not be enough to override the established subcategorisation properties. Indeed, with the examples in (11) it is rather difficult to figure out exactly what the *being* is doing semantically, as it does seem quite redundant there. I am not sure how this would also stop the double-*ing* construction with the participle or gerund, which are also out in PDE. Not also that the general restrictions on the progressives also apply to *being*. The progressive cannot be used for states such as *is tall*, and thus *John is being tall* approaches nonsense. I am also not quite sure about the use of a redundancy argument as old uses of double-*ing* also seem redundant but were used. Warner does admit that his argument for the loss of the double-*ing* is not 'entirely waterproof'.

[120] The other reason being the triumph of periphrastic *do* (see Lightfoot (1979, 1991, 1999)) for details. That is, by the 18th century, the operation that moves verbs to an inflection position (V to I raising) was lost. So sentences like 'Visited Mary Amsterdam last week?' and 'Mary visited not Amsterdam last week' became obsolete and replace by 'Did Mary visit Amsterdam last week?' and 'Mary did not visit Amsterdam last week'. This exacerbated the differences between modals and ordinary verbs, as modals were now base generated to appear in I position. Note that *be* patterns with the modals and also still appears in I position: "Is she over eighteen?" "She is not over 18". Lightfoot claims that because *be* was never with the inflectional position in the same way as the modals, and can occur in non-finite contexts (*to be happy*, *being happy*, **to can be happy*, **canning happy*), they still undergo V to I movement. This, in turn, further separates *be* from ordinary verbs, which have lost V to I raising.

[121] The idea here is that a child abducts a grammar by setting various parameters. She scans her verbal environment for cues as to how the parameters are to be set. In this case, the parameter remains on a default 'No', unless the child gets cues that it should be set to 'Yes'. Here, a cue would be inflection.

P: A minor word class has inflected categories whose patterning is shared with that of the major class to which it is closely related – Yes/No

M: The parameter is set 'No' unless there is appropriate positive evidence of shared inflectional composition with the minor class.

The auxiliaries are the minor word class, ordinary verbs, the major. And once *thee/thou* ceases to be used in ordinary English, there is no trigger for a child to set the parameter to 'Yes', as modals cease to display any hint of inflection. But since BE is an auxiliary, the various forms/inflections (*is, was, being,* etc.*)* all need to be specified directly in the lexicon, with the consequence that specified features can now override the defaults, thus explaining the various odd bits of data seen earlier, and allowing for a passive progressive. See Warner (1995) for a nice pair of before and after inheritance trees for auxiliaries.

This is not the end of the story, however. There are also a couple of other issues to deal with. If we accept Warner's account, there is an explanation as to how *being* could be used as a progressive. But it does not explain the social aspects of this change – namely the fairly copious historical record that seems to suggest that the form was first used by a small group of largely anti-establishment writers, and diffused through them despite inordinate condemnation by established literary circles. Secondly, if there is no longer a passive progressive form for ordinary verbs, then why are phrases like "The cake is baking", and "The movie is filming" still perfectly fine? And if these are examples of an extant ordinary verb passive progressive, then why is "The play is running" felicitous, but not "The supper is preparing"? We will deal with the social aspects first.

4.3 **The Progressive Passive as Romantic Conspiracy**

Using Warner, we can explain how the progressive passive became available in an individual's grammar, but are still left with an explanation as to its innovation and spread throughout the linguistic community. Robert Southey is generally given credit for the first instance of the innovation, in a private correspondence from 1795[122]. He was 21 at the time,

[122] There are a few earlier examples that have a passive progressive flavour but do not have the structure BE + *being*. But there are two examples from letters between James Harris, the 1st Earl of Malmesbury, and his mother from the 1770's:

(1) I have received the speech and address of the House of Lords; probably, that of the House of Commons *was being debated* when the post went out. (1772, James Harris to his Mother)

(2) The inhabitants of Plymouth are under arms, and everything *is being done* that can be. (1779, Mrs. Harris to James)

As far as the historical record goes, there is nothing again until the Southey letter. I do not know quite what to make of this. James Harris seems to have no connection to the Romantics (they were just being born in the 1870's), though his father, a philosopher, had correspondence with a number of writers. Even if the Harris family had a progressive passive, there is no evidence that it diffused beyond the family. Then again, James Harris, a diplomat and establishment figure, in contrast to the anti-establishment Romantics. Assuming the Milroys' thesis that networks of weak social ties are necessary for language innovation, Harris' upper class life his social network in England may have consisted mainly of strong ties.

had recently fallen in with Samuel Taylor Coleridge, the two of them developing radical religious and political views, and just beginning to publish; this is the start of the Romantic movement[123]. According to Denison (1993) other early users of the progressive passive were John Keats, Percy and Mary Shelley, Thomas DeQuincey, Charles Lamb (Elia) and W.S. Landor, all Romantics, and all who had some sort of connection with one another. Coleridge, Lamb, Landor and Southey were all born in the 1770's, DeQuincey in 1785, and the rest in the 1790's.

Of the early examples (1795-1825) documented by Visser and Denison, most are from the above authors. The few exceptions are in a translation of Jean de la Fontaine by the Romantic writer Mary Charlton, and in an article in the Guernsey Star and Gazette:

(16) The extortionate profiteering that is being practised by the tradesmen in the public market (1814)

Strangely enough, Denison notes that W.S. Landor was in the Channel Islands in 1814. I could not find out too much about Mary Charlton, as far as her social ties and contacts go, but she was also a Romantic writer. So a rather strange chronology shows itself. We have some examples of a progressive passive from the 1770's (Harris family), which, according to extant records, seems to have had little effect on other speakers. It appears again in 1795 in a letter by a young Romantic writer, and then makes its next appearances mainly in letters or diaries of other Romantic writers. By the late 1820's, it seems to be appearing beyond the tight Romantic circle, as well as in published works of the Romantics. At the same time (1830's) older grammarians and literary critics began to rail against the blasphemous new form.[124] Interestingly, Visser notes that a 1822 issue of *Gentleman's Magazine* contains a letter to the editor complaining about the new idiom, noting that it has occurred in certain publications and newspapers, but never in a work by an author of any repute. None of the early critics attribute the new idiom to the spoke English of the masses, which I assume they would do, given the chance. Instead all the evidence seems to point to this form initially being a dialect of a rather small group, bound by literary and ideological ties. So, perhaps the innovation and diffusion of the progressive passive can be partially explained using the idea of social networks developed by James and Lesley Milroy (Milroy & Milroy (1985), Milroy (1992)).

All speakers, aside from the odd hermit, are members of social networks, in the sense that all individuals have numerous contacts and ties with other members of society. The social networks can then be looked at as the consisting of the multiple web of relationships, institutions, and organizations that a given individual is involved with. An important point to be aware of in the social networks is the notion of *strong* and *weak* ties. Strong ties are

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Further bolstering Visser's patriotic thesis that Dutch may have had something to do with the development of the passive progressive, Harris did spend a year of his schooling in Leiden, and then a year as a diplomat in the Netherlands upon finishing university. As there are extant letters from Harris from as far back as when he was 7, it would be interesting to see if he used the form prior to going to Leiden.

[123] Southey ultimately betrayed the cause – first taking an annual allowance from the Tory government, then becoming poet laureate and even going so far as to write a commemoration of the death of George III.

[124] In support of Warner's theory of recategorisation, a main objection made by the grammarians at the time is that to use a copula with *being* is absurd – R. Grant White (1871) notes that it makes BE an auxiliary of itself, which would certainly be the case if, in his grammar, BE did not get individual lexical specification. White was born in 1821, well after the recategorisation should have taken place (certainly *thee/thou* is gone), and it is odd that he should still find the form so unacceptable (by the 1860's many grammarians/critics seem to have accepted the progressive passive). However, White was American, and it remains to be seen when the form entered American English. Note that Landor and the American Transcendentalist Ralph Waldo Emerson were close friends.

characteristic of rather close-knit groups, bound by emotional ties, intimicacy, culture, ideology, and tend to be rather conservative in relation to innovation. Weak ties are rather the opposite, and can generally be seen as the ties between differing social groups[125]. For simplicity, imagine a network consisting of a number of social groups. The ties within the groups can be seen as strong ties. But there are also ties linking the various social groups (called bridges), and these can be either strong or weak ties. The theory then goes that groups that are loose-knit, linked to other groups mainly by weak ties are more susceptible to innovation, as strong-ties tend to be conservative and norm enforcing. Milroy gives a nice comparison of the development of Icelandic to the development of English. Icelandic has been relatively stable throughout time. Part of this can be explained by its geographical isolation, but there is still the rather strange phenomenon of its uniformity within the country, given that it is a sparsely populated country with various communities separated by climate and geography. Because of this, one would expect a fair amount of dialectical diversity to develop, but this isn't the case. Milroy and Milroy (1985) took at look at Icelandic Family Sagas from the 12th and 13th centuries, and noted the high value placed on maintaining strong-tie relationships over distance. If the importance of close-knit strong-tie relationships change, the Icelandic social network would have very few bridges with weak ties. And on the thesis that social network with weak ties is necessary for a rapid diffusion of linguistic changes, the uniformity would then be expected. English has been historically subjected to numerous invasions, internal migration, civil war, and huge economic, industrial and social change, all of which would make ties within and between various social groups much weaker.

As an idealisation, it is considered that a social network[126] of an urban community would have the majority of the weak ties in between the middle social groupings, and between the groups, the extreme ends of the being characterized by strong ties within the groups.[127] In this model, a speaker-innovator is someone who is marginal to a number of close-knit groups, forming a bridge across the groups to pass innovation. In the case at hand, we have a group of Romantic writers who, in a sense, have a number of strong ties to each other, being bound together by ideology and sensibility. However, they are not united geographically[128], and would have had numerous weak tie relations with other social groups. They also satisfy Milroy's criteria of a speaker innovator, being fairly marginal figures, who by

[125] There can also be a strong tie relation between social groups, however. The links would then be much more closely bound by ideology, intimacy, etc.

[126] This is all being painted with a rather broad brush (my fault, this is no criticism of Milroy), and leaves out factors such as prestige, status, power, and their various ramifications. The interested reader should see Labov (1972, 1980, 1986) for example. Milroy does show how these factors related to the idea of a social network.

[127] As there is contact between the various social groups there will be weak ties between the social classes. The idea here is that the upper working and middle classes will be the catalyst in inspiring 'innovation' because of their numerous weak ties and consequent contact with people of various social groups. Of course, the groups characterized by strong ties have their own dialects and there is certainly change and innovation within those dialects (just look at the wonderful dialectical varieties within minority groups of the U.S., UK and France). The social networks seem to get at the diffusion of a particular form thorough the social network and into the various dialects. Contrast this with the case of Iceland, where the social network would consist primarily of strong ties. There would be no case of a marginalized population with strong internal ties would develop its own dialect, because every group would have strong ties to the others.

[128] The Shelleys were obviously married; Southey and Coleridge married sisters and worked together in the early years. Coleridge went to a charity boarding school with Lamb, other connections are numerous. However, this 'social group' is still quite different from a social group in a particular geographically discrete urban area. Instead, they travelled a great deal, and for the most part lived in various parts of the UK and the world. Does the physical diffusion increase the amount of weak-ties and thus the diffusion of the passive progressive?

virtue of their ideology and way of life, would have few close-ties to other groups.[129] But their contacts and weak-ties with others may have caused the form to diffuse – note again the coincidence of a newspaper in Guernsey using the form when Landor was in the Channel Islands. This is pure speculation, of course, but did Landor, being a writer, have contact with whoever wrote the article? It would be quite interesting to find other instances of the form prior to say, 1820, and see if a link can be made with the Romantics. One final bit of speculation can be made as well. Assume that the Harris family did have a passive progressive, as may be the case given the examples, but their use did not diffuse into society (or even their own social groups) as a whole. Could this be due to the fact that their upper class and establishment status – James Harris was the 1st Earl of Malmesbury – impede the diffusion? On Milroy's account, at least, the Harris' would in no way fit the profile of a speaker-innovator.

4.4 **The Cake is Baking, the Movie is Filming, but the Supper is not Preparing**

Observe the following 1829 passage from Landor, one of the early users of the progressive passive:

(17) While the goats are being milked, and such other refreshments are preparing for us as the place affords.

The 'real' progressive passive (*are being milked*) and the 'passival' (*preparing for us*) co-occur. Indeed both forms seem to have happily co-existed throughout the 19th century, and as Denison notes, still occasionally appear in contemporary English:

(18) a. Bramante's palace was still building until 1565, the great church not consecrated until 1626 (Parkinson, 1957)

b. Inside the …room more than a dozen television cameras were setting up on an elevated stand to the left of the chamber. (*The Guardian*, 1983)

But the examples in (18) are fairly rarefied and should not be considered to be part of ordinary usage,[130] and, for the most part, the progressive passive has completely replaced the passival. However, there still does seem to be use of the passival in a variety of cases:

(19) a. The movie is filming in Vancouver.
b. The movie is being filmed in Vancouver.
c. The movie is shooting today.
d The movie is being shot today.
e. *The movie is shooting by a famous cinematographer.
f. The movie is being shot by a famous cinematographer.
g. ??More and more movies are filming in Vancouver these days..
h. More and more movies are being filmed in Vancouver these days.

[129] Around 1795, Coleridge and Southey were planning to move to Pennsylvania and set up a commune. The activities and lives of the other Romantics were quite well known.
[130] 18(b) might be OK, if it is a case of metonymy; that is, the 'cameras' referred to are actually the individuals operating the cameras. I've heard this done in movie-making, but do not know about the context here.

i. The play is running for two months.
j. *The play is acting.
k. The movie is showing for one night only.

(20) a. Supper is cooking.
b. Supper is cooking in the oven.
c. *Supper is preparing.
d The cake is baking (in the oven).
e. The cake is being baked (in the oven).
f. *The cake batter is mixing.
g. The cake batter is being mixed.
h. ??The cake batter is mixing in the blender.
i. The tea is brewing.
j. The tea is being brewed.

(21) a. An evil plot is hatching.
b. ?A plot is being hatched as we speak.
c. A plot is being hatched by the evil villain as we speak.

So then, if the passival was supposed to have become obsolete, exactly what is going on here? Denison suggests that many of the currently existing passival sentences are really interpreted as being ergative, i.e. an intransitive usage whose subject corresponds to the object of a transitive verb. Thus 22(a) is an ergative use related to 22(b) in this rather standard example.

(22) a. The ice melted
b. Sunshine melted the ice.

Melt here can be seen as an ergative verb, and, indeed the object of the transitive sentence becomes the subject of the intransitive on. And as far as the home economic examples in (20) go, this does seem to be the case. We can say that 'supper cooked in the oven' or 'the tea brewed in the kettle' and so on. But this does not hold for (19) or (21).

(23) a. A famous cinematographer filmed the movie.
b. *The movie filmed.
c. Tuschinski Art House showed Wim Wenders' latest movie.
d. *Wim Wenders' latest movie showed last month.
e. The evil genius hatched a villainous plot.
f. *The plot hatched.

It then seems that a bit more is going with contemporary use of the passival aside from ergative usage. For the non-ergative cases, why is it that "The movie is filming" is fine, but "The house is building" or "Supper is preparing" are infelicitous? I have a feeling that this is largely an issue for pragmatics and surmise that a great deal of the contemporary use of the passival can be dealt with by Optimality Theory type constraints. I've not been able to fully work this out, but will make a few suggestions.

First, it seems that Denison is correct in regards to the ergativity of sentences like those in (20). I would like to take this further, and propose a constraint tentatively called ERGATIVE, which states that if an ergative interpretation of the subject and verb is possible, then the passival is preferred. And certainly, in default contexts this does seem to be the case. I would find it rather strange to say to someone, "There is a cake being baked in the oven – it should be ready to eat soon" instead of "There's a cake baking in oven – it should be ready to eat soon." Where the human agent becomes important the passival is no longer so useful

or at all grammatical[131], perhaps implying that a focus related constraint needs to be ranked higher than ERGATIVE.

(24) a. I'll not be drinking that tea. It's being brewed by John, a known poisoner.
b. *I'll not be drinking that tea. It's brewing by John, a known poisoner.[132]
c. I'll not be drinking that tea. It's being brewed in a contaminated kettle.
d. I'll not be drinking that tea. ?It's brewing in a contaminated kettle.

But human agency is not enough to distinguish the other cases. In the cases of "supper is preparing", "the house is building", and "the movie is filming", there is an implied animate agent. Yet the first two are infelicitous, and the third is perfectly fine. But note the various examples in (19). The passival only seems to work for a specific movie that is conceived as an entity in itself,[133] in a sense independent of human agents. Thus the "The play is showing (or running)" is fine, but "The play is acting" is not since it is hard to conceive of without the actors themselves. Also observe that 19(g) sounds rather odd, and here a specific movie is not referred to,[134] but rather a general property of the film industry.

With 24(c), it appears that focus on the inanimate brewing agent also makes the passive progressive more preferred. In this case, the contaminated teapot is the reason for not drinking the tea, and this focus seems to override the ERGATIVE default. From this, it may be that if the focus is merely on the fact that the tea is brewing, the passival is preferred. Should either the human or inanimate agent come into play, the progressive passive is needed.

But still the question remains as why we cannot say, "The house is building". It can be a specific house that is conceptually abstracted away from any particular human agent in the same way "The movie is filming" can. As a final act of pure speculation I suggest that this has something to do with our conceptual ontology. On the face of it, "The house is building" is in no way ambiguous, as houses rarely do any sort of building. But imagine that houses belong to some sort of conceptual hierarchy HUMAN STRUCTURE, which also includes other sorts of buildings like factories. And of course

(25) The factory is building

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[131] Of course, the *by*-phrase probably has a lot to do with the ungrammaticality of 24(b). Compare:

Ice is melting in the sun.
*Ice is melting by the sun.
Ice is being melted by the sun.

Note also the impact of focus on the inanimate instrument. Assume I am a vegetarian and see my breakfast being cooked in a pan that previously fried bacon. Here it seems that the real passive should be used to emphasize this focus (the preceding sentence with 'being' came out rather naturally). So perhaps focus on the instrument may outrank the standard ERGATIVE context, and demand a real passive.

[132] The * here is probably best explained syntactically. John brews the tea, or the tea is brewed by John, so it should be expected that *The tea is brewing by John* is out. However, in regards to the teapot, this isn't the case, and while (d) is certainly not out, I think that (c) is a bit better.

[133] This should not be confused with the medio-passive seen in such sentences as "These houses sell quickly" which can also be expressed in the passival as "The houses are selling quickly now that the economy is back on track". This seems to be a quasi-ergative use, where the subject is seen as having something to do with the action described. Thus it is a property of the house that it sells quickly. Indeed, we might say, "The houses are so nice and so inexpensive, they practically sell themselves."

does contain ambiguity if a passive interpretation is possible. And if all members of the same conceptual category have similar properties in regard to passivisation among others, this little oddity can then be explained.

If the above comments on the relationship between the progressive passive and passival are of any value at all, I think they can be applied to passive/passival gerunds are used as well:

(26) a. Tea brewing in the kettle and eggs cooking on the stove for breakfast are two of childhood memories
b. Tea being brewed in the kettle and eggs being cooked… (this is ok, but I prefer (a))
c. *John was elated to hear of his house finally building.
d. John was elated to hear of his house finally being built.
e. The movie filming in Vancouver cost the L.A. film unions a lot of work.

And speaking of the gerund, I will now attempt to flesh out Houston's account of the evolution of the gerund using some of the framework given above, as well as look at how the split of the gerund into verbal and nominal forms had a domino effect on language use and even the lexicon, and indeed may not have gone to completion yet.

4.5 **Changes in the Gerund – a Cognitive Link?**

Recall the basic facts as put together by Houston (1989). When gerunds first began to take bare direct objects they did so only in the oblique distributional position.[135] From Houston's data there is a 50-year gap between when gerunds with bare direct objects first appeared in oblique contexts, to when they began appearing in other NP distribution slots such as subject and object. Other data, notably Tajima's, find gerunds with direct objects appearing in any sort of frequency far earlier, perhaps 100 years earlier. However, all of the earlier examples extant also appear in oblique position. So the most that can be concluded from this is that there was a more substantial gap than 50 years, but the general trend (first oblique position, then subject and object) is unchanged. Recall also that appositive participles and gerunds in oblique position share a discourse function – adverbial, providing information about time, manner, cause, goal, etc[136]. Houston's data from the relevant period show no evidence of adverbial usage with gerunds used in subject and object position, and aside from causal explanation, it is hard to conceive of situations where gerunds in subject/object contexts would be adverbial[137]. She then concludes that a variety of syntactic[138] and semantic

[135] Remember that in the time period being looked at (pre-1600), *gerund* should only be taken to mean the original gerund (verbal noun) so to speak. *Gerund with bare direct* object should not be taken to mean a PDE verbal gerund (i.e. PRO-Ing, etc.), though they can be the same at surface level.
[136] This may be due to the prepositions themselves – *for, by, in*, *with,* etc. all seem to set up some sort of modification (whether locative, temporal, manner) of the issue talked about. Could it be that the influx of prepositions in Middle English itself contributed to the gerund split?
[137] Houston has a quote from the *Verney Papers*: "Resolved: That *the preferring some men, and displacing others*…is a cause of our evills." (the verbal noun here is really a subject or a predicate, but does have a causal flavour). But there is a bit more subtlety involved here. Drawing on the notions of foregrounding and backgrounding in discourse phenomena, she notes that both appositives and oblique gerunds tend to function as backgrounding devices, commenting on the focal event. In the quote above, the gerund is used causally, but, being the subject, is the foreground. Compare with "He

similarities between oblique gerunds and appositive participles might have contributed to an increasing similarity between the two in regard to the taking of bare direct objects.[139] But still the question arises as to how the semantic and syntactic similarities could cause this to happen.

First off, we should note Houston's data – in the 15th and 16th century, verbal nouns in oblique position comprised over 60% of all verbal nouns. Furthermore, of the oblique verbal nouns, the percentage of adverbial usage hovers between the mid 70's to 90 percent range. Given this, one may conclude that a language user will have encountered verbal nouns as expressing an adverbial function about half the time they encountered a verbal noun at all.[140] Furthermore, of all appositive participles used, well over half are also instances of adverbial usage. This is the correlation that Houston is pointing out – language users in the 15th and early 16th century would have become accustomed to hearing oblique verbal nouns with an adverbial discourse function (given the high percentage, they very well may have expected it), as well as hearing appositive participles fulfilling the same function in a majority of their instances. And somehow, this semantic affinity led to a syntactic change, which first seems to have started with a change in language use, that is speakers using a gerund with a direct object in oblique position to express adverbial modification. But is this possible, and if so, how?

The answer may lie in the realm of Cognitive Grammar. Cognitive Grammar (or more to the point here, Construction Grammar) holds that the meaning linguistic utterances is in part determined by the linguistic construction used, and not merely on the standard senses of the lexical items in a given utterance. We will briefly see how this might work.

Tomasello (1998) gives the following example:

(27) Mary kicked John the football.

This is a ditransitive construction[141] of the form **Sub V Obj Obj_1** , with **Obj** being the indirect object, and **Obj_1** direct object of the verb (*Mary kicked the football John* makes little sense). But notice that *kick* followed by an NP like John is normally not a ditransitive verb – the typical example being:

(28) a. Mary kicked John. **Sub V Obj**
b. Mary kicked John across the room. **Sub V Obj Obl**

But even if *kick* is not typically used to express transfer of possession by related motion, it can certainly be taken that way, because kicking can certainly convey directed motion. This can be taken a bit further even.

(29) Mary sneezed John the football.

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entertained us by juggling chainsaws". Here the entertainment is in the foreground, and is modified (as to how) by the gerund in an oblique context.

[138] Aside from the morphological identity of the participle and gerund in the south and midlands of England, the oblique gerund also can occur in clause-initial and final positions just as appositive participles can.

[139] And as I noted in the last chapter, appositive participles began to behave like nominal gerunds in taking an *of*-adjunct direct object at about the same time.

[140] This, of course, rests on the tenuous assumption that the frequency and distribution of spoken English will have been the same as the fragmentary written records. Alas, with no recourse to spoken English of the time, this is the best we can do.

[141] A prototypical example would be *Mary gave John the book*, and the construction typically expresses some form of motion or possession transfer.

Sneeze is an even more prototypically intransitive verb, but still works (in a sort of imaginative way) in the ditransitive context, because *sneeze* can convey a certain degree of directed motion. But this flexibility does have its limits. Thus:

(30) Mary smiled John the football

is utterly bizarre, understandably, as *smile* has little to do with either directed motion or possession transfer. The point here, drawn from Goldberg (1998), *is that the construction itself conveys the sense of directed motion or possession transfer*. Rather than imbue the lexical item *sneeze* with a different sense (and subcatergorization) in every possible construction,[142] instead associate some of the meaning with the construction itself[143]. Thus (30) is an instance of the *double object* construction (**Sub V Obj Obj$_1$**), and generally signifies the meaning *X causes Y to receive Z*, and its various subtle variations. More generally, we have what Goldberg formulates as the **Scene Encoding Hypothesis**:

Scene Encoding Hypothesis: Constructions that correspond to basic simple sentence types encode as their central senses, event types that are basic to human experience.

These abstract event types would be things such as something changing state or location, someone experiencing something, movement, possession, etc. The construction types can be seen as dividing the world (or our concept of it) into rather discrete event types. So while the *double object* construction can be said to have a sense of *X causes Y to receive Z*, the *caused-motion* construction (**Sub V Obj Obl**) generally has the sense of directed motion[144], as in, "Mary put the book on the table". Of course it can be stretched a bit to incorporate verbs that normally wouldn't fit in the construction as the prototypical *put* does.

(31) Gerald argued himself into a corner.[145]

Metaphorically, (31) does express motion on the direct object, and fits nicely in the construction. Now, *being argued into a corner, drinking someone under the table, talking someone to sleep* are all probably conventionalised and part of the general lexicon. But as seen with (29) this need not always be the case. But (29) is, though a bit odd, perfectly understandable. Sentence (30) makes sense only in a story where people practice telekinesis by subtle lip-movements. That (29), but not (30) is felicitous indicates that the felicity conditions are to a large extent due to the conventional meaning of the verb and context. A verb such as *send* may be said to be said to have the semantics of the *double object* construction (in that sending inherently connotes transfer of possession) as in *Mary sent John a letter*, and so would then fit perfectly in the frame; *sneeze* certainly doesn't, but is *coerced* by the construction to express the requisite *transfer of possession* meaning. This

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[142] Aside from the intransitive and ditransitive senses there are numerous other ways to use *sneeze*. A few from Goldberg.

She sneezed a terrible sneeze (cognate object construction)
She sneezed her nose red (resultative construction)
She sneezed her way to the emergency room (*way* construction)

[143] For a more detailed account of cognitive or construction grammar see Tomasello (1998) and the various contributions therein.

[144] This constructions and all others have various "extensions": Thus the directed motion construction can mean *X causes Y to move Z* as in *Mary put the book on the table*, but can also mean *X enables Y to move Z*, as in *Mary let John into the room* among numerous other construction 'polysemes'.

[145] This example from Taylor (1998), some of his others: "Sue talked us into a coma", "Gerald drank us all under the table"

can happen because *sneeze* can convey directed motion,[146] which is often a feature of possession transfer. *Smile*, on the other hand, has very little directed motion inherent in it, and our world knowledge, unlike the imagined story premise, can also not coerce *smile* into something conveying transfer of possession.

This sort of coercion doesn't just extend flexibility to a construction's acceptance of words of the same grammatical category (i.e. verbs in the examples above). Nouns are commonly used as verbs or adjectives, and if used frequently enough, may enter the lexicon in the new category. Thus, if someone asks me what I what I'm doing for lunch, I can say, "I'm brown bagging it" meaning that I brought my homemade lunch -- brown bags being a commoner container for lunches brought from home. Its early use could be seen as coercion in certain constructions made possible by context and world knowledge.[147] Frequent, regular use would then see *brown-bag*[148] in the lexicon as ordinary verb.

Simple constructions get semantically tied to various basic, abstract types of events, and these constructions themselves impart some of the meaning to a sentence that is an instantiation of it. Depending on how far our concepts and world knowledge can stretch, marginal instantiations of the construction are perfectly acceptable,[149] although not necessarily productive. But, in order to account for Houston's hypothesis, we need to extend this idea beyond simple constructions, and do a little bit of speculation while doing so.

4.6 **Houston's Missing Link?**

I would like to extend this idea beyond the rather simple constructions as seen above, and propose that instantiations of the more complex constructions with verbal nouns in oblique position generally (but not always) carry with them as part of their meaning some sort of adverbial modification of the focal event, property, subject, etc. For example take this initial part of a sentence from the Essex papers (late 1600's):

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[146] In fact the pure directed motion instances of sneeze are much more credible than the, admittedly strange, *Mary sneezed John the football*. Take, for instance, *Mary sneezed her napkin off the table*, which is perfectly natural. My guess is that with the football example, a double leap is made. First from intransitive to directed motion construction, and via the directed motion or transfer of possession.

[147] The early uses of "I'm brown-bagging it" would be perfectly understandable to the appropriately knowledgeable questioner. Had the speaker answered, "I'm green-shirting it", the questioner would be justifiably confused. Beyond the construction itself, context forces a response that has to do with someway of having lunch, or the denial thereof (e.g. *I'm skipping it*). The associations of *brown bag* allow this to happen, and had the question been, "What are you wearing to the party" then the reply "I'm green-shirting it, as usual" would make perfect sense.

[148] *Merriam-Webster* has the date as 1959 for the verbal noun *brown bagging*, it is also entered as the verb and adjective *brown-bag*.

[149] Recall the PRO-ing gerunds that could take the demonstrative *this*. Pullum conjectures that this is the result of using a verbal gerund as if it were an N'. Using the above terminology, the construction *This* **Obj** has the sense of a presentational context of something nominal (an event, person, idea, activity, etc.). If the context allows, the verbal gerund can be coerced. I disagree with Pullum, however, in that he claims that this (non-productive) construction usually denotes an activity, especially a characteristic or repeated one. However, recently I found myself exclaiming, "This not having salt in the house is beginning to annoy me." I was trying to cook at the time, and then remembered that there was no salt. However, what was denote was not an activity, but was rather a state that existed longer than it should have. The *this* was most likely used for emphasis on the present, salient instance of not having salt, and out of sheer exasperation.

(32) Wee are very vigerous in asserting our Religion…

Presumably, it has the form **Sub Pred Obl**. My guess is that in the majority of sentences of this form, the **Obl** slot will semantically signify some sort of adverbial modification of the subject-predicate component. Here the modification is that of manner or means, i.e. the oblique clause describes how the speaker(s) are very vigorous. In a sentence like "Mary was unhappy after John broke up with her", the oblique embedded sentence modifies both why and when Mary was unhappy. In the caused motion construction **Sub V Obj Obl**, we can see this adverbial modification (means in these examples) both with an ordinary NP, and with a verbal gerund.

(33) a. Mary shot John with a gun.
b. Mary killed John by shooting him in the head

Now recall from Houston's data the intimate connection between verbal nouns in oblique position and appositive participles – they both have an adverbial discourse function. The claim here is that the constructions with instantiations using verbal nouns in the oblique position, themselves contribute to the meaning of sentence having some sort of adverbial modification of whatever is foregrounded[150]. Houston's data seems to support this in that oblique verbal nouns are primarily used in the adverbial discourse function; during the critical time period, 1450-1550, 90% of all oblique verbal nouns are instances of adverbial usage. It then seems reasonable to assume that language users hearing constructions with oblique verbal nouns would expect the oblique phrase to have an adverbial discourse function.[151] And given that the appositive participle itself would be associated with an adverbial discourse function, could it be that some sort of coercion is possible for the early appearances of verbal nouns with direct objects? Houston theorizes that the discourse function similarity cause oblique verbal nouns to begin taking bare direct objects. I am playing with the idea that in fact, the early instances were merely coercion of an appositive participle in construction with oblique slots; however, Houston's conjecture fits the data just as well, and I will leave both possibilities open.

Either way, this is a far more radical claim of coercion than was presented in the preceding section. On my conjecture, it implies that the class of appositive participles[152] began to be used as if they were verbal nouns.[153] This might be justified by the fact that for well over 100 years, direct object verbal nouns were used exclusively in the oblique position. Should we attribute the early examples as instances of a newly analysed verbal gerund, we should also expect greater variety in the distribution. This new verbal gerund would presumably still be an NP (albeit with internal verbal features), and one would expect to see it occur with some frequency at least in both subject and object position. But were the early direct object verbal

[150] My best guess is that is the oblique context in general that serves as an adverbial discourse function, but I have not had time to research this any further. But, this should not be taken to mean that all perfect nominals in oblique contexts are coerced into 'fact' readings. For example, "The U.S. was shocked by the assassination of JFK" can have either an event or fact reading. But in both readings, the perfect nominal 'the assassination of JFK' is an example of causal adverbial function.
[151] This, of course, uses the rather tenuous assumption that the frequency of adverbial oblique verbal nouns in actual speech would be about the same as in the written records. Alas, there is no way to check the validity of this assumption.
[152] Some questions that dogged the original conflation theory then still remain. Did this coercion start in areas that already had the *–ing* ending for participles? I have only encountered a few examples of an *ende* that appears to be used as a gerund, but nothing in any frequency. The early uses of the direct object verbal gerund that I can trace all come from the south of England.
[153] Another option is that the verbal noun began to acquire the internal syntactic properties of the appositive participle – this seems to be Houston's position. I don't know if this would still be considered coercion, or how exactly it would work.

nouns instances of coercion then one would not expect them to appear in either subject or object position[154]. As Houston's data shows, subject and object verbal nouns in the relevant time period never have an adverbial discourse function. The possibility of the coercion speculated upon is dependent upon a similarity in this discourse function.

However, if language users were exposed to this form frequently enough, it is possible that it was eventually reanalysed into a new productive form – the verbal gerund. Once this happens, then the normal NP distribution is seen. Soon after, the internal verbal structure asserts itself, and the verbal gerund begins to passivize[155], and take auxiliaries. The verbal gerund also begins to acquire a subject, yielding forms that look suspiciously like the modern Poss-Ing and Acc-Ing gerunds.

It also appears as if the very fact that these direct object verbal nouns appeared in oblique position (i.e. as objects of prepositions), may have aided in the reanalysis into a verbal gerund. Recall that the only feature that PRO-Ing gerunds[156] share with ordinary NP's is the external distribution; otherwise they behave rather like clauses. But while clauses can appear productively in both subject and object position,[157] they are not quite so regular with prepositions (especially clauses with *that* or *for*):

(34) a. *I'm not sure of that your claim is true.
b. *I'm worried about that nobody's home.
c. *I would be very happy with (for me/myself) to take over.[158]

So perhaps it was that because these direct object verbal nouns were both used as verbal nouns (NP's) and appeared first in the external syntactic position that is only really productive for NP's, that the coerced form was eventually reanalysed as the form as we know it today, an NP with a VP head[159]. Recall from the first chapter that the modern PRO-Ing gerund is only NP-like in one respect – its distribution. The early instances of direct object verbal nouns, on the surface, do resemble the PRO-Ing gerund. Now the other possibility for a syntactic analysis of the PRO-Ing (and Acc-Ing) is that of a clause (see Reuland (1983)). But, since NP's, and not clauses can appear productively as objects of preposition, then one would expect that this 'coerced' form would be analysed as an NP, and so perhaps giving birth to the mixed nominal and verbal form that is the verbal gerund.

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[154] Were subject and object position verbal nouns always event denoting there would be an alternative reason that the direct object verbal nouns only appear in oblique position, as they wouldn't denote events, being imperfect. But the data shows that perfect to imperfect coercion happened fairly early on in the history of verbal nouns. Poutsma, Visser, Jespersen, et al, all agree that verbal nouns were used as concrete things first, then events, and that the coercion to an imperfect reading came later.

[155] One odd thing to note. Before the real verbal gerund emerged, there are no examples of direct object verbal nouns that are passive. But if appositive participles could passivize, why would they also not be coerced? One answer may be that passivization hit both participles and verbal gerunds at the same time. Houston notes that appositives began passivizing at least as early as the 17th century (around the same time of verbal gerunds passivizing). None of Houston's examples of appositives from the pre-1550 time period are passive, and I imagine she would have used one if they existed.

[156] At surface level the early direct object verbal nouns look (and seem to behave) exactly like modern PRO-ing gerunds

[157] For simplicity I am taking subject, object and oblique position as the 'basic' positions. Note that there are a number of more complex positions that have productive distribution for verbal gerunds but do not for clauses. For instance, verbal gerunds can occur in S-internal NP positions.

[158] These examples are from Pullum.

[159] This also brings up another intriguing concept. Can we trace these changes all the way back to the loss of morphological case? This loss brought about an increased use of prepositions and no overt oblique case marking.

4.7 **Social Diffusion and the Emergence of Numerous Gerundive Forms**

As we have seen earlier, there were a wide variety of gerund and participle constructions, the majority of which have passed into the realm of ungrammaticality by the 20th century. Interestingly, both Tajima's Type **VI** (*the –ing*) and the participle with an *of*-adjunct, do not appear in any frequency prior to 1500, and if Visser's and Jespersen's data is to be believed, greatly increased in frequency around the mid-16th century. More generally, the time period under examination by Houston is a major time of both social and linguistic upheaval. Raumolin-Brunberg and Nevalainen (1994), in their survey of the *Helsinki Corpus*, break the Early Modern English period into three discrete subperiods: Period I, 1500 – 1570, Period II, 1570 – 1640, and Period III, 1640 – 1700. They trace a whole variety of changes in English, including massive vocabulary growth, increase of use of periphrastic *do*, and increased use of *can* instead of *may* primarily to the middle period.[160] They note that while Period I is a fairly strong tie, stable society, it quickly changes into a more chaotic, weak tie one. As we move into the latter part of Period I and into Period II, society becomes much more unstable, population increases by 50%, urbanization is on the rise, the reformation takes hold, as does increased social mobility from the middle classes to the gentry. These social ingredients taken together yield a society in transition, a society that would be predicted to undergo a great deal of linguistic change[161].

Given this rather chaotic, fluid social context, the proliferation of numerous forms of gerunds and participles becomes somewhat less remarkable. While we begin to see 'verbal nouns' with direct objects appearing for quite a while before the mid-16th century, it is not until that we begin to see anything approaching a modern verbal gerund. Ultimately the spread of the Type **VI**, the strange participles and 'progressives' with an *of*-adjunct in the mid-16th may be the result of huge social and linguistic changes. Eventually, things settled down a bit, and by the late 19th century the gerund seems to be more or less as it is today, save what appear to be deliberate literary archaisms. Rather disturbingly, the gerund forms that did survive at the expense of the numerous others are exactly the forms that were favoured by many of the early grammarians such as Lowth and Murray. One would hope that this result is merely coincidental and not the result of speech patterns conforming to the will of a few pedants, but I suppose this possibility cannot be entirely discounted, given the massive standardization of English in the 18th and 19th centuries.[162]

So then, what of the verbal gerund? If indeed it was the result of semantic and discourse similarity of oblique verbal nouns and appositive participles, we still are left with the question as to why it began to be used in such marked frequency. That is, just because the possibility of some sort of coercion was there, this does not mean that people would necessarily take advantage of this possibility. Instead, one may wish to see it as the working out of the semantic perfect/imperfect distinction in the language. Recall that the standard semantics of perfect nominals in PDE has the default meaning of *ing-of* nominals to be events. In certain

[160] This is but an abbreviated list – Raumolin-Brunberg and Nevalainen point out 10-12 almost simultaneous changes, including the change in the gerund.

[161] Once again, the linguistic data inevitably will be skewed due to the lack of records from the illiterate lower classes; however the increased social mobility from the middle to upper ranks of society is almost certainly a factor in the many changes and their diffusion. Overt and covert prestige would cause the middle classes to imitate their perceived superiors, an imitation that is sometimes quite overdone. If the new verbal gerund had originated among the upper, educated classes (this is an undecidable 'if', alas), then its great diffusion in the latter part of the 16th century would be rather unsurprising.

[162] Recall that despite the grammarians utter horror of the progressive passive, it flourished within 80 or so years from its introduction and for the most part replaced the older 'passival'.

verbal and discourse contexts, they are coerced into having an imperfect, 'state of affairs' or propositional reading.[163] The story developed by Poutsma, Jespersen, and Visser seems to support a claim that this was in fact always the case. After the initial use of *–ing/-ung* for concrete nouns like *clothing*, there begins to appear paradigmatic event nouns like *the kinges courouning, the kinges comynge*, along with descriptions of killings, blood-letting and other lovely Anglo-Saxon modes of behaviour. Eventually, the use of the verbal noun expands to most verbs, and coercion into an imperfect meaning is seen rather early on.

Now take the point of view of a language user sometime in late 15th or early 16th century. She wishes to express some sort of adverbial modification of a focal event by using a verbal noun. The construction she uses will necessarily be one with an oblique slot. Assuming that the modification is imperfect, i.e. the modification itself does not denote an event, then should she use an *ing-of* noun, the regular coercion comes into play for the listener. But then, is this any better from both a production and comprehension point of view from using the constructively coerced direct object verbal noun? After all, the default meaning of this form (in this context) seems to be that of the appositive participle.[164] So from a comprehension standpoint, the direct object verbal noun may indeed be more optimal. For example, should a listener hear an oblique verbal noun with an *of*-adjunct, whether this is to be interpreted as perfect or imperfect is still an issue. However, with the constructive coercion there is only an imperfect interpretation available, thus making comprehension slightly easier.[165] Given this, one might also see the Type **VI** gerund as yet another instance of the semantic distinction being worked out. A survey of the copious instances of this form in the 16th and 17th centuries (from Visser) does shed some interesting light upon this.

First, unlike the early instances of the Type **V** (what I have been calling the *direct object verbal noun*), the Type **VI** appears much earlier in object and subject position[166], and by the 17th century still seems to have a slightly higher frequency of appearance in subject and object position. If they appear as subject, they will serve in discourse as the focal 'event', and not a mere adverbial modification. More interestingly, most of the examples seem to be semantically imperfect, but not generic[167]. A few examples:

(35) a. *The gaining Gripe's daughter* will make me support the loss of this young jilt here. (Pepys, 1668)

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[163] Notice that we are now dealing with two different types of coercion here. For clarity's sake, I will refer to the perfect to imperfect coercion as *regular coercion* and the type conjectured in section 4.6 as *constructive coercion.* These should not be taken as theoretical terms, necessarily, but only to make things comprehensible.

[164] Ultimately, this situation might be ripe for a formulation in bi-directional optimality theory, especially to account for the 100 years or so of transition.

[165] I am not sure how this would work from the speaker's perspective. It is hard to say that one form or another would be more 'economical' from a production standpoint.

[166] While I have seen no instances of direct object verbal nouns in any other position than oblique prior to 1550, a few Type **VI**'s in subject position do exist, but mostly from the idiosyncratic Pecock. There is one example that Visser attributes to the Paston letters: "The untrewe forging and contryvyng certayne testaments…by naked words" If this is indeed the beginning of the sentence then we have a 1467 example in subject position. Alas, I cannot find this quote in any letter of the ones available online. One interesting to note is that while the Pastons were Norfolk gentry, their dialect (as far as participles go) was more in line with the Southern Dialect, as their participles are exclusively of the *ing* form. This perhaps has to do with them being members of the aspiring upper middle class, with numerous southern contacts, as well as being educated at Oxford and Cambridge.

[167] By the 19th century the generic Type **VI** increase in frequency tremendously. Recall the Oscar Wilde quote from Chapter 2. However, if by the 19th century this form had indeed become a deliberate archaism, as Pullum and others suppose, this is unsurprising. One little problem with this conjecture is that some of Visser's examples do seem to be ordinary event denoting nominals (see Chapter 2), but they are few and far between.

b. you have deferred *the telling it*, till it is past time to sturdy for prevention (Dryden, 1673)

c. *The paying Ned Sheldon the fifty pounds* put me upon this speed (Dryden, Collected Letters, 1655-1700)

Perhaps this was an attempt at a sort of mixed meaning. While in the sentence, the meaning of the verbal noun is certainly imperfect, there is a related event that seems to hang about in the context of discourse, and is remarkably similar to the examples we saw in the last chapter distinguishing purely generic imperfects from the more mixed kind.

Note that the above speculations should be taken exactly as such. I think a case can be made that the split of the gerund into a verbal and nominal gerund is partially due to semantic and discourse related factors, but this case is by no means watertight. However, once the split does occur, there is far more substantial evidence that the imperfect/perfect distinction did manifest itself in the use of verbal and nominal gerunds. The next two sections will serve to illustrate this point.

4.8 **Continuing 'Catastrophic' Effects on the Use of Nominalization**

Emonds (1973) notes that at least for his own dialect, verbal gerunds or derived nominals (i.e. perfect nominals that are not in *–ing*) are to be strongly preferred to *ing-of* nominals. *Ing-of* nominals will be used only if there is no other option available, if the context demands a determiner or another NP-internal trait.[168] To illustrate the case he gives examples of preferred (36) and less preferred (37) usage:

(36) a. Reading books is a great pleasure.
b. The children are engaged in finding their presents.
c. Achieving fame is difficult.
d. The achievement of one's goals is difficult.

(37) a. The reading of books is a great pleasure.
b. The children are engaged in the finding of presents.
c. The achieving of one's goals is difficult.[169]

Attempting to bolster this further, he checked through a bit of Veblen's *Theory of the Leisure Class*, and found but one example of an *ing-of* nominal, which appears coordinated with a number of derived nominals (hence using a verbal gerund would destroy the style). From this, Emonds tentatively concludes that his preferences are true of usage in general. While this may be a bit strong,[170] Emonds is generally correct. Where verbal gerunds (as opposed to *ing*-of) can be used, they generally are. With generics, a paradigm case of the imperfect, this contrast becomes most apparent. 37(a) sounds quite bizarre, as does an example from

[168] It should be noted that Emonds makes no reference whatsoever to the semantic differences between verbal and nominal gerunds; however, I do believe his intuitions are coloured by them.
[169] While there is no * next to 37(c), I think it is marginal at best, in contrast to the previous two, which, while perfectly grammatical, are fairly awkward.
[170] The usage issue here may be largely one of dialect and register. As far as the standard American dialect is concerned, I think Emonds is perfectly correct. Upper register British speech seems to make much more use of *ing-of* nominals – especially BBC news presenter speak.

Hamm and van Lambalgen (2000) used to show that *ing*-of nominals are fine in wide containers.

(38) The singing of the song is fun.

With generic, imperfect property readings, where there is not even a specific event implicit in the context, it seems that the *ing*-of nominal's role has been completely usurped by the verbal gerund.[171] As we have seen, this certainly was not always the case; even after the emergence of the verbal gerund, *ing*-of generics would still appear with great frequency. Recall the delightful quote from the *Spectator*:

(39) [he] had a numerous Collection of old English ballads, and took pleasure in *the Reading of them*. (Addison, *Spectator*, 1711)

Visser's collection of *Ing*-of nominals has ten examples of the above form, both generic and specific, all imperfect, with the sense of an agent reading a book to himself. Then, from 1902, we have this:

(40) From *the daily reading of the Bible* aloud to his mother… (Harrison's Biography of Ruskin)

This is essentially the contemporary default reading of expressions like *the reading of …*-- a 'public' reading event (or at least reading aloud to someone else). So we speak of things like *the reading of a will*, or a public accusation, or minutes of a board meeting, or even *a* reading in a bookstore, but certainly not of the pleasure we get from *the reading of the newspaper in the morning*. The availability of the verbal gerund to express the default imperfect meaning of *read* has blocked the *ing*-of form from being used in all but the marked public reading interpretation.[172]

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[171] This can vary somewhat depending on meaning of the nominal. With *read* in the context that someone reads something to themselves, while one can think of it in terms of a corresponding event, there is nothing involved in someone's reading, construed as a sort of event, that is worth talking about (i.e. geographical, locative, or manner). *Singing* seems to fall somewhere more along the event side of things, but still sounds quite awkward to be used as a noun in generics. But now take a verb with strong event connotations – *kill*. One can use a verbal gerund in the generic, "Killing innocent people is wrong", but the *ing*-of version, "The killing of innocent people is wrong" is much better than the above examples with *read* and *sing*. And should one want to express something stronger than a normative judgment, say an absolute judgment, a perfect nominal must be used: "Any killing of innocent people is wrong." Here, there is implicit quantification over *all* actual and possible *killing innocent people* events, saying of them that they are morally wrong. But observe that:

Any(Every) reading of books is a great pleasure

verges on the non-understandable.

My guess is that certain verbs such as *kill* or *bomb* are seen as much more 'eventive'. Currently there is much talk of *the bombing* even in imperfect contexts. Given that there is a fairly large bombing event that is happening, this is perfectly understandable.

[172] This does not necessarily mean that for *read*, the perfect nominal of reading is never coerced – (40) can be interpreted as imperfect; it only means that it is a signal for a public reading. Imagine your favourite totalitarian regime:

a. Citizen X was arrested for reading subversive literature.
b. Citizen X was arrested for the reading of subversive literature at a dissidents' meeting.
c. Citizen X was arrested for reading subversive literature to a group of dissidents.

What has happened with 'reading' is an extreme example of what has happened in general with gerunds. Once the syntactical form – the verbal gerund -- entered the language, a form was available that only expresses the imperfect, the perfect nominal *the reading of …* became marked, and is used primarily to refer to a public reading event. This varies with the lexical item in question, but in general Emonds' intuitions seem to be on the mark, and there is probably much less regular coercion in PDE than there was even 100 years ago. It seems that this is a rather simple case of pragmatic blocking – two syntactic forms can be used to express the same sense. Eventually, one of them will either disappear from the language or acquire a slightly different sense.[173] In this case, with the availability of an imperfect nominal, the need to coerce a perfect nominal into an imperfect reading is no longer necessary. As can be seen with the contrast of (36) and (37) this seems to especially be the case with imperfect generics. Of course, many perfect nominals have not at all disappeared from the language, but instead are used primarily when a perfect reading is needed, or the rhetorical force seems to require a strong intimation of an event, such as in a recent anti-war petition, which begins, *The killing of innocent civilians is always wrong*. However, as well shall soon see, some *ing*-of nominals have disappeared from the language altogether, to be replaced by a semantically appropriate derived nominal.

It would be nice to ascribe this change and its direction to a single factor – coercion. Once a verbal gerund became established, language users now a form whose default meaning was the same (or similar to) a coerced meaning of the nominal gerund. So, language users would then prefer the gerund on the basis of an economy of comprehension principle. Gradually, the *ing*-of forms would start to lose much of their previous ability to be coerced, and appear only in more marked situations, or in their canonical event denoting meanings. Unfortunately, this is complicated by the productivity of derived nominals in imperfect contexts.[174] They are also coerced from their canonical event meaning, but yet happily co-exist with verbal gerunds in a number of contexts[175]; and while there may be a subtle meaning difference between a coerced derived nominal and its verbal gerund counterpart, it is not certain whether this is enough to distinguish it for blocking purposes. But, there is also the fact that, in general, many *ing*-of nominals have dropped out of the lexicon entirely, and

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(b) has a coerced reading, but the perfect nominal is perfectly fine. But it would not be if we were trying to express the sense of (a): ?? *Citizen X was arrested for the reading of subversive literature.*

[173] This is certainly the case with pure lexical blocking, the phenomenon where two lexical items with the same meaning and function will only co-exist for a temporary period of time, and one of them will either disappear from the language or acquire a slightly different meaning. Taylor (1994) did a study of past tense form doublets (*walked/welk*, *awaked/awoke*) and noticed that the average life span for doublets co-existing is around 300 years. While we no longer use *welk* or *awaked*, but the productive strong verb past tense versions, both shined and shone still exist, but only because they now have different functions (shone is not causative)

[174] As a bit of meta-research, I have noticed that this thesis employs scores of derived nominals with imperfect meanings, but very few *ing*-of nominals at all. Most that exist are not fact or event readings, but resultative or substantive, as in "the reading available in this context".

[175] There may be a specific/generic distinction here, as well as a difference if an activity in general is referred to, or the focus is on the person doing the activity:

a. Performing arias is difficult.
b. ?? The performance of arias is difficult.
c. The soprano's performance of a heavy metal song was surprising.
d. The soprano performing a heavy metal song was surprising.

I am not quite sure how well derived nominals do in the majority of generic contexts. And, for myself, if I mean to express 'That the soprano performed a heavy metal song', I prefer (d) to (c) -- 'performance' is still loaded enough with 'act' connotations, so that I cannot but want to think about *aspects* of the soprano's performance.

continue to do so. This does seem a rather paradigm case of lexical blocking, and the general marginalization of *ing*-of nominals may also have contributed to their declining productivity in imperfect contexts.

Observe the following quotes, culled mainly from the OED:

(41) a. To telle hasty destriyng of them. (Wyclif, 1380)
b. I determined no longer to delay in the destroying them. (A. Duncan, 1806)
c. It were no betraying of the sacred principles of religion. (*Young Man's Call*, 1678)
d. In the entering of the spring. (Urquhart, 1653)
e. The performing of my office amongst you, I must confesse, hath been much unlike. (ABP. SANDYS *Serm* xxii, 1575-1585)
f. [The] cruel murthering of their ancient citizens. (T. Washington, 1585)
g. The…cause of the collapsing of the sensitive plant. (E. Darwin, 1791)
h. At Norton, near Wulpit, King Henry VIII was induced to dig for Gold. He was disappointed, but the Diggings are visible at this Day. (De Foe, 1769)
i. in the morning at the entring into the wood this depon^{t}: espied a fellow out of the pathe standing wth a Calfe. (Deposition of Robert Wyard, Virginia, 1844)

This is just a small sample of the numerous, and now obsolete, *ing*-of nominals. Aside from the other irregularities, all of the above would now receive a '*' in many Present Day English dialects. The above nominals would now be replace by *destruction, betrayal, entrance, performance, murder,* and *collapse*[176]. (h) and (i) are thrown in as examples of *ing* forms that were once resultative nouns, and would now be replaced by *dig*, and *entrance*.[177] Curiously, the 50's hepcat slang for one's residence, *digs,* seemed to have its origin in the 19th century *diggings*, used in the exact same way.

Of the erstwhile event nominals, most of them went out of fashion in the 19th century – at least the OED citations stop in various parts of that century.[178] *Collapsing of / Collapse* is an interesting case as the blocking effect appears to have taken hold rather quickly. Both entered the language in the late 18th or early 19th century. The last entry for the perfect nominal *collapsing* is 1855, but certainly may have persisted beyond that.[179] What seems to be happening is that many gerunds are losing their nominal force entirely. Instead, where an appropriate derived nominal is available, it takes the place of the event and result meaning, while the imperfect meaning is carried by the verbal gerund, and where gerunds still have

[176] I've asked a number of native speakers for their intuitions on the derived/*ing*-of nominal conflict. For the most part their intuitions are the same as mine. However, a couple of people took slight issue with *destroying/destruction*. If a destruction event has finishing they would use *the destruction of the city*. However, if it is still in progress, they would use *the destroying of the city*, as it conveys the sense that the event is still happening. A default approach, such as Optimality Theory, could handle this fact quite easily.

[177] Example (i) is from *Everyday English* and involves a trial in colonial Virginia; this quote is taken from the deposition of a man, who along with his wife, witnessed Nathaniell Moore 'Buggering a Calfe.' I strongly suggest that the reader take a look at this book, especially the sections on public accusations and trials. It makes the *Jerry Springer Show* look like children's television. I am not sure whether or not it is gratifying to know that while our language may change, our human nature does not.

[178] The last cites for p*erforming* and *murdering* are the exceptions, both being at the end of the 17th century. Curiously, it was *performing* that caused me to investigate a change in *ing*-of, derived nominal usage. Zucchi frequently uses "The beautiful performing of the song" as an example of an *ing*-of nominal. I found this to be rather ungrammatical and asked a number of native speakers (all Americans) what they thought of this. They all said, without prodding, "No, that should be *performance*!".

[179] Prior to this, there was also *collapsion* which seemed to have the same meaning and function. The first entry is 1623 and the last, 1823.

nominal force, they are far more marginalized than they were even one or two hundred years ago.[180] What remains rather strange is that derived nominals in imperfect contexts are frequent despite the fact that these need to be coerced and there is an imperfect nominal available. This seems to bring up the question as to whether there may indeed be subtle meaning or discourse differences between derived nominals and their imperfect counterparts.

My intuition and feeling for the language is that this phenomenon is still happening -- that derived nominals are still entering the language and pushing out the corresponding *ing*-of nominals, but actual corpus work would be needed to verify or falsify this prediction[181]. But this would mean that the gerund, once exclusively nominal, may be going more and more to being exclusively verbal. And so once again history is a cruel mistress. It very well may have been that a coincidence of discourse use and a derived nominal conspiracy helped along a process of semantic differentiation and led to what seems to be a continuing decline of the gerund as a strongly nominal form.

4.8 **Conclusion**

In this chapter we began by examining a change in the progressive that provides a good example of all the various factors that can be involved in language change – historical accident, syntax, semantics, social factors, and pragmatics. I've tried to take some of these lessons and apply to the development of the gerund – including attempting to ground and give a mechanism Houston's intuition that the change was a result of similarity in discourse function via cognitive grammar. These changes did not occur in a vacuum, however, and really seemed to take off in a period of vast social and linguistic change. Furthermore, once the initial change did happen, it seems to have triggered a rather dramatic change in the way gerunds are used – the verbal gerund has primarily taken over the role of expressing the imperfect, while *ing-of* gerunds, when they still exist, are often limited to certain marked contexts, or used primarily to express their default, perfect interpretation. Derived nominals, which happily co-existed alongside their *ing*-of counterparts for centuries seem to be pushing many of them out of productivity, something that may also be connected with the emergence and marked rise in frequency of the use of the verbal gerund.

[180] This seems true much more of the class *ing*-of nominals than the compound ancestors of Type **II** gerunds like kite-flying, which, when productive, seem perfectly fine in imperfect contexts. That is one may describe their favoured hobby as either *flying kites* or *kite-flying*, but never *the flying of kites*.
[181] Dialect and register distinctions undoubtedly play a role here, also.

Conclusion

This has been a rather long, dense journey through a number of aspects of nominalization in English, which I hope has been somewhat enlightening. Starting from the standpoint of the present, going back in time and up to the present again, we have seen some rather startling changes, which, when put into a larger framework, begin to make sense. Overall, I hope that I have shed light on how the various changes came about, as well as illustrating the continuing fallout from changes that happened hundreds of years ago, as the English language continues to change. Furthermore, I hope that it has served to illustrate the enormous complexity of dealing with language change, and how only by examining a number of factors in a variety of related disciplines can we begin to understand it.

More specifically, I have attempted to make Houston's connection between syntactic change and discourse function more explicit and grounded. Moreover, it seems that there is good evidence that after the syntactic change occurred, pragmatic and discourse factors may have indeed caused the use of the gerund to mirror more closely the semantic perfect/imperfect distinction. The timing involved in the change and the rapid rise of the gerund from something only nominal to something approaching to the modern verbal gerund occurs at a time contemporaneous with massive linguistic and social change, and a connection with these factors must also be considered.

Nevertheless, I see this as only a beginning, as many questions remain unanswered, and new connections and oddities have been revealed. More research needs to be done in regard to the semantic status of nominalization, and how this shows up in language use. The intriguing issue of how people conceive of and express the perfect/imperfect distinction also merits further investigation, as does a sort of 'ontology' of events. Given that these involve matters of human conception and cognition, languages other than English need be examined, especially as to how they manifest the distinction.

Continuing changes in the use of the gerund still need to be examined in greater depth, perhaps by detailed corpus work. To what extent exactly has the split into a nominal and verbal gerund change the way nominalization is done in Modern English? Is it really the case that derived nominals are squeezing out many *ing*-of nominals from the lexicon? I have presented some evidence to show changes in both the use of gerunds and derived nominals, but it really needs to be examined in a more systematic basis. Issues of register, status, syntactic control, semantics and pragmatics all seem to play a role here, but to what extent each of these factors play a part is still undetermined.

On a more personal note, this research seems to have affected my own language. No longer do the Type **VI** gerunds sound horribly ungrammatical or the slightest bit grating. I've even found them popping up in my own speech production and writing. As to exactly what this means, I haven't a clue. But, given the incredible flexibility of gerunds and their use in English, I suppose that this really isn't all that surprising.

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