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Deconstructing Meaning : a semiotactic approach to gerundival constructions in English

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Chapter 4 – The situational gerund

4.1 – Introduction

The situational (or, more commonly, the clausal) gerund is interesting, as it furnishes the English language with a third nonfinite form, after the *to*-infinitive and the bare infinitive. The situational gerund and the *to*-infinitive structures have more or less twined together, one might say. For example, in many sentences they can occur as near-synonyms (e.g. *I like reading* and *I like to read*). In some other cases a real difference in meaning can be detected (e.g. saying *I remembered buying milk* refers to you remembering the moment you did it, but *I remembered to buy milk* means that you did it because you remembered). Lastly, there are also positions in which one or the other can be found, but not both (e.g. “She wanted to dance / *She wanted dancing” (Wierzbicka 1988, p. 24) and “He imagined being blind (*to be blind)” (p. 59)). This being the case, there must be similarities between them, but the fact that there are distributional differences indicates that they are not identical in meaning either. To come to a full understanding of the meaning of the situational gerund, finding out the differences and similarities between this form and the *to*-infinitive is essential. Of course, the bare infinitive is also a potential candidate for competition (e.g. *I heard him shoot his gun*). The question that I will attempt to answer, then, is the following: what is the difference in meaning between the situational gerund and the other infinitival forms that can explain these distributional differences, and how can this difference be reflected in semiotactic notation?

To find a potential answer to this question, first it is important to isolate each of these infinitival forms as *signs* in the Saussurean sense of the word. That is to say: the first step is to show that there are semantic as well as formal differences between the nonfinite forms and other, related forms. It will appear that the bare infinitive cannot be regarded as equivalent to the situational gerund and the *to*-infinitive by performing this analysis, but the situational gerund and the *to*-infinitive can. We will then examine the positions that the situational gerund and the *to*-infinitive can take. An overview of those that are discussed in the present work will be given in the third section. The distinction must be detailed enough to explain the difference in meaning between the two forms where both can be used, and why only one of them is grammatically acceptable in other contexts. Broadly speaking, there are three positions that these nonfinities can take in a sentence: they can occur as the subject of a sentence, as the object of a preposition, and as the object to the main verb of the sentence. However, as the examples above already indicate, the appropriateness of either nonfinite depends on the sentence as a whole, which, as will be hypothesised here, is due to the difference

in meaning between the two nonfinite structures. After that, the distinction Ebeling proposes to explain these constructions within (some of) these phenomena will be examined in the fourth section. Different explanations can be found in the vast extant literature on the subject of the English nonfinite constructions. The necessity of presenting new notations to account for the differences between the two nonfinites discussed here will become clear from the literature review. The new distinction and its explanatory value will be presented in the fourth section of this chapter. To further elucidate the semiotactic distinction found, the fifth chapter will be devoted to the notation of the examples given in section 4.3, with an eye to prove the applicability of the distinction proposed in every context distinguished in this chapter.

4.2 – *English nonfinite forms: form and meaning*

In the present section, the three nonfinite forms will be isolated as Saussurean signs. In order to meet the criteria to be signs, a construction must have its own semantic properties, as well as its own formal properties. As it is the semantic properties that prompt the investigation in the first place, it seems appropriate to start with these. First, the semantic properties of the situational gerund will be discussed. The *to*-infinitive will be analysed after that, and the bare infinitive will be analysed last. Having analysed all of them semantically, an assessment of the independence of these forms will then be performed in the same order. Since there are syntactic structures that are formally identical to both the situational gerund and the *to*-infinitive, both must be shown to be instances of syntactic homonymy. As such, it will not be the formal features themselves that will be compared and contrasted to other constructions. This means that the principle of *one form – one meaning* cannot be maintained in its strictest (i.e. the phonetic) sense. It can still be made clear that different meanings clearly underlie their structures with relative ease. This also goes for words like *well*, for instance. *Well* in its adverbial meaning has the same phonetic structure as the word *well* referring to a hole in the ground dug for water, yet one would never confuse the two in sentences like *He dances well* or *He is digging a well*. Similarly, *to* + infinitive constructions mean something radically different and occur in different positions than *to*-infinitives, yet one cannot distinguish them by simply hearing them in isolation. Rather, they will be set apart on the basis of their *syntactic* properties. This can be done by contrasting constructions on the basis of their grammaticality, and inferring the difference in the positions that these constructions take. Note that in this chapter, the term *situation* will be used to describe the meaning of an entire nonfinite clause, whereas the terms *event* and *verbal action* are both used to refer to the semantic content of the nonfinite verb *within* such a clause.

4.2.1 – Semantic properties of the nonfinite forms

In this section, it will be shown that the nonfinite constructions under discussion display different semantic features. This will be the first indication that the situational gerund is indeed different from the forms discussed in the preceding chapters. Apart from that, both the *to*-infinitive and the bare infinitive will be analysed along the same lines.

4.2.1.1 – SEMANTIC PROPERTIES OF THE SITUATIONAL GERUND

The formal properties which distinguish the situational gerund from gerundive temporal gradation constructions will here be shown using some minimal pairs. There are essentially two separate constructions to contrast the situational gerund to: gerundives in temporal limitation relations and gerundives in temporal gradation relations. The differences between these two will be discussed separately, because the features of each are slightly different.

Let us first look at the following pair:

(89) She sat *talking*.

(90) She liked *talking*.

On the surface, these two sentences may appear to be rather similar, but semantically it is not hard to note a difference. As discussed in chapter 3, (89) contains a gerundive in a temporal gradation relation with the main verb. In other words, the sitting event is going on while the talking is going on. The same relation cannot be said to exist, however, in (90). When one utters (90), one is not stating that a liking event is occurring at the same time as a talking event, as some analysts (e.g. Wierzbicka 1988) have suggested. This would imply that the liking event did not have an object at all, according to the analysis provided above. Rather, the talking is the thing that the subject likes, whether she is performing it or not. The construction certainly does not connote temporal identity between *liking* and *talking*, because *liking*, being a state, is more or less constantly true (even when someone is asleep, for instance). The same cannot be said of talking. Other examples highlight the contrast between these constructions even more. Take, for instance, (91–93) below:

(91) She stopped *talking*.

(92) She avoided *talking (to him)*.

(93) She continued *talking*.

In all of these cases, the relation between the gerund and the main verb is not simply one of sameness of time. In (91), this is clear because the main verb directly applies to

the gerund: the talking is what is stopped, rather than that some other activity was stopped while the talking went on (which would be the case, for instance in *She stopped the car, smelling of alcohol*). Similarly, (92) does not imply that the two events occurred simultaneously. In fact, this would be impossible: if something happens, you have not avoided that thing happening. The main verb event ensures that the second does not occur. Lastly, (93) may at first appear to be an example of sameness of time, but it is not. Rather, the verbal content of the main verb frames the event described by the gerund. The person was not simply talking during the NP, but also before that time. This seems to be the fundamental difference between *She talked* and *She continued talking*: the projection of the talking event simply fills the NP in the former case, whereas it stretches out before the NP in the latter. In the context of some main verbs, temporal gradation therefore does not suffice as a description of the connection between main verb and gerund.

Similar differences can also be found in cases where there is another entity present as well. Huddleston & Pullum (2002) provide some examples of this. Note (94–6) below, for example:

(94) “I caught *Kim mistreating my cat*”

(Huddleston & Pullum 2002, p. 1204, italics added).

(95) “I resented *Kim mistreating my cat*” (p. 1204, emphasis added).

(96) “That way I avoided *her seeing the brand on my inner thigh*”

(Swarovski, 2015).

Huddleston & Pullum remark that “[the first] example might be glossed as ‘I caught Kim in the act of mistreating my cat’; Kim is the patient-argument of *catch*. In [(95)], however, it wasn’t Kim that I resented, but the whole situation in which Kim mistreated my cat” (p. 1204). The description of the first example corresponds neatly to a notation with temporal gradation as discussed in chapter 3 above: she was caught in the process of mistreating the cat. This is exactly the kind of relation that the symbol ‘ \supset ’ forges. By contrast, the fact that in (95) the *whole situation* is resented clearly indicates a reading of *Kim mistreating my cat* as a nonfinite clause. An English sentence which comes close to the meaning of this sentence is *I resent that Kim mistreats my cat*. Sentence (96) provides a further example. The explanation given of participial gerundive constructions does not suffice as an explanation for (96). If I avoided her while she saw the brand on my thigh, then I have not succeeded in hiding the brand from her. Rather, this would result in a situation in which her seeing my brand and my avoidance of her would have occurred simultaneously. That this is not the intention of the writer of this sentence becomes clear, if from nothing else, from the context in

which it is used: the sentence is preceded by “when I had taken off all my clothes, I had made sure to hop in the bath while Nell grabbed the lotions for my hair” (Swarovski, 2015). The only conclusion open to the reader, then, seems to be that Nell herself is not avoided, but rather the situation in which Nell sees the branding. Having thus provided a brief description of the participial construction and the grammaticalised situational gerund, it still stands to be proven that this is in fact a separate *form-meaning unit*. In order to do so, some of the distinct formal features of the situational gerund will be discussed below.

4.2.1.2 – SEMANTIC PROPERTIES OF THE *TO*-INFINITIVE

In a sense, the *to*-infinitive has to compete with itself. That is to say: the *to*-infinitive is often formally identical to a prepositional *to*-phrase, so the competing pattern would be *to* + infinitive. Semantically, there is a tangible difference between these two patterns, as the examples below show:

(97) John left *to work out*.

(98) John likes *to work out*.

In the first example, the working-out event is predicated upon the leaving. John left as a means to an end, which is working out. In (98), however, the relation between these forms is rather different. The liking event is not a means to an end at all. Rather, the liking concerns the activity as a whole. In a way, this is similar to saying *John likes ice-cream*: here, the liking event clearly takes *ice-cream* as its object. Semantically, (98) is rather similar: the sentence does not make any claim as such about whether or not a particular working out event will happen or not, or that John’s liking it has any effect on its occurrence. The message is simply that John enjoys engaging in the activity of working out. A similar distinction exists between the following examples:

(99) Stella killed Mickey *to send a message*.

(100) Stella had counted on Mickey *to toe the line*.

In example (99), the object of Stella’s killing action is simply Mickey. The *to*-construction following this message clarifies something about Stella’s reason for doing so. The murder was a means to an end: she killed him, with hopes that this would send a message to other people. Example (99) is similar in this regard to (97): here, the leaving event was a means to an end as well: John deemed it necessary to leave in order that he might engage in a work-out. The *to*-construction in (100) is different. Here, what was counted on was not simply Mickey, but rather the situation that he would toe the line. If the *to*-construction were analysed here in the same way as in (99), this

would mean that she counted on Mickey, so that she herself might toe the line. Clearly, this is not the intended message. In this way, (98) resembles (100): rather than standing alone, the *to*-infinitive is part of a construction which, as a whole, seems to perform the object role of the verb. In (98), what he likes is the situation in which he works out, whereas in (100), what is counted on is (or had been) the situation in which Mickey toed the line. This suggests that Mickey is the subject of *toe the line* in (100), rather than simply the object of *counted on*. In short, the four examples above suggest that the *to*-infinitive in (99) semantically does play a different role than the prepositional *to*-construction in (100), and that the *to*-infinitive can also have an overt subject. This, too, has to be connected to formal differences in order for the *to*-infinitive to count as a sign of its own.

4.2.1.3 – SEMANTIC PROPERTIES OF THE BARE INFINITIVE

The bare infinitive can only appear in a small number of contexts, in which it is almost always in competition with a temporal limitation gerundive. Consider Ebeling's examples below:

- (101) "I saw the man jumping" (Ebeling 1978, p. 308, italics removed).
 (102) "I saw the man jump" (p. 308, italics removed).

About the semantic difference between the two forms, Ebeling notes the following: "Intuitively, with [101], what I see in the first place is rather the man than his action, whereas, with [102], such a feeling is absent or at least less strong. This impression is perhaps corroborated by the observation that it is more acceptable to pronounce *I saw the man* with a complete sentence intonation and then to add *jumping* as an afterthought than to do so with *jump*: one has a feeling that the delayed addition of *jump* changes the structure of the sentence" (1978, p. 309). Thomas Egan seems to analyse this form in a similar way: as a situation standing on its own. About the semantics of this situation, he notes: "Either it is actually realised at the time of the main verb. . . or, if it [is] located in time after the main verb, it follows hard upon it." (Egan 2008, p. 91). He further notes: "Immediacy and certainty of realisation are two things that all instances of bare infinitive complement constructions have in common. Another is the fact that in all cases the event or state in question is profiled as an undifferentiated whole", by which he means "the *bare infinitive* is used to profile a process as a whole, making no reference to the unfolding in time of the process in question" (p. 92). In (102), for example, the whole jumping event is projected as a whole, occurring at exactly the same moment as the watching, and also as being completed there and then.

It may still be wondered, however, how immediacy and certainty of realisation differentiate the bare infinitive from the gerundive form in (101). As has been discussed in chapter 2, such a construction is notated using temporal limitation, which by definition indicates that the man was seen while he was jumping. The difference seems to be in the certainty of realisation, as the following examples show:

(103) I saw a man *writing a book*.

(104) I saw *a man write a book*¹⁹.

When someone says (103), this does not necessarily mean that the book will, as a whole, be finished at all. Rather, it means that at the time you are discussing, a man was busy writing a book. Example (104), however, does imply that the speaker was there as the book was being started *and* completed while they were watching. As such, it seems the whole event, rather than the person performing it, is the message of the bare infinitive in (102).

4.2.2 – English nonfinites: syntactic properties

In the above, the semantic side of the argument for the situational gerund, the *to*-infinitive and the bare infinitive being separate constructions was discussed. In what follows, the syntactic status of these constructions will be tested. This will be done in the following ways: first, they will be placed in the subject position of a sentence. If the resulting sentences are grammatical with singular agreement on the main verb, this will show that these forms can represent separate situations as entities in the subject position. The second and third test will determine whether or not these forms can also do so after the main verb. This will be determined first by taking forms in which there is a contested form present, and then removing this form from it. If the result is a grammatical sentence, this shows that the nonfinite was not in the object position to the main verb. As a final test, the contested forms will first be presented in sentences in which they occur with an entity present, and the entity will then be removed. If the resulting construction is still grammatical, this will be taken to show that the construction in question is a nonfinite.

¹⁹ Note, however, that there are verbs for which this sort of pair cannot be made, such as *let*, *make* and *help*. One can say *I let the plate fall out of my hands*, for instance, but not **I let the plate falling out of my hands*. In these cases an overt agent of the event is still required, however, as **I let fall out of my hands* is not a complete sentence. These verbs therefore still do not appear to invoke a situation, although the comparison with the temporal gradation construction also falls short in these cases.

4.2.2.1 – SYNTACTIC PROPERTIES OF THE SITUATIONAL GERUND

In the present section, the distinct formal properties of the situational gerund will be discussed. Primary among them is the fact that these forms, although they do not appear with any markers commonly associated with entities (e.g. articles, number marking), they can readily take any position in which an entity is usually found, as the following examples show:

- (105) *Being loud* is just *being young and dumb*.
(106) “In the broad scheme of things, *kids being loud* is just *kids being young and dumb*” (Beekissed, 2010).

As (105–6) show, the gerund can occur in the subject position, both with and without an accompanying agent. Example (106) is especially telling, as this element agrees with the main verb in the singular, even though *kids* is a plural noun. This indicates that the form performs a different function from a construction in which the entity *kids* is simply the subject (compare (106) to *Kids being loud are annoying*, in which *kids being loud* functions like the constructions in chapter 2). The singular here seems to agree with the situation as a whole, rather than the kids specifically. This also seems to be the case in (105), in which there is no entity at all being presented. The fact that the entire construction functions as a singular entity is the most obvious formal distinction between these constructions and constructions containing a gerundive, like those described in chapters 2 and 3.

Also, it can be shown that the semantic difference between (89) and (90) is connected to a syntactic difference by removing the gerundival form in both sentences. Consider the following pairs:

- (107) She sat *talking*.
(108) She sat.
(109) She likes *talking*.
(110) *She likes.

The word *talking* can easily be left out without creating an ungrammatical sentence if it is there to indicate what the agent was doing while performing the main verb action as well, as (107) and (108) show. By contrast, it cannot be omitted when it does not perform this function, as in (109) and (110) show. The fact that it cannot be removed here indicates that it is an object in this instance, because (110) is ungrammatical precisely because nothing complements the verb *like* here.

To show that the same goes for the situational gerund with its own subject, another test must be performed. Huddleston & Pullum argue that a difference between the two constructions can be found in the fact that the participial element always requires an entity to specify, whereas the situational construction can also contain only a gerund. In other words, since “I resent them being exploited” and “I resent being exploited” (p. 1205) are both correct, this shows that what I resent in the latter case is the situation in which I am being exploited, not any specific person being exploited. Both variants, then, are equivalent, in that they introduce a separate situation into the sentence. This is not the case with a gerundive, however: such a form always specifies the meaning of another element in the sentence. If this is taken out of the sentence, its purpose is lost. This distinction holds for the examples discussed above, as the following shows:

- (111) I caught her *mistreating my cat*.
- (112) *I caught *mistreating my cat*.
- (113) I resent *her mistreating my cat*.
- (114) I resent *mistreating my cat*.
- (115) *I resent.

As the above examples show, only the example implying sameness of time (111) is ungrammatical without the subject (*Kim*) – and that is precisely because it is *not* a subject in that example, but the object of *catch*. Conversely, in (113) and (114), the lack of an entity after the main verb is permitted, which indicates that the *-ing* forms here do not simply specify an entity. Rather, their meanings themselves seem to suffice as object participants in these constructions. This is not due to the fact that the verb *resent* does not require any object, as the ungrammaticality of (115) shows. This indicates that in both (113) and (114), the situational gerund takes the object position as a whole.

A further point which distinguishes the gerundive from the situational gerund is the following: it can be proven that the situational gerund in both cases is not equivalent to the participle form, because the situational gerund, being a gerund, always requires an *-ing* suffix to be present. This is not, strictly speaking, part of the test, and it cannot be repeated for the other forms, but it is important to note. Consider the following examples:

- (116) Men *driven insane* (*is/)are dangerous.
- (117) *Men being driven insane* is a serious problem.
- (118) I found her *trapped in her room*.
- (119) I resent *her being trapped in her room*.

In the examples above, the participial forms cannot be replaced by situational gerunds. In (116), for example, the subject can only be *men*, not any nonfinite situation. This is because the situational gerund is not participial at all: it is a separate form, which requires *-ing*. This also explains why (117) is grammatical: *men being driven insane* can be used as a situational gerund. Contrastively, (118) is grammatical, because here the participle adds information about the state she was in when she was found. Example (119) is also correct. However, it is impossible to remove *being* from (119): this would remove the *-ing* form from the situational gerund. This shows that participles take different positions in sentences than situational gerunds.

An important point to be addressed here is that variants with forms presented in the genitive case can only be logical if the situational reading is connected to the sentence:

(120) “I resent *Kim/Kim’s mistreating my cat*”
(Huddleston & Pullum 2002, p. 1204, emphasis added).

(121) “I caught *Kim/*Kim’s mistreating my cat*”
(p. 1204, emphasis added)

I would argue that the genitive and the oblique form are equivalent in the sense that they both introduce situations, which explains why the genitive cannot be used in (121) whereas it can in (120). However, as the principle of *one form – one meaning* dictates, the two forms cannot simply be assumed to be identical in meaning. For a full explanation of the situational gerund, then, analysing the difference between the two variants in (120) is important.

4.2.2.2 – SYNTACTIC PROPERTIES OF THE *TO*-INFINITIVE

The discussion of the formal features of the situational gerund has yielded a fruitful way of determining whether or not a potential situational sign has its own formal features. That is, if the *to*-infinitive can take the positions a singular entity can also take, with the same restrictions, then this would be sufficient evidence that the *to*-infinitive is separate from a normal *to* + infinitive form. In 4.2.2.1, the first test was to see if the form could stand on its own in the subject position. To this point, consider (122) and (123) below:

(122) “I can safely say that *to know him* was *to love him*, and *to love him* was *to know him*. Those who knew him loved him, while those who did not know him loved him from afar”
(Roddenberry et al. & Landau, 1989).

(123) *To know the truth* is a burden.

Clearly, these sentences are not topicalised (like, for example, *In the cave lived a bear*). None of the *to*-constructions in these sentences apply to any element as a means to an end. In (122), the first *to love him* takes the predicate position, not to indicate that people knew him so that they would love him, but to indicate that the two situations are equated: if you know him, you love him. This is even made explicit by the line that follows. Crucially, this means that the verbal agreement of the copula *was* in (122) is not due to any other element than the *to*-construction itself. As was the case with the situational gerund, the situation as a whole agrees with the main verb as a singular entity. This is impossible for the prepositional *to*-construction, because it is impossible for prepositional phrases in general (e.g. **In the house is to go* versus *To love her is to go*).

In the position following the main verb, the *to*-infinitive can also appear as the complement to that main verb, rather than as a prepositional phrase. This can be shown by the fact that the *to*-infinitive cannot be removed, whereas the *to* + infinitive-construction can. To show this, (97) and (98) are repeated here, along with variants without the forms in question:

- (124) John left *to work out*.
- (125) John left.
- (126) John likes *to work out*.
- (127) *John likes.

When the *to*-construction is not given to add information about the main verb, but rather to complement it, it cannot be removed. Sentence (127) is similar to (115), in that in both forms, there is no target given for the liking, which makes the sentence as a whole illogical. This shows that the *to*-infinitive in (126) does in fact fill the object position.

In the object position, it can also be shown that the *to*-infinitive can take its own subject. This can be shown using the following pairs:

- (128) John brought the car *to pick her up*.
- (129) *John brought *to pick her up*.
- (130) John expected *Jim to see her*.
- (131) John expected *to see her*.
- (132) *John expected.

As examples (128) and (129) show, if the *to*-construction is merely there to specify the aim of the action described by the main verb, the object of that verb cannot be removed. However, both (130) and (131) are grammatical. This will be taken to indicate that the *to*-infinitive takes the object position in both cases. The semantics of a situation are clearly present in both cases: in (130), the message is not that John expected Jim, so that John could see her, but rather that John expected the situation to arise in which Jim saw her. Moreover, the fact that (131) is grammatical shows that the verb *expect* does take the *to*-infinitive situation as its complement, unlike *brought* in (129). This is further proven by (132): it cannot occur without an object complement. These facts together lead to the conclusion that the *to*-infinitive is also present in (130), and not a prepositional *to*-meaning.

4.2.2.3 – Syntactic properties of the bare infinitive

The final construction to be analysed in this section is the bare infinitive. The difference between these forms and the other two nonfinite constructions analysed here is that there is no construction that it is syntactically homonymous with.

As stated above, the bare infinitive can only take the object position to a very restricted number of verbs. This means that it automatically fails the first test used for the constructions above, as (133) and (134) show:

(133) **The men drink beer is/are a problem.*

(134) **The man jump is impressive.*

Neither of the two sentences above are grammatical: it simply cannot take this position, nor can a bare infinitival accompany another entity in the subject position. If it could (133) would be grammatical with *are* instead of *is*, because then *the men* would simply be the subject. As such, the bare infinitive verb is not there to temporally specify an entity, but it does not present a situation as an entity either, as the other constructions discussed here do.

In the object positions in which the bare infinitive can be used, it is always possible to omit it, just like the gerundive:

(135) I saw *a man writing a book.*

(136) I saw *a man write a book.*

(137) I saw a man.

As the three examples above show, whether it is a gerundive or a bare infinitive, it can be removed without leading to an ungrammatical form, as (137) shows. It appears,

then, that the bare infinitive also fails the second test. Similarly, it cannot appear without an overt agent,²⁰ as the following examples show:

(138) I hear *the doorbell ring*.

(139) *I hear *ring*.

How do we proceed knowing this? It appears that the bare infinitive does not have the flexibility that the other two nonfinites do show. It cannot be used in the subject position, nor can it appear as merely a verb. It seems that although the form is more or less unitary in the object position, then, that it does not constitute a singular entity in the way that the situational gerund and the *to*-infinitive do. This means that the bare infinitive does not function as a separate, singular entity, and, as such, is not in competition with either the situational gerund or the *to*-infinitive, but rather with gerundives in positions where they specify the main verb through temporal gradation. For this reason, this form will not play a role in the remainder of this discussion.²¹

4.3 – Positions of nonfinite clauses

In this section, the use of the situational gerund and the *to*-infinitive will be examined. As stated, they can occur in the subject position of the whole sentence, as the object to a preposition, or as the complement to a main verb. For each of these positions, it will be examined under what circumstances both the situational gerund and the *to*-infinitive can be used, and in which cases only one of the two can be used, so that the differences between these types can be compared and contrasted. Doing so will help us determine the exact nature of these nonfinite forms. Essential to the discussion to follow is the distinction between *simple* and *complex* nonfinite forms. The term *simple* is used to refer to nonfinites which do not take an overt subject, e.g. *I like to swim* or *I regret waiting*. *Complex* nonfinite forms, on the other hand, do have an overt subject, e.g. *I'd like you to swim* or *I regret him seeing me*. As stated, the following discussion will

²⁰ Note that *help* forms an exception to this generalisation: *I helped find the cat* is an acceptable sentence, in which case the finding action is essentially that of another person: in certain contexts, it is synonymous with *I helped you find the cat*.

²¹ Ebeling notes that “it is necessary for [*I saw the man jump*] that the speaker saw not only the man himself but also the situation S characterised by the fact that the man jumped” (p. 310). This indicates that the jumping event performed by the man is a message in its own right, which is just as much part of the sentence meaning as the first nexus. In other words, it is not a situation in its own right, but an equally characterising event within the same situation, according to this explanation. His proposed notation therefore contains another nexus: one linking ‘me’ with ‘see₁’, and another linking ‘man’ and jump₁’.

present the difference in distribution that this work will set out to explain. It is not intended as an analysis as such, but as an inventorisation of phenomena under discussion. The sentences exemplified here will be analysed in section 4.6, based on the generalisations made in 4.4–5.

4.3.1 – Position 1: the subject position

The subject position is, under most circumstances, open to both the situational gerund and the *to*-infinitive. However, there are many conditions to using the *to*-infinitive, excluding it in many cases, although there are a few contexts in which only the *to*-infinitive can be used as well. When both can be used, there is naturally a semantic difference to be detected. This will be discussed in 4.3.1.1. After that, we will examine the use of a nonfinite subject in aspectually specified sentences. In the third subsection, sentences specified by temporal adverbials will also be looked at, noting that there is a difference between the situational gerund and the *to*-infinitive in this context as well. Lastly, an explanation will be given for the fact that the *to*-infinitive is the only proper subject to a sentence with another *to*-infinitive as its predicate.

4.3.1.1 – SPECIFIC VERSUS GENERAL

In a sentence in which both the situational gerund and the *to*-infinitive can be used, it is noticeable that in each case a subtle difference in meaning is felt. Consider, for example, (140) and (141) below:

(140) “*Living in fear of attack* is a terrible stress and one which GPs could do without” (Egan 2008, p. 133, emphasis added).

(141) *To live in fear of attack* is a terrible stress and one which GPs could do without.

Comparing the first example to the second, it may be noted that in (140), the situational gerund places the nonfinite clause at the moment of speaking, whereas in the case of *to live*, the interpretation is rather different: this statement seems to refer to a general truth, not limited by any temporal boundary, which as such may be read as “when one lives in fear of attack, it is a terrible stress”. This distinction can also be felt in sentences in which certain modal verbs are used:

(142) *Doing so* would have required 18,446,744,073,551,615 grains.

(143) “*To do so* would have required 18,446,744,073,709,551,615 grains!” (Featherstone 1975, emphasis added).

Both situations are part of a hypothetical sentence. However, the idea that the requirement is only applicable to the hypothetical situation described is present in

(142), whereas (143) holds this requirement to be true regardless of the context. This also explains why (143) is the original sentence: it pertains to the amount of grain required to pay a man who said: “If you are determined to pay me something, give me one grain of wheat for the first square on the chessboard, two for the second, four grains for the third, eight for the fourth, and so on, doubling the number for each square until all 64 squares of the board are covered” (Featherstone 1975). Naturally, this procedure would result in the same number in every case, so the sentence pertains to a general truth.

There also seems to be a connection between the tense within which the finite situation is presented and the acceptability of nonfinite clauses in subject position. Naturally, the past tense cannot be used to describe general truths, and it does appear that the *to*-infinitive cannot be used in such contexts. To this point, consider (144) and (145) below:

(144) *Washing the dishes* used to be a drag until I bought a dishwasher.

(145) *?To wash the dishes* used to be a drag until I bought a dishwasher.

Here, the fact that the situational gerund is temporally specified actually leads to a grammatically acceptable sentence, whereas this is not the case in (145): here, the more general reading seems to lead to a logical inconsistency: how can it be a drag *to wash the dishes* when I have already bought a dishwasher? This semantic distinction must be discussed in order to understand the semantic distinction between the two constructions completely.

4.3.1.2 – OCCURRENCE IN SENTENCES WITH ASPECT

Similarly, there seems to be a connection between aspect and the acceptability of the *to*-infinitive in subject position. Consider (146) and (147), in which the main clause contains the present progressive (see section 1.7):

(146) *Working at the post office* is driving me crazy.

(147) *?To work at the post office* is driving me crazy.

The same is true for perfect sentences (see section 1.7) within which the subject is an event that refers to a situation that has occurred. In such contexts, the *to*-infinitive cannot be used, even though (148) is acceptable:

(148) *His not taking his medication* has killed him.

(149) **For him not to take his medication* has killed him.

Again, the generality of the *to*-infinitive is not applicable here, because the event in the nonfinite situation is not supposed to take place in a general sense, but rather before the main verb event. It seems, then, that in all of these cases, the generality of the *to*-infinitive on the one hand, contrasted to the temporal flexibility of the situational gerund on the other, seems to bar it from these positions.

4.3.1.3 – NONFINITES WITH NONFINITES

Moving on, there appears to be only one context in which the *to*-infinitive is required in the subject position, namely when the predicate also consists solely of a *to*-infinitive sentence. An example of this is given below:

(150) *To lie* is to sin.

(151) **Lying* is to sin.

As the pair above shows, when one situation is equated to a *to*-infinitive situation, this also needs to be a *to*-infinitive situation. It seems, then, that they share a common temporal and modal meaning that is not shared in the same way by the situational gerund.

In the present work, it is assumed that situational gerunds in the subject position mean exactly the same. The same goes for the *to*-infinitives in the above. This view is consistent with the notion of *one form – one meaning*. When the meanings of these constructions are discussed, the description must therefore account for each of the phenomena given above. The same goes for the situational gerunds and *to*-infinitives that are given in the rest of this section. The present work will aim to take all of the phenomena described into account in formulating a single meaning for each of the nonfinite constructions.

4.3.2 – Position 2: object to preposition

Nonfinite clauses also frequently find themselves in the object position to prepositions. In order to discuss this position in a systematic manner, we will analyse what each preposition means when it is combined with a nonfinite clause. That is to say, most prepositions have a meaning related to place: *in* means that one object is inside another, *before* means that one is in front of the other from the speaker's point of view, etc. However, such prepositions are also used to refer to time: when we say *in three years*, we mean that a process or an event will take place during those three years, or right at the end of that time span (e.g. *I will die in three years*), whereas *before* refers to the period of time within which something has not happened yet (e.g. *The time before the Great Flood*). In combination with nonfinite clauses, prepositions seem to be

analysed as providing their temporal meaning. This being the case, three different types of prepositions can be distinguished:

1. Prepositions that place the nonfinite situation event before the main verb event;
2. Prepositions that place the nonfinite situation in the same timeframe as the main verb event;
3. Prepositions that place the nonfinite situation event after the main verb event.

The following discussion will be structured along these lines.

4.3.2.1 – NONFINITE EVENT BEFORE MAIN VERB EVENT

The first category of prepositions places the nonfinite verb event before the finite verb event. Prepositions of this nature include *after*. A good example of a sentence containing such a construction is found in (152) below:

(152) The senator fell off the stage *after giving his speech*.

(153) *The senator fell off the stage *after to give his speech*.

Comparing (152) to (153), one can easily see that the grammaticality of the sentence depends on the selection of the correct nonfinite construction: *after* can take a situational gerund, but it results in an ungrammatical sentence if it is complemented by a *to*-infinitive.

4.3.2.2 – NONFINITE EVENT SIMULTANEOUS WITH THE MAIN VERB EVENT

Similarly, when a preposition places the two events within the same timeframe, the situational gerund is the only nonfinite object it takes. Naturally, there are a number of different prepositions that do so, each of which supply a subtly different meaning. This is shown by the examples below:

(154) I cleaned the floor *by scrubbing it*.

(155) *I cleaned the floor *by to scrub it*.

(156) The senator fell off the stage *while giving his speech*.

(157) *The senator fell off the stage *while to give his speech*.

(158) I hope I'm not sending the wrong message *in doing so*.

(159) *I hope I'm not sending the wrong message *in to do so*.

In (154), *by* presents the two events as simultaneous by presenting the nonfinite event as the means by which the main verb event is brought about. The *to*-infinitive cannot

be used in this context, as (155) shows. Sentence (156) contains a preposition (*while*) that is wholly temporal in its meaning. The *to*-infinitive is also not usable in this context. The preposition *in* in (158) provides a similar meaning: the sending of the message is inherent in the action, so both occur simultaneously. Using the *to*-infinitive here leads to an ungrammatical sentence, as (159) shows.

4.3.2.3 – NONFINITE EVENT OCCURRING AFTER THE MAIN VERB EVENT

The final category of prepositions to be discussed places the finite event before the nonfinite event. This can be shown by juxtaposing (160) and (161) below:

(160) The actor brushed his teeth *before going on stage*.

(161) *The actor brushed his teeth *before to go on stage*.

As (160) and (161) show, when the event described by the main verb is placed before the nonfinite, a situational gerund must be used with *before*. However, there is one preposition of this kind which does take the *to*-infinitive: *to* itself. One might have expected two *tos* to follow one another in such instances, but this is not borne out in practice. When it is used in such a context, the *to*-infinitive loses its own *to*. An example of such a sentence is found below:

(162) “Patient works out in gym *to win back his strength*”

(Egan 2008, p. 102, emphasis added).

(163) *Patient works out in gym *to winning back his strength*.

In (162) above, the nonfinite event is presented as following the main verb event; this event is performed so that the nonfinite event may consequently be completed as well. In this context, the situational gerund cannot be used, as (163) shows. Note, however, that the situational gerund is only blocked when the *to*-infinitive has a purposive meaning, but not when it denotes (temporal) direction, as the examples below show:

(164) I went from washing cars *to selling them*.

(165) *I went from washing cars *to sell them*.

In (164), the contrast between *from washing cars* and *to selling them* clearly shows that both refer to a temporal ‘place’ rather than the purpose of either nonfinite event. In such a context, as (165) shows, the *to*-infinitive cannot be used. A solid description of the meaning of these two nonfinite constructions must take this difference into account.

4.3.3 – Position 3: object to main verb

Main verbs that take nonfinite complements are called *catenative* verbs (e.g. *like* in *I like fishing*). The term *catenative* refers to this ability of the verb to connect directly to another verbal meaning. In contrast to prepositions, it is very common to find the situational gerund and the *to*-infinitive being used as the complement to the same catenative verb (e.g. *I remembered locking up* versus *I remembered to lock up*). To give a thorough analysis of the variety of ways in which catenatives and nonfinite meanings interact, the overview of these forms in *The Cambridge Grammar of the English Language* (Huddleston & Pullum 2002, p. 1225-45) will be used as a basis. This work presents various classes of catenative verbs, distinguished on the basis of the kinds of complements they take. For the purposes of the present work, it seems best to discuss catenatives along these lines as well, grouping them together on their compatibility with one or both of the nonfinite constructions first, and zooming in on more detailed distinctions within each of these groups. Because the catenative verbs which can take both the situational gerund and the *to*-infinitive provide us with the best opportunity to compare the meanings of these constructions, this group will be discussed first. After that, we present a number of gerund-only catenatives. Finally, the group of catenatives which are only open to *to*-infinitive nonfinite complementation will be analysed. Naturally, not every construction they present in their extensive work on this paper can be addressed separately, but it is hoped that in using this work as a reference, the picture presented in this chapter of the meaning of the situational gerund and the *to*-infinitive will be as complete as possible.

4.3.3.1 – GROUP 1: CATENATIVES TAKING BOTH SITUATIONAL GERUNDS AND *TO*-INFINITIVES

In this group, the contrast between the two nonfinite complements can be made clear most effectively, because the contrast in these cases must be purely semantic in nature. Because the nonfinite functions as the object to the main verb, naturally there is a connection between them. The type of connection, however, differs between the situational gerund and the *to*-infinitive. It is this contrast that this section will focus on. With some catenative verbs, the difference is temporal (see 4.3.3.1.1), but this is not the only way in which such sentences can differ. In other cases, for instance those discussed in 4.3.3.1.2, it seems that the specificity with which the nonfinite event is referred to is different. This difference is also reflected in cases where the main verb is aspectual in nature, as shown in 4.3.3.1.3.

4.3.3.1.1 – DIFFERENT TEMPORALITY WITH DIFFERENT NONFINITES

It may not surprise the reader that when a different nonfinite is used, the sentence can have a different meaning. A case in point is *remember*, as (166) and (167) show:

(166) “I remembered *locking up*” (p. 1243, emphasis added).

(167) “I remembered *to lock up*”

(Huddleston & Pullum 2002, p. 1243, emphasis added).

These examples fall into what Huddleston & Pullum call *memory verbs*. They note: “in [(167)] the locking up is simultaneous with the remembering – but I remembered some kind of prior obligation to lock up and hence there is projection into the future with respect to that implicit earlier time. In [(166)], on the other hand, I simply remembered some actual past event” (p. 1243). As such, (167) refers to an event in the past being recalled for the future, whereas (166) refers to an event that has been performed in the past. If we approach these sentences from the perspective that the nonfinites themselves cause the semantic difference, the description of their respective meanings must be able to account for all the differences between these two sentences. This will be discussed in detail in section 4.6.

4.3.3.1.2 – DIFFERENT SPECIFICITY WITH DIFFERENT NONFINITE

A more subtle difference accounts for the difference between (168) and (169) below:

(168) “I hate *lying*” (Jespersen 1940, p. 193, emphasis added).

(169) “I hate *to lie*” (p. 193, emphasis added).

Catenative verbs like those found in (168) and (169) would fit Huddleston & Pullum’s category of “verbs of liking (and not liking)” (p. 1242). However, a difference is clearly felt. About these examples, Jespersen (1940) states that (168) refers to the “vice in general”, whereas the example in (169) is argued to refer to the vice “in this particular case” (p. 193). This is in contrast to what has been stated in section 4.3.1.1 about the generality of the *to*-infinitive versus the specificity of the situational gerund. This contrast must be explained by the distinction proposed in order for it to be complete.

4.3.3.1.3 – ASPECTUAL VERBS AND NONFINITE COMPLEMENTS

Another important group of catenative verbs to be discussed contains *aspectual* verbs (Huddleston & Pullum 2002, p. 1241). These verbs, rather than referring to a type of event themselves, specify the complement nonfinite. Specifically, they give information about the time in which the action in the nonfinite complement takes place. The sentences below serve to exemplify this:

(170) “Mary began *hitting John*”

(Wierzbicka 1988, p. 85, emphasis added).

(171) “Mary began *to hit John*” (p. 85, emphasis added).

As (170) and (171) show, some aspectual verbs take both a situational gerund and a *to*-infinitive form as their complement. Moreover, it is essential to note the difference between aspectual verbs which allow for both nonfinites to complement them, and those which only take one. To *begin hitting* refers to an ongoing event, whereas *to hit John* refers to the event as a whole. Wierzbicka cites Dixon, who notes on the first example that “to be appropriate, Mary must have rained at least a few blows on John (...)” (Dixon 1984b, p. 591, cited in Wierzbicka 1988, p. 85), whereas (171) “could be said when she had merely raised the stick but had not yet brought it down upon his head (perhaps she will, or perhaps she won’t)”. The reason for this distribution will take us one step closer to describing a unified meaning for each of these constructions.

4.3.3.2 – GROUP 2: ONLY SITUATIONAL GERUND COMPLEMENTS

The verbs in this group usually refer either to temporality, aspect, or modality in some regard. In that sense, many of these verbs are similar to the prepositions taking situational gerunds discussed above; their meanings often involve the temporal coordination of the main verb event and the nonfinite event. The present overview is based on Huddleston & Pullum’s (2002) grammar. It is important to repeat this here, because some of the terminology they readily employ is not compatible with the semiotactic framework. This will be pointed out wherever it occurs.

4.3.3.2.1 – ONLY SIMPLE SITUATIONAL GERUND COMPLEMENTS

Examples of verbs which only take simple situational gerund (i.e. situational gerunds without a subject of their own) complements are *avoid*, *complete*, *resist*, and *repent* (Huddleston & Pullum 2002, p. 1228). Some examples containing verbs of this nature are found below:

(172) He repented *having done so*.

(173) He avoided *paying the damage to the other car*.

The meaning of a verb like *repent* includes a retrospective element: the situational gerund event must come before the main verb event in this case. In (173), on the other hand, it is not the timeframe that is different, but rather the modality of the complement: when one avoids a situation, this means that that situation does not occur at the time at which the avoiding is taking place.

4.3.3.2.2 – SIMPLE AND COMPLEX SITUATIONAL GERUND COMPLEMENTS

The verbs which can take simple and complex situational gerund complements (i.e. situational gerunds with an explicit subject in the sentence) also have some characteristics in common: most of them involve some form of mental activity or mental representation of the event. *Deplore*, *celebrate*, *recall* and *welcome* are of this kind (Huddleston & Pullum 2002, p. 1232–3). Sentences (174–6) give examples containing such verbs:

(174) I celebrate *you saving our lives*.

(175) I deplore *his insisting I do everything*.

(176) I contemplated *intervening on his behalf*.

The complements to these verbs, then, can refer to an event in the past (174), in the present (175), or in the future (176) from the perspective of the main verb event. They all have in common that they refer to the mental representation of an event. However, this does not mean that they are represented as *only* existing in the head of the speaker: sentences (174) and (175) would not be correct if the events had not occurred or did not occur in the real world. Example (176) does not require this; in fact, it is more likely that the event described never occurred up to this point.

4.3.3.2.3 – ONLY COMPLEX SITUATIONAL GERUND COMPLEMENTS

The final group of catenatives to be discussed in this subsection is the group that only takes complex situational gerund complements. Semantically, these verbs do not differ much from those discussed above, in that they do refer to an attitude toward a certain situation that may or may not have occurred already. Verbs in this group include *forgive*, *prohibit*, and *prevent* (Huddleston & Pullum 2002, p. 1238). Consider the example sentences in (177–9) below:

(177) Forgive *my saying so*.

(178) We prevented *them escalating the problem*.

(179) The government has *prohibited our protesting the new bill*.

In the strictest sense, the verb *forgive* is always retrospective: an action need only be forgiven if it has actually occurred. However, this verb is often used right before the action to be forgiven (usually involving a statement about something) is performed. This, however, is a small interpretive step to take. The verb *prevent*, used in (178), is similar to *avoid* in that it usually refers to the non-occurrence of some event at the same time as the main verb. The difference between *avoid* and *prevent*, it seems, is that avoiding usually involves something to do with an agent. In the same way that *He*

avoided the ball refers to an action by the agent which caused him not to be hit by the ball, *He avoided being seen* refers to an event in which the third person acted in a way that caused him not to be seen. *Prevent*, on the other hand, refers to an event which lies outside the agent completely. For this reason, potentially grammatical sentences like *?I prevented me/my being seen* sound strange: this is the kind of meaning that *avoid* would normally express. The same distance exists between someone who prohibits an action and the person who would have performed that action; for this reason, *prohibit* only takes complex complements as well. Temporally, it may be said that *prohibit* refers to the future, because from the moment it is prohibited, the event will (ideally) not occur anymore.

4.3.3.3 – GROUP 3: ONLY *TO*-INFINITIVE COMPLEMENTS

The final group to be discussed is the group in which verbs are found which only combine with the *to*-infinitive. There is some variation in the kinds of complements to be found in this group that is not found in the situational gerund group.

4.3.3.3.1 – ONLY SIMPLE *TO*-INFINITIVE COMPLEMENTS

Starting off with some catenatives which only take simple *to*-infinitive constructions as their complement, it may be noted that many of these verbs refer to future events. Examples of verbs of this kind are *try*, *grow*, *serve* and *decline* (Huddleston & Pullum 2002, p. 1228). Examples of sentences with these catenatives are found below:

(180) This will only *serve to cause panic*.

(181) He declined *to take up the challenge*.

(182) I'm trying *to understand you*.

In each of these sentences, the entirety of the situation is to be found right after the main verb event. As (181) and (182) show, there is also some modal variation to be found in this group: when one declines to do something, the event will naturally not take place. Similarly, when one tries to do something, this does not necessarily mean that the event will take place. This must be taken into account in the final analysis of the *to*-infinitive.

4.3.3.3.2 – “RAISED” VERBS

There are also verbs like *seem* and *appear* (Huddleston & Pullum 2002, p. 1228), referred to as *raised* verbs, which present the complement not as occurring in the future, but at the same time as the main verb:

(183) He seems *to be lying*.

(184) He appears *to have a hidden agenda*.

These verbs are called raised verbs because there are some indications that the implicit subject of the nonfinite complement has been “raised” to the subject position of the whole sentence. The fact a dummy-*it* can be used as the subject of the main verb is taken to be evidence for this position. In such a construction, they argue, the nonfinite verb takes the original subject as its own subject: *It seems (that) he is lying*, *It appears (that) he has a hidden agenda*. This operation is not possible in the case of (181) or (182): **It declines (that) he takes up the challenge*, **It is trying (that) I understand you*. This sort of evidence, however, regards semantics and syntax to be more or less separate from one another: the fact that this ‘transformation’ is possible proves that the underlying structure of the sentence is different. This approach differs from the present one, in that it does not assume that the grammaticality of the ‘raised’ verbs, or illogicality of the other sentences, is solely due to semantics. The analysis in the present work does assume that semantics is the only cause, which leads to the conclusion that it is purely the semantics of these verbs that makes the dummy-*it* sentences logical.

4.3.3.3 – SIMPLE AND COMPLEX TO-INFINITIVE COMPLEMENTS

Moving on, there are some interesting cases of catenatives that take either simple or complex complements in this group. Notably, these verbs again refer to the future, as examples like *ask*, *pledge* and *request* indicate. However, the verb *ask* shows great variation in the kinds of complements it takes. It stands out, because it is not simply a catenative, but it can also be ditransitive, as a sentence like *I asked you a question* shows. The interaction between the ditransitive nature and the use of the *to*-infinitive as a complement leads to many different combinations, as (185–7) below show:

(185) “He asked *Pat to be interviewed*”

(Huddleston & Pullum 2002, p. 1230, emphasis added).

(186) “He asked *for Pat to be interviewed*” (p. 1230, emphasis added).

(187) *Pat asked to be interviewed*.

(188) *Pat was asked to be interviewed*.

The variation exhibited here should be fully explained, so that other ditransitive catenative verbs can be explained along the same lines. These must also be contrasted with verb types in which such variation does not occur, e.g.:

(189) “They are actually *willing him to do it*”

(Isherwood 1964, p. 11, emphasis added).

4.3.3.3.4 – “RAISED-OBJECT” VERBS

Apart from verbs like this, there are also verbs that Huddleston & Pullum call *raised-object* verbs, such as *expect*. In a passive sentence containing a verb like this, the subject of the nonfinite complement is placed in the subject positions of the main clause, as (191) shows:

(190) I expect you *to work harder*.

(191) You are expected *to work harder*.

In the first sentence, it is clear that what the first person expects is the situation in which the second person works harder. That is to say, I do not expect the person, I expect the event. This does not explain the grammaticality of (191), however. As explained before, the purported *transformation* that is implied by the term “raised object” is of no use within the semiotactic framework. The broader question of what semiotactic structure (191) presents, however, must still be answered for the classification presented here to be complete.

4.3.3.3.5 – CATENATIVES WITH PREPOSITION

There are also many verbs in this group which contain a prepositional element (Huddleston & Pullum 2002, p. 1235). Because these exhibit some other characteristics than the catenatives examined above, these require separate discussion as well. A good example of such a catenative is *count (on)*:

(192) I counted on *Ed to bake the cookies*.

(193) I counted on *the oven to work to bake the cookies*.

Again, the semantics of *count on* refer to something which is yet to occur at the moment it is counted on. However, the semantic-syntactic relations between all the words in the sentences presented here are unclear. For instance, is Ed the object of *count (on)* in (192), making *to bake the cookies* a regular prepositional phrase, or is it the situation in which Ed bakes the cookies? Are there ways to come to a conclusion on this, or is the sentence ambiguous? This will be discussed in section 4.

4.3.3.3.6 – PROPOSITIONAL VERBS

As a final point to be discussed here, it is important to note that a category of verbs referred to as *propositional verbs* also falls into this group. Examples of verbs of this type are found in the example sentences below:

(194) “I believe John to have liked Anselm”

(Kiparsky & Kiparsky 1971, p. 363).

(195) *I believe *John having liked Anselm*.

(196) I verified *him to be lying*.

(197) *I verified him (*being*) *lying*.

As (194) and (195) show, when a statement is made about the (real or imaginary) world, the situational gerund cannot be used, and the *to*-infinitive is the only one that can fill this position, as (194) and (196) show. Why this would be, and how it can be accounted for in the description of the meaning of these two constructions, will be discussed in section 4.6.

In short, the situational gerund and the *to*-infinitive can both take the subject position and the complement position to a preposition or a verb. However, there are constraints to their placement. It appears that the use of the situational gerund in the subject position can contribute a more general reading than the *to*-infinitive where they can both occur. However, only the situational gerund can be used when the sentence as a whole takes aspect. Most prepositions only take the situational gerund as their complement, but *to* itself can take both, each with a different meaning. There are also many catenative verbs which take both these nonfinite forms, replacing one with the other leads to a different meaning. In particular, it seems that here, the situational gerund has the ability to refer to the past, whereas the *to*-infinitive does not. Moreover, Jespersen noted that the *to*-infinitive refers to a particular event, whereas the situational gerund leads to a more general reading as the complement to *hate*. One particular group of catenatives stands out: the one containing *propositional verbs*. In these contexts, only the *to*-infinitive can be used. If we want to explain these distributional differences on the basis of the semantics of these forms, this must be taken into account.

4.4 – *English nonfinites and the semiotactic framework*

The present chapter constitutes the first attempt to capture the differences between the situational gerund and the *to*-infinitive by performing a systematic study of these forms. Importantly, Ebeling also notes the difference between the situational gerund and constructions which lead to temporal gradation/limitation. Consider, for instance, the differences between the following examples and the notations given:

(198) “I saw the man jumping” (Ebeling 1978, p. 308).

(notation adapted to present style)

$$\begin{array}{l} \dots \quad \Sigma \\ \text{me} \quad = \quad [\text{see}_1] \\ \quad \quad \quad \quad \quad \quad [\text{see}_2]; \text{man} \supset^{22} \text{jump}_1' \end{array}$$

(199) “He likes being rich” (1978, p. 307)

(notation adapted to present style).

$$\begin{array}{l} \text{'}\Sigma \qquad \qquad \qquad \downarrow \text{ / PR} \\ \qquad \qquad \qquad \qquad \qquad \supset \text{ }^a\Sigma \\ \text{ }^b\text{he} \quad = \quad [\text{like}_1] \\ \qquad \qquad \quad \quad \quad [\text{like}_2]; \qquad \quad \quad \text{ }^a\Sigma \\ \qquad \qquad \qquad \qquad \qquad \text{ }^b\text{X} = \text{rich}' \end{array}$$

The differences between the two notations above provide an interesting opportunity for further research. As has also been argued in chapter 2, the difference between *a jumping man* and *a man jumping* is a matter of temporality versus specification. This is precisely the reason for introducing temporal limitation (1978, p. 312). This has been applied in the case of (198), but (199) takes a rather different form. In this notation, the gerund contributes its own sigma. Two sigmas, in fact. Starting from the beginning, the notation of (199) indicates that there is a divergent temporal gradation between the situational gerund and the matrix situation. *Quasi-divergence* is used here, because a divergent relation is one semiotactic position in and of itself, whereas the notation makes clear that the situation *being rich* is also the object of the liking. Being in two positions at once like that requires quasi-divergence, which explains the superscript “a”. The first of these related sigmas is connected to the sigma above the entire situation through divergent temporal gradation. As discussed in chapter 1, divergence is used to indicate that two elements do not share features – they are separate meanings. In this case, this means that the situation as a whole is not the same as the situational gerund, just like *the boy’s bicycle* does not imply that the bicycle shares any features with the boy. The two situations in (199) are connected, however. The use of temporal gradation does indicate that the two situations occur simultaneously. Taking the quasi-divergence between the subject of the matrix situation and the subject of the complement situation into account, this notation may therefore be paraphrased as *When he is rich, he likes that he is rich*. This perspective has definite advantages. For one, it presents the

²² Later in the book, the symbol for temporal limitation is introduced and applied in such cases as well, e.g. “Peter reading (written under a photograph)” (Ebeling 1978, p. 313) becomes ‘Peter ~ read₁’ using the present notational style.

situational gerund as a situation rather than a gerundive performing a specifying function, which explains why the situational gerund can occur as a singular entity in the subject position. Ebeling provides a similar but different notation for the *to*-infinitive:

(200) “He likes to be rich” (1978, p. 307).

$$\begin{array}{rcl} & \Sigma / \text{PR} & \\ {}^a\text{he} & = & [\text{like}_1] \\ & & [\text{like}_2]; \Sigma \\ & & {}^a\text{X} = \text{rich}' \end{array}$$

In the notation of (200), there is still quasi-divergence between the two subjects, and the structure of both situations is identical to that presented in (199). The big difference is in the fact that no divergent temporal gradation exists between the matrix situation and the situational gerund. In other words, this notation could be paraphrased as: *He likes the situation in which he is rich.*

The most obvious question to be asked at this point naturally becomes: are the temporal features of the matrix situation really all that different? This would imply that there is a period imaginable in which “He likes to be rich” is true, but in which the statement “He likes being rich” is not. Ebeling argues that the notation in (199) is appropriate if “NE(“ Σ_1 ”) is included in the time of NP(“ Σ_2 ”) and/or NE(“ Σ_2 ”) is included in the time of NP(“ Σ_1 ”)” (1978, p. 308). In other words: it is appropriate if the event described in the matrix situation is part of the timeframe of the situational gerund, or the other way around. The notation in (200) does not have this limitation. Although this distinction may intuitively work for these two examples, one may wonder whether or not this model works in every position in which both constructions can be found, or even if it is as felicitous in the context of every verb. Naturally, this was not the aim of Ebeling’s description. The distinction presented above may simply be regarded as a proposed distinction, and is not the result of a systematic comparison between the two forms in a broad range of contexts. The present work may therefore be considered the first to do so from a semiotactic perspective.

4.5 – A new semiotactic explanation of the situational gerund

The previous section indicates the need for a new semiotactic explanation, which takes all the contexts discussed into account. A lot of literature has already attempted to capture the distinction between the situational gerund and the *to*-infinitive, and it seems most prudent to incorporate the generalisations made in them in the present model. Naturally, any such generalisation must adhere to the principles that the semiotactic model is based on. Rather than discussing a number of models separately, it

would be most useful to compare and contrast a number of claims concerning specific aspects of the two nonfinite forms under discussion. It may be argued that temporal differences on the one hand and the resulting projection of the nonfinite event on the other may influence the appropriateness of the two nonfinite forms. Based on this suggestion, the literature review below has two parts: one discussing the temporal aspects of the nonfinite events, and the other focusing on the projection of the events.

4.5.1 – The temporality of nonfinite events

In order to get an idea of the full range of temporal relations that the nonfinite constructions can enter into, a look at the existing literature on the topic of the nonfinite seems essential. This will be presented below. First, the situational gerund will be discussed. After that, claims concerning the temporal features of the *to*-infinitive will be put side by side.

4.5.1.1 – THE TEMPORALITY OF THE SITUATIONAL GERUND

Traditionally speaking, situational gerunds have been regarded as marked by the lack of tense, which means that they must be temporally undefined at the very minimum. This is the position essentially taken by Ronald Langacker, stating on the one hand that “a verbal expression – a verb or a finite clause – profiles a *process*, by which I mean a relationship followed sequentially in its evolution through time” (2011, p. 51), but also the following:

Equally common is the absence of grounding, as with *to* and *-ing*. Indeed, *to* and *-ing* occur in lieu of grounding precisely because they serve to atemporalize the subordinate process. An ungrounded clause is inherently subordinate in the sense of depending on the main clause to specify the status of the process it is based on. (2008, p. 413)

Grounding, in Cognitive Grammar terminology, is defined as follows: “The term *ground* is used in CG to indicate the speech event, its participants (speaker and hearer), their interaction, and the immediate circumstances (notably, the time and place of speaking)” (2008, p. 259). Any full grammatical sentence is grounded. That is to say: it is oriented with respect to the speaker and the hearer, their temporal situation, and also modality: it “situates the profiled relationship with respect to the speaker’s current conception of reality” (p. 259). More specifically, Langacker argues “despite their verbal base, infinitives and participles are not themselves verbs. Typically they profile nonprocessual relationships” (2008, p. 119). This does not mean that an infinitive does away with the process entirely, but rather that “an infinitive or participle may still

profile a complex relationship comprising all the component states of the verbal process” (p. 120), but only summarily: together as a whole, not in sequence.

The above model is problematised, however, by the fact that a *midinterval* perspective can be given (in which case “some of the event has occurred at the moment described, and it will go on after the moment referred to” (Egan 2008, p. 111)) as Egan points out:

Langacker (1991: 91, 2000: 230) maintains that adding *-ing* to a perfective stem creates an imperfective relation that profiles a process as unfolding. No reference is made to its beginning or ending. He maintains, moreover, that all the component states making up this complex relation are viewed as homogeneous and scanned summarily, thus neutralising the distinction between perfective and imperfective processes. (2008, p. 129)

For instance, when one says *I continued feeding the ducks*, the feeding action is not conceived of as homogeneous. Rather, the feeding event is presented as having occurred before the moment pinpointed, occurring at the moment in question, and continuing after that moment. In such a context, then, the projection of the event is varied rather than homogenous because part of the projection has passed and the other is projected as occurring in the future, and temporally defined for the same reason.

A different perspective on the temporal features of the situational gerund is proposed by Anna Wierzbicka, who proposes a *same-time* perspective for the situational gerund. She acknowledges that “other linguists have pointed out that the contrast between nominal and verbal gerundive complements is reflected in their internal structure” (1988, p. 63) on the basis of the use of articles (e.g. *the boxing* instead of *boxing*), modification using adjectives (e.g. *fair boxing* instead of *boxing fairly*), and reference to the direct object using *of* (e.g. *I like the singing of songs*). She herself does not use these formal properties as diagnostic tools in the discussion following. Rather, Wierzbicka focuses on one criterion in particular: “what is particularly important from our point of view is that nominal gerunds do not imply any sameness of time” (p. 63). She notes that there are structures that are “(verbal) gerunds which do behave externally like noun phrases” (p. 66). In other words, the internal structure of a phrase can be verbal, even if the positions it takes are the same as those of nouns and not of verbs. When this occurs, the semantics of the phrase is either like that of the nominal form discussed or like the verbal form. Wierzbicka argues this point on the basis of Menzel’s (1975) work, which has shown that in different contexts, different head nouns can be used to change the situational gerund into a noun phrase. She gives the following examples:

Mary enjoyed [the action of] eating the steak.
 [The process of] growing old is painful.
 John enjoys [the state of] being sick.
 Mary regretted [the fact of] quarrelling with Jane.
 John considered [the possibility of] locking the door.
 (Wierzbicka 1978, p. 67)

In each case, the sentence without the bracketed words is the original sentence. As we can see from the examples above, however, in each of these sentences a different head noun seems appropriate. This observation is an important aspect to Wierzbicka's analysis of situational gerunds, as will be shown below. Of course, in adding the bracketed words to the sentence, its structure would be altered completely. This explains why Wierzbicka states:

Personally, I wouldn't want to commit myself to the methodological framework within which Menzel carried out his analysis, and I regard his 'head nouns' as no more than convenient fictions. I believe, however, that these fictions point to important semantic and syntactic realities, and that they are indeed convenient. (p. 67)

Wierzbicka makes the following generalisation about situational gerunds: "ING complements range over both temporal (actions, processes, states) and atemporal types (facts, possibilities)" (p. 68). Having made this distinction on the basis of temporality, she states the following:

[W]henver time is relevant [gerundive complements] imply sameness of time. In other words, they imply sameness of time whenever they combine with temporal semantic types such as actions, processes and states; when, however, they combine with atemporal semantic types such as facts and possibilities they are free of the 'sameness of time' constraint, because under those circumstances, time is irrelevant. (p. 69)

In other words: when a fictitious head noun which is temporal is appropriate (i.e. *action*, *process* and *state*), the semantics of that externally nominal situational gerund must imply sameness of time with the main verb. As such, in the sentence "Mary enjoyed [the action of] eating the steak" (p. 67), the enjoyment and the eating action occur at the same time. In this quote, the brackets again refer to the 'convenient fiction' of the head nouns: by filling in the 'head noun' in this way, she is able to determine

what meaning situational gerunds contribute to the sentence. If the fictitious head noun that fits best in this scenario is something like *action* or *process*, which implies time, the situational gerund as a whole implies sameness of time. Contrastively, with an atemporal fictitious head noun (i.e. *fact* and *possibility*) the situational gerund complement does not imply this temporal identity. “Mary regretted [the fact of] quarrelling with Jane” (p. 67), for instance, does not imply that the regretting occurs at the same time as the quarrelling. Rather, the regret naturally followed it.

There are two essential problems with this model, however: if any situational gerund is supposed to be *same-time*, then the use of the situational gerund in combination with prepositions leads to inaccurate analyses. For instance, when the situational gerund is used with a preposition like *before*, like in *He brushed his teeth before going on stage*, the head noun to be used would certainly be one implying time: *before [the process of] going on stage* sounds more appropriate than *before [the fact of] going on stage*. Wierzbicka’s analysis would therefore lead us to analyse it as making reference to time, and therefore as being *same-time*. This would be inaccurate, as it is the function of the preposition to place the situational gerund event in some position with regard to the main verb event.

Moreover, the distinction between the two types of *external syntax* discussed here, especially the idea of two types of externally nominal situational gerunds, each with a different temporal relation to the rest of the sentence, seems to go against the notion of *one form – one meaning*. Patrick Duffley essentially states as much, when he says “Wierzbicka’s explanation amounts however to hypothesizing the existence of two different types of *-ing* form, one temporal, the other atemporal, a solution which is hardly satisfactory, as it would violate the semiological principle by entailing that the *-ing* has no constant inherent meaning” (2006, p. 4). I subscribe to this critique of her analysis.

Patrick Duffley (2006) himself also presents a model to explain the situational gerund and the *to*-infinitive. He states: “What must be done in the case of the gerund-participle, then, is to try to imagine what sort of schema could produce both perfective and imperfective instantiations in discourse” (2006, p. 6). *I enjoy cooking*, for instance, yields an imperfective reading (meaning that one does not conceive of the cooking event as having a definite endpoint), whereas in other cases, like *Losing his money drove him insane*, the situational gerund contributes an event that is interpreted to have occurred in its entirety, i.e. perfectly. As a consequence, he distinguishes between the *progressive* and the *gerundive* use of the *-ing* form. Before these terms are defined,

however, it must be noted that Duffley conceives of language use (and language study) as occurring on three levels. On the lowest level, there is the “meaning-effect produced by a particular use of a form” (p. 7). This refers essentially to an actual instance of a form. The data available to the linguist always consists of a collection of such particular instances. In analysing these forms, we may arrive at the “actual use of [the] schematic potential in combination with other words in a particular situation” (p. 7). That is to say, the linguist generalises on from the data, to “identify under what conditions each type of expressive effect is produced” (p. 7). These types of expressive effects are the *uses* of a particular form. The term *use* here is somewhat reminiscent of the term *interpretation*, although its claim is somewhat broader: every particular use of a form may lead to a different interpretation, but there is systematicity to be found on this level as well. In the case of the situational gerund, Duffley argues that there are some contexts in which the situational gerund is perceived as *progressive* (i.e. “an action in progress” (p. 18), and some in which it is perceived as *gerundive* (i.e. “a complete action (or a state)” (p. 18)). If his abstraction from the data is correct, these two uses should, in general terms, cover every specific instance of the situational gerund. Both uses themselves are derived from the “meaning as a schematic potential stored in [the] speaker’s mind ready for use” (p. 7). Having arrived at these two uses of the situational gerund, then, Duffley must now abstract from these the underlying, maximally schematic meaning of the form. He notes the following:

The hypothesis put forward here will be based on the concept of schematicity proposed by Langacker (2000, p. 2, 1987, p. 370-1). This concept allows a unified account of the gerund-participle’s uses to be proposed based on a generalized schema which is instantiated in each of these uses. In the case of the English gerund-participle, the content of this schema is very abstract: it corresponds to the simple notion of interiority. (p. 19)

Schematicity in Langacker’s terminology refers to the notion that meanings, and the relations between meanings, can be expressed using abstract representations (schemas). For example, the notion of interiority would simply be expressed using a schematic representation showing one element being inside another. This representation will, in every case, be interpretively specified to fit the rest of the sentence in which it is used. In the case of the situational gerund, Duffley notes the following on this: “the instantiation of this schema in the progressive construction is not difficult to describe. In its use in this construction, the gerund-participle evokes as its base the schematic conception of a perfective process and “imposes on that base an immediate temporal

scope from which the endpoints of the process are excluded,” thereby “limiting focused observation to a segment of that process” (Langacker 2000, p. 227)” (Duffley 2006, p. 19). As such, the description of the progressive use comes very close to the description given of the progressive aspect in 1.7, in which the narrated period falls within the verbal action, thereby only focusing on it as ongoing, and not its beginning or its ending.

Contrastively, the gerundive use is discussed as follows: “In gerundive use the endpoints of the event are assimilated into the interiority of the event due to their qualitative identity with the rest as part of the substantial whole whose nature is denoted by the lexeme” (p. 21). According to Duffley, this explains why the situational gerund in the sentence *Losing his money drove him insane* presents the whole event as having happened. Every internal part of its meaning is represented homogenously. Contrastively, *I enjoy cooking* takes a temporal position in coordination with the temporality of the main verb. As stated, both of these uses fall under the umbrella of *interiority* according to Duffley.

An important aspect of Duffley’s description of the situational gerund has to do with the distinction made above between elements in different temporal positions with regard to the main verb event. Duffley argues that this is not to do with the nature of the situational gerund *per se*, but rather with the role of the object to that main verb:

The semantic effects produced by the *-ing* as verbal complement can be fully accounted for by correlating the two factors described above – the meaning of the *-ing* and its function in the sentence – with the meaning of the main verb. Since the relation of a direct object to a transitive verb is basically non-temporal (the role of the object being merely to identify one of the participants in the event), the production of any temporal implications is due to the meaning of the transitive verb. (2006, p. 37)

The distinction in section 4.3, then, does not tell us much about the situational gerund as such, but rather about the verbs it combines with. This makes sense from Duffley’s perspective, since the *to*-infinitive, in most cases, does not take this object position at all (see section 4.5.1.2). Rather, Duffley argues that “the *to* preceding the infinitive is no different from prepositional *to*, but merely represents one use of the preposition which, like other uses in which its object is a noun rather than a verb, is felt to be analogically connected to the idea of direction” (2006, p. 25).

Duffley's model provides a markedly detailed explanation of both the situational gerund and the *to*-infinitive. However, it does run into some problems. For one, it may be noted that the line between two separate *uses* and separate *meanings* is a rather arbitrary one, especially if the two uses distinguished vary so significantly from one another. The level of abstraction required also to arrive at the gerundive use of the situational gerund from the general notion of interiority is problematic. Specifically, the notion of *total interiority* seems problematic. Duffley argues that the interiority is homogenous because "the interiority of an event is constituted by a series of instants, all of which have the same nature due to the fact of their being located between the beginning and the end of the event", and then goes on to say that "in gerundive use the end-points of the event are assimilated into the interiority of the event due to their qualitative identity with the rest as part of the substantial whole whose nature is denoted by the lexeme" (p. 21), which, in turn, "produces a basically perfective aspectual reading" (p. 21). However, the beginning and end of an event themselves naturally are not between the beginning and end, so it cannot be maintained that all the elements within the 'total interiority' are the same. As such, I believe that this characterisation constitutes a breach with the semiological principle Duffley tries to maintain, because the gerundive use cannot be derived from the schematic meaning. This way, the idea of *one form – one meaning* is not maintained.

Another point of contention between my own analysis and Duffley's is the fact that my analysis never presents the situational gerund as directly perfective. As argued above, this analysis seems to be in violation of the principle of *one form – one meaning*. However, polysemy and homonymy are not necessarily impossible. If there are contexts in which the situational gerund can only refer to a perfective meaning, then naturally the analysis of these forms must reflect that. The evidence for this appears to be rather slim, however. Take the following example Duffley gives:

(201) "I remember filing that article somewhere in the top drawer of my filing cabinet" (Duffley 1999, p. 303).

Egan (2008, p. 69) quotes Duffley as saying "Here the *-ing*'s event is necessarily evoked as a whole, i.e. perfectively and not imperfectively [...] In a use such as (201) [...] the interiority of the *-ing*'s event is simply taken as a whole, as the totality of positions contained between its beginning and end-points (Duffley 1999: 303-304). As Egan rightly points out, however, it is purely a matter of the context of the sentence (and therefore of interpretation) whether one construes this as perfective or not. Egan contributes a follow-up sentence:

- (202) “I remember filing that article somewhere in the top drawer of my filing cabinet. The drawer was absolutely full, and I had to squeeze it in at the back” (2008, p. 69).

In this example, it is clear that the construal of the event itself is not perfective at all: the interpretation of this sentence forces one to construe the filing event as ongoing, and not as a whole. The fact that the speaker had to squeeze it in is part of this filing action, and therefore the perspective taken is not perfective. This indicates that the notion that the situational gerund can be construed as perfective is merely a matter of interpretation. Naturally, when the dominating elements of the situational gerund require it to be placed before the events described in the main verb, this may lead to an interpretation of completion (in the sense that it may be over at the moment of the main verb), but this does not mean that its meaning is necessarily perfective. For this reason, imperfectivity is maintained as part of the *meaning* in all cases, which, in some instances, may lead to a perfective *interpretation*.

Thomas Egan (2008) provides his own perspective on the distinction between these two forms, especially in the complement position. Based on his extensive corpus research, he notes that *durativity* (“the event described by the gerund lasts for some time” (Egan 2008, p. 111)) and *imperfectivity* (“i.e. it is represented as extending through time” (p. 136)) are without exception part of the meaning of the situational gerund complement. The descriptions given may appear to mean nearly the same thing, but they do refer to different things. As discussed in chapter 2, for instance, sometimes verbs are simply presented in abstraction, e.g. *the reading of books*. The event described itself is imperfective: there is no endpoint to it, unlike, *the reading of the book*, for instance. However, the representation given in the former case is not *durative*: a nominal gerund does not have any verbal features. However, there are also other meanings beside interiority and durativity that combine with this construction only in certain contexts. For instance, it is the context within which the gerund is found which helps the hearer to determine whether to view it from the outside or the inside. This is illustrated best by the following comment by Egan: “it is a moot question whether or not the perspective in [She *stopped speaking* abruptly and stared at Clare with a look of fixed terror in her eyes] should be described as *midinterval*. The ongoing activity of speaking is construed from the point of its cessation, not a point prior to this” (2008, p. 112). This point is important: the speaking event naturally is still presented as having some duration, and *speaking* itself does not imply its own conclusion, but in this Backward-Looking construction (i.e. a construction in which

“some situation is profiled as occurring before the time of the main verb” (p. 39)), it is clear that the speaking is over at the moment the sentence is uttered. The fact that this is not the case with many other main verbs shows that the main verb has an effect on the way one projects the gerundival situation.

In abstracting from his data a useful generalisation, he notes the following as the root meaning of the situational gerund: “The *-ing* form profiles a situation as extended in some specified domain” (p. 132). Importantly, Egan also notes that “while Same-time activities are prototypical, there is actually a broad network of senses for *-ing* complements, with the exact sense of the form varying according to the meaning of both the main verb and the complement predicate” (p. 308). This is an essential generalisation on the nature of the situational gerund and forms a source of great inspiration for the perspective provided below, although it is extended even further, in such a way as to state that the same mechanism is at play in the context of prepositions and even the subject position.

The generalisations concerning durativity and imperfectivity, as well as the concept of the gerund being specified by the context in which it is found, are all useful. Starting with durativity and imperfectivity: these notions together indicate a progressive projection. This is definitely borne out by the data discussed above: *Washing the dishes* in *Washing the dishes is driving me crazy* does not refer to a state of affairs in which they have been washed, or in which the event is yet to begin. Similarly, *I remember locking up* does not mean that the speaker remembers the state of affairs that the door has been locked (which would be closer to *I remembered that I had locked the door*), but rather that the speaker remembers the event of locking the door itself. This is also true in prepositional examples, however, and not just catenative verbs: *The senator fell from the stage while giving his speech* would not be able to mean what it did if the situational gerund did not refer to the speech-giving event mid-interval. In all these examples, then, the situational gerund situation is presented as ongoing, and its temporal features are also specified by the rest of the sentence. All in all, then, these points made seem to adequately explain the examples discussed above.

The notion of the context defining the meaning of the situational gerund situation itself is essential: in the object position, temporal specification is not sufficient: the modality of the position also specifies this construction. This explains why the situational gerund can be used in the context of catenatives which imply insecurity concerning the (coming into) existence of the event, or even its non-existence. Sentences (173) and (176) are cases in point: *avoid* means that the situation described does not occur due to

the actions of the subject of the main verb, and *contemplate* leaves open the question of whether the action actually comes about later.

The description of the situational gerund presented above excludes the situational gerund from a number of positions, namely:

1. Contexts which refer to the initiation of an event;
2. Contexts which refer to the conclusion of an event;
3. Contexts in which the temporal and modal characteristics of the nonfinite clause are separate from the temporal and modal features imparted by the meaning dominating it.

The first two of these points relate to the notion of *interiority* proposed by Egan, and part of Duffley's description of the *progressive use* of the situational gerund. As stated before, when one says something like "Mary began hitting John" (Wierzbicka 1988, p. 85) or *I remember locking the door*, one does not project the nonfinite event itself beginning as part of the meaning of the situational gerund. In *I began hitting him*, it is the initiation of an ongoing event that is referred to (hitting repeatedly²³) rather than the beginning of the event (hitting) in general. Rather, if one were to refer to the beginning of the event itself, the *to*-infinitive would be more appropriate (e.g. *I'd hate to hit you*). The third point refers to the observation that situational gerunds seem to be defined, in part, by other elements in the sentence. This is also shown by *I remember locking the door*, as well as *I anticipate this being very useful*: in both sentences, the situational gerund takes a different temporal position. In other sentences, the appearance of the event at all is also (completely) defined by the other elements in the sentence: *I avoided getting locked up* means that you did not get locked up. There is a difference between these contexts and propositional contexts, however, which are only open to *to*-infinitives. This must also be accounted for.

4.5.1.2 – TEMPORALITY OF THE *TO*-INFINITIVE

Concerning the semantics of the *to*-infinitive, much of the debate seems to centre itself around a single idea, namely that of futurity. Duffley argues that the two 'nonfinites' differ in the following way: one is actually nonfinite, whereas the other is a preposition with a nonfinite verb. Duffley: "the schematic meaning of *to* which will be postulated here is the very general notion of movement leading to a point" (2006, p. 26). This schema can be used temporally, spatially, but also mentally. He notes that "in the

²³ This is also noted by Dixon (1984), who states that for this sentence "to be appropriate, Mary must at least have rained a few blows on John (...)" (p. 4, cited in Wierzbicka 1988, p. 85).

mental domain, the action of comparing two things involves a mental movement from one to the other (cf. *He compared the President to Adolf Hitler*)” (p. 26). I would concur with Duffley on this point. However, there are more difficult examples, such as “The wall seems to be crooked” (p. 27). Duffley explains this in the following way: “here the domain of application of *to*’s meaning is that of the relation between appearances and reality, i.e. logical rather than chronological. The existence of motional-directional metaphors with other expressions in this domain shows that *to* is not at all foreign to the way things are conceived in this area of experience” (p. 27). In general, the idea put forward by Duffley is that “the event expressed by the main verb is understood to constitute a before-position in time with respect to that of the infinitive, which is therefore conceived as an after-position with respect to the main verb’s event” (p. 43).

Duffley does not mean to suggest that every instance of the *to*-infinitive is prepositional, however. Rather, he states that “when the *to*-infinitive phrase has an adverbial function of goal or result specification, *to* . . . plays the role of denoting the relation which pertains between the infinitive and the main verb. More precisely, *to* represents the infinitive’s event as the term of a movement implied by the main verb’s event” (2006, p. 51). About the sentence “John tried to be careful”, for instance, he states the following:

Given these semantic relations, it comes as no surprise that the prospective realizer of “being careful” should be understood to be the same as that of the trying. The notion of movement signified by *to* is an explication of an idea of movement already implied in the event denoted by the main verb *try*. . . Consequently, the subject of the main verb (John) is understood to correspond to the mobile entity in the movement expressed by *to* which leads up to the position in time at which the infinitive’s event will be actualized. (p. 51)

However, where this identity of the subject of the main verb and the subject of the complement to *to* cannot be established, as in, for instance, “John said to be careful” (Duffley 2006, p. 50), the *to*-infinitive is not used adverbially, but as a direct object, just like the situational gerund. The situational gerund also does not always imply that its implied actor is the same entity as the subject of the main verb, as “I recommended going to the beach” (p. 48) shows. In cases where the *to*-infinitive does take this position, the *to* in the *to*-infinitive, “is not used to express the relation between the infinitive and the main verb. Consequently, the movement evoked by *to* in this type of use is not construed as being already implied by the main verb’s event but is conceived

rather as a movement in the abstract, defined only by the fact that the infinitive's event is represented as the term to which this movement leads" (p. 51).

In the model proposed by Duffley, the *to* in the *to*-infinitive is therefore a preposition in most cases. What is linked through this preposition is simply the bare infinitive, which Duffley describes as either fully evoking the meaning of the verb, with all its intermittent states in the case of action-like verbs, or as having "a full-fledged existence at each and every moment of its duration" (2006, p. 28), when the verb is state-like, e.g. *worry*. Between this meaning and the preposition *to*, there are four different configurations: either the verb is action-like or it is state-like, and *to* as a preposition is "indifferent to whether the movement it signifies is actually gone through or not. If the movement is not conceived as carried out, this gives rise to an impression of futurity" (p. 30). Duffley exemplifies this future reference using the following examples:

(203) "He wanted to open the window" (Duffley 2006, p. 30).

(204) "He wanted to be home when she arrived" (p. 30).

The first contains future reference, and an action-like verb, meaning that the action itself is projected in the (desired) future, whereas in (204) the movement is toward the occurrence of that state.

The notion that the *to*-infinitive in most instances simply acts as a preposition followed by an infinitive hinges entirely on the idea that the main verb must always be the *before*, and the *to*-infinitive the *after* of the prepositional relation. However, this cannot be maintained in every case. Remarkably, Duffley himself uses an example which does not neatly conform to this idea: "I managed to talk to Mary about it" (p. 44, italics removed). Duffley presents this as an example of a *to*-infinitive which implies actual realisation of the infinitive event. However, it seems a stretch to conceive of *manage* as occurring before *talk about it*. Rather, one must do the talking to manage it. Specifically, one only *managed* to do it if the *talk* action is completed in its entirety. Similar problems also arise when Duffley gives an explanation for the acceptability of the *to*-infinitive with *cease*:

According to the analysis of *to* proposed here, the *to*-infinitive after *cease* has the function of a goal/result circumstantial. This implies that *cease* itself is conceived as involving the notion of movement, with the infinitive being represented as the term of that movement. Given the description of *cease*'s meaning as operating on the level of the existence of states or conditions, with the infinitive ceasing is

conceived as a transition into a new state of affairs in which the infinitive's event no longer exists. (p. 120)

It is notable that the *goal/result* schematisation proposed here is no longer independent of the meaning of both states. The analysis in the quote above implies that *cease* is itself what moves toward the infinitive event, which comes close to a direct-object reading. Of course, Duffley argued above that “*to* represents the infinitive's event as the term of a movement implied by the main verb's event” (p. 51). However, the movement from A (the main verb) to B (the infinitive) is a rather different one than stating that B already exists regardless of A, and that the meaning of A *influences* B. This means that *to* cannot simply be an explicitation of movement, as this would hamper a correct reading of this sentence. If we were to distinguish two states, these would be the following: one in which the infinitive event is still occurring, and one in which it is not. This is the reverse of what had been proposed for “I managed to talk to Mary about it”, in which *I* went from *managing* to *talking about it*. That is, Duffley's analysis, if it were consistent with his most schematic description of the *to*-infinitive, would mean that the sentence *I ceased to talk about it* meant that *I* went from *ceasing* to *talking about it*, whereas the quote above seems to suggest that it is the *ceasing* itself that goes to *me talking about it*, yielding a new situation in which I am not talking about it. This kind of description does not correspond to Duffley's *to*-infinitive description, but all the more to the kind of description one would expect if the *to*-infinitive filled the direct-object position, since what was ceased was the talking.

The fact that the schematic meaning of *to* as a preposition in some contexts leads to problems is all the more problematic, since, if it cannot be maintained that *to* simply provides its prepositional meaning in each of these cases, it would appear that the *to*-infinitive does occur in the object position after all. If we are forced to come to that conclusion, then the temporal flexibility of the situational gerund *does* contrast with the *to*-infinitive, and not simply the positions they each take. The distinction between the two forms must then also take this into account, which Duffley's does not, as he believes the *to*-infinitive is not commonly in the object position.

Apart from that, Wierzbicka believes that, on the one hand, “The TO complement is associated with a personal, subjective, firstperson mode: ‘I want’, ‘I think’, or ‘I know’” (Wierzbicka 1988, p. 164). On the other hand, future reference is also proposed as a meaning connected to this construction: “sentences in the TO pattern, such as *I was sorry to fail* can of course refer to past events, as well as to future events; but by choosing the TO pattern the speaker indicates that he is viewing the past event in the light of a future-oriented or open-ended attitude” (p. 104). As a consequence of these

two meanings together, Wierzbicka argues that the famous line from Hamlet, “To be or not to be – that is the question” can be paraphrased as follows: “Should I decide: ‘I want this: I will be’, or should I decide: ‘I want this: I will not be?’” (p. 27). She compares this to a variant of the phrase containing situational gerunds instead of *to*-infinitives: “?Being or not being – that is the question” (p. 27). The lack of control of the subject over the choice seems to make this sentence questionable at best, just as “To know or not to know” is, because “‘knowing’ is not something one can control at will” (p. 27). This meaning, she notes, is similar to that of the purpose adjunct *to*, as can be read in the following paraphrase of the sentence “Mary went to the library to read the latest issue of *Language*”:

Mary went to the Library

because she thought this:

I want this: I will read the latest issue of *Language*. (p. 28)

There seems to be some appeal to this perspective: as the difference between *I remembered locking up* and *I remembered to lock up* shows, the situational gerund readily refers to the past, whereas from the point of view of the moment of remembering, the *to*-infinitive refers to the future. However, this analysis leads to problems in other contexts. For instance, when one seems to be doing something, does this refer to the future or the present? Similarly, Egan (2008, p. 64) notes that verbs which refer to perception or judgement (e.g. “We have observed the sun to set each day...” (p. 151, italics removed)) can also take the *to*-infinitive, but no link to the future can be established in those cases either. Another significant problem emerges when the catenative verb *cease* is examined. This verb can only take the *to*-infinitive, but seems to place the nonfinite event in the past rather than in the future, in that the ceasing event naturally follows the infinitive in these cases. As a final point, it seems odd that a *to*-infinitive referring to the future would be combinable with the perfect aspect in many cases; does the sentence *I was sorry to have failed* have the same open-ended implication as Wierzbicka claims *I was sorry to fail* has? I believe not. For these reasons, it seems that the notion of futurity cannot unequivocally be linked to the *to*-infinitive.

This being the case, one may wonder what the temporal aspects of the *to*-infinitive are, if there are any definite claims to be made about this at all. The claim will here be upheld that, unlike the situational gerund, the *to*-infinitive is not temporally defined. Being the object to any verb always places an entity in some temporal position with regard to the action described by that verb, as Duffley also notes. When one says *I have painted a still life*, for instance, one is not saying that the still life was already there when the painting began. Rather, it was our action that brought the still life into

existence. Similarly, *I ceased the strike* means that it is the ceasing that put an end to the strike. Since entities are not temporally defined, however, this relation is completely based on interpretation, which is evidenced by the fact that there is no difference in form between *I bought a still life* and *I painted a still life*. In much the same way, the *to*-infinitive depends on the relation between the main verb and its complement for its temporal information. Nothing in the form of either sentence indicates that it already existed, or that it was the main verb action that brought it into existence. It may refer to an event yet to occur, as in *I want to eat*, or to something in the past, as in *I ceased to strike*, just like an object entity may or may not exist at the point described. It appears, then, that the *to*-infinitive also remains temporally unspecified: *I ceased to strike* may refer to the same event as *I ceased the strike*. The *to*-infinitive is not atemporal, however. For instance, *I was sorry to have failed* is a perfect aspect *to*-infinitive. This kind of combination would be incompatible with absolute atemporality. In short, the *to*-infinitive is not a nominalised form, it is merely a temporally undefined event.

A further difference between the *to*-infinitive and the situational gerund seems to lie in the fact that the latter presents the situation it discusses as ongoing, whereas this is not a feature of the *to*-infinitive. As noted in section 4.3.3.3.1, sentences like “I began to hit John” (Wierzbicka 1988, p. 85) “could be said when she had merely raised the stick but had not yet brought it down upon his head (perhaps she will, or perhaps she won’t)” (Dixon 1984b, p. 591, cited in Wierzbicka 1988, p. 85). “I began hitting John”, on the other hand, “to be appropriate, Mary must have rained at least a few blows on John (...)”. The fact that the initiation of the event is part of the scope of the *to*-infinitive, then, appears to be an important contrasting feature between the two forms.

With this position in mind, we might say that the *to*-infinitive universally displays the following features:

1. The temporal features of the *to*-infinitive remain undefined (e.g. the nonfinite *I regret talking to him* receives temporal features from the main verb, whereas it does not in *I regret to inform you* (as it is not in the past));
2. The *to*-infinitive always includes a reference to either the initiation or the conclusion of the event (e.g. *I remembered to lock the door* contains the initiation of the event whereas *I remembered locking the door* does not).

As will be shown in 4.5 below, the above generalisations will account for many of the positions that the *to*-infinitive can and cannot take. However, temporality is not the

only thing in which the *to*-infinitive differs from the situational gerund. A closer look at the specifics of the projection of these nonfinites will be presented in the following section.

4.5.2 – The structure of the situational gerund and the *to*-infinitive

The above distinction accounts for a great many differences between the situational gerund and the *to*-infinitive. However, on its own it cannot explain all of the phenomena listed in 4.2. For one, the distinction in the level of specificity found in section 4.3.1.1 between “To do so would have required 18,446,744,073,709,551,615 grains!” (Featherstone 1975) and *Doing so would have required 18,446,774,073,709,551,615 grains* cannot be explained on the basis of mere temporality alone. On the other hand, the constructions in section 4.3.3.1.3 show that in the object position, the opposite may apply: “I hate lying” (Jespersen 1940, p. 193) is argued to refer to “the vice in general”, whereas “I hate *to lie*” refers to the lying “in this particular case” (p. 193). How can this contradiction be resolved? Furthermore, what is it about the *to*-infinitive that makes it possible for this form to be used with *propositional* catenatives (see section 4.3.3.3.6), and what makes the situational gerund unacceptable in such positions? In order to answer these questions, an overview must be presented of the atemporal claims which earlier analysts have made concerning the differences between these two forms. After that, a meaning must be distilled which may account for the totality of the phenomena encountered here.

Wierzbicka’s position on the *to*-infinitive is one which relates to the perspective of the speaker: “The TO complement is associated with a personal, subjective, firstperson mode: ‘I want’, ‘I think’, or ‘I know’.” (Wierzbicka 1988, p. 164). Going back to the quote “To be or not to be, that is the question”, if this phrase is analysed in the way described above, what does that mean for a sentence like *To lie is to sin*? Should this sentence be paraphrased as *If one thinks this: I want this: I will lie, one is also thinking this: I want this: I will sin*? I believe that this paraphrase is inaccurate: the sentence is a warning to someone who might lie, that this constitutes an act of sin. This meaning is lost in Wierzbicka’s paraphrase, because the definition of the *to*-infinitive proposed by Wierzbicka requires that the thought and the desire are part of the sinning as well as the lying. For this reason, Wierzbicka’s notions of futurity and subjectivity to my mind seem to overspecify the meaning of the *to*-infinitive. However, part of this analysis does correspond with the analyses of other linguists. For one, Egan, who does not make a definitive claim concerning a temporal meaning of the *to*-infinitive, notes the following:

The reason why [the *to*-infinitive] is not used to encode Same-time or Backward-looking situations would appear to be that it always implies an element of doubt as to the realisation of the complement situation. There is no room for the admission of doubt as to what *is happening* or what *has happened*. (2008, p. 99)

His ultimate characterisation of the *to*-infinitive in general is as follows: “*to* infinitive: a situation, viewed as a whole, is profiled as the targeted of several theoretically possible situations in some specified domain” (Egan 2008, p. 103). This means that when the *to*-infinitive is used, there are implicit alternatives. From these alternatives, the speaker usually draws attention to the one most likely to occur in reality. This overarching meaning is then specified on the basis of the sentence position this *to*-infinitive takes: in the subject position (e.g. *To work is a virtue*), this is the only meaning that is associated with the infinitival form (i.e. it is the only one targeted out of several theoretically possible situations). As a complement, however, (e.g. *I love to work*) it indicates the most likely scenario from among a number of scenarios in every instance (p. 97): the working, in this case, would be singled out as “likely to be realised on all suitable occasions” (p. 97). In the case of a purpose adjunct (*I work to enjoy myself*), the most desired is targeted, whereas in a resultative context (*It served to get me in trouble*), it singles out the scenario that actually occurred. The correspondence between this claim and that made by Wierzbicka is clear: the notion that a situation is targeted among alternative situations, and that there is an element of doubt involved, corresponds to Wierzbicka’s claim about the *to*-infinitive implying subjectivity on one front: the use of the *to*-infinitive is one which implies a level of uncertainty.

As Egan points out himself, in most cases, the alternatives are not made explicit. This necessitates interpretation on the part of the hearer. Since interpretation does not influence the notation, this definition by necessity does not suffice. On the other hand, it does lead one to ask the question: which constructions *could* be false, and which cannot be? For an answer to this question, let us turn to Kiparsky & Kiparsky (1971). They argue that certain constructions are *factive*, using sentences like “It is significant that he has been found guilty” (1971, p. 345) as examples. Their position is that this sentence entails the presupposition that he has been found guilty. Contrastively, the sentence “It is likely that he has been found guilty” (p. 345) is not based on such a presupposition. Furthermore, they note that “only factive predicates allow the full range of gerundial constructions, and adjectival nominalisations in *-ness*, to stand in place of the *that*-clause” (p. 346). In the case discussed, this would lead to *His being found guilty is significant*. By contrast, the non-factive sentence can lose its dummy

subject, and gain a *to*-infinitive: *He is likely to be guilty*. They further note: “gerunds can be objects of factive predicates, but not freely of non-factive predicates” (p. 347). This claim is exemplified by sentences like (194) above: “I believe John to have liked Anselm” (Kiparsky & Kiparsky 1971, p. 363) is grammatical when a *to*-infinitive is used, but not in combination with a situational gerund.²⁴

All the claims about the *to*-infinitive discussed here involve some notion of potential untruth. Is there a linguistic way in which this can be accounted for? To answer this question, we might wonder at what point something said has the potential to be untrue, and for what kind of statements truth or untruth may be said to be irrelevant. For instance, is any concept in isolation potentially untrue? Most people will argue this is not the case: a word like *chair* on its own does not constitute a claim about the world. The reason for this seems to be that there is no connection to the real or imaginary world. That is to say, the form of the word naturally has a connection to a meaning, but the connection between this word and the real or imaginary world is not specified. On the other hand, the sentence *He sat on a chair* clearly does say something about the world. As a statement, it can be true or false. This is why this clause can be used in combination with a propositional verb like *believe*, whereas *chair* cannot: *John believed [that] he sat on a chair* is acceptable, but **John believed chair* is not. Taking this context as an indicator of propositionality, *chair* is not propositional, whereas *He sat on a chair* is. The difference between the grammatical sentence *John believed him to have the money* and *John believed (that) he had the money*²⁵ on the one hand, and the ungrammatical sentence **John believed him having the money* on the other, can also be phrased in these terms. Since the *to*-infinitive can be used in a propositional context, it must be considered propositional. Contrastively, since the situational gerund cannot, it is not propositional.

4.5.3 – The semiotactic structure of the English nonfinites

In the discussion to follow, the generalisations about the situational gerund and the *to*-infinitive will be represented using the semiotactic framework. This section will follow essentially the same structure as the previous one: first the temporal features of the

²⁴ Kiparsky & Kiparsky themselves analyse these forms making reference to ‘deep structure’. In the deep structure of factive elements, a semantic particle ‘fact’ is included, whereas such a particle is missing in the case of a non-factive form (1971, p. 356). As argued in chapter 1, the linguistic data is here analysed at face value, so such an underlying semantic particle cannot be taken to account for this distinction from the present perspective.

²⁵ In semiotactic analysis, when *that* is omitted, the full sentence is simply analysed as the object to the main verb.

nonfinites will be discussed, then their propositionality. This means that we will first take a look at the temporal properties of both the situational gerund and the *to*-infinitive, which will require specification of the sigma of the nonfinite of at least one of these forms. From that point on, the notation below the sigma will be scrutinised, to see whether a different notation is able to account for the distinctions in the projections of both situations outlined above. In the final section of this chapter, the distinctions proposed here will be put to the test by notating the example sentences given in section 4.2.

4.5.3.1 – TEMPORAL FEATURES OF THE ENGLISH NONFINITES

I will attempt to outline a notational method which bases itself on the following generalisation: the situational gerund places a situation in a certain time and endows it with modal features dictated by the semantics of the element that directly dominates that situation. As such, it links two places in time: the point of time in which the dominating element takes place and that in which the action described by the situational gerund occurs. The distance between the two positions in time is determined by the dominating element. For example, in *I remember locking the door*, the verb *remember* informs the hearer that the situation that is being remembered takes place in the past, whereas the remembering event itself takes place in the present. On the other hand, when one says *I remembered to lock the door*, the event occurs at the same time as that in the main verb. Other catenatives, which place the event in the future, e.g. *I anticipate this being very useful*, can also be explained in this way: only the situational gerund can be used here, because it is sensitive to this kind of temporal specification.

In all these cases, it appears to be the meaning dominating the situational gerund that provides its temporal and modal features. Since these implications are of a modal and temporal nature and concern the whole of the nonfinite situation, these must appear on the sigma line in the semiotactic notation. Further, the situational gerund, much like the progressive, presents the verbal action as ongoing. This is corroborated by Egan, who states that durativity and imperfectivity are part of the meaning of the situational gerund in every context. As stated in section 1.7, the progressive meaning positions the NP with regard to the EP in such a way that *the NP falls within the EP*. As discussed, NP stands for *narrated period*, i.e. that period of time which the sentence actually refers to, whereas the EP, the *event period*, refers to the duration of the verbal action, which may or may not be part of the time referred to by the sentence. This means that the stretch of time in which the situation takes place within the period of time in which the verb event takes place, meaning that the initiation and the conclusion

of the event both fall outside the scope of the situational gerund. In this way, Egan's notions of *durativity* and *imperfectivity* are both represented in the meaning of the situational gerund: it is durative, because a stretch of time is referred to (i.e. the NP), and it is imperfective in every case, because the conclusion of the event (i.e. the last part of the EP) is never part of the meaning of the situational gerund. The fundamental difference between the progressive meaning and the temporal features of the situational gerund lies in the fact that the situational gerund is also sensitive to the elements dominating the meaning of the clause. This is not a small difference, as it explains why *I regret informing you* refers to a past event that is regretted, whereas *I regret to inform you* does not.

Taking the progressive (i.e. the NP falling inside the EP) together with this generalisation concerning the time position of the situation, the meaning that specifies a situational gerund situation may be described as follows:

‘ING’ = “a situation of which the NP appears within the EP of the verbal action, and which occur insofar as and to the temporal extent that is specified by the element that directly dominates this situation.”

Obviously, the above definition of ‘ING’ is only appropriate in the case of the situational gerund, and not with any other *-ing* form. The symbol ‘ING’ is chosen over a symbol like ‘GER’ because it clearly indicates that this meaning is restricted to the English language, and is not applicable to gerunds in other languages. The above definition, brief though it may be, yields a number of fruitful and falsifiable claims concerning the nature of this nonfinite construction, repeated here from 4.4.1.:

1. Contexts which refer to the initiation of an event;
2. Contexts which refer to the conclusion of the event;
3. Contexts in which the *temporal* and *modal* characteristics of the nonfinite clause are separate from the temporal and modal features imparted by the meaning dominating it.

As this list shows, it argues for a different relation between the situational gerund and the main verb, or indeed any other element that might dominate the situational gerund. The point is that the semantic features of the main verb interact with the situational gerund, whereas this does not occur in the case of the *to*-infinitive. As such, the *to*-infinitive remains firmly within the narrated period of the entire event, just as the object in a sentence like *I remember the ball*. The projection of the ball is in the present, because the remembering event is. In the same way, *I remembered to buy the*

ball is placed in the same past scenario as the rest of the sentence: when the remembering occurs, the projection of the event occurring is also *present*: the whole of the projection takes place in that moment. When the situational gerund is used, the retrospective aspects of *remember* are carried over to the situational gerund: it itself is placed in a *past* remembered.

In the above, the *to*-infinitive has been negatively defined, in that it does not position itself in relation to the main verb, and it does not share the aspects of the progressive described above. If we define the *to*-infinitive this way, then it follows that there is considerable overlap in the positions that the two nonfinite constructions can take, which, of course, happens. The above shows that in contexts in which both are possible, the meaning of the situational gerund may serve to negatively define the *to*-infinitive: the two forms can occur in exactly the same position in many cases, yet a change in meaning can be effectuated by replacing one with the other. This difference will be explored in detail in 4.6.

Notably, the specification of the situational gerund by dominating elements is presented here as a semantic aspect of the situational gerund, in much the same way that Egan argues (see 4.5.1.1 above). This is necessary in the present analysis, as it does contrast the *to*-infinitive and the situational gerund: where the *to*-infinitive is interpretively related to the situation as a whole (often, but not always, leading to a reading of futurity), the situational gerund relates itself specifically to the meaning dominating it. This contrasts with the model proposed by Duffley (2006), who states that “since the relation of a direct object to a transitive verb is basically non-temporal (the role of the object being merely to identify one of the participants in the event), the production of any temporal implications is due to the meaning of the transitive verb” (p. 37). In other words, it is inherent in the fact that the situational gerund is the object to the catenative verb that it is temporally specified in his view. This works in Duffley’s analysis, because the *to*-infinitive usually does not take this position. It rather functions as a regular preposition in most cases. However, as has been argued in the above, the meaning often relates to catenative verbs in just the same way, rather than via the separate meaning of *to*: *cease to play* does not mean that the ceasing occurs with an aim to play, but rather that the playing itself was ceased. For this reason, *to*-infinitives are argued to function as complements to the main verb, rather than as prepositions to them in such cases. The difference in temporal flexibility must therefore be a part of the nonfinite meanings themselves. As it happens, the *to*-infinitive actually does appear to behave like a regular object: *I want an iguana* does not mean that the iguana is already in my possession, and the same goes for *I want to have an iguana*. In both sentences,

the temporal features of the object are the same. Nobody would argue that *an iguana* in the first example somehow has a different NP than the rest of the sentence. I believe *to have an iguana* in the second example is no different. By contrast, when the situational gerund is placed in the complement position of a verb or a preposition, this does happen: *before having an iguana* means that the NP of the situational gerund is positioned with regard to the element that *before* links to the situational gerund. In fact, I would argue that this is the very reason that the situational gerund can be used as a complement to most prepositions at all. Examples contrasting these forms will be analysed in section 4.6.2.

This does, however, still leave open the question of how to deal with the difference between *cease*, which takes a *to*-infinitive, and *stop*, which takes the situational gerund as its complement. I would argue that the difference between the two can be accounted for on the basis of their temporal features: *cease* requires a complement which refers to an event that is interpreted as occurring with some regularity (Egan classifies it as a *General* construction for this reason, i.e. “Some situation is profiled as likely to occur on a more or less regular basis” (2008, p. 39). To refer to this regularity, the entirety of the event must be projected, which is why the situational gerund is not felicitous in this context. By contrast, *stop* refers to an activity as it is ongoing, whether it is repetitive or not. This may be a rather slight distinction, but I believe the distinction can be made clear by juxtaposing *He ceased to look at the painting* and *He stopped looking at the painting*. In the first instance, it is clear that his habit of looking at the painting has ended, whereas in the latter case, the activity itself is interrupted as it was occurring.

Another aspect of Duffley’s analysis that is not taken over here is the notion that there are two distinct uses of the situational gerund, which each bear description. Duffley notes that one refers to an event in progress whereas the other is perfective. It must be noted that Duffley does distinguish these *uses* as different instantiations of the same intrinsic meaning, but here it will not be assumed that this *use* is in any way relevant to the description of the form. As Egan also showed in section 4.5.1.1, there is no direct link between the form of a situational gerund and its potentially perfective reading. Rather, it is the context of such a form which may or may not lead to such an interpretation. Of course, elements that are placed in the past are more prone to be read as perfective, but this is by no means inherent in the clausal gerund form.

Some of the claims made in the literature discussed contrast with the generalisations made here. For one, Wierzbicka’s claim that the situational gerund is only appropriate for introducing same-time meanings is only accepted in some contexts. Moreover, the *to*-infinitive in her work is given future orientation and a subjective, first-person mode.

However, the claim is here that the future orientation is not inherent in the *to*-infinitive, but rather that when the initiation of the *to*-infinitive event is referred to, this may yield a future interpretation. This means that futurity is not part of the meaning of the *to*-infinitive itself, which explains why it can be used with main verbs like *cease*. Langacker's model, on the other hand, relies heavily on nominalisation, which implies atemporality. This perspective is not held to here, as the nonfinite forms are taken to be temporal. Moving on, Egan's work supplies important generalisations concerning the meaning of the situational gerund, but the idea proposed, that it "profiles a situation as extended in some specified domain" (2008, p. 132), requires some further specification. The hope is that this is achieved by describing this connection in detail.

All of the claims above will be exemplified and elucidated below. Before any discussion of these positions can take place, however, first the possibility of a different notation of the two nonfinite constructions must be explored. This will be done in the following section. After that, the sentence positions that these infinitivals can take will be compared and contrasted.

4.5.3.2 – PROPOSITIONALITY AND STRUCTURE

In the present section, I will argue for the following positions:

- a. When a sentence is negated, there are many possible reasons for why the negated situation does not or did not occur;
- b. Whatever the reason for the negation may be, however, what is universally true is that the subject of such a sentence cannot be ascribed to the predicate of the sentence;
- c. For this reason, I argue that the propositionality of any sentence (i.e. the possibility of its being true or false) may be found precisely in the connection between the subject and the predicate;
- d. As Kiparsky & Kiparsky have shown, non-factive contexts can take the *to*-infinitive but not the situational gerund (see section 4.3.3.3.6);
- e. Since non-factive contexts require a nonfinite complement which can be true or false, and the nexus in the semiotactic framework expresses the relation between the subject and the predicate, I argue that the *to*-infinitive does contain a nexus, whereas the situational gerund does not.

As discussed in section 4.5.2, temporality is not the only factor in the positioning of the situational gerund and the *to*-infinitive, because it does not explain why only the *to*-infinitive can be used in the context of what I call *propositional* verbs, or *non-factive* contexts, as Kiparsky & Kiparsky (1971) call them. One may wonder how this distinction could be reflected in the notation of the nonfinities under discussion. In other words: what makes something propositional? Kiparsky & Kiparsky may actually lead us to an answer to this question. In analysing the sentence “Mary didn’t kiss John” (1971, p. 352), they note the following ambiguities:

Someone may have kissed John, but not Mary
Mary may have kissed someone, but not John
Mary may have done something, but not kiss John
Mary may have done something to John, but not kiss him. (p. 352)

Kiparsky & Kiparsky argue that in a syntactic tree structure of the original sentence, “each major constituent may be negated” (p. 352). In other words, it seems that they argue that the scope of the negation changes with every different reading. This does not seem to be in line with the principle of *one form-one meaning*, however. One might wonder if there is no way to generalise over all these different readings. What do all these possible interpretations of the sentence have in common? They all imply that *Mary* was not the agent of the event in which John was kissed. Of course, there are many possible reasons why the subject and the predicate do not belong together. For instance, if one saw Mary kiss Jack, or one saw Mary kick John rather than kiss him, or do something else entirely, or one saw someone else kiss John, what is not true is [*Mary = kiss John*], so using the sentence *Mary kissed John* would probably lead a response like *No, she didn’t*. All of Kiparsky & Kiparsky’s examples are alike in this respect. The same goes for a sentence like *She didn’t kiss John because she loved him*. Here, the connection between *She* and [*kiss John because she loved him*] is negated. This does not mean that she could not have kissed him for another reason, which is why it could be followed by a phrase like *but because she had too much to drink*. In spite of all possible interpretations, then, the fundamental point of this is that the negation in the sentence negates the connection between the subject and the predicate. On the semantic side, we may say that in order for something to be able to be true or untrue, it has to be a *proposition*: something that is presented as possibly true, but not necessarily. Taking these notions together, I argue that propositionality resides in the connection between subject and predicate.

Kiparsky & Kiparsky consider *non-factive* contexts to refer to states of affairs that may be true or untrue. It stands to reason that the elements that can appear in such a

context present a proposition. Since the *to*-infinitive can fill these positions, but the situational gerund cannot, this means that one of the differences between the *to*-infinitive and the situational gerund must be that the *to*-infinitive is propositional, but the situational gerund is not. As Kiparsy & Kiparsky have argued, “gerunds can be objects of factive predicates, but not freely of non-factive predicates” (p. 347) (see section 4.3.3.3.6 above). Further, if we assume the above to hold true – that the propositionality of any sentence is found in the connection between the subject and the predicate – then this would lead to the conclusion that there is a difference between the *to*-infinitive and the situational gerund with regard to the way the subject and the predicate interact with one another.

One might be tempted to think that it is the *nexus* that expresses the propositionality to a sentence or clause. This is the relation that connects the subject to the predicate, and keeps the two elements divergent, though creating a single complex meaning (i.e. a situation). If the *nexus* implies propositionality, then it follows that the difference causing the *to*-infinitive to be acceptable and the situational gerund to be unacceptable in propositional contexts lies in the respective presence or absence of a subject-predicate relation, which is expressed using the *nexus*. In other words: *because the situational gerund is not propositional, whereas the to-infinitive is, the situational gerund should be notated without a nexus, but the to-infinitive should be notated with a nexus.*

To validate the proposed distinction above, it is important to go back to what the *nexus* and the *sigma* contribute to the notation. As Andries van Helden puts it: “A *nexus* is a pair of semantic particles the conjunction of which in one or more appropriate referents serves as a means to characterise a third set of appropriate referents directly” (2017, p. 259). In other words, in a sentence containing a *nexus* neither the subject nor the predicate are directly referred to: *Someone stole my bike* does not refer to a person directly, nor to the stealing event, nor to the bike. Rather, the message is that there was some point in time at which these divergent meanings together created a situation in which someone was the agent of a bike-stealing action. As stated in chapter 1, the *sigma* is placed above the *nexus* so that meanings like tense and aspect can be tagged onto it. This requires abstraction: rather than specifying any element of the state of affairs, it is rather the existence of the situation as a whole that is specified. By contrast, situations without *nexus* have also been discussed in 1.4.1, and they simply express situations in which some meaning can be found. This does not imply that any relation between two meanings is the message. Rather, that single meaning is all that sets this situation apart.

One may wonder, however, whether this is all that the sigma truly represents in Ebeling's framework. Van Helden rightly notes that "in Ebeling 1978 and Ebeling 1994, Σ is a fully-fledged semantic unit: it represents an effort on the part of the speaker to evoke the features of a situation in the hearer's mind" (2017, p. 261). Though not made explicit, this is true for Ebeling's notations of the two nonfinite constructions under discussion as well (represented in (199) and (198)). In (199), the sigma is used to express that the situation as a whole is the object. This contrasts with Ebeling's (2006) notion that "the relation is fully symbolised by "=", the line above it with ' Σ ' stands for the piece of the world that is already unambiguously indicated by "=" . Nevertheless, such a ' Σ '-line is usually not redundant, because it offers room to add an element like 'then' in *Grandpa was young then*" (2006, p. 152).²⁶ Based on this, Van Helden argues that in Ebeling (2006) " Σ ceases to stand for an autonomous contribution to the meaning of a sentence and seems to be reduced to a notational device, a linking pin for semantic elements occurring in a sentence that do not refer to the appropriate referents that make up the nexus but rather characterise the status of the nexus as a whole" (2017, p. 261). This does seem to be the gist of Ebeling's point here, but later Ebeling does still apply the sigma as if it were a semantic unit: a sigma dominating a single element rather than a nexus relation is referred to as "a situation Σ such that x is a component of Σ " (2006, p. 195)²⁷. Note that this is not the same as mere abstraction: in a sentence like *Two glasses is fine*, the phrase *two glasses* is taken to refer to such a situation, which explains the singular agreement on the main verb. This does not refer to *being two glasses* or *the existence of two glasses*, but rather to a situation in which two glasses play some role, here kept implicit. Ebeling's definition of a sigma above a nexus relation is the following: "a situation Σ such that a component x of Σ is identical to y " (p. 195).²⁸ *The man drank a cup of coffee*, for instance, means that x , *the man*, is identical to the agent of a coffee-drinking event for the interpreted event period of that situation.

Can this difference suffice to distinguish the situational gerund and the *to*-infinitive along the lines of propositionality? To investigate this, perhaps it would be useful to give the two proposed notations side by side:

²⁶ "De relatie is volledig gesymboliseerd door "=", de regel erboven met ' Σ ' staat voor het stukje wereld dat ook al ondubbelzinnig door "=" is aangeduid. Toch is zo'n ' Σ '-regel meestal niet overbodig, want hij biedt ruimte voor een element als 'toen' in *Opa was toen jong*" (Ebeling 2006, p. 152). Note 1.7 above, in which it is argued that the sigma line ought not to be used for temporal adverbials.

²⁷ "een zodanige situatie Σ dat x een bestanddeel van Σ is" (Ebeling 2006, p. 195).

²⁸ "Een zodanige situatie Σ dat een bestanddeel x identiek is met y " (Ebeling 2006, p. 195).

(205) To lock the door
 ‘Σ
 X = [lock₁]
 [lock₂]; door’

(206) Locking the door
 ‘Σ / ING
 [lock₂]; door’

The *to*-infinitive in (205) provides an example within which an unspecified first nexus member performs the door-locking action. In (206), on the other hand, the situation is such that a door-locking event is simply a part of it. The message in the first is precisely captured by the ascription of ‘[lock₁]’ (the agent role) to some entity, whereas in the second, the image is merely one of a situation in which a door is being locked. The ascription of *x* to *y* is therefore absent from (206), which is precisely where I argue the propositionality may be found.

One question does remain, however: how is *complementation* (‘;’) warranted in (206)? First, it must be noted that the difference between the nexus and dominated valence has to do with *assemblage*. Assemblage concerns the notion “that the speaker, while mentally decomposing the projection of the portion of the world and recomposing it so as to create “n” [e.g. a situation], takes (or has taken) the projection of the features of W [i.e. an element in the projection] before or after the projection of the features of V [i.e. another element]” (Ebeling 1978, p. 29). This type of ordering can be exemplified by comparing an active sentence to a passive one: *I wrote the letter* presents *me* (‘W’, following the description by Ebeling) before the letter (‘V’), whereas *The letter was written by me* presents the letter (‘V’) before *me* (‘W’). Both may refer to the same portion of the world, but the way the situation is described is clearly different. The subject in both these sentences is also the first nexus member – this indicates the primacy of this element. Both times, the other element takes a secondary position. Ebeling notes: “the symbol ‘;’ therefore indicates that what is right of it realises a subordinate valence within a plurivalent property which characterises the dominating valence” (2006, p. 239).²⁹ In *I wrote the letter*, for instance, the letter is only there to further specify the situation the first person is in.

²⁹ “Het symbol “;” geeft derhalve aan dat wat er rechts van staat een ondergeschikte valentie realiseert binnen een plurivalente eigenschap waardoor de dominerende valentie gekarakteriseerd wordt” (2006, p. 239).

Looking at (206), however, it may be wondered what is dominating *door* in this instance. In (205), it is clear that the agent role dominates it, but in (206), this meaning is missing. In this case, it is the semantic element ‘ Σ ’ that dominates the event ‘[lock₂]’: it is a situation in which locking occurs, and what is locked is a door. Its contribution is not propositional as such, not because the relation is dissimilar, but rather because the relation between the role (‘lock₂’) and the entity (‘door’) is not the message of the form as a whole: it is merely supplementive. However, it must be noted that this does not mean that the relation is different in other respects: before designing the ‘;’ functor, Ebeling would notate both the subject and the (direct and indirect) object of any verb using the nexus symbol. The fundamental difference between complementation and the nexus relation lies in the role it plays in the assemblage of the sentence: the nexus relation is different in that it contains the message of the entire situation, whereas complementation simply adds specifications to the identity between *x* and *y* forged by the nexus (i.e. ‘*x* = *y*’). In the case of *I eat bread*, or Ebeling’s own example “Piet eet brood” (*Pete eats bread*, Ebeling 2006, p. 238), Ebeling would argue “the bread is merely mentioned to further specify Pete’s situation” (p. 238).³⁰ Likewise, in (206) above, *the door* is merely there to supplement *locking*, which is the essential message of the situation.

There is something more to be said about this. Ebeling (1978) presents the distinction between notations like (205) and (206) in other contexts, such as the following Russian examples:

- (207) “*veter* *svalil* *berezu*” (p. 292)
 wind-MASC-NOM fell-MASC-PST birch-FEM-ACC
 ‘ Σ . . .
 wind = [fell₁]
 [fell₂]; birch’
- (208) “*berezu* *svalilo* *vetrom*” (p. 337).
 birch-FEM-ACC fell-NEUT-PST wind-MASC-INSTR
 ‘ Σ . . .
 [fell₂]; birch
 [fell₁]; wind. . .’³¹

³⁰ “het brood wordt vermeld ter nadere specificatie van Piets situatie” (Ebeling 2006, p. 238).

³¹ It must be noted that Ebeling (1980) also describes Russian examples like this, but that the resulting notations are rather different: rather than notating the entity in the instrumental case

I will refer to the first nexus member as *subject* on a number of occasions, but to the entity taking the agent role simply as *agent* (i.e. *veter* in (207) is both the subject and the agent, but *vetrom* in (208) is only an *agent*). Note that the notations above are not literally taken from Ebeling (1978), but have been adapted to fit the notational style of the present work. As (207) shows, there is gender agreement between the subject of the sentence (*wind*) and the main verb, as is normal in Russian past tense sentences. Moreover, *birch* takes the accusative case, because it is the object of the main verb. As such, the subject role and the object role are clearly indicated by the morphology of the words, and the structure of the notation is therefore comparable to the English sentences we have analysed before. Sentence (208) is rather different, however. We see the same accusative *birch*, but neuter past tense on the verb, even though there is no neuter word in the sentence, and *wind* taking the instrumental case. Due to the lack of agreement with the main verb of any noun in the sentence, it may be said that there is no clear *subject* in this sentence. Rather, it appears that the neuter past tense refers to the action in the main verb itself, and the cases on the nouns in the sentence simply reflect their roles within that verbal meaning. The closest approximation I can come up with in English would be *There were birches being felled by the wind*. Ebeling notes that one uses such a sentence when one “starts from a projection of (the features of) the situation characterized indirectly by the features of “q” [in ‘p = q’ on the nexus line] and supplements the message by adding “p” as a projection of the direct carrier of these features” (p. 290). In other words, the speaker of a sentence like (208) presents a *single* meaning as the most important meaning in the situation. As noted in section 1.4.1, a situation without a nexus presents “a situation Σ such that x is a component of Σ ” 2006,

as the actor of the event, it is rather notated as connected to the verbal action through gradation, as the following example will show:

ego ubilo kirpičom (Ebeling 1980, p. 370)

he-ACC kill-NEUT-PST brick-MASC-INSTR

“ Σ ”

(<[y; x kills y]> [w; w instr z]; *the 3dp* – male sing

[z; w instr z]; brick / sing” (Ebeling 1980, p. 370)

This notation shows that *being killed* is first specified by the instrumental case, to show that the role of *being killed with a brick* is what is being ascribed to the male third person. This change is made because the Russian instrumental case does not always invoke the *actor* of the verbal action, because it can also be used to introduce the means by which the actor performed the action, or a cause without agency rather than the actor. Note, however, that the nexus is still not introduced into the notation, and that this distinction need not be made in the case of the clausal gerund, because the English accusative is not ambiguous in this way.

p. 195).³² In (208), this meaning x is clearly the verbal meaning *fell*. The other meanings in the sentence are merely there to further specify this essential meaning: the projection of the felling event is merely *supplemented* by the adding of the other meanings. This is where this notation contrasts with that of (207): here “the speaker . . . starts from “s” [in a situation with a nexus line ‘s = t’] and arrives at a projection of the situation by assigning to “s” the features mapped as “t”” (p. 290). In other words, here it is not any single meaning in the sentence that is the message of the sentence. Rather, it is the *assignation* of the subject to the predicate which is the message. Ebeling (2006) defines such a situation as follows: “a situation Σ such that a component x of Σ is identical with y ” (p. 195).³³ As I have argued in the above, I believe the propositionality of a phrase to reside in the assignation of x to y , and thus in the relation expressed by the nexus. Where this does not occur, the nonfinite verb is merely supplemented by the projections of other meanings, without making the ascription of one to the other the message of the nonfinite situation. This is the fundamental difference: not that the relation is inherently different, but rather that this relation is not itself the message of the situation. I would argue that the acceptability of *I believe him to have lied* and the impossibility of using the situational gerund here is due to the presence of the nexus in the nonfinite situation, and the absence of it in the situational gerund.

One thing still stands out, however: the constructions discussed above do not necessarily seem to imply a lack of propositionality in the same sense that the situational gerund does. Both Russian sentences above certainly are full sentences, and as such (208) does not seem any less apt to be negated than any other. I would argue that this is entirely due to its direct relation to THE period through tense: by linking it to the real world in such an explicit manner, they can always be negated as a situation. However, tense can never be part of either a situational gerund or a *to*-infinitive. As such, it can only be linked to the real or imaginary world through the tense of the sentence it occurs in. *To examine her* is not a proposition as such, but *I tried to examine her* is: both my trying to do it can be false, and the nonfinite situation actually coming to fruition may or may not actually happen. In short, the *to*-infinitive only acts as a proposition when it occurs in a full sentence.

The definition given here of propositionality leads to an intriguing solution to other problematical cases discussed. For instance, the difference between *I hate lying* and *I hate to lie* has been discussed for some time now. Jespersen (1940) notes that the first

³¹ “een zodanige situatie Σ dat x een bestanddeel van Σ is” (Ebeling 2006, p. 195)

³³ “een zodanige situatie Σ dat een bestanddeel x van Σ identiek is met y ” (Ebeling 2006, p. 195)

refers to “the vice in general” whereas the second example is applicable “in this particular case” (p. 193). The distinction between the vice in general and a specific instance reflects Wood’s observation below:

where the infinitive, although it does not specify an agent, usually implies one, the gerund represents the activity as it were in vacuo, without reference to any agent or occasion. When we say *To lie is wrong* we are thinking of you, me or anyone else telling lies; that is to say we think of it in connection with a subject, though not with any particular subject, and with various, though unspecified occasions. But when we say *Lying is wrong* we are thinking of the activity or practice in a universal sense, as a vice having an existence independent of the individual who succumbs to it. (Wood 1956, p. 11, cited in Egan 2008, p. 46)

The generality of the situational gerund is due to its not having a subject, and the *to*-infinitive always implying one directly stems from its propositionality. That is to say, if propositionality is the relation between the subject and the predicate, then naturally a propositional infinitive must always imply a subject, even if it is not overtly given.³⁴ This way, also, the generality of the *to*-infinitive in the subject position can be clearly distinguished from the generality of the situational gerund in the object position: the *to*-infinitive is only more general in the subject position due to its lack of temporal specifications. Conversely, the generality of the situational gerund is caused by the stativity of the verb (e.g. *hate*), which hardly serves to limit the timeframe within which the situational gerund occurs. Moreover, the fact that a subject is implied in the case of the *to*-infinitive also interpretively leads to the idea that it is applicable to the present moment: one interpretively fills in this subject position on the basis of the context of the speech situation, thereby making it more specific to that speech situation.

In other words, the notion of an implied subject and its relation to a specific instance also makes sense in this discussion: it is the fact that an agent is always implied that makes a *to*-infinitive propositional: because there is a nexus, there must be both a first and a second nexus member. This would also explain Wood’s generalisation: since there is no first nexus member, no agent (and certainly no *subject*) is necessarily implied in a situational gerund, therefore it can be perceived as an action in vacuo. These two aspects of propositionality are two sides of the same coin: the ascription of *x*

³⁴ Note, however, that I disagree with Wood in that I do believe that the *to*-infinitive can have an overt subject on its own.

to y is what makes a proposition, so naturally a proposition requires both an x and a y . By contrast, the situational gerund only contains a verbal meaning, which may or may not be accompanied by other elements. As such, the correct notations of *I hate lying* and *I hate to lie* are, respectively:

$$(209) \quad \begin{array}{l} \text{I hate } \textit{lying}. \\ \Sigma / \text{PR} \\ \text{me} \quad = \quad \begin{array}{l} [\text{hate}_1] \\ [\text{hate}_2]; \quad \Sigma / \text{ING} \\ \text{lie}'_1 \end{array} \end{array}$$

$$(210) \quad \begin{array}{l} \text{I hate } \textit{to lie}. \\ \Sigma / \text{PR} \\ \text{me} \quad = \quad \begin{array}{l} [\text{hate}_1] \\ [\text{hate}_2]; \quad \Sigma \\ \text{X} \quad = \quad \text{lie}'_1 \end{array} \end{array}$$

In sum, in the above I have argued that the propositionality of any situation can be found in the relation between the subject and the predicate. Since non-factive contexts require propositions to fill them, naturally the complements to propositional verbs must contain such a relation between the subject and the predicate. As this connection is expressed through the nexus functor in the semiotactic framework, I argue that such a complement must contain a nexus. As the *to*-infinitive can fill these positions, but the situational gerund cannot, I believe the *to*-infinitive must be notated with a nexus, whereas the situational gerund should be notated without one.

In totality, the section in the above has argued the following points:

- The temporal difference between *I remembered locking up* and *I remembered to lock up* are a direct result of the nonfinites and their relation to the other meanings in the sentence. The situational gerund is sensitive to the temporal specification that the verb *remember* imposes, whereas the *to*-infinitive is not. For this reason, *locking up* refers back to a past event from the moment of remembering, whereas *to lock up* refers to an event without temporal specification. This normally leads to the interpretation that it occurs at the moment referred to by the overarching sigma;

- This temporal sensitivity on the part of the situational gerund also explains why so many prepositions can take the situational gerund as their complement: in these positions, the situation described is actually placed in the temporal position the

preposition refers to, e.g. *The senator fell off the stage after giving the speech* places the speech-giving event before the falling event;

- The situational gerund only refers to the event within it as ongoing, whereas the *to*-infinitive refers to the whole event. This explains why the *to*-infinitive can be used as the complement of catenatives which refer to either the initiation or the conclusion of an event, i.e. *I expect you to work hard*;

- The message of a *to*-infinitive is always that a subject, whether explicit or implicit, performs the event, which lends it its *propositionality*, whereas the message of a situational gerund is the occurrence of that event first and foremost. This latter meaning can be supplemented by an agent as well as an object, but the event itself remains the essence of the message. For this reason, the event itself is directly dominated by the sigma in semiotactic notation, whereas, in the *to*-infinitive, it is the connection between the subject and the predicate (i.e. the nexus) that is dominated by the sigma. The fact that this connection is the message makes it possible for the *to*-infinitive to be used in contexts in which its actual occurrence is unsure, e.g. as a complement to *believe*.

4.6 – Notations of examples

In the present section, the examples given of the various contexts in which the situational gerund and the *to*-infinitive occur will be represented using the semiotactic framework. Since 4.2 only exists to distinguish the situational gerund from temporal gradation constructions, the examples used in that section will not be represented here. Rather, the examples given in 4.3 will here be given a notation, since that section aims to provide an overview of all grammatical positions the situational gerund and the *to*-infinitive can take. For obvious reasons, only the correct examples given in 4.3 will actually be notated, although the ungrammatical ones will be part of the discussion on multiple occasions. When this happens, the ungrammatical example will simply be repeated in the text. In every case, first the sentence will be repeated, after which the notation will follow.

4.6.1 – The subject position

The subject position is where the semiotactic framework may be the most insightful, as without it, pinpointing the meanings that dominate the situational gerund in this position would be difficult. Recall that meanings are on the sigma line when they concern the whole of the situation. These meanings are temporal and modal in nature. They specify the temporal and modal characteristics of any situational gerund in the subject position. By contrast, *to*-infinitives remain temporally unspecified, which in

some instances makes this construction the only grammatically correct option available, whereas it is disallowed in other contexts.

4.6.1.1 – SPECIFIC VERSUS GENERAL

Examples (140–144) are repeated in (211–5) below, and represented using semiotactic notation:

(211) “*Living in fear of attack* is a terrible stress and one which GPs could do without.” (Egan 2008, p. 133, emphasis added)

$$\begin{array}{rcl} & & \text{'}\Sigma / \text{PR} \\ \Sigma / \text{ING} & & = \text{stress – terrible . . .} \\ \text{live}_1 & > & [\text{in}_1] \\ & & [\text{in}_2]; \text{fear. . .}' \end{array}$$

(212) *To live in fear of attack* is a terrible stress and one which GPs could do without.

$$\begin{array}{rcl} & & \text{'}\Sigma / \text{PR} \\ \Sigma & & = \text{stress – terrible . . .} \\ \text{X} = \text{live}_1 & > & [\text{in}_1] \\ & & [\text{in}_2]; \text{fear}' \end{array}$$

(213) *Doing so* would have required 18,446,744,073,551,615 grains.

$$\begin{array}{rcl} & & \text{'}\Sigma / \text{PF} / \text{WILL} / \text{PA} \\ \Sigma / \text{ING} & & = [\text{require}_1] \\ \text{do}_1 > \text{so} & & \\ & & [\text{require}_2]; \text{grain} / 18446. . .}' \end{array}$$

(214) “*To do so* would have required 18,446,744,073,709,551,615 grains!” (Featherstone 1975, emphasis added).

$$\begin{array}{rcl} & & \text{'}\Sigma / \text{PF} / \text{WILL} / \text{PA} \\ \Sigma & & = [\text{require}_1] \\ \text{X} = \text{do}_1 > \text{so} & & \\ & & [\text{require}_2]; \text{grain} / 18446. . .}' \end{array}$$

(215) *Washing the dishes* used to be a drag until I bought a dishwasher³⁵.

$$\begin{array}{rcl}
 & \Sigma / \text{PA} & \\
 \Sigma / \text{ING} & = & [\text{use_to}_1] > [\text{until}_1] \\
 \text{wash}_2; \text{dish} & & \\
 & [\text{use_to}_2]; \Sigma & \\
 & X = & \text{drag} \\
 & & [\text{until}_2]; \Sigma / \text{PA} \\
 & & \text{me} = [\text{buy}_1] \dots
 \end{array}$$

As stated in section 4.5.3.1, it is argued here that ‘ING’ requires that a dominating element specify its temporal position. In (211), the dominating element is the topmost sigma, which in turn is specified as occurring in the present. Comparing (211) to (212), *living*, which must be specified by the present tense indirectly if we hold to this definition of ‘ING’, has the effect that the occurrence of the nonfinite clause is at moment of speaking, whereas this reading is not foregrounded in any way in the case of *To live*: this statement seems to refer to a general truth, not limited by any temporal boundary, which as such may be read as “when one lives in fear of attack, it is a terrible stress”. This is indicated in the notation, both by the fact that the sigma representing the *to*-infinitive is not specified, and by the fact that there is an implicit first nexus member in (212). To make this point more explicit, (213) and (214) have also been provided. In (214), the *to*-infinitive is used. In using this nonfinite, the speaker indicates that the validity of applying the predicate to this subject holds regardless of the modal and aspectual meaning specifying the overarching situation. That is to say: since the *to*-infinitive is modally and temporally unspecified, and the requirement is applied to this situation rather than a more narrowly defined situation, the statement is valid in a general sense. This is where the alternative in (213) differs: in this case, the nonfinite is one which carries exactly those properties that the overarching sigma also carries. As such, the equation of the two is more limited: here it appears that it is only within this specific instance that doing so requires so many grains. The proposed meaning of ‘ING’ accounts for this, because it requires the nonfinite to be contextually bound to the situation of the sentence as a whole.

There are contexts in which this added meaning is foregrounded and even excludes the use of the *to*-infinitive. Consider, for instance, example (215) discussed above. As **To wash the dishes used to be a drag until I bought a dishwasher* shows, the situational

³⁵ It is possible to regard *used to* as contributing a merely temporal/modal meaning as well. In the present notation this has not been done, hence its notation below the sigma. This has been done because it appears to me that the function of the infinitive is truly like a *to*-infinitive.

gerund cannot be replaced by the *to*-infinitive in this case. This is due to the fact that the *to*-infinitive does not limit itself to the past-tense situation, and for this reason, it is not acceptable here. The sentence as a whole needs the situation of washing the dishes to be limited to the time before the present. The situational gerund is therefore more appropriate in this instance.

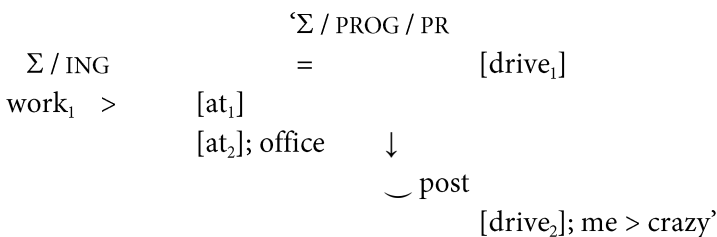
Apart from the temporal distinction made above, it is also worth noting that the presence or absence of the nexus has an important effect in these notations as well. Notably, the sentences containing situational gerunds not only refer to the present moment, but also seem to imply that the situational gerund situation in itself is occurring, whereas the *to*-infinitive sentences do not do so. They are not simply temporally undefined, but also *non-factive*, as Kiparsky & Kiparsky call it.

There is one thing left to discuss, and that is the effect that the *mode* and the *intention* of the sentence has on 'ING'. These elements are quite different from other meanings on the sigma line, in that they reflect interpersonal properties (see chapter 1). As such, the complex projection that the sentence creates is not specified itself. Rather, these meanings indicate the stance the speaker has to the situation described. In other words, it is not an inherent property of any situation itself. Rather, the complex projection as a whole is cast in a certain light. For this reason, then, mode and intention as meanings do not interact with the meaning of a situational gerund in subject position directly. The situational gerund in a sentence like *Does working out improve your health?* is no different from the one in *Working out improves your health*, even though the difference in meaning between the interrogative and the declarative construction is represented on the sigma line. As the analysis above shows, any modal verbs do affect the meaning of the situational gerund: its occurrence is specific to the overarching situation.

4.6.1.2 – OCCURRENCE IN SENTENCE WITH ASPECT

Moving on to sentences with aspect, one notes that the *to*-infinitive is used far less in these contexts. Examples (146) and (148) are repeated below:

(216) *Working at the post office* is driving me crazy.



(217) *His not taking his medication* has killed him.

$$\begin{array}{rcl}
 & & \text{'}\Sigma / \text{PF} / \text{PR} \\
 \Sigma / \text{ING} & & = \quad [\text{kill}_1] \\
 \text{take}_2 \quad \downarrow & ; \text{medication} / \text{NO} & \\
 - \text{he} & & \\
 & & [\text{kill}_2]; \text{he}'
 \end{array}$$

In (216), the situational gerund shows that the event in the subject position is occurring at the same time as the event within which it plays a role. Specifically, it seems that the situational gerund takes on the *event period* of the dominating sigma. As such, *?To work at the post office is driving me crazy* sounds questionable at best, because it is not specified in this way. Similarly, in sentences like (217), the perfect aspect also blocks the *to*-infinitive, as **For him not to take his medication has killed him* makes clear. This difference is attributable to the semantic difference between the two constructions once again: the situational gerund, being specified by tense and aspect, indicates that the event is positioned such that it has been the cause of his death. The situational gerund event is placed before the narrated period, i.e. the present. The event period of the highest sigma seems to position the situational gerund. Notably, in both these sentences the *to*-infinitive, which we analyse as being propositional, would also lead to an illogical analysis: the rest of the sentence requires of the nonfinite that its occurrence in the real world is presupposed. For this reason, a situation with a nexus seems inappropriate.

4.6.1.3 – NONFINITES WITH NONFINITES

Example (150) has been repeated in (218) below:

(218) *To lie* is *to sin*.

$$\begin{array}{rcl}
 & & \text{'}\Sigma / \text{PR} \\
 \Sigma & = & \Sigma \\
 \text{X} = \text{lie}_1 & & \text{X} = \text{sin}_1'
 \end{array}$$

The reason the above notation is felicitous whereas **Lying is to sin* is not, is that the temporal properties of the first situation must align with those of the second, otherwise a different perspective on the same deed would result in the same event taking more or less long: 'ING' only takes an internal view of an event, whereas the *to*-infinitive takes the event as a whole. This combination is illogical, and for this reason either both situations must be presented as *to*-infinitives, or as situational gerunds, as is the case in *Seeing is believing*. Apart from temporal features, factivity can naturally not be equated

to nonfactivity, which is another reason why the situational gerund, which does not take a nexus, cannot be equated to the *to*-infinitive, which does.

4.6.2 - Complement to preposition

Some statements have already been made about the situational gerund in the context of a preposition. Essentially, what has been said in other contexts is applicable here as well: when the situational gerund is used, the dominating element (in this case: a preposition) will temporally and modally specify it. Notably, prepositions seem to have a strong predilection for the situational gerund, whereas the *to*-infinitive is usually disallowed. The definition presented above shows why this is the case: a prepositional phrase specifies the temporal position of the nonfinite complement with respect to the dominating element, and the situational gerund is sensitive to such temporal specification.

4.6.2.1 – NONFINITE EVENT OCCURRING BEFORE THE MAIN VERB EVENT

Example (152) has been repeated in (219) below:

(219) The senator fell off the stage *after giving his speech*.

‘Σ / PA

senator =	fall ₁	>	[off ₁]	>	[after ₁]
			[off ₂]; stage		
					[after ₂]; Σ / ING
					give ₂ ; speech. . .’

In the above sentence, the falling event occurs after the speech-giving event. In this position, then, the temporal features of the nonfinite are again entirely dependent on the element that dominates it. As has been discussed before, whenever a situational gerund is used, any perfective reading is an interpretive matter: there is no semiotactic difference between *The senator fell off the stage after giving his speech* and *The senator fell off the stage while giving his speech*. As such, the perfective interpretation of this clausal gerund does not require a separate meaning to be explained.

4.6.2.2 – MAIN VERB EVENT OCCURRING SIMULTANEOUSLY WITH THE NONFINITE EVENT

Examples (154), (156) and (158) have been repeated in (220–2) below:

(220) I cleaned the floor *by scrubbing it*.

‘Σ / PA					
me	=	[clean ₁]	>	[by ₁]	
		[clean ₂]; floor			
				[by ₂];	Σ / ING
					scrub ₂ ; it’

(221) The senator fell off the stage *while giving his speech*.

‘Σ / PA					
senator	=	fall ₁	>	[off ₁]	>
				[while ₁]	
				[off ₂]; stage	
				[while ₂];	Σ / ING
					give ₂ ; speech...’

(222) I hope I’m not sending the wrong message *in doing so*.

‘Σ / PR					
me	=	[hope ₁]			
		[hope ₂];	Σ		
			me =	[send ₁] >	[in ₁]
				[send ₂]; message . . .	
				[in ₂];	Σ / ING
					do ₁ > so’

In (220), *by* naturally does not only have a temporal meaning: the nonfinite event provides the means by which the main verb event is achieved. This does necessitate that both events occur simultaneously. After all, the scrubbing action is essentially described as the cleaning action in this sentence. For this reason, it is appropriate that the temporal features of the nonfinite are specified to fall within the same timeframe rather than being temporally unspecified. Moreover, there is no uncertainty implied in the presentation of the scrubbing event. For this reason, a nexus would be inappropriate in the nonfinite situation in this context. In the same vein, the prepositions in (221) and (222) serve to place the nonfinite situation in the same temporal position as the main verb event. The notation of these does not differ significantly from (219): the only difference is found within the meaning of the preposition, which the situational gerund is sensitive to.

4.6.2.3 – MAIN VERB EVENT OCCURRING BEFORE THE NONFINITE EVENT

Sentences (160), (162), and (164) are repeated below:

(223) The actor brushed his teeth *before going on stage*.

‘Σ / PA			
actor	=	[brush ₁]	>
		[brush ₂]; teeth. . .	[before ₁]
			[before ₂]; Σ / ING
			go ₁ > [on ₁]
			[on ₂]; stage’

(224) “Patient works out in gym *to win back his strength*”

(Egan 2008, p. 102, emphasis added).

‘Σ / PR			
patient	=	work_out ₁	>
		[in ₁]	[to ₁]
		[in ₂]; gym	[to ₂]; Σ
			X =
			[win_back ₁]
			[win_back ₂]; strength’

(225) I went *from washing cars to selling them*.

‘Σ / PA			
me	=	go ₁	>
		[from ₁]	[to ₁]
		[from ₂]; Σ / ING	
		wash ₂ ; car	[to ₂]; Σ / ING
			sell ₂ ; they’

The differences between these prepositions and those discussed in the previous section are that they place the situational gerund event in a different timeframe. For instance, in (223), the situational gerund event is projected as occurring after the event in the main clause. This is possible because the situational gerund receives its temporal position from the preposition *before*. In this position, then, the situational gerund is again entirely dependent on the element that dominates it for its temporal dimension. Whenever a situational gerund is used, any perfective reading is an interpretive matter.

Egan’s example reproduced in (224) deserves some further explanation, however. This is an interesting example because it is one of the rare cases in which a preposition takes a *to*-infinitive. Because this would require two *tos* to follow one another, one *to* is

dropped (224). The purposive prepositional *to* requires the verbal action within it to be regarded as a whole: the actions described in the matrix clause are taken in order to create the other situation or, as is the case here, to complete the action in nonfinite. As such, the complement situation of *to* must refer to the conclusion of an event, which the 'ING' form cannot do – it captures only the period within which the event is taking place. Moreover, the *to*-infinitive contains a nexus, which captures the uncertainty as to the infinitival event actually taking place. On the other hand, the 'directional' meaning that *to* can contribute in other constructions *must* take a situational gerund. For instance, (225) cannot be rephrased to **I went from washing cars to sell them*. The situational gerund takes on the temporal and modal specifications that are inherent in the element that directly dominates it, which, in this case, allows the two elements to be separated from one another in time. Further, neither of the two situational gerunds in this sentence (*washing cars* and *selling them*) is conceived of as being initiated or concluded within the clause. Rather, the first person is stated to be performing the act of washing cars in the first situation, and selling them in the second. It is only by interpreting the whole sentence that the first situation is perceived as concluded. Moreover, the only proposition in this sentence is that *I went from x to y*. Neither event here is non-factive: both are represented as actually occurring (or having actually occurred in the past, depending on the dominating element). The *to*-infinitive would also be incompatible with this position for this reason.

4.6.3 – Object to main verb

In the complement position to a catenative verb, the situational gerund is specified temporally and modally by the main verb, whereas the *to*-infinitive remains insensitive to this specification. The consequences of this essential difference, as well as a number of other differences, will be analysed in detail here. First, the group of catenative verbs that can take both the situational gerund and the *to*-infinitive will be discussed. Within this group, choosing one form over the other can have a variety of effects depending on the catenative verb dominating the nonfinite. These effects will each be discussed. After that, the group of catenative verbs taking only situational gerunds will be analysed. The variation within this group is smaller than in the first. Lastly, the group of catenatives which only takes *to*-infinitives will be discussed.

4.6.3.1 – GROUP 1: CATENATIVES TAKING BOTH SITUATIONAL GERUNDS AND TO-INFINITIVES

The discussion of this group will proceed along the same lines as section 4.3: first the cases in which a difference in temporal features is detected will be discussed, after which an explanation will be given for the sentences in which a difference in specificity

is felt. After that, sentences containing aspectual verbs will also be notated, to show that the semiotactic descriptions of the situational gerund and the *to*-infinitive can be maintained in these contexts as well.

4.6.3.1.1 – DIFFERENT TEMPORALITY WITH DIFFERENT NONFINITE COMPLEMENT

Sentences (166) and (167) have been repeated in (226) and (227) below:

(226) “I remembered *locking up*”

(Huddleston & Pullum 2002 p. 1243, emphasis added).

$$\begin{array}{lcl} & \text{'}\Sigma / \text{PA} & \\ \text{me} & = & [\text{remember}_1] \\ & & [\text{remember}_2]; \quad \Sigma / \text{ING} \\ & & \text{lock_up}_1' \end{array}$$

(227) “I remembered *to lock up*” (p. 1243, emphasis added).

$$\begin{array}{lcl} & \text{'}\Sigma / \text{PA} & \\ \text{me} & = & [\text{remember}_1] \\ & & [\text{remember}_2]; \quad \Sigma \\ & & \text{X} = \text{lock_up}_1' \end{array}$$

The difference between the temporal features of these nonfinites is crucial in the distinction between (226) and (227). In the situational gerund variant, *locking up* is placed in the position of occurring before the present moment, because something that is recalled at a given point must have occurred at an earlier time. Further, the event is ongoing in that remembered instance, because the moment in which it is unfolding is what is being remembered. As such, the ‘ING’ meaning, as it has been described above, is an accurate description of the relative distance between the two situations. When the main verb has a retrospective semantic component like this, the verb in the complement may or may not be interpreted as perfective. There is no basis on which to conclude that this is automatically part of the situational gerund's own meaning in English: *I will remember reading the book* may imply that the book has been read from cover to cover, or it may not. The projection it gives rise to is one in which the first person is in the middle of performing the act. The moment at which the action is taking place is what is contributed by ‘ING’, not its onset or its conclusion.

Conversely, the temporal features in (227) remain unspecified, which means that only the NP of the entire sentence is invoked. The locking up occurs after the act of remembering because, in contrast to the definition of the situational gerund here

presented, the *to*-infinitive form does not depend on its dominating elements for its temporal scope. Moreover, because the temporality of the situation is not specified, the whole of the event is part of the projection. As such, the initiation is part of the nonfinite whereas it is not when a situational gerund is used. This being the case, the interpretation that the rest of the event follows the remembrance is not a big step to take. This is also why a present tense sentence containing a *to*-infinitive sounds strange: *?I remember to lock up* seems to imply that you now remember that you are going to lock up, because the initiation is placed in the same timeframe as the remembering, i.e. the present. Moreover, it may be noted that *I remember locking up* does not question the truth in the real or imaginary world of *locking up*. Conversely, the *to*-infinitive refers to a moment at which its being locked has not yet occurred at all – this is to flow forth from the remembering. The presence of the nexus in the case of the *to*-infinitive succinctly accounts for this distinction.

There is something more to say about these two sentences. In (227) the remembering action interpretively leads to the (re-)emergence of the event in the speaker's mind, which allows the speaker to act upon the memory. The difference between this and a situational gerund complement is that the clausal complement implies the uninterrupted existence of the situation in the mind of the speaker since its first emergence. Based on this distinction, I would on some level agree with Cuykens, D'Hoedt & Szmrecsanyi (2012) that *to remember* is a polysemous word, the meanings of which can be distinguished as follows:

- remember1 = "recall"
- remember2 = "not to forget to do something"
- remember3 = "keep in mind" (2012, p. 20)

In fact, they state that 'remember2' has been left out of Cuykens, D'Hoedt & Szmrecsanyi's study, because it categorically takes the *to*-infinitive as its complement, and the same was said for 'remember3', which takes *that*-clauses as its complement. I would argue that the difference in meaning felt here is actually entirely due to the accompanying non-finite's semantics. The *to*-infinitive remains insensitive to the temporality inherent in *remember*, therefore it is part of the situation as it occurs. The situational gerund, on the other hand, is sensitive to this temporal specification, which is why the situation is recalled from the past.

4.6.3.1.2 – DIFFERENT SPECIFICITY WITH DIFFERENT COMPLEMENT

Example sentences (168) and (169) are repeated below in (228) and (229):

(228) “I hate *lying*” (Jespersen 1940, p. 193, emphasis added).

$$\begin{array}{l} \text{'}\Sigma / \text{PR} \\ \text{me} \quad = \quad [\text{hate}_1] \\ \quad \quad \quad [\text{hate}_2]; \quad \Sigma / \text{ING} \\ \quad \quad \quad \text{lie}'_1 \end{array}$$

(229) “I hate *to lie*” (p. 193, emphasis added).

$$\begin{array}{l} \text{'}\Sigma / \text{PR} \\ \text{me} \quad = \quad [\text{hate}_1] \\ \quad \quad \quad [\text{hate}_2]; \quad \quad \Sigma \\ \quad \quad \quad \text{X} \quad = \quad \text{lie}'_1 \end{array}$$

As stated before, Jespersen distinguishes these sentences from one another in the following way: (228) refers to the lying event as “the vice in general”, whereas (229) refers to the event “in this particular case” (1940, p. 193). The distinction between any situational gerund and *to*-infinitive is always twofold according to the model proposed here. On the one hand, there is the temporal dimension: the situational gerund presents its situation as ongoing, and as occurring within the timeframe which the verb *hate* places it in. On the other hand, it has been argued that the two meanings differ from one another on the level of propositionality. This explains the lack of the nexus in the notation of the situational gerund in (228). This representation of the lack of propositionality falls in line with Wood’s generalisation that the *to*-infinitive always implies the proposition of a subject performing an action, whereas the situational gerund refers to the action *in vacuo* and as non-propositional: because there is a nexus, there must be both a first and a second nexus member contained in a *to*-infinitive, whereas this is not the case with the situational gerund. Since the situational gerund does not imply a subject, it refers only to the action. In the case of (228) and (229), the most tangible difference in the projection of the situation itself is based on Wood’s generalisation that the *to*-infinitive has a subject whereas the situational gerund does not.

The difference in temporality between (228) and (229) can adequately be explained both by reference to the meaning of ‘ING’ described above, and to the presence or absence of a nexus functor. For one, the fact that the verb *hate* refers to a state rather than an action, and that the situational gerund gets its modal and temporal properties from the main verb in this context, can indicate generality. That is to say: in the

sentence *I hate lying*, the fact that I hate it is indefinitely true. For the meaning of *hate* to work, it would therefore also make sense for the activity itself to be projected as indefinite. In other words, in this sentence *lying* is not projected as being part of some projected future or past in the way that it would as the complement of *anticipate* or *regret*, but rather as occurring simultaneously with the hate, which occurs indefinitely. Contrastively, since the *to*-infinitive does not get its temporal and modal properties from its dominating element, it does not refer to the same stretch of time, but to a situation in which the full event described in the infinitive takes place.

4.6.3.1.3 – ASPECTUAL VERBS AND NONFINITE COMPLEMENTS

For the purposes of the present discussion, (170) and (171) have been repeated in (230) and (231) below:

(230) “Mary began *hitting* John”
(Wierzbicka 1988, p. 85, emphasis added).

$$\begin{array}{l} \Sigma / \text{PA} \\ \text{Mary} = \quad [\text{begin}_1] \\ \quad \quad [\text{begin}_2]; \Sigma / \text{ING} \\ \quad \quad \quad \text{hit}_2; \text{John}' \end{array}$$

(231) “Mary began *to hit* John” (p. 85, emphasis added).

$$\begin{array}{l} \Sigma / \text{PA} \\ \text{Mary} = \quad [\text{begin}_1] \\ \quad \quad [\text{begin}_2]; \quad \quad \Sigma \\ \quad \quad \quad \text{X} \quad = \quad [\text{hit}_1] \\ \quad \quad \quad \quad \quad \quad [\text{hit}_2]; \text{John}' \end{array}$$

Aspectual verbs include *begin*, *commence* and others. Generally speaking, aspectual verbs specify what part of the nonfinite verb accompanying them is projected. This sort of temporal specification would be expected to co-occur only with the situational gerund, given the definition presented here. However, as Wierzbicka’s examples in (230) and (231) show, this is not the case. Wierzbicka cites Dixon (1984b, p. 591), who notes the following concerning the situational gerund variant: “to be appropriate, Mary must have rained at least a few blows on John (...)”, whereas (231) “could be said when she had merely raised the stick but had not yet brought it down upon his head (perhaps she will, or perhaps she won’t)” (p. 591, cited in Wierzbicka 1988, p. 85). In fact, this distinction does fall in line with the definitions presented in this work. The notations of (230) and (231) illustrate this point: in both notations, the interpretation is that Mary is the agent of the action described. Furthermore, since the semantic element ‘ING’ is

present in (230) it is presented as ongoing. By contrast, the *to*-infinitive in (231) is not specified in this way at all. As such, the entirety of the situation is part of the projection, including its initiation. In both instances, then, the aspectual verb projects the EP of its complement situation from the beginning, but the situational gerund can only occur as ongoing (i.e. its EP falls within its NP), whereas the *to*-infinitive necessarily starts at the beginning. Moreover, the presence of the nexus in the *to*-infinitive falls in line with Duffley's treatment of the aspectual verbs *start* and *cease*. He uses examples like "I started to throw it. At a car that was parked across the street. But I changed my mind" (Salinger 1962, p. 63, cited in 2006, p. 105-6). On this example, he notes that "one can start to do something but not do it" (p. 106). In the second example he starts to throw a snowball, but changes his mind before actually doing so. In other words, even in the context of an aspectual verb, it appears that the actual occurrence of the event is propositional with a *to*-infinitive.

4.6.3.2 – GROUP 2: ONLY SITUATIONAL GERUND COMPLEMENTS

The discussion of this group consists of three parts: one concerns itself with simple situational gerunds only, i.e. those situational gerunds which do not have an overt agent. The next group consists of catenatives which take both complex situational gerunds (i.e. those that present an overt agent) and simple situational gerunds, and the final group to be discussed in this subsection is dedicated to verbs which can only take a complex situational gerund as their complement.

4.6.3.2.1 – ONLY SIMPLE SITUATIONAL GERUND COMPLEMENTS

The types of events found as complements to verbs in this category are marked by two characteristics:

1. They are events that refer to a specific point in time with relation to the main verb event;
2. They refer to events that are always interpreted as performed by the subject of the main verb.

As such, verbs like *repent* or *avoid* fall within this category: you can only repent what you have done yourself, and when you avoid a nonfinite situation, you act in such a way as makes it impossible for you to be in that situation. The temporal position of these situations is specified by the semantic element 'ING'. In either case, the absolute occurrence or non-occurrence (as in the case of *avoid*) is also established as given, meaning that a nexus would be inappropriate in these nonfinite complements. Sentences (172) and (173) have been repeated in (232) en (233):

(232) He repented *having done so*.

‘Σ / PA
 he = [repent₁]
 [repent₂]; Σ / PF / ING
 do₁ > so’

(233) He avoided *paying the damage to the other car*.

‘Σ / PA
 he = [avoid₁]
 [avoid₂]; Σ / ING
 pay₂; damage – [to₁]
 [to₂]; car. . .’

It may be noted that in (232), there are two elements specifying the second sigma. The fact that the perfect meaning is applied first is visible from its form: *have done so* receives the *-ing* suffix for this reason, rather than that *doing* is placed within a perfect construction (which would look something like *have doing(ed) so*). Moreover, semantically, this is the only logical structure. The perfect meaning specifies the sigma first. The NP of the resulting meaning then forms the EP for the ‘ING’ meaning, within which the NP of the newly specified situation can be found. In other words, *having done so* refers to the time after the original event (*doing so*) has already taken place. This is what the perfect aspect meaning contributes. The ‘ING’ meaning then specifies this new timeframe (the time in which *doing so* has already occurred) as ongoing, and places it in the past, as this meaning is being passed down to it by the main verb *repent*. In the case of (233), the modal features of *avoid* make it so that the situation itself does not occur. As such, its truth-value is fixed: it is non-propositional precisely because it will not occur in this instance.

4.6.3.2.2 – SIMPLE AND COMPLEX SITUATIONAL GERUND COMPLEMENTS

When both a simple and a complex situational gerund can be used, the verb will usually have a meaning that is related to the attitude of the speaker toward a certain situation, whether this situation is found in the past, in the present, or in the future. When the situational gerund has an overt agent, it indicates that the situation is one in which that person performed the activity. On the other hand, when no overt subject is presented, the interpretation is usually that the subject of the main verb takes this role. Sentences (174–6) have been repeated in (234–6) below:

(234) I celebrate *you saving our lives*.

‘ Σ / PR
 me = [celebrate₁]
 [celebrate₂]; Σ / ING
 [save₁]; you
 [save₂]; life ↓
 - we’

(235) I deplore *his insisting I do everything*.

‘ Σ / PR
 me = [deplore₁]
 [deplore₂]; Σ / ING
 insist₂ ↓ ; Σ / PR
 - he
 me = [do₁]
 [do₂]; everything’

(236) I contemplated *intervening on his behalf*.

‘ Σ / PA
 me = [contemplate₁]
 [contemplate₂]; Σ / ING
 intervene₁ > [on₁]
 [on₂]; behalf ↓
 - he’

In the first example, the situational gerund is used to place the event that is celebrated in the past. What is celebrated is the event in which you saved our lives. In other words, the meaning of *celebrate* necessitates that the situation that functions as its complement occurs in the past. The sentence ?*I celebrated you to save our lives* sounds illogical if what follows *celebrated* is read as a *to*-infinitive, because this form of the *to*-infinitive is not sensitive to temporal specification, nor does it imply that the event most definitely occurred (or, more specifically, that the sentence implies that it has definitely occurred). In (235) *his insisting* refers to an event that is projected as ongoing at the moment. This sentence would be illogical with the *to*-infinitive, because neither the initiation nor the conclusion of the event is part of the projection, and, again, the structure of the sentence leaves no doubt as to whether the nonfinite event is actually occurring. This is the reason for the absence of the nexus in the notation of the complement. As discussed, the use of the genitive subject does not take away from the

fact that this nonfinite is a situational gerund. Lastly, in (236), the fact that no overt agent is ascribed to the situational gerund quite naturally leads to the interpretation that the agent of the contemplated situation is the subject of the contemplation event. A contemplated event, however, is one that may or may not occur in the future. As such, both the modal and the temporal specifications inherent in *contemplate* serve to contextualise the situational gerund.

4.6.3.2.3 – ONLY COMPLEX SITUATIONAL GERUND COMPLEMENTS

There are also some catenatives which can only occur in combination with a situational gerund. Verbs of this type would be *pardon*, *prevent*, *excuse* etc. Examples (177–9), containing sentences with such verbs, have been repeated in (237–9) below:

(237) Forgive *my saying so*.

		'Σ / IMP			
X	=	[forgive ₁]			
		[forgive ₂];	Σ / ING		
			say ₁	↓	> so
				- me'	

(238) We prevented *them escalating the problem*.

		'Σ / PA			
we	=	[prevent ₁]			
		[prevent ₂];	Σ / ING		
			[escalate ₁];	they	
			[escalate ₂];	problem'	

(239) The government has prohibited *our protesting the new bill*.

		'Σ / PF / PR			
government	=	[prohibit ₁]			
		[prohibit ₂];	Σ / ING		
			protest ₂	↓;	bill – new
				- we'	

As discussed above, complex situational gerunds generally also accept a genitive as the subject of the complement pronoun. In (237) it is again impossible to use the *to*-infinitive. Here, the action to be forgiven is presented as having taken place in the past relative to the forgiveness itself, because only past actions can be forgiven. What is more, the fact that the event is in the past must mean that it is factive, so there is no room for a proposition here. In this case, however, the two events may also be

presented in opposite order: the forgiveness could be requested before the deed has been done (as in *forgive my saying so, but you look rather pale*). In that context, it might be regarded figurative language.

Other verbs that show the same behaviour are those that refer to prevention, as (238) above shows. The fact that the 'ING' form is modally specified in this instance is to the point: the projection of the situation is one which is supposed to be read as not occurring *due to the main verb*. Note that this modal specification does not change the non-propositionality of the event: there is no doubt as to whether it will happen or not, because it is presupposed not to happen. It is not *proposed* that it may not have happened. Rather, the verb *prevent* clearly indicates that in fact it has not – a kind of certainty that the nexus would not be able to express.

4.6.3.3 – GROUP 3: ONLY TO-INFINITIVE COMPLEMENTS

The final group of verbs to be discussed here contains those catenatives which can only take the *to*-infinitive as their complement. Once again, those that only take simple nonfinites will be discussed first. The group of 'raised' verbs will be set apart, just as in section 4.3, because some analysts have taken them to be different because of variants of the sentence which are grammatical with these forms but not with others. After discussing these two types of catenatives, those that can take both simple and complex nonfinite complements will be notated, and the notations given will be explained along the lines of the model proposed here. Following this, the particular group of 'raised-object' verbs will be analysed, requiring some new notations in order to account for their specific properties. Following this discussion, the catenatives that only appear with a preposition will be discussed and notated. As a final group, the group of *positional* verbs will be discussed.

4.6.3.3.1 – ONLY SIMPLE TO-INFINITIVE COMPLEMENTS

The majority of verbs found in this class of catenatives relate to some point in the abstract future, e.g. *serve, decline* and *try*, exemplified in (180–182) above, and repeated in (240–242) below:

(240) This will only serve *to cause panic*.

	Σ / WILL / PR			
this	=	[serve ₁] > only		
		[serve ₂];	Σ	
			X	=
				[cause ₁]
				[cause ₂]; panic'

(241) He declined *to take up the challenge*.

		'Σ / PA			
he	=	[declin _{e1}]			
		[declin _{e2}];	Σ		
			X	=	[take _{up1}]
					[take _{up2}]; challenge'

(242) I'm trying *to understand you*.

		'Σ / PROG / PR			
me	=	[try ₁]			
		[try ₂];	Σ		
			X	=	[understand ₁]
					[understand ₂]; you'

When these verbs are used, what is referred to is either the initiation of an event (as is the case with *decline*) or its completion (as *serve* and *try* indicate). Neither of these meanings is expressible through the use of the situational gerund. This impossibility alone accounts for this use. It must be noted, however, that the contrast of the presence or absence of the nexus is of lesser importance here for the selection of the *to*-infinitive over the situational gerund. The same is true of a verb like *fail*: when one fails to do something, one is unable to carry it to its completion. This being the case, there is no possibility of it occurring anyway, although this was not certain at the time at which the activity was begun. The same is true of (241): when one declines to do something, the phrase does not leave open the interpretation that it may still happen. Only the temporal features that the main verb requires, then, determine the selection for the *to*-infinitive in these cases.

In (240) and (242), however, the nexus does play an important role in the selection of the sigma. When one is trying to do something, as in (242), it is not certain that it will succeed. In other words, one remains unsure as to whether or not the situation in the complement position will actually be completely fulfilled. In (240), the same is true: the verb *serve* here refers to something having the purpose of bringing the nonfinite situation about. Whether this will happen, however, is not necessarily implied by this construction, even though it will, in many cases, be interpreted as such. Moreover, in both (240) and (242), the temporal specificity of the situational gerund would lead to inaccuracies, as the entirety of the complement event must be referred to.

4.6.3.3.2 – “RAISED” VERBS

As noted before, there are also some verbs which are considered *raised* verbs, or *raised subject* verbs. Examples of this type were given in (183–4), and repeated in (243–4) below:

(243) He seems to be lying.

$$\begin{array}{l} \text{'}\Sigma / \text{PR} \\ \text{he} \quad = \quad [\text{seem}_1] \\ \quad \quad \quad [\text{seem}_2]; \quad \quad \Sigma / \text{PROG} \\ \quad \quad \quad \text{X} \quad = \text{lie}'_1 \end{array}$$

(244) He appears to have a hidden agenda.

$$\begin{array}{l} \text{'}\Sigma / \text{PR} \\ \text{he} \quad = \quad [\text{appear}_1] \\ \quad \quad \quad [\text{appear}_2]; \quad \quad \Sigma \\ \quad \quad \quad \text{X} \quad = \quad [\text{have}_1] \\ \quad \quad \quad \quad \quad \quad [\text{have}_2]; \text{agenda. . .}' \end{array}$$

Because the verbs in this group can also be used in sentences with dummy-*it* subjects like *It seems (that) he is lying*, it is argued that sentences like (243) are formed by raising the subject of the relative clause up to the subject position of the main clause. This notion is bolstered by the fact that, if the meaning of the verb stays the same, the role the subject is performing in the projection is still *lying*, not *seeming*.

One may wonder, however, if the possibility of using a dummy-*it* with these forms is really due to the connection between these nonfinites and the verb, or if it is simply inherent in the verbs themselves. A good way to test this would be to replace the nonfinite complement with something else, e.g. *He seems down*. This sentence, too, can undergo the above transformation: *It seems he is down*. As such, it seems to be an aspect of the meaning of the verbs in this category that dummy-*it* subjects can be used, rather than the combination of a nonfinite and such a verb specifically. This may have to do with the semantics of the verbs: rather than indicating a relation formed between two entities through some action, these verbs rather imply an estimation of the relation between the two elements. For this reason, it does not matter that much if the subject is a dummy *it* or person. In the case of the dummy-*it* subject, the opinion expressed seems to be on the entirety of the situation, whereas if a sentence like (243) or (244) is used, the estimation is on the relation between the subject of the main clause and the situation in the complement position. As both seem to deal with uncertainty, the accompanying nonfinite must be propositional: for any doubt to exist, it would have to

be possible for the situation to be true or untrue. For this reason, I argue that the complement nonfinite situation should contain a nexus, as is shown in the notations above. The notations of (243) and (244) look the way they do for this reason. As this notation makes clear, there is no marked difference in the relation between the elements in this sentence and an equivalent sentence with a different main verb.

4.6.3.3.3 – SIMPLE AND COMPLEX TO-INFINITIVE COMPLEMENTS

The present section will discuss catenative verbs which can occur with either a simple or a complex complement. Recall that a simple complement does not contain its own subject/agent, whereas complex complements do. Interestingly, some of these verbs can also occur with an indirect object and a nonfinite complement. There is a meaningful distinction between the addition and omission of *for* in constructions with these verbs. To this point, Huddleston & Pullum provide example sentences containing *ask*. Examples (185–8) are repeated in (245–9) below, with their proposed notations:

(245) “He asked *Pat to be interviewed*”
(Huddleston & Pullum 2002, p. 1230, emphasis added).

‘Σ / PA
he = [ask₁]
[ask₃]; Pat
[ask₂]; Σ
X = interview₂’³⁶

In the notation above, the fact that *for* does not occur in the sentence indicates that *Pat* is not featured as the overt subject of the complement *to*-infinitive. When *for* is used, the notation therefore changes into the following:

³⁶ Note that this notation corresponds to Ebeling’s (1978) notation of “John asked her to go to the dance” (p. 247) which is only different from this notation in that there is quasi-divergence between ‘she’ and the ‘X’ in the nonfinite situation. Note also that ‘X’ is not used to indicate the third argument of ‘ask’, even though it might have been filled here. This is because the use of ‘X’ is only required when the semiotactic structure requires it. Every asking event naturally requires something or someone being asked the question, but since the structure does not require it, no ‘X’ is required either. Much like any event requires a place to occur in, this does not mean that there has to be an ‘X’ to indicate the undefined location in a sentence like *I ate my breakfast*. So, too, does a sentence with a verb which may occur with three valences not require reference every one of them in every case.

(246) “He asked *for Pat to be interviewed*” (p. 1230, emphasis added).

‘Σ / PA

he	=	[ask ₁]
		[ask ₂]; Σ
		Pat = interview ₂ ’

Huddleston & Pullum argue that “in [the first example] *Pat* represents the goal of *ask* as well as the patient of *interview*, but in [the second] only the latter” (p. 1230). The difference is therefore found in the role that *Pat* plays: he is either the indirect object of the question, or the subject of the complement clause. This will be explored further using the examples in (247–9) below. The following two notations are presented to indicate the necessity for trivalent notation (i.e. distributing three roles) by indicating what happens when this construction is passivised. For this reason, (247) is notated as follows:

(247) *Pat asked to be interviewed.*

‘Σ / PA

Pat	=	[ask ₁]
		[ask ₂]; Σ
		X = interview ₂ ’

Next, a notation is given in which the main verb is also passivised: *Pat was asked to be interviewed*. In this sentence, the *to*-infinitive complement is assigned the object role, because it is what was asked. *Pat*, on the other hand, is the person to whom the asking was directed. Following this line of reasoning, the correct notation of this sentence thus becomes:

(248) *Pat was asked to be interviewed.*

‘Σ / PA

Pat	=	[ask ₃]
		[ask ₂]; Σ
		X = interview ₂ ’

Furthermore, this category contains verbs such as *urge*, *remind*, *tempt* etc. Interesting about these verbs is the fact that, as might have been expected when approaching the topic of catenative verbs from Duffley’s perspective, many of these verbs actually refer to future action, e.g. “She urged me to go” (Huddleston & Pullum 2002, p. 1233). Structurally, these do not differ in any meaningful way from other complex *to*-infinitives that have been discussed in the first section of the present chapter. A good

example of this type of verb is found in Isherwood's *A Single Man* (1964): "They are actually willing him to do it" (p. 11) ((189) in section 4.3), which would therefore be notated as shown below:

(249) "They are actually *willing him to do it*"
(Isherwood 1964, p. 11, emphasis added).

$$\begin{array}{rcll} & \Sigma / \text{PROG} / \text{PR} & & \\ \text{they} & = & [\text{will}_1] > & \text{actual} \\ & & [\text{will}_3]; \text{ he} & \\ & & [\text{will}_2]; & \Sigma \\ & & \text{X} & = & [\text{do}_1] \\ & & & & [\text{do}_2]; \text{ it}' \end{array}$$

4.6.3.3.4 – "RAISED-OBJECT" VERBS

Other trivalent catenatives are *expect*, *wish*, *claim* etc., which can take complex clause objects, which do not take *for* in the way that *ask* above did. Sentences (190) and (191) provide examples of sentences like this, which are repeated below, along with the notations appropriate to them.

(250) I expect *you to work harder*.

$$\begin{array}{rcll} & \Sigma / \text{PR} & & \\ \text{me} & = & [\text{expect}_1] & \\ & & [\text{expect}_3]; \text{ you} & \\ & & [\text{expect}_2]; & \Sigma \\ & & \text{X} & = & \text{work}_1 > \text{hard} > \text{COMP}' \end{array}$$

(251) You are expected *to work harder*.

$$\begin{array}{rcll} & \Sigma / \text{PR} & & \\ \text{you} & = & [\text{expect}_3] & \\ & & [\text{expect}_2]; & \Sigma \\ & & \text{X} & = & \text{work}_1 > \text{hard} > \text{COMP}' \end{array}$$

Unlike sentences that contain *for*, sentences like (250) have passive variants with the 'subject' of the nonfinite complement in the subject position e.g. *I expect you to work harder* → *You are expected to work harder*. The same is true of the sentence notated in (245): *He asked Pat to be interviewed* → *Pat was asked to be interviewed*. In all, then, it seems that the catenative verbs in this class function in the same way as the verbs discussed above in a construction without *for*. *I expect you to work harder* is therefore

notated as is shown in (250) and its passivisation as shown in (251). Again, the temporally undefined character of the *to*-infinitive allows for a reading that includes the initiation of the event, which is appropriate given the semantics of *expect*. Specifically, it is the *type* of futurity that is implicit in these verbs that disallows the use of the situational gerund: if something is expected to happen, then it is expected that it will be initiated at some point, rather than be ongoing at that point. Moreover, since the nonfinite situation is expected, it is not presupposed to be true as a matter of course. As such, the propositionality that is expressed by the nexus is also appropriate in this context.

4.6.3.3.5 – CATENATIVES WITH PREPOSITION

Other catenative constructions contain a prepositional element, e.g. *appeal (to)*, *bank (on)*, *count (on)* etc. When they occur with an infinitival, this must be a complex complement. However, it may still be wondered what the connection between the *to* and the rest of the sentence is. *To* could either function as a full preposition, in which case it would have to be notated independently, or as a *to*-infinitive. The respective notations of these approaches are presented below:

(252) I counted on *Ed to bake the cookies*.

$$\begin{array}{rcl}
 \text{me} & = & \begin{array}{l} [\text{count_on}_1] > [\text{to}_1] \\ [\text{count_on}_2]; \text{Ed} \end{array} \\
 & & \begin{array}{l} [\text{to}_2]; \Sigma \\ \text{X} = [\text{bake}_1] \\ [\text{bake}_2]; \text{cookie}' \end{array}
 \end{array}$$

(253) I counted on *Ed to bake the cookies*, alternative notation.

$$\begin{array}{rcl}
 \text{me} & = & \begin{array}{l} [\text{count_on}_1] \\ [\text{count_on}_2]; \Sigma \end{array} \\
 \text{Ed} & = & \begin{array}{l} [\text{bake}_1] \\ [\text{bake}_2]; \text{cookie}' \end{array}
 \end{array}$$

It appears (252) could be rejected given the semantic difference between the purposive adjunct construction and the infinitival construction. That is to say, when one utters this sentence, the message is not that one counted on Ed so that the speaker of the sentence could bake cookies, but rather that Ed was supposed to do it. However, it is not impossible to come to such an interpretation of many similar sentences: in the case of *I counted on the oven to work to bake the cookies*, *to bake the cookies* is a clear

adjunct. In this sentence, however, it is also impossible to read *the oven to work* in the same way, with the implication that I can only work using the oven. For this reason, it may well be argued that the *to*-infinitive reading can occur in tandem with the purposive adjunct reading, as is shown below:

$$\begin{array}{l}
 (254) \text{ I counted on } \textit{the oven to work to bake the cookies.} \\
 \quad \quad \quad \Sigma / \textit{PA} \\
 \text{me} \quad = \quad \begin{array}{l} [\textit{count_on}_1] \quad > \quad [\textit{to}_1] \\ [\textit{count_on}_2]; \Sigma \\ \textit{oven} \quad = \textit{work} \\ \quad \quad \quad \quad \quad \quad \quad \quad [\textit{to}_2]; \Sigma \\ \quad \quad \quad \quad \quad \quad \quad \quad \text{X} \quad = [\textit{bake}_1] \\ \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad [\textit{bake}_2]; \textit{cookie}' \end{array}
 \end{array}$$

On the basis of the above, it may be argued that, when the construction does not force a purposive reading to the preposition *to*, the notation in (253) is correct. The fact that to count on something to do something refers to either a fact or something to be initiated blocks the usage of the situational gerund.

In the above, it is always uncertain whether or not the situation will ever be accomplished. However, the accomplishment of that situation is clearly intended in every instance: when one utters (252), one expresses that they had counted on all the cookies to have been baked by Ed, i.e. for the baking action to have been completed. I believe the notation proposed here for the *to*-infinitive encapsulates both aspects: it presents its contents as propositional, meaning that they may or may not occur, and yet they are temporally unspecified, meaning that the entire event is referred to. For this reason, I would argue that the notation of the *to*-infinitive proposed here works in these contexts.

4.6.3.3.6 – PROPOSITIONAL VERBS

Verbs like *state*, *argue*, *prove*, *verify* etc. must be explained in a different way. In the present tense, these verbs make a statement about the present, without reference to the past or the future. Examples (194) and (196) above contain examples with such verbs. These are repeated in (255) and (256) below:

(255) “I believe John *to have liked Anselm*”

(Kiparsky & Kiparsky 1971, p. 363)

			‘ Σ / PA
me	=	[believe ₁]	
		[believe ₂];	‘ Σ / PF
		John =	[like ₁]
			[like ₂]; Anselm’

(256) I verified *him to be lying*.

			‘ Σ / PA
me	=	[verify ₁]	
		[verify ₂];	Σ / PROG
		he =	lie ₁ ’

As stated in the literature review above, the fact that the *to*-infinitive can be used in these contexts is taken to be evidence for the presence of the nexus in the *to*-infinitive, and for its absence in the situational gerund. The presence of the nexus indicates that the message of the situation is the equation of the first nexus member to the second nexus member, whereas its absence indicates simply that a verbal meaning is part of the situation. As has been argued above, the connection between subject and predicate is taken to be where the propositionality is found in the *to*-infinitive, and therefore the *to*-infinitive, being used in propositional contexts, must contain a nexus. The temporal features do not necessarily play a big role in the selection here, because propositional verbs do not have temporal features to pass down unto a situational gerund. As such, the nonfactivity of the *to*-infinitive forces the selection for this form over the situational gerund.

4.7 – Conclusion

In the above, I have attempted to present a semiotactic model for the situational gerund. The first step in doing so was distinguishing it from participial gerundives like the ones discussed in chapter 3. The clausal gerund can appear in the subject position of a sentence, as the complement to a preposition, and as a complement to many catenative verbs. The same is true of the *to*-infinitive, however, and to get to the definition of one of these constructions, the contrast between the two must be made clear. For this reason, these two constructions have been analysed together. The distinction the present analysis has come to may be summarised as follows:

1. the situational gerund is sensitive to temporal specification from dominating elements, whereas the *to*-infinitive is not. This explains

the difference in specificity in the subject position of the sentence, the semantic difference effected by replacing one for the other, and also why the situational gerund can be used as the complement to so many different prepositions;

2. The situational gerund always projects the situation as ongoing, which explains why it cannot be used in contexts in which the initiation or the conclusion of the event is referred to;
3. The *to*-infinitive is propositional, whereas the situational gerund is not, which explains why it can be used in combination with the preposition *to* (in which case it is uncertain whether the infinitive situation, representing the goal of a given action, will be reached), why it can be used in propositional contexts, and why the *to*-infinitive always seems to imply a subject: the propositionality of any propositional clause may be found in the fact that the message of such a clause is the connection between the subject and the predicate (i.e. the first nexus member and the second nexus member), which is symbolised using the nexus.

I hope that this is a useful contribution to the ongoing debate surrounding these forms. Naturally, the constructions discussed above are not exhaustive, and there may be constructions which are not yet explained by the description of the situational gerund and the *to*-infinitive given above. However, it is believed that a great many useful observations that analysts have made over the years have been successfully integrated into the analyses and notations presented, and as such a robust model has been developed, which is capable of explaining certain seemingly contradictory notions using the same general description.

