

Prepositional Complement Clauses in English: An Exploration in Cognitive Grammar

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Abstract

This paper seeks to substantiate two fundamental claims of Cognitive Grammar (CG) with respect to prepositional complement clauses introduced by the -ing gerund. One claim is that all linguistic elements posited in grammar have semantic import. On the basis of this claim, the paper argues that the -ing gerund has not only a syntactic function but also conceptual content of its own which conditions its presence in a construction. The other claim is that the syntactic organisation of an expression is a reflection of its semantic organisation, which represents the specific construal imposed on its content. A syntactic alternation reflects semantic contrast. On the basis of this claim, the paper argues that gerundial complement clauses represent different dimensions of construal. The -ing gerund prototypically refers to an action that is going on at the moment of speaking. It points to an activity, expressed in the complement clause, as having duration. This stands in contrast to complement clauses introduced by the to-infinitive which prototypically refers to an action which occurs later in time than that of the main verb. It points to a move, expressed in the complement clause, forward in a series of events. The aim is to show, based on examples, that different grammatical forms carry different meanings and that structure iconically reflects function.*

Key words: complement clause, conceptual content, construal, perspective, etc.

1. Introduction

This paper deals with clausal complementation in English. In its broadest sense, the term *clausal complementation* is taken to denote the process of embedding a clause as a complement in a main clause. A complement clause is a clause which functions as an argument of the main clause. The complement clause is mostly introduced by a *complementiser*, a morpheme whose function is to identify the structure as a complement. In *She likes climbing rocks*, *she likes* is the main clause and *climbing rocks* is the complement clause. Complement clauses fall into two major types: finite and non-finite. A finite complement clause in English contains a verb inflected for tense and agreement. Finite complement clauses include *that*-, *wh*- and *whether/if* clauses. A non-finite complement clause carries a tenseless verb, which does not agree with its subject in person or number. A non-finite complement verb is either left uninflected, or preceded by a particle like *to*, or followed by the suffix *-ing*. Non-finite complement clauses include *for-to*, *to*-infinitival, bare infinitival or zero, *-ing* participial and *-ing* gerundial clauses.

One further but neglected type of complement clauses is a prepositional complement clause, which consists of a preposition and a complement clause serving as its object. The complement clause which is governed by the main verb of the construction begins with the *-ing* complementiser. Prepositional complement clauses occur in a range of constructions as illustrated below:

- (1) a. Mark left without paying the bill.
- b. He took to playing golf.
- c. He had to put up with teasing at school.

- (2) a. He confessed to sleeping/*sleep through most of the film.
b. She dedicated her whole life to working/*work for peace.
- (3) a. The students work hard to finish/at finishing their assignments.
b. The government commits itself to improve/improving health care.

The constructions cited above highlight some of the different uses of prepositional complement clauses in English. In (1a), the *-ing* complement clause is used after the ordinary preposition *without*. In (1b), the *-ing* complement clause is used after the prepositional verb *take to*, consisting of a verb and a preposition. In (1c), the *-ing* complement clause is used after the phrasal-prepositional verb *put up with*, consisting of a verb followed by an adverbial and a preposition.

In the constructions under (2), only the *-ing* gerund complement clause is allowed to occur after the main verbs despite the fact the preposition is *to*. In (2a), the main verb is followed by just a complement clause. In (2b), the main verb is followed by a noun phrase functioning as object of the main verb and a complement clause. In such constructions, the *to*-infinitive is not allowed to occur. The reason, as we will see, is due to semantic incompatibility.

In the constructions under (3), both the *to*-infinitive and the prepositional *-ing* gerund are permissible after the main verbs. In (3a), just a complement clause follows the main verb. In (3b), both a noun phrase functioning as object of the main verb and a complement clause follow the main verb. The occurrence of the *to*-infinitive and the *-ing* gerund is not at random. It is governed, as we will see, by semantic considerations.

A look at the above constructions raises two questions. Concerning the constructions under (2), the question is: why is only the *-ing* gerund complement clause allowed in such constructions? Phrased differently, why is the *to*-infinitive complement clause not allowed in such constructions? In terms of the CG approach adopted here, I show that each type of complement clause has conceptual content of its own which determines its felicity in a given construction. Concerning the constructions under (3), the question is: when both *to*-infinitive and *-ing* gerund complement clauses are permissible in some constructions, what accounts for the alternation between them? In terms of the CG approach adopted here, I show that the difference in meaning between them resides in the construal which the speaker imposes on the situation s/he describes. Each construction has meaning of its own and a special mission to carry out in the language.

On English complementation, there exists a substantial amount of literature, both classic and recent. Classic works on complementation include, among others, Rosenbaum (1967), Menzel (1975), Ransom (1986), Mair (1990) and Duffley (1992). Recent works on complementation include, among others, Smith & Escobedo (2001), Hamawand (2002), Duffley (2006), Egan (2008), Mair (2009). Reference grammars of English include Quirk et al (1985), Biber et al (1999) and Huddleston & Pullum (2002). The main focus of the present project is on the semantics of prepositional complement clauses, specifically on complement-clause variation following prepositions, i.e. investigating and elucidating differences in meaning in near-synonymous pairs of complement clauses that follow the same main verbs but begin with different prepositions. In this area, the literature can be characterised as rather scarce. Some of the works tackle the subject on formal grounds. Others tackle it very briefly or just in passing.

The aim of the present analysis is then to provide insight into the meanings of prepositional complement clauses using an approach that is capable of accounting for the semantic differences between rival constructions. To do so, I organise the paper as follows. In section (2), I draw an outline of the CG approach adopted here. In section (3), I probe the first question, namely the conceptual content of the *-ing* gerund and its counterpart the *to*-infinitive, which is responsible for their occurrence in some constructions. This section explores the CG claim that all elements posited in grammar have conceptual content, which motivate their linguistic function. In section (4), I investigate the second question, namely the possibility of using either complement clause in some constructions. This section explores the CG claim that the semantic value of a construction is characterised relative to the particular construal imposed on its conceptual content. Throughout the paper, I show that a difference in form results in a difference in meaning. In (5), I present the main findings of the investigation.

2. Theoretical framework

The theoretical framework adopted in the present analysis is CG, which is associated with Langacker and laid out in his books (1987, 1991a, 1991b, 1997, 2008) respectively. CG sees language as an integral part of cognition and a means whereby cognitive content is given structure. It ascribes to language the function of symbolizing conceptualization by means of phonology. Grammar is defined as a structured inventory of conventional linguistic units, where each unit is viewed as pairing a phonological form with semantic content. In CG, both closed (grammatical) and open (lexical) entities are meaningful. They are represented in the speaker's mind as symbolic assemblies, giving rise to a lexicon-grammar continuum. Grammatical units are inherently symbolic and grammatical constructs have semantic import. Every grammatical unit is bipolar, consisting of a semantic structure at one pole which is overtly realised by a phonological structure at the other pole. Unlike autonomous approaches which maintain a strict separation between the realms of form and meaning, CG embraces the idea that there is a non-arbitrary relationship between the two. A cognitive approach, then, is not restricted to investigating form independently of meaning, as is often the case in formal linguistics.

In CG, the form of a construction is therefore associated with its meaning. The meaning of a construction is characterised in terms of two facades: *conceptual content* and *construal*. Langacker (1997:4-5) writes: "A semantic structure includes both conceptual content and a particular way of construing that content".

Conceptual content refers to the semantic property inherent in a linguistic unit. Both closed and open units have the function of providing conceptual content. The meaning of the word *playing*, for example, is provided by the conceptual content of both the verb *play* which denotes action and the marker *-ing* which means in progress. In this paper, I ascertain the significant role of the facade of conceptual content in describing the meaning of the *-ing* and the *to*-infinitive. To take just an example, I show that in a construction like *She enjoys playing tennis* the *-ing* gerund is felicitous because its meaning, prototypically referring to an action in progress, accords with that of the construction: you enjoy something while doing it. The *to*-infinitive is infelicitous because its meaning, prototypically referring to a future action, clashes with the meaning of the construction which includes an action in progress.

Construal is the act of conceiving the conceptual content in alternate ways, and choosing the appropriate linguistic structures to express them. Two expressions may share the same conceptual content, but they differ semantically by virtue of their choice of construal. As Langacker (1991b:ix) points out: "There are many different ways to construe a given body of content, and each construal represents a distinct meaning; this is my intent in saying that an expression imposes a particular image on the content it evokes". One dimension of construal which is at work here is *perspective*, the viewpoint which the speaker takes of a situation. To take just an example, I show how the same conceptual content can be construed differently and expressed linguistically by different complement clauses. For example, in *I am working hard to finish my assignment* the speaker has a plan in his mind to achieve something in the future, and so opts for the *to*-infinitive. In *I am working hard at finishing my assignment* the speaker is engaged in an activity having duration, and so chooses the *-ing* gerund.

To identify the meanings of the *-ing* and *to*- complementisers, CG builds on the prototype theory. According to this theory, most linguistic items are considered polysemous in the sense of having numerous senses. A linguistic item constitutes a network of interrelated senses. In this network, one sense, described as prototypical, serves as a standard from which other senses, described as peripheral, are derived via semantic extensions. The prototype is the sense that comes to mind first and contains the central characteristics associated with the category in question. The senses are related to each other like the members of a family, where they share some general properties but differ in specific details. For instance, a *kitchen chair* is regarded as the prototype of the *chair* category because it possesses almost all of its features. A *kitchen chair* is a piece of furniture that has a seat, a back, usually four legs and sometimes two arms. By contrast, *rocking chair*, *swivel chair*, *armchair*, *wheelchair* or *highchair* are regarded as the periphery because they possess only some of these features.

3. Bodies of conceptual content

This section substantiates the first claim that all linguistic elements posited in grammar have semantic import.

Relative to this claim, the paper argues that the *-ing* complementiser, or its counterpart the *to-* complementiser, has not only a syntactic function but also conceptual content of its own which shifts the meaning of the construction hosting it to a special direction. In what follows, I first address the conceptual content of the *-ing* complementiser, and second consider that of the *to-* complementiser.

3.1 The *-ing* complementiser

The prototypical sense of the *-ing* is simultaneity, where two durative events happen at the same time. This sense of temporary ongoingness of an activity, which is the hallmark with complements marked by *-ing* gerund, is compatible with the *happening now*, or *sameness of time* suggested by Wierzbicka (1988: 60,162). In a sentence containing a verb expressing an emotional reaction like *She enjoys playing tennis*, the complement event is concurrent with the main event. This implies that if one enjoys doing anything, one takes delight or pleasure in it at the very time one is doing it. To verify this, the use of an adverb of time such as *yesterday* would render the sentence ungrammatical, but the use of *now* would not, as in *She enjoys playing tennis now/*yesterday*.

The use of the *-ing* complementiser in gerundial complement clauses is motivated by its lexical meaning as a grammatical marker. Like the progressive *-ing*, the *-ing* gerund refers to an activity which is in progress at the moment of time serving as the reference point for the construction. In Langacker's (1991a: 91–7) view, the *-ing* evokes a process which comprises an arbitrary series of internal states. It restricts the profile to these internal states and portrays them as homogeneous. In *She is watering the garden*, the *-ing* progressive refers to an ongoing activity which is happening at exactly the same time of speaking. The activity of watering takes place over some period of time relative to the moment of speaking. Like the progressive, the *-ing* gerund takes an internal perspective on the action described by the verb stem, to the exclusion of the initial and final states. The only difference is that the former is grounded in time, whereas the latter is ungrounded in time.

The peripheral sense of the *-ing* is anteriority, where the complement event temporally precedes the time of the utterance expressed by the main verb. This sense is analogous with Kiparsky & Kiparsky's (1970) notion of *factivity*, where the speaker of the sentence presupposes that the action expressed by the complement is true or has taken place. This sense is found after verbs expressing communication, as exemplified in *He admits tripping her up*. That is, the *-ing* clause describes a situation which is actual in relation to the process represented by the main verb *admit*. This implies that the complement event happened before the main event. To verify this, it would be contradictory to use a follow-up expression rejecting the complement content, as in *He admits tripping her, *but he hasn't done it*.

The *-ing* participle is similar to the *-ing* gerund in that it views only the internal phase of the action with no reference to beginning or end. The difference between the two resides in two respects. As for profile, the gerund is nominal in function occurring in nominal positions, while the participle is relational in function occurring in adjectival and adverbial positions. As for meaning, the gerund implies the two values of simultaneity and anteriority, whereas the participle implies only the extended meaning of simultaneity. This latter value is found after verbs expressing perception as in *He heard them talking in the kitchen*, causation as in *He set the video working*, and cognition as in *He found her watching TV*. In all the examples, the action described by the main verb coincides in time with the action described by the complement verb.

3.2 The *to-* complementiser

The prototypical sense of the *to-* is futurity, referring to an event that takes place in the future. The *to-* is the sign that the event expressed by means of the infinitive is seen as subsequent in time with respect to the time of the main verb. *To-* signifies subsequence by virtue of its potential meaning of a movement from one point in time to another. This value is compatible with Duffley's (1992: 88–89) notion of a *before/after sequence* between the event denoted by the main verb and the one denoted by the *to-* infinitive. For the sake of illustration, let us look at an example. The sentence *He has decided to take early retirement* contains two consecutive events: that of decision-making and that of pension-taking. The verb *decide* has the sense of an intention to achieve something in the future. The sentence means that the decision-maker, who is still working, resolves to go into retirement ahead of time. Evidence in support of positing that the complement event is subsequent comes from the use of adverbial expressions of time signifying future, as in *He has decided now to take early retirement later*.

The use of the *to-* complementiser in infinitival complement clauses is motivated by its lexical meaning as a preposition. Literally, the preposition *to*, as Lindstromberg (1998: 19) asserts, signifies the notion of a path towards a goal. In a sentence like *She walked to the shop*, *to* signals motion along a path with the aim of reaching a concrete goal. This meaning codes a spatial relationship between the subject, represented by *she*, and her destination, represented by *the shop*. The subject is construed as following a path to the destination via the action coded by the main verb *walk*. This notion applies directly to the use of *to-* in infinitival complement clauses. In a sentence like *She wants to shop*, *to-* expresses motion leading to an abstract goal. Thus, as a complementiser, the extended value of *to-* incorporates some notion of subsequence, where the complement event follows the main event. This sense can be paraphrased into two ways.

The first is subsequent potentiality, where the realisation of the event expressed by the complement verb is futurised with respect to that of the main verb. This occurs especially after verbs of desire, intention and endeavour, as in *They hoped/planned/attempted to climb Mount Everest*. With these verbs, the *to*-infinitive evokes an event as non-realised or yet to be realised. In this context, the movement denoted by *to* does not reach its endpoint, i.e. the objective of climbing has not been fulfilled yet. Evidence in support of positing that the complement event is not necessarily realised comes from the use of expressions offering alternatives. In *They hoped to climb Mount Everest, and they did/but they didn't*, the use of either follow-up expression would not affect the grammaticality of the sentence.

The second is subsequent actualisation, where the event expressed by the complement verb is realised as a consequence of a previous event bringing it into being. This occurs especially after verbs expressing achievement as in *They managed to climb Mount Everest*, and some verbs expressing causation as in *She forced him to reconsider his position*. With these verbs, the *to*-infinitive evokes the impression that the event is realised. This context characterises the whole of the movement from beginning to end as actualised, i.e. the goals of climbing and reconsidering have been accomplished. Evidence in support of positing that the complement event is realised comes from the use of expressions offering alternatives. In *They managed to climb Mount Everest, *but they didn't*, the use of the follow-up expression renders the sentence ungrammatical.

Thus far, I have said that *to-* implies some distance in time in that it refers to a subsequent action. In CG, the semantic network of a lexical item subsumes its various senses, including even convoluted extensions. A convoluted extension is one that is not directly related to the original concept. In the peripheral zone of the *to-*, the convoluted sense is the value of sameness of time, which is realized when *to* occurs after verbs of cognition. After such verbs, *to-* does not refer to actions but to states that occur at the same time as the event expressed by the main verb. In *I believe him to be honest*, both my belief and his honesty coincide in time. In a case like this, the judgment passed is deductive, based on personal opinion, which is not necessarily true. This use of *to-* provides evidence for the claim that a network embodies not only regular but also contradictory senses.

4. Dimensions of construal

This section substantiates the claim that the syntactic organisation of an expression is a reflection of its semantic organisation, which represents the specific construal imposed on its content. In terms of this claim, the paper argues that gerundial complement clauses, or their infinitival counterparts, represent different dimensions of construal. Relative to the type of complement that immediately follows, verbs which take complement clauses can be divided into two categories. One category includes verbs which take only the *-ing* gerund, as in *She succeeded in winning the first prize*. After verbs of this category, there is no option to replace the *-ing* gerund with the *to*-infinitive. The other category includes verbs which are followed by both the *-ing* gerund and the *to*-infinitive, as in *I am working hard at finishing/to finish my assignment*. After verbs of this category, there is an option to replace the *-ing* gerund with the *to*-infinitive.

In cases of optionality, the complement types are not in free distribution, nor could they be regarded as paraphrases of each other. In what follows, I dwell upon the factors which affect the choice between the complement types. As shown by Hamawand (2002, 2003, 2004), the choice is determined by both semantic opposition and pragmatic inference. Along semantic opposition, the *-ing* gerund and the *to*-infinitive are argued to depart at two points: temporal reference and aspect. From each semantic opposition, the listener can, as we will see, make a number of pragmatic inferences.

4.1 Temporal reference

The first semantic opposition resides in temporal reference, the relationship between the time of a complement event and the speech time, which is evoked by the semantic structure of the main verb. The semantic opposition consists of three references: anteriority, simultaneity and futurity. In the light of this, the *-ing* gerund generally describes a situation whose time is either similar or anterior to that of the main verb. The *to*-infinitive, by contrast, generally describes a situation that is subsequent with respect to the time of the main verb. From this semantic opposition, the language user can make the following pragmatic inference. With the *-ing* gerund, the success of the complement event is predominantly guaranteed, whereas with the *to*-infinitive it is not.

1. Simultaneity

Simultaneity means happening or done at the same time as something else. Applied to complement clauses, it means both the main and the complement events occur simultaneously. Let us first examine a construction in which an *-ing* complement clause, follows the main verb. Of particular interest here is the use of the *-ing* gerund after *to* when *to* is a preposition and not part of the infinitive, as the examples below show:

- (4) a. The children adhere to observing the rules of conduct.
b. The news leads to raising their morale immeasurably.

The examples in (4) contain just a prepositional *-ing* gerund in object position. In (4a), the verb takes an animate subject, who is consciously involved in performing the complement event. The covert subject of the *-ing* gerundial complement clause is interpreted as being coreferential with the speaker, i.e. the action expressed in the complement clause is controlled by the animate subject *the children*. In (4b), the verb takes an inanimate subject, which is unconsciously involved in causing the complement event. The covert subject of the *-ing* gerundial complement clause is interpreted as being coreferential with the speaker, i.e. the action expressed in the complement clause is controlled by the inanimate subject *the news*. In both examples, the time of the complement clause coincides with that of the main verb¹.

Let us second examine a construction in which both a noun phrase and an *-ing* complement clause follow the main verb. The *-ing* gerund follows *to* which is a preposition and not part of the infinitive, as the examples below illustrate:

- (5) a. She dedicates herself to protecting the rights of the needy.
b. She dedicates her time to protecting the rights of the needy.

The examples in (5) contain a nominal object and a prepositional *-ing* gerund in object position. In (5a), the main verb takes an animate object. The implicit subject of the *-ing* complement clause is coreferential with the animate object. That is, the main clause object, namely *she*, is involved in performing the event denoted by the *-ing* complement clause. In (5b), the main verb takes an inanimate object. The implicit subject of the *-ing* complement clause is coreferential with the speaker. That is, the speaker, namely *she*, is involved in performing the event denoted by the complement clause. In both examples, the time of the complement clause and that of the main verb happen at the same time².

2. Anteriority

Anteriority means happening or done before something else. Applied to complement clauses, it means the complement event is carried out or takes place before the main event. Let us examine a construction in which an *-ing* complement clause follows the main verb. Of particular interest here is the use of the *-ing* gerund after *to* when *to* is a preposition and not part of the infinitive, as the examples below demonstrate:

- (6) a. The teacher admits to being strict with the children.
b. She confesses to knowing nothing about computers.

The examples in (6) contain a prepositional *-ing* gerund in object position. The *-ing* gerund implies anteriority, which represents an important property of its peripheral meaning. In these examples, the time expressed by the complement event is anterior to the time expressed by the main event. As evidence, a sentence that contains any of them could be modified by adverbs such as *yesterday*, *some time ago*, *a few hours before*, etc.

Verbs which belong to this class are factive by nature in the sense that they refer to something that has actually occurred. Accordingly, sentences containing such verbs cannot be conjoined with expressions rejecting the complement content or denying its expectation. For instance, it is a contradiction to say *She confesses to knowing nothing about computers, *but she knows about them*. Owing to this lexical meaning, these verbs are incompatible with the *to*-infinitival pattern³.

4.2 Aspect

The second semantic opposition resides in aspect, the way an event unfolds through time. In view of this semantic opposition, the *to*-infinitive signals boundedness in time in the sense that it views an event in its entirety and conceptualises it as changing through time. By contrast, the *-ing* gerund signals unboundedness in time in the sense that it views only its internal part and conceptualises it as unchanging through time. From this opposition, the language user can make three inferences.

The first inference pertains to completion vs. non-completion. The *to*-infinitive symbolises an event as being complete, whereas the *-ing* gerund symbolises an event as being non-complete. This contrast is demonstrated by sentences such as:

- (7) a. The rescue team laboured to free the trapped men.
b. The rescue team laboured over freeing the trapped men.

The examples in (7) contain one structure in object position, represented by either a *to*-infinitive or a prepositional *-ing* gerund. In (7), the main verb *labour* is followed by either the *to*-infinitive or the *-ing* gerund. In the *to*-infinitive construction under (7a), the speaker considers the complete act of freeing the trapped men. In making the statement, the speaker considers all parts of the act and merges them into a single unit. In the *-ing* gerund construction under (7b), the speaker regards the continuous act of freeing the trapped men. In making the statement, the speaker considers only the inner part of the act. The speaker expresses their feelings while they are in the middle of performing the action.

To sustain the argument, we need to investigate further examples, in which both the *to*-infinitive and the *-ing* gerund are equally possible, but they express different nuances of meaning.

- (8) a. The government aims to reduce unemployment by 50%.
b. The government aims at reducing unemployment by 50%.

The examples in (8) contain one structure in object position, represented by either a *to*-infinitive or a prepositional *-ing* gerund. In (8), the main verb *aim* is followed by either the *to*-infinitive or the *at+ing* gerund. The *to*-infinitive under (8a) implies a bounded event seen as one or a series of an action with non-durative content. The focus is on *the government's* working towards the goal represented by the infinitival clause. *To* is used to denote a path towards a goal. The *-ing* gerund under (8b) implies an unbounded event seen as a single activity having duration. The focus is on the ongoing process of the complement clause, i.e. on *the government's* being engaged in reducing unemployment.

The second inference pertains to infrequency vs. frequency. The *to*-infinitive describes an event as being repeated occasionally or rarely and in a different fashion, whereas the *-ing* gerund describes an event as being repeated regularly or often and in a similar fashion. This contrast can be illustrated by sentences such as:

- (9) a. The judge sentenced him to do community service.
b. The judge sentenced him to doing community service.

The examples in (9) contain two structures in object position: an object pronoun and either a *to*-infinitive or a prepositional *-ing* gerund. In the *to*-infinitive construction in (9a), the speaker describes the act of doing the community service as something occurring infrequently. In this sense, each act assumes a different fashion. As evidence, the sentence allows adverbs of low frequency, as in *The judge sentenced him to do community service occasionally*. In the *-ing* gerund construction in (9b), the speaker describes the act of doing the community service as something occurring frequently. In this sense, each act is relatively similar to the one before it and the one after it.

As evidence, the sentence allows adverbs of high frequency, as in *The judge sentenced him to doing community service regularly*.

To uphold the argument, we need to scrutinise further sentences, in which both the *to*-infinitive and the *-ing* gerund are equally possible, but they express different nuances of meaning.

- (10) a. Hunger drove the children to steal.
b. Hunger drove the children to stealing.

The examples in (10) contain two structures in object position: a nominal object and either a *to*-infinitive or a prepositional *-ing* gerund. The *to*-infinitive in (10a) implies a pattern of occasional repetition which includes one or a number of occurrences of an action viewed in isolation. The *-ing* gerund in (10b) implies a pattern of regular repetition which includes repeated occurrences of an activity viewed as a habit. In Rudanko's (1995: 278-9) words, the shade of meaning carried by the *to*-infinitive goes with a particular behaviour, whereas the one carried by the *-ing* gerund goes with a habitual behaviour. In (10a), the *to*-infinitive highlights *the children's* recurrent behaviour and focuses on the end result, whereas in (10b) the *-ing* gerund focuses on their habitual behaviour and places emphasis on the process⁴.

The third inference pertains to premeditation vs. instantaneity. The *to*-infinitive expresses an intentional, deliberate and voluntary action, whereas the *-ing* gerund expresses a non-intentional, accidental and involuntary action. This contrast is clarified by sentences such as:

- (11) a. They rejoiced to see their son well again.
b. They rejoiced at seeing their son well again.

The examples in (11) contain a complement clause in object position represented by *to*-infinitive in (11a) and prepositional *-ing* gerund in (11b). The *to*-infinitive in (11a) expresses an intentional, deliberate and voluntary action. This means they perform the action of rejoicing knowingly and consciously, i.e. it is under their control. As evidence, the sentence tolerates intentional adverbs, as in *They *unexpectedly rejoice to see their son well again*. The *-ing* gerund in (11b) expresses a non-intentional, accidental and involuntary action. This means they have no power to avoid the occurrence of the action of rejoicing, i.e. it is beyond their control. As evidence, the sentence tolerates non-intentional adverbs, as in *They unexpectedly rejoice at seeing their son well again*.

To maintain the argument, we need to probe further sentences in which both the *to*-infinitive and the *-ing* gerund are equally possible, but they express different nuances of meaning.

- (12) a. They decided to share the profits equally.
b. They decided on sharing the profits equally.

The examples in (12) contain a complement clause in object position represented by *to*-infinitive in (12a) and prepositional *-ing* gerund in (12b). The difference between the two types of complement clause lies along intention. Each type represents a different measure of intention and determination. The intention in sentence (12a) is rather more deliberate and final than in (12b). Sentence (12a) conveys the notion that they have made up their mind to share the profits, whereas sentence (12b) implies that such is their design, but they might be induced to change their mind. Besides, the agent in (12a) is more determinative than the one in (12b). In (12a), the agent has more willpower and shows more determination than the one in (12b). As evidence, only (12a) accepts adverbs like *adamantly*, *persistently* and *wilfully*. Only (12b) accepts adverbs like *impulsively*, *spontaneously* and *accidentally*.

The *to*-infinitive highlights the speaker's intention which results in a deliberate action. In the *to*-infinitive, the speaker's degree of commitment and determination to the task seems more definite or specific and perhaps higher than in the *-ing* gerund. This analysis is in accord with Searle's (1983: 84-7) distinction between prior intention and intention in action. In the *to*-infinitive, the agent first forms an intention and then tries to perform the action. The intention and the action are separable. In the *-ing* gerund, the agent suddenly forms an intention and carries out the action at the same time. The intention and the action are inseparable. For Lind (1986: 268), the difference resides in the degree of purposefulness.

In the *to*-infinitive, the agent appears more forceful and purposeful than the agent in the *-ing* gerund, which is less purposeful and more tentative. In other words, with the *-ing* gerund, there is a less decisive approach or a less precise goal expressed. In Wierzbicka's (1988:32) opinion, the difference between the two complement types can be pinned down to the contrast between intention which is associated with the *to*-infinitive and possibility which is associated with the *-ing* gerund. In the light of this, *decide to* does not imply any series of possibilities, but indicates merely the intention of the speaker to realise the complement clause. For its part, *decide on* implies that a number of possibilities have been going through in the speaker's mind, and that the subject has decided to choose one of them

After the main verb *think*, the use of *to*-infinitive or prepositional *-ing* gerund also produces a distinction in meaning, as is seen below:

- (13) a. I didn't think to tell her.
b. I am thinking of changing my job.

The examples in (13) contain one structure in object position: a complement clause represented by *to*-infinitive in (13a) and prepositional *-ing* gerund in (13b). The difference lies along premeditation vs. instantaneity. The *to*-infinitive refers to an event that is planned in advance, whereas the prepositional *-ing* gerund refers to an event that happens immediately. This is in line with Jørgensen's (1982: 54-62) view, where the distinction between the two patterns lies in the realisation of the complement event. With *think + to*, the intention is deliberately followed by action. That is why it can hardly be used in the progressive because it has a reduced content. With *think of (about) + -ing*, the intention is not necessarily followed by action. The attention is focussed on the process rather than on the realisation. That is why it can be used in the progressive because it has a durative content. When *think* occurs in a past-time context which show, by means of a *but* co-ordinator or otherwise, that the actual thought did not materialise, *thought of (about) + -ing* is normally used, as in *He thought of climbing the mountain, but the weather was cold*. The *to*-infinitive is rarely used in sentences of this kind. According to Wood (1956: 15), *think + to* means something like *did it occur to you?*, while *think of + -ing* means *have the intention*. Though this interpretation applies to some cases, it does not account for the wide field of meanings which the verb covers.

5. Conclusion

This paper has described prepositional complement clauses in English. In the course of the description, it has substantiated two fundamental claims of CG. The first claim is that all linguistic elements, including *-ing* gerund *to*-infinitive, are ascribed semantic values, which motivate their grammatical behaviour. A linguistic element has meaning of its own and contributes to the semantic import of the construction in which it occurs. The *-ing* signifies the notion of simultaneity, whereas *to* signifies the notion of futurity. As complementisers, *the -ing* and the *to-* convert a temporal clause into an atemporal one representing just a type of an event which cannot be distinguished from events of the same type. This is so because it is stripped of tense and/or modality markers. As a result, the complement clause, which the *-ing* or the *to-* introduces, denotes a situation that is not tied to a specific time or a specific occurrence.

The second claim is that the form of a linguistic expression, containing a gerundial or an infinitival complement clause, is motivated by its semantic organisation. The semantic value of a complement clause construction is characterised relative to the particular construal imposed on its conceptual content. The semantic opposition between a prepositional *-ing* and a *to*-infinitive complement clause was shown to be the result of two construals. In terms of temporal reference, the *-ing* was shown to prototypically denote simultaneity, whereas the *to-* was shown to prototypically denote posteriority. In terms of aspect, the *-ing* was shown to describe only the internal parts of an event, whereas the *to-* was shown to describe the entirety of an event. From this opposition, three inferences were drawn. The *-ing* was shown to refer to an incomplete, frequent and instantaneous event, whereas the *to* was shown to refer to a complete, infrequent and premeditative event. This serves to show that as part of its semantic value, every complementiser helps to construe the content of a situation in a certain fashion.

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Notes

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¹ Among other verbs that occur in this pattern, Rudanko (1992: 68-79, 1998: 336-348) lists the following: admit, amount, cling, come down, confess, contribute, extend, run, come around, fall, get around, get down, resort, return, settle down, shift, take, turn, keep, stick, depose, testify, vouch, agree, assent, consent, adjust, attend, feel up, look forward, react, submit, trust, etc.

² Among other verbs that occur in this pattern are allocate, devote, dedicate, limit, reduce, restrict, etc.

³ To test the function of to, Swan (1980: 33,337) suggests putting a noun after it. If the noun fits, to is a preposition and therefore followed by an -ing gerund. This is instanced in He objects to working at night vs. He objects to night-work. If to does not accept a noun, it is then the sign of the infinitive. This is instanced in He wants to resign vs. *He wants to resignation. As explained by Graver (1972:151) and Jørgensen (1988:348-354), this test helps to distinguish between two particularly confusing verbal phrases, namely used to vs. be + used to. The phrase used to + infinitive refers to a past action or habit which no longer takes place, as in I used to live on a house boat, but I don't now. The phrase be + used to + gerund suggests familiarity through a repetition of an activity, as in I'm used to sailing single-handed. Unlike the phrase used to + infinitive, which is a fixed idiom and cannot be used in any other tense, the phrase be + used to + gerund can be used in almost all the tenses in English.

⁴ Among verbs of similar behaviour, Rudanko (1993: 488) mentions adapt, set, gear, switch, start, bind, condition, rouse, commit, condemn, abandon, reconcile, demote, hold, convert, inure, introduce, move, pin down, put back, put up, relegate, subject, etc.