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Caroline Gentens

THE FACTIVE-REPORTED DISTINCTION IN ENGLISH

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Voor oma

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Figures

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Tables

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Abbreviations

Corpora

BNC	British National Corpus; see Davies 2004–
CLMETEV	Corpus of Late Modern English Texts, Extended Version; see De Smet 2005, 2012
CLMET	Corpus of Late Modern English Texts, version 3.0; see De Smet 2005, 2012, Diller et al. 2011
COCA	Corpus of Contemporary American English; see Davies 2008–
EEBO	Early English Books Online; see http://eebo.chadwyck.com/home
LOB	The Lancaster-Oslo/Bergen Corpus (cited in Halliday & Matthiessen 2004; see Johansson et al. 1978)
OBC	Old Bailey Corpus; see Huber et al. 2012
OBO	Old Bailey Proceedings Online; see Hitchcock et al. 2012
OED	Oxford English Dictionary Online; see Simpson & Weiner 1989
WB	Collins Wordbanks Online Corpus; see https://wordbanks.harpercollins.co.uk/

Symbols

*	ungrammatical
?	questionable grammaticality

Glosses

SG	singular
PL	plural
PRS	present tense
ART	article
M	masculine

Figure and Table markings

%	relative frequency, in percentage
n	absolute frequency
N	normalized frequency, per million words
OBJ	object
OBL	oblique
p	proposition
q	qualitative state
S	sentential complement
SBJ	subject
t	temporal dimension

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1 Introduction

1.1 The *what*, *why*, and *how* in brief

This study deals with factive complementation constructions in English. In their highly influential paper "Fact", Kiparsky & Kiparsky (1970) proposed that factive complements (e.g. the *that*-clause in (1)) contain a proposition that is presupposed to be true by the actual speaker. That is, it would be illogical for me to utter (1) if as a speaker I did not believe that the content of the complement clause was true. We do not normally say "Julia resented that John was nominated for an award, but he wasn't really". Kiparsky & Kiparsky proposed that *resent* should be classified in the lexicon as a factive predicate, which only takes complements that are presupposed true.

(1) *Julia resented that John was nominated for an award (? but he wasn't really).*

The importance of the category of factive complements is clear from the systematic contrasts they show in comparison to complementation constructions of reported speech or thought. Reported complements as in (2) are represented from the cognitive perspective of the speaker or cognizer referred to in the main clause, i.e. *Julia*. A speaker uttering (2) can therefore straightforwardly express their disagreement by saying "Julia said that John was nominated for an award, but he wasn't really". Reported complements have thus been characterized as involving commitment on the part of the represented speaker or cognizer in the main clause, while factive complements are said to involve commitment on the part of the actual speaker uttering the entire complex sentence. To account for this difference in semantics, Kiparsky & Kiparsky classified verbs such as *say* and *think* as non-factive predicates, in contrast to factive predicates such as *resent*.

(2) *Julia said/thought that John was nominated for an award (but he wasn't really).*

The two complement types further show distinct grammatical behaviour, as illustrated in (3)–(6). Factive complements correlate with nominal constructional alternates: they can be expressed by means of a complement clause introduced by *the fact* as in (3), and can be referred to by the pronoun *it* as in (5). Reported complements tend not to occur to with these alternates, as illustrated in (4) and (6a). They can be substituted by a clausal alternate *so*, as in (6b).

https://doi.org/10.1515/9783110669695-001

(3) *Julia resented the fact that John was nominated for an award.*

(4) *? Julia said the fact that John was nominated for an award.*

(5) *Julia resented it.*

(6) a. *? Julia thought it.*
b. *Julia thought so.*

The semantic and formal differences between the two types point towards a fundamental distinction in the system of English complementation. However, the original definition of what motivates the distinction, i.e. a truth presupposition on the part of the speaker, lexically determined by the choice of matrix predicate, was soon shown to be problematic (see Chapter 2 for references and discussion). Firstly, a number of contexts were identified in which the complement of a predicate such as *resent* is presented as not necessarily true. A typical example involved hypothetical contexts as in (7), which clearly do not necessarily carry a truth commitment.

(7) *If John was nominated for an award, Julia would resent it.*

Moreover, I will show in Chapter 4 that it is not necessarily the actual speaker who is the source of commitment to the proposition contained in a factive complement. In example (8), for instance, the content of the complement is explicitly attributed to a third party, i.e. to Christie. The example does not carry an implication that the speaker is committed to the content of Christie's accusation.

(8) *Keynes and Christie disliked each other from their schooldays at Eton, and Keynes resented* ***Christie's accusation*** *that Keynes at CEMA had copied his own ideas for a national council of music.* (from the Wordbanks Online corpus, henceforth abbreviated as WB)

While such an interpretation can for examples as in (8) be argued to be imposed by the specific constructional environment of a semiotic noun that projects the content of the finite clause, I will in Chapter 4 argue that even without the presence of abstract NPs such as *Christie's accusation*, factive complements can involve a source of commitment other than the actual speaker.

A third problem involves the classification of predicates proposed by Kiparsky & Kiparsky (1970). For instance, they identify *assert* as an inherently

non-factive predicate, and predict that it only occurs with constructional alternates of the non-factive paradigm. Example (9), however, shows that we do find examples where *assert* is combined with a complement pattern that they associate with factivity.

(9) *During this mandate, he asserted **the fact** that there could be no competitiveness for European businesses as long as external trade relations are not balanced*. (from Wikipedia.org, entry for Franck Proust)

These various problems (see also Chapter 2) show that the notion of factivity itself needs to be reconceptualized. The main aim of this study is to do so. I will propose a new definition of factive complements which is not based on a notion of necessary truth, but on an analysis of the representational semantics of the matrix clause. Factive complements, I claim, are pre-existent to (Davidse 2003), and unaffected by, the situation described in the matrix. Reported complements, by contrast, are effected, i.e. created by the main clause situation (Davidse 1994; Vandelanotte & Davidse 2009). This account will be shown to explain the tendency for factive and reported complements to occur with certain semantic classes of predicates (e.g. describing an emotional reaction or an act of saying or thinking), but does not attach them to specific lexical items as such (e.g. *regret*, or *say*/*think*).

The analyis moreover covers complementation constructions which contain semantic and formal features of both factive and non-factive constructions, as in (9). It is proposed that the integration of both factive and non-factive component structures within one complex sentence defines a third construction type, which I will refer to as manipulative constructions. Manipulated complements will be characterized as being pre-existent to, and affected (e.g. confirmed, denied, or recreated) by the main clause situation.

I further give an account of the commitment phenomena that have been considered crucial to the different interpretation of factive and reporting constructions (see (1) and (2) above). Recall that the traditional view has it that factive constructions involve the *actual speaker*'s commitment to the truth of the complement, while reporting constructions involve commitment on the part of the *represented speaker or cognizer* in the main clause. I will critically assess the validity of this claim by focusing on the potential for explicit speaker-related modal auxiliaries in the different types of complement clauses (see Chapter 4). This means that in an example as in (10), I will concentrate on the modal auxiliaries *might* and *must* in the complement.

(10) *At the end of the week Stephen examined Fox, pronounced him well, and said that he **might** walk for half an hour on deck, but that his diet **must** still be moderate.* (WB)

Both modal auxiliaries in this example involve a notion of desirability rather than of truth: *might* encodes a modal stance of permission, and *must* encodes obligation. The source of the modal stance is in this case the represented speaker, i.e. Stephen. Such modal auxiliaries encode interpersonal semantics: they convey how the content of the complement should be taken in the dynamics of a (possibly represented) speaker-hearer interaction. More specifically, speaker-related modal auxiliaries express the position a speaker assumes with respect to desirability or likelihood of the content of the complement clause. The findings with respect to the interpersonal status of the different types of complement clauses will be linked back to the analysis of their representational semantics. It will be shown that differences with respect to the source of the modal stance in the different complement types can be explained on the basis of their distinct representational semantics.

All of these issues are considered from a cognitive-functional linguistic perspective. The primary aim is to develop an account of the abstract semantics of factive and reporting constructions as well as of specific constructional alternates for the complement, and to show how these semantics, and the ways in which they are combined, explain differences in form. It is argued that the default semantics of factive and reporting constructions relies on parallels with arguably basic categories of human experience, namely the categorization of entities as unaffected, affected, or effected. A second important question involves the notion of perspective – it will be shown that the different semantics of factive and reporting constructions correlates with a different degree of relatedness to the represented speaker-hearer interaction instead of the actual speaker-hearer interaction for the source of cognitive perspective. The distinction between these complementation constructions in language use is not seen as absolute; rather, it is argued that instantiations of one category can be presented as instances of another category through principles of construal and coercion. To argue for this, I draw upon insights from various cognitive and functional approaches, as they were advocated mainly by Halliday (1985), Langacker (1987, 1991), Dik (1989, 1997), Hengeveld (1989) and Croft (1991, 2012). Another important source of inspiration was the work of Levin & Rappaport Hovav (2005), which studies argument structure constructions from the vantage point of lexical semantics.

The discussion is focused on English complementation constructions with a personal subject, a verbal predicate (e.g. *resent*, or *say* above) and a finite complement clause introduced by *that*. This means that the contrasts between factive and non-factive semantics of the patterns illustrated in Table 1 will not be focused upon in this study.

Tab. 1: Patterns excluded from the analysis

Pattern	Non-factive complements	Factive complements
Non-personal subject	*It seemed that John was nominated for an award.*	*It mattered that John was nominated for an award.*
Non-verbal predicate	*I'm sure that John was nominated for an award.*	*I'm glad that John was nominated for an award.*
Non-finite complement	*John claimed to be nominated for an award.*	*John disliked being nominated for an award.*
Finite *wh*-complement	*Julia asked when John was nominated for an award.*	*Julia knows when John was nominated for an award.*

Readers interested in the specific constructional semantics of (factive and non-factive) impersonal constructions can consult Achard's (1988) work on French and the discussion by Verhagen (2005: 132–136) as a starting point. Norrick (1978) and Ransom (1986) explicitly deal with the status of subject clauses in their discussion. Norrick (1978) provides a detailed account and subclassification of factive adjectival predicates. The literature that focuses on the distinct meaning, form, and distribution of (*to*-)infinitives and gerund complements in English, i.e. non-finite complements, has a long tradition (e.g. Bolinger 1977; Wierzbicka 1988: 23–168; Rudanko 1989; Smith & Escobedo 2001; Egan 2008; De Smet 2010), even if the relation to the factive-reported contrast deserves further investigation. Nye (2013) provides an excellent account of the systematic grammatical differences that characterize factive and reporting constructions across different finite subordinate clause types (declarative, interrogative, exclamative), amongst others by setting out the distinctive grammatical differences between "true interrogative" complements such as the *wh*-clause in *Julia asked when John was nominated for an award*, and presupposed "resolutive" *wh*-complements, as in *Julia knows when John was nominated for an award*.

As a final point in this introduction, I will give a concise overview of the structure of this book. In Chapter 2, I review prior approaches to the concept of factiv-

ity. The chapter shows that the concept of truth presupposition has been variously reinterpreted in the literature, but that none of these reinterpretations is uncontested. The overview highlights the main problems with the existing literature, which form the central issues to be addressed in this study.

In Chapter 3, I provide an analysis of the representational semantics of three complementation constructions, which I refer to as factive, manipulative, and reporting constructions. It is proposed that the three complementation types involve a different semantic relation between the matrix clause and the complement: factive complements are unaffected by the main clause situation, manipulated complements are affected by it, and reporting complements are effected by it. This will be correlated with the tendency for the three complement types to occur with specific semantic classes of predicates, which express contact/reaction, re-creation or modification, and creation respectively.

In Chapter 4, I describe the interpersonal status of the complement in each of the three complementation constructions. The chapter focuses on the type of modal stance (i.e. involving an assessment of likelihood or desirability) and the source of the modal stance (actual speaker, represented main clause conceptualizer, or other) that is expressed by a modal auxiliary in the complement.

Chapters 5 to 7 present three case studies that focus on specific constructional alternates. The case studies add a dynamic dimension to the conceptual characterizations proposed in Chapters 3 and 4. They show how the three complementation constructions that were distinguished can shift from one type to the other in synchrony and diachrony.

In Chapter 5, I give a synchronic analysis of the object extraposition construction, which involves the anticipation of a complement clause by a pronoun *it* in object position. An example would be *John regretted it that you could not be at the wedding*. Object extraposition has traditionally been considered a factive constructional alternate. I will propose a new account of the function of object extraposition as a construction in itself. I will further explain its natural integration in factive complementation constructions, and its potential to be used to shift a reporting construction to a manipulative construction.

In Chapter 6, I present a diachronic analysis of *the fact that*-clauses, which have also been associated with the factive paradigm. It is proposed that early instances of *the fact that*-clauses in Late Modern English were predominantly used in the context of manipulative constructions, and were not presented as presupposed true by the speaker.

In Chapter 7, I provide a diachronic analysis of *I regret*. I describe how the subject-predicate combination in Late Modern English acquired a use as an illocution modifier to a conjoined utterance. This will be shown to represent a shift from a factive construction to a reporting construction over time.

Finally, I will sum up the main conclusions of this study and propose some questions that can be addressed in further research.

2 Prior definitions of factivity. Disparate views

This chapter gives an overview of how factive complementation constructions have been described in the literature. The starting point is the intricate definition of factivity as it was first proposed by Kiparsky & Kiparsky (1970), which had an immense impact on the linguistic field even before it was published in print.[1] The ultimate aim of Kiparsky & Kiparsky's account was to identify "syntactic-semantic interrelationships" which allowed for a systematic distinction between different types of complement clauses (1970: 182). They define complements of factive predicates, e.g. *regret*, as containing a proposition that is presupposed to be true by the speaker, and correlate this semantic feature with an underlying structural characterization: factive complement clauses are part of a complex noun phrase (implicitly or explicitly) headed by *fact*. By contrast, complements of non-factive predicates, e.g. *suppose*, are characterized by the absence of speaker presupposition, which is formally represented by their lack of a head noun *fact*. The two types of complementation constructions are further shown to be distinct in terms of the range of alternate realization patterns they allow for their complements.

Later work on factive complementation constructions revealed a fundamental disagreement about the semantico-functional features that motivate the distinct meaning and form of the category. I will expand on this in section 2.1, where it is shown that the feature of presupposition was variably interpreted as a (logical) semantic, pragmatic, or interpersonal (i.e. involving the grammatical encoding of speaker-hearer positioning) notion. In section 2.2, I comment on the fact that the grammatical realization patterns characteristic of factive constructions received different theory-specific explanations of their nominalized status. In section 2.3, it is pointed out that the correlation of specific constructional alternates with semantic types of predicates was originally based on a lexicalist approach, whereby a verb such as *claim* was classified as inherently non-factive, and a verb such as *regret* as inherently factive (Kiparsky & Kiparsky 1970). It is proposed that a cognitive constructionist account is more apt to fully account for the range of constructional combinations that are possible. In section 2.4, I give an overview of the structure of the book.

In the following sections, I will thus deal with the various interpretations of (i) the semantico-functional motivation for, and (ii) the grammatical structure of,

1 This is the first version of Kiparsky & Kiparsky's paper that I could find in print. It should be noted, however, that the paper had been widely circulated before publication, witness the 1,891 citations on GoogleScholar (on 16 February 2019) of a manuscript version dated back to 1968.

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factive complementation constructions separately. I am aware of the fact that this is an artificial presentation format, especially since studies dealing with factivity all do embrace some kind of form-meaning relationship. This structure nonetheless allows me to contrast distinct definitions of the same semantic or grammatical concept in a focused manner. It allows me to clearly highlight the areas in need of clarification which formed the onset for this study.

2.1 The factive presupposition

A lot has been written on the notion of presupposition and the various contexts in which it can occur, and, as Levinson (1983: 167) puts it, "as a consequence of the large literature, the assiduous student will find just about every pronouncement ... [about it, C.G.] contradicted somewhere". This section is by no means intended as an exhaustive review of the notion. Rather, the aim is to identify the distinct positions on how to define the notion of presupposition in as far as these have contributed to theories on factive complement constructions. I have grouped the different accounts of presupposition into three broad approaches. In 2.1.1, I explain the original notion of *logical presupposition*, which is seen as a precondition for the larger sentence to have a truth value. In 2.1.2, I turn to the concept of *pragmatic presupposition*, which defines presuppositions as information that is part of the common ground. In 2.1.3, I deal with the *interpersonal value* of the factive presupposition. It has been proposed that presupposed complements are grammatically reduced: they cannot encode speaker-hearer related modal positioning, or illocutionary force. In 2.1.4, I set out my own position on the nature of the factive presupposition.

2.1.1 From philosophy to logical semantics

The linguistic notion of presupposition originated in the philosophical literature, mainly in the works of Frege (1892) and Strawson (1950, 1952). The central object of discussion was the referential status of definite noun phrases (including proper names) as involving an existence presupposition, e.g. *Kepler* in (11) or *The King of France* in (12), and the importance this had for the truth conditions of the sentence it occurs in.

(11) *Kepler died in misery*. (Frege 1984)

(12) *The King of France is wise*. (Russell 1905; Strawson 1950, 1952)

The authors note that in ordinary usage, examples such as (11) and (12) contain an assertion (having died in misery, having the property of being wise) made with respect to a referent (designated by *Kepler*, *The King of France*). There are two conditions for examples as in (11) and (12) to be true: (i) The noun phrase *Kepler* or the *King of France* must have an actual referent, and (ii) this referent must have the property of having died in misery or being wise.

For the negated counterparts (13) and (14) to be true, only one of the two conditions is maintained, i.e. that the subject noun phrase has an actual referent.

(13) *Kepler didn't die in misery*.

(14) *The King of France is not wise*.

The property ascribed to these referents under negation (13)–(14) is said to be exactly the opposite from (11)–(12): it is now that of not having died in misery, or that of not being wise. When the definite noun phrase fails to refer, as when (14) is followed by "because there is no King of France", the sentence[2] in (14) cannot be either true or false; it simply lacks a truth value.

These observations form the basis for distinguishing presupposition as a type of semantic relation distinct from entailment, i.e. logical consequence. In logical semantics, a sentence as in (11) presupposes the existence of a referent for the proper name *Kepler*, because this existence is a precondition for the truth of (11), and this condition further remains stable under negation, as in (13). A sentence as in (11) logically implies or entails that the referent of *Kepler* is no longer alive, because this entailment is a precondition for the truth of (11), but is not maintained under negation as in (14). Let me briefly illustrate the entailment-presupposition contrast with another example, given in (15). The sentence in (15) logically entails that the fly referred to is dead. This entailment is not a necessary consequence in the negative form of the sentence (16). The sentence does presuppose the existence of a referent for *Peter* and *the fly* in both (15) and (16), i.e. irrespective of negation.

(15) *Peter killed the fly*.

(16) *Peter didn't kill the fly*.

2 For Strawson (1950, 1952), only assertions can be true or false, not sentences. In standard logical semantics, which dates back to Aristotle, sentences (or the propositions contained in them) are taken to be the primary bearers of truth-value.

Besides in negative contexts as in (14) and (16), presuppositions are also generally seen to be maintained when they are in the scope of a modal, or interrogative or conditional operator (e.g. Karttunen 1971), as in (17a–c): the existence of a particular fly is presupposed in all cases. The set of contexts involving these negative, modal, interrogative, and conditional operators is generally referred to collectively as the "family of sentences" test for diagnosing presuppositions.

(17) a. *Perhaps Peter killed the fly*.
b. *Did Peter kill the fly?*
c. *If Peter killed the fly, he will get a reward*.

The logical semantic notion of presupposition is seen as conventionally associated with a set of "presupposition triggers",[3] which comprises certain lexical items (e.g. a factive verb such as *regret*, an iterative adverb such as *again*) as well as grammatical expressions (e.g. the definite article, cleft constructions). Kiparsky & Kiparsky (1970) are credited with being the first to associate the notion of presupposition with specific complement-taking predicates such as *regret*.

Summing up, logical semantics holds that a presupposition is a precondition for a sentence to have a truth value. The logical presupposition must be satisfied, i.e. hold true, in order for the (higher) clause containing it to convey a true proposition. It is seen as triggered by specific grammatical patterns or lexical items, e.g. the definite article in (15)–(17) carrying an existential presupposition or the "true factive predicate" *regret* in (18) carrying a truth presupposition. Similarly to the existential presupposition, the logical semantic truth presupposition is characterized by its constancy under negation (18a), but also within the scope of an interrogative (18b), conditional (18c), or modal (18d) expression: in order for the sentence "John regrets that he had not told the truth" to have a truth value, it must be the case that the complement proposition "John had not told the truth" holds true, and this requirement is maintained when the main clause is negated, interrogated, in the antecedent of a conditional, or under the scope of a modal expression.

(18) a. *John didn't regret that he had not told the truth*. (Karttunen 1971: 63)
b. *Did you regret that you had not told the truth?* (Karttunen 1971: 63)

3 See Levinson (1983: 181–184) for a (non-exhaustive) overview of presupposition triggers. Tonhauser et al. (2013) provide a new subdivision of a set of traditional triggers of entailments, presuppositions or implicatures into four subclasses.

c. *If I regret later that I have not told the truth, I will confess it to everyone.* (Karttunen 1971: 64)
d. *It is possible that I will regret later that I have not told the truth.* (Karttunen 1971: 64)

The notion of presupposition that is assumed by Kiparsky & Kiparsky (1970) subscribes to this definition. They add, however, the point that while the asserted part of a proposition is relative to that proposition, "presuppositions ... are relative to the speaker" (1970: 155). This leaves room for an entirely different definition of factivity, which I will turn to in the next section. I will first address the main problems with the logical semantic definition of presupposition, which led to its largely being abandoned (Levinson 1983: 204).

Problematic for this logical semantic definition is, firstly, that presuppositions can be cancelled in various contexts. The truth of a presupposed complement can, for instance, be explicitly suspended by means of a following *if*-clause (Horn 1972: 15), as in (19), or cancelled by explicit contradiction, as in (20).

(19) *Harry clearly doesn't regret being a CIA agent, if he actually ever was one* (Levinson 1983: 195)

(20) *John doesn't regret having failed, because in fact he passed* (Levinson 1983: 201)

They can also be cancelled as a result of the shared knowledge between discourse participants. Thus, when (21) is uttered in a context where speaker, hearer, and others know that John failed to get a doctoral grant, it is interpreted as an ironic statement, in which the content of the complement, i.e. John's doing a PhD, is not presupposed to be true.

(21) *At least John won't have to regret that he did a PhD* (Levinson 1983: 187)

The potential cancellation of presuppositions as in (19)–(21) is a problem because the logical semantic account accounts for factive complements by including extra information in the lexical entry for *regret*, stating that the predicate selects for complements that are presupposed true. The semantic content stipulated in a lexical entry is expected to be constant irrespective of the constructional environment or discourse context, in contrast to what we find in examples like (19)–(21). Moreover, the complementary semantic relation of entailment does not seem to admit these cancellations, cf. *? Peter killed the fly, but in fact it's not dead.*

A further problem was that the range of phenomena associated with presuppositions was extended to cover amongst others address terms, as in (22), where the contrast between French *vous* represents the formal, polite form of singular address; while *tu* "presuppose[s] that the addressee is an animal, child, socially inferior to the speaker, or personally intimate with the speaker" (Keenan 1971: 51).

(22) a. *Tu* *es* *le* *bienvenu*
you.SG be.PRS.2SG ART.M.SG welcome.guest
[You (informal singular) are a welcome guest]
b. *Vous* *êtes* *le* *bienvenu*
you.PL be.PRS.2PL ART.M.SG welcome.guest
[You (formal singular) are a welcome guest]

The informal or formal variant have the same referent, and therefore the distinction does not make a difference for the truth conditions of the sentence. Instead, the contrast between *tu* and *vous* is related to differences that stem from the context of utterance and its participants. While it is doubtful whether such phenomena should be treated as presuppositions on a par with those in (18) (see e.g. Levinson 1983: 185; see also Tonhauser et al. 2013 on subgroupings of different types of traditional presuppositions), they did contribute to the replacement of the notion of the logical semantic presupposition with that of pragmatic presupposition, which I deal with in the next section.

One way to rethink semantic notions of presupposition is to accept that presupposition crucially "depends on the semantic relation between the sentences involved, not on their actual truth values" (Karttunen 1973: 192). In 2.1.4 I will come back to the idea that the truth-functional component of semantic theories on presupposition should be rethought. Karttunen (1973) considers this different perspective to essentially be in line with the pragmatic notion of presupposition that he advocates, which is what we will turn to now.

2.1.2 Pragmatic presupposition

In the previous section, I discussed how the traditional logical semantic notion of presupposition is seen as conventionally attached to specific lexical items or grammatical structures, and defined as a precondition for the sentence that contains it to have a truth value. However, since the advent of the notion of pragmatic presupposition (Stalnaker 1970, 1974, 1978, 2002; Keenan 1971; Karttunen 1973;

Heim 1983), it is argued that "[t]he notion of presupposition must be relativized with respect to linguistic contexts, that is, to sets of background assumptions" (Karttunen 1973: 192). Pragmatic presuppositions are defined relative to contextual features, that is, relative to "the attitudes and intentions of the speaker and his audience" (Stalnaker 1974: 472). Crucial to this pragmatic notion of presupposition is the fact that "it is persons [i.e. speakers, C.G.] rather than sentences, propositions or speech acts that have or make presuppositions" (Stalnaker 1974: 473).

Pragmatic presuppositions are not defined in terms of truth-conditional constraints; rather, they restrict the contexts in which an utterance containing presupposed material can be "appropriate" or "felicitous". In this approach, presuppositions are defined as containing material that is given in the common ground, or, if they are uncontroversial with respect to what is already known, presuppositions carrying new information are expected to be easily accommodated within that common ground. In Stalnaker's terms, "[t]o presuppose something is to take it for granted, or at least to act as if one takes it for granted, as background information – as *common ground* among the participants in the conversation" (2002: 701, italics as in original).

One of the problems with the pragmatic account is that the way it defines the notion of pragmatic presupposition is inherently vague. Thus, Stalnaker (1974) suggests that pragmatic presuppositions are "like the *background* beliefs of the speaker – propositions whose *truth* he takes for granted, or seems to take for granted in his statement" (1974: 472, emphasis mine); that they represent "*common* background belief" (1974: 473, emphasis mine), and that they can be taken for granted "once a proposition *has been asserted* in a conversation ... (unless or until it is challenged)" (1974: 478, emphasis mine). This leaves open whether his definition of pragmatic presupposition involves background vs. foreground (i.e. focused) information, speaker commitment to the truth of a proposition, shared knowledge, or given information (see Chapter 5 for a more detailed discussion of these notions). Stalnaker is aware of this, as he states that "these suggested definitions are vague, and each is different from the other. But I do not think it would be fruitful to refine them, or to choose one over the others" (1974: 473).

Besides the fluid characterization of pragmatic presupposition, Stalnaker himself discusses exceptions to his definitions (1974: 474), in cases where the speaker presupposes information that is not part of the shared knowledge amongst participants and/or that he knows to be false, as in the ironic statement in (21) *At least John won't have to regret that he did a PhD (he didn't get the chance)*. He considers these as a confirmation of the fact that presuppositions are contextually rather than semantically determined.

Another problem is that the notion of pragmatic presupposition does not account for its association by Kiparsky & Kiparsky (1970) and Karttunen (1971) with specific grammatical structures or lexical items, such as *regret*, or rather, with specific semantic classes of predicates, such as emotive predicates. In other words, it fails to explain the contexts in which presuppositions are conventionalized, and broadens the notion of presupposition to some kind of given information which can be applied to an almost unconstrained number of phenomena.

More recent accounts of pragmatic presuppositions have tried to refine the relation of factive presuppositions to the common ground or to cancellation contexts. One current approach is to include factive presuppositions under the header of content that is not "at-issue", a term attributed to Bill Ladusaw but popularized by Chris Potts. Content that is not at issue is not likely to be taken by "hearers … to constitute the speaker's central message" (Potts 2015: 168). The relation of not-at-issueness to various types of speaker commitment (including traditional presuppositions, entailments, and Gricean implicatures) has been discussed by Simons et al. (2010, 2017), by starting from a more general pragmatic explanation of the diagnostic tests for presupposition in themselves, i.e. for the operators (negation, interrogation, modality, antecedents of a conditional) that make up the family of sentences in (18). I will briefly set out the main gist of their theory to show how their account of pragmatic presupposition is more nuanced than just appealing to givenness in the common ground, but is intended to cover a large range of phenomena and in that sense cannot account for the specific grammatical status or semantics of factive complementation constructions.

In Simons et al. (2010), firstly, it is proposed that the scope of "sentential operators such as negation, conditionals and modals typically [are] linked roughly to what is understood as the main point of the utterance, … the *at-issue content* of the utterance" (2010: 315, original emphasis). More precisely, they propose that the scope of these operators is restricted to at-issue content, and that what is traditionally referred to as (factive) presuppositions on the basis of these diagnostic tests therefore follows naturally from these scopal properties.

In their (2010) account, the scope of negation, interrogation, modality, and conditional operators is defined relative to the information-structural focus-presupposition structure of the proposition they apply to: the focused part (which may cover the entire sentence) has to be relevant to, i.e. provide a possible answer to, what Roberts (1996) refers to as the "question under discussion". The latter is defined as "a semantic question (i.e. a set of alternative propositions) which corresponds to the current discourse topic" (Simons et al. 2010: 316). The specific (typically implicit) question under discussion is marked by intonational promi-

nence as the focus (2010: 318). Because there is sometimes more than one possible interpretation of what is at-issue in a particular utterance (2010: 322), at-issue content is further restricted to be relative to "speaker intention", in itself "constrained by relevance to the [question under discussion, C.G.], and by the requirement that the intention be identifiable to the addressee" (2010: 323). The part of the propositional content that is not at-issue, then, does not serve to provide a contextually relevant response to the question under discussion, and is thus not part of the focused information – as a result, this not-at-issue content is the content that can involve various types of speaker commitments (traditional presuppositions, entailments, or Gricean implicatures) despite a higher negative, interrogative, modal, or conditional operator. It is stated that "at least some constructions or lexical items conventionally mark their content as not-at-issue" (2010: 322), but it is not the authors' aim to explain why or how.

In Simons et al. (2017), the authors' (2010) "largely information-structural account" (2017: 190) is applied specifically to complement clauses in the context of cognitive predicates. Thus, in an example as in (23), they propose that the focus structure of (23a) naturally relates to a question under discussion of *who* is having a party, instead of whether or not someone has found out about it. They argue that no special mechanism of presupposition cancellation is required for the continuation in (23b) to be felicitous, and instead posit that standard cases in which the content of the complement is implied to be true may be "a by-product of the construction of focal alternatives" (2017: 191).

(23) a. *He didn't find out that HARRY's having a graduation party,....*
b. *... he found out that HARRIET is having a graduation party ...*
(Simons et al. 2017: 190, original emphasis)

In this way, the fact that the content of the complement of *believe* in (24b) is entailed to be true by the speaker is also taken to follow naturally from the fact that it has to be seen as relevant to the question under discussion in the discourse context. This is furthermore taken to show that their model "appl[ies] to factive and non-factive sentences alike, which explains why the complement of *believe* is sometimes taken to be a commitment of the speaker" (2017: 204).

(24) a. *Why is it taking Phil so long to get here?*
b. *He didn't believe that the car's parked in the parking garage.*
(Simons et al. 2017: 203)

Simons et al. (2017)'s account of the factive presupposition has a very specific focus on the complements of semi-factives, i.e. cognitive predicates, in contexts with a narrow focus accent, as in (23), or in examples for which the content of the complement has been presented as doubtful or untrue in the prior context (cf. (21) above). The model they propose is in itself useful to account for these known contexts of presupposition cancellation, as well as for contexts as in (24) that have been said to trigger presuppositions on non-factive verbs (cf. Kallulli 2006). They do this by elaborating on general principles of information structure and their interactions with scopal properties of interpersonal modifiers, grounded within a theory of cooperativity in discourse. The primary goal of the model is to explain what various types of traditional presuppositions and entailments share with respect to the traditional family of sentences diagnostics. It does not explain how the semantics of specific grammatical constructions or lexical items is conventionally associated with (factive) presuppositions.

In Tonhauser et al. (2013), the authors consider two additional features besides the potential for inferred speaker commitments under negative, interrogative, modal, and conditional operators (called "projection" after Langendoen & Savin 1971), which allows them to identify and distinguish four subclasses of such "projective content". In this article they do turn to specific commitment triggers in contrast to the aforementioned focus on information-structural effects with respect to commitment cancellation (without, however, making explicit how the two aspects can be integrated within an over-all perspective).

They consider, firstly, whether the projective content, i.e. inferred speaker commitments, involve strong contextual felicity constraints based on the prior context. It is shown that some projective contents, including those involving the main verb *know*, can easily be accommodated without being entailed by the prior discourse context and therefore need not be known or given to the interlocutor (2013: 79–81), while others, like the existential presupposition for using a pronoun like *he*, do need to be established in the immediate prior context.

Secondly, Tonhauser et al. (2013) consider whether the projective content is subject to an "obligatory local effect". For this they focus mainly on speaker commitments embedded under non-veridical propositional attitude verbs such as *think*, and consider whether or not the speaker commitment in the complement is also part of the main clause conceptualizer's belief state. Thus, in (25), the commitment to Bill's having smoked prior to the time of utterance, due to the aspectual verb *stop*, is something that is necessarily part of the commitments asserted on behalf of Jane – it cannot be contradicted as part of Jane's belief state, as illustrated in (25a). By contrast, the content of a non-restrictive relative clause as in (25b) may, but need not be a part of Jane's belief state. The projective content of

a complement such as *know* is said to have an obligatory local effect, similar to the aspectualizer *stop* in (25a).

(25) a. *#Jane believes that Bill has stopped smoking and that he has never been a smoker.*
b. *Jane believes that Bill, who is Sue's cousin, is Sue's brother.*
(Tonhauser et al. 2013: 92)

Much like what was pointed out above with respect to the pragmatic accounts of presuppositions in general, this model does not aim to provide a real explanation for the relation of the factive presupposition to different semantic classes of predicates, or to a specific grammatical semantics associated with constructional alternates and with differences in syntagmatic integration, and it is explicitly intended to group together a large set of different phenomena.

All in all, the proposal to replace the notion of the logical semantic presupposition with the relatively unconstrained notion of pragmatic presupposition has been critiqued by, amongst others Abbott (2000) and de Cuba & Ürögdi (2010), and Tonhauser et al. (2013) do argue against the need for factive presuppositions to be established in the prior discourse context to be felicitous. Nonetheless, it is still claimed that "the distinction between presupposition and givenness mostly seems to be blurred" (Kallulli 2010: 206). I will in Chapter 5 provide further empirical justification against the claim that the factive presupposition should be defined as (a subtype of) given information, and will in Chapter 3 propose that it is revealing to assume a certain semantic notion of the factive presupposition (though distinct from that in 2.1.1; see 2.1.4) to explain the distinct semantic and grammatical value of factive complements.

2.1.3 Interpersonal value of the factive presupposition

A third approach to defining the presupposed status of factive complements centers around the grammatical potential to encode speaker-hearer positioning within the complement clause (2.1.3.2), which can be seen as linked to the specific entity type (cf. Lyons' (1977) "orders of entities") (2.1.3.1) referred to by the factive complement. The approach I single out in this section is not generally recognized in surveys on presupposition. It is much more focused on factive complement clauses than on presupposition triggers in general (including definite articles, clefts, iterative adverbs, etc.). This approach shares a fundamental property with

the pragmatic approach, namely that it takes into account the context of utterance, or more specifically, what Langacker (1991) calls the "ground", i.e. the speech event with its participants (speaker, hearer, and others) and its immediate circumstances (e.g. its temporal and spatial coordinates). It differs from the pragmatic account in that it does not focus on how presuppositions relate to a discursive model of conversation structure, but on the grammatical potential to incorporate certain markers encoding a speaker or hearer's assessment of the complement (e.g. by means of modal auxiliaries).

In what follows, I will in 2.1.3.1 present the distinction between the different entity types that linguistic expressions have been said to refer to (things, states of affairs, propositions, and utterances). This is relevant because factive complements have sometimes been considered to refer to states of affairs and sometimes to propositions. In 2.1.3.2 it will be shown how different entity types, and especially the contrast between states of affairs and propositions, have been correlated with a different potential for grammatical markers of speaker positioning. In the approach described here, factive complements are still defined as being presupposed true by the speaker, as in the logical semantic approach. The import of this definition is however very different. In the logical semantic approach, the presupposed truth of the complement was a precondition for the complex sentence to have a truth value. In the approach described in 2.1.3.2, the factive presupposition is instead associated with a reduced interpersonal structure for the complement: factive complements cannot be explicitly qualified by a speaker in terms of degrees of certainty or assessments of desirability statuses. That is, they cannot contain explicit grammatical markers of modal positioning, expressed by e.g. speaker-related modal auxiliaries such as *might* or *must* (see Chapter 4). The inability for linguistic expressions to contain markers of speaker-hearer positioning is a grammatical property that is considered to be characteristic of expressions referring to states of affairs, rather than propositions (see below).

2.1.3.1 Entity types

Vendler (1967: 122–146) notes that Strawson (1959) and Austin (1961) pose the question of how to distinguish between linguistic elements referring to "facts, events, situations, states of affairs" (Vendler 1967: 124), i.e. he poses the question of how to determine the entity type that a linguistic expression refers to. Based on his study of "nominalizations" (which includes deverbal nouns, gerunds, and finite complement clauses), Vendler proposes that *objects*, *events*, and *facts* can be distinguished on the basis of the way in which they can be qualified. Firstly, linguistic elements referring to objects (e.g. *tree*) can be qualified in terms of a perceptual property, e.g. being round or yellow (cf. 26a), or can be described in

terms of a (change of) location. As such, objects are characterized as entities that "are in space" (1967: 143).

(26) a. *The tree is big.*
b. *The tree is in the garden/was removed.*

Secondly, expressions referring to events can be qualified in terms of manner and punctuality, e.g. being slow or sudden, as in (27a), can be the object of direct perception, as in (27b), and they can be said to last or be located at a specific point in time, as in (27c). Thus, events are "primarily temporal entities" (1967: 144).

(27) a. *John's singing is slow.* (Vendler 1967: 137)
b. *I heard the singing of the Marseillaise.* (Vendler 1967: 138)
c. *John's singing of the Marseillaise occurred after midnight.* (Vendler 1967: 139)

Thirdly, and finally, linguistic expressions of facts can be qualified as being possible, unlikely, or certain, as in (28a), they can be paired with nouns such as *result* or *fact*, as in (28b), and can be the object of mention, denial, surprise or thought, as in (28c–d). Facts, then, "are not in space and time" (1967: 144); instead of referring to objects or events in space and time, facts are "*about* things in the world", in the sense of "talking about something" (1967: 145).

(28) a. *John's having sung the Marseillaise is unlikely.* (Vendler 1967: 134)
b. *It is a fact that John sang the Marseillaise.* (Vendler 1967: 136)
c. *That John sang the Marseillaise surprised me.* (Vendler 1967: 135)
d. *I think that John died.* (Vendler 1967: 127)

With this point, Vendler (1967) also reacts against the notion of logical presupposition (2.1.1), when it is interpreted as being necessarily true in the external world rather than in some possible world. As he puts it, "if the correspondence theory requires a relation between empirical statements and observable entities in the world, then facts are not qualified for this latter role", as they are not in the world, they are "*about* things in the world" (1967: 145–146, original emphasis).

The three-way distinction between objects, events, and facts is probably best known in linguistic theorizing due to Lyons (1977), who also refers to Strawson (1959) as an inspiration. Lyons essentially recognizes the same three entity types as Vendler did, and calls them first-, second-, and third-order entities. As Lyons

puts it, first-order entities typically refer to "physical objects" which are characteristically perceivable through the senses and located in "a three-dimensional space" (Lyons 1977: 443). Second-order entities refer to states of affairs, "which are located in time and … said to occur or take place" (Lyons 1977: 443). Third-order entities refer to "such abstract entities as propositions, which are outside space and time" (1977: 443). I will refer to these three entity types, as *things*, *states of affairs*, and *propositions*.

Halliday (1967b, 1968, 1985) also recognizes the idea that there is a difference in abstraction between things and states of affairs, which are located in space and time, and propositions, which are outside space and time. Halliday refers to things and processes as "*phenomen[a]* of experience" (1968: 194, my emphasis), while propositions are *metaphenomena*, i.e. "linguistically processed phenomena" (1968: 195). Phenomena (things and processes) are central to our experience of the material world. Metaphenomena (propositions) are of a semiotic nature; they represent meanings central to the grammar of consciousness.

Crucial for our purposes is that Halliday (1967b, 1968, 1985) adds a further distinction to Vendler's and Lyons' set of entity types. He systematically distinguishes between two types of metaphenomena, which he calls *facts* and *reports* (1968: 194). The distinction centers on the same phenomenon that Kiparsky & Kiparsky called factive and non-factive. Halliday's reports, or non-factive complements, are linguistic representations of what is said or thought. They occur with clauses referring to a verbal or mental process, as e.g. in (28d). These verbal or mental reporting clauses confer onto the reported clause the status of "a meaning created in [someone]'s consciousness" (1985: 248). Facts, or factive complements, most typically occur with clauses referring to an emotion, as in (28c), but also with some mental clauses e.g. in *He accepted that John sung the Marseillaise* or with relational clauses involving attribution or identification,[4] as in (28b). Like reports, facts are "projections" in Halliday's terms, i.e. they do not directly represent experience, but represent metaphenomena. Unlike reports, however, with facts "there is no … implication of a conscious participant that is doing the projecting. A fact … is an impersonal projection" (1985: 244); "the process [in the main clause] is not what projects them" (1985: 251). The import of Halliday's proposal of the semantic value of reports and facts will become clearer in the following chapters. What is essential at this point is that Halliday incorporates his analysis of factive (e.g. in (28c)) and non-factive (e.g. in (28d)) complements in his

4 I follow Halliday's (1985) terminology in distinguishing attributive and identifying relational clauses, which have also been referred to in the literature in terms of "predicative" vs. "identifying" copular clauses.

account of different entity types. It states explicitly that a distinction should be made between factive and non-factive "metaphenomena", where these are grouped together as facts by Vendler (1967), or as third-order entities by Lyons (1977).[5]

A fourth and final account of entity types is that of Functional Grammar (Dik 1989, 1997; Hengeveld 1989). Functional Grammar inherits the three entity types distinguished by Lyons, and refers to them as *individuals/spatial entities*, *states of affairs*, and *possible facts*. As the term "possible facts" suggests, Halliday's distinction between reports and facts is not fully maintained in Functional Grammar. The entity type includes both non-factive complements, e.g. as complements of a predicate expressing belief (29), and factive complements, e.g. as complements of a predicate expressing loss of knowledge (30). Moreover, they consider a subset of factive complements to refer to states of affairs, namely those that occur with emotive predicates such as *surprise* in (28c) (Dik 1997: 113).

(29) *John presumed that Mary was ill.* (Dik 1997: 106)

(30) *John forgot that Mary was ill.* (Dik 1997: 107)

On top of the three entity types inherited from Lyons, Functional Grammar includes a fourth entity type, that of speech acts, or *utterances*, which are inherently dependent on a specific deictic center (involving a specific speaker, interlocutor, and spatio-temporal setting) for their interpretation, and involve their own illocutions. The set of complement clauses that are considered to refer to represented utterances include non-factive complements of predicates of speaking, as in (31). As Dik (1997: 96–102) argues, this can be applied to both directly and indirectly reported complements.

(31) *John said that he was tired.* (Dik 1997: 100)

In sum, four different entity types can be distinguished: things, states of affairs, propositions, and utterances. Whether factive and non-factive complement

5 I do not intend to suggest that Vendler (1967) and Lyons (1977) are not aware that further subdistinctions can be made within their set of abstract entities outside of time and space. In fact, Lyons (1977: 446–447) stresses that the "threefold classification is not intended to be exhaustive. ... No attempt has been made to draw a distinction between various kinds of third-order entities: between psychological and non-psychological entities; between communicable and non-communicable entities; and so on. Distinctions of this kind must clearly be drawn if we are to use terms like 'fact' and 'proposition' ... with any degree of precision."

clauses should be seen as distinct entity types is a matter of debate. Vendler (1967), Halliday (1967b, 1968, 1985) and Lyons (1977) all suggest that factive and non-factive complements refer to their type of abstract entities (called facts, third-order entities, and metaphenomena respectively). Halliday, however, proposes to systematically distinguish between factive and non-factive complements within this type. Functional Grammar (Dik 1989, 1997; Hengeveld 1989), then, considers a subset of both factive (e.g. occurring with *grasp*) and non-factive complements (e.g. with *think*) to refer to propositions, a subset of factive complements (e.g. with *surprise*) to refer to states of affairs, and a subset of non-factive complements (e.g. with *say*) to refer to utterances. In the next section, I will turn to the way in which entity types have been correlated with differences in grammatical marking.

2.1.3.2 Interpersonal marking in complement clauses

2.1.3.2.1 Functional layers: grammatical restrictions on entity types

In Functional Grammar, each of the different entity types (things, states of affairs, propositions and utterances; see 2.1.3.1) is accorded a different grammatical potential. The different entity types are hierarchically structured, so that the higher entity types have the potential to contain each of the lower entity types, but not vice versa (utterances > propositions > states of affairs > things). This structure of increasingly narrowed down reference and grammatical complexity is called layered structure, with each layer defined in terms of its reference to an entity type paired with its concomitant grammatical potential. In the following, I will restrict myself to the grammatical differences crucial for the interpersonal notion of presupposition.

As regards complementation, Dik (1989, 1997) and Hengeveld (1989) propose that grammatical differences in the system of complementation can be explained on the basis of the distinct functional layers they are associated with. Examples (32), (33), and (34) contain complement clauses that are respectively considered to designate a state of affairs, a proposition, and an utterance in Functional Grammar.

Complements referring to a state of affairs are typically realized by a non-finite clause, such as *Peter feeding the cat* in (32a). States of affairs can amongst others be modified with respect to their frequency of occurrence, as in (32b), or in terms of their manner, as in (32c). They are restricted by their matrix predicates in terms of aspect and tense marking. A predicate of direct perception as in (32) restricts the complement to refer to a simultaneous state of affairs. The complement cannot, for instance, refer to a state of affairs anterior to the perception, as

in (32d). States of affairs can also not contain modal markers encoding the speaker's degree of commitment towards the state of affairs, as in (32e).

(32) a. *John saw Peter feeding the cat*. (Dik 1997: 112)
b. *John saw Peter feeding the cat again and again.*
c. *John saw Peter hastily/carefully feeding the cat.*
d. * *John saw Peter having fed the cat.* (Dik 1997: 112)
e. * *John saw Peter certainly feeding the cat.*

Complements as in (33), then, are said to refer to propositions in Functional Grammar. Crucially, these can contain epistemic modal markers such as *might* in (33a), which specify a conceptualizer's degree of commitment to the proposition. Complements referring to propositions do not show the same degree of tense or aspect restrictions (33b) as states of affairs.

(33) a. *people presumed that I might have something to do with all those rip-offs* (WB)
b. *people presumed that I had had/would have something to with all those rip-offs.*

Finally, complements referring to utterances as in (34) are characterized by the fact that they have the grammatical potential to formally encode differences in clause types, for instance a represented declarative as in (31), or a represented interrogative or exclamative as in (34a) and (34b).[6] Complements referring to utterances can also contain illocution modifiers such as *frankly* in (34c), which modify the way in which an utterance is made, rather than the content of that utterance.

(34) a. *John asked whether Mary was tired* (Dik 1997: 100)
b. *"Talk about keeping us on the edge of our seats!" he exclaimed.* (WB)
c. *The DAILY MAIL says ... that frankly, the prospects are not reassuring.* (WB)

6 See Nye (2013) for an excellent account of factive exclamative complements (e.g. *She discovered what a great person he was*) and factive resolutive complements (e.g. *He forgot when he had gotten married*) and their grammatical differences from (directly represented) non-factive exclamatives as in (34b) and from non-factive represented interrogatives as in (34a).

2.1.3.2.2 Functional layers: grammatical restrictions on factive complements

Now that the different entity types and their grammatical potential have been introduced, we can turn to the relevance of these distinctions for definitions of factive complements. It has been proposed that the different grammatical potential associated with different entity types (see the previous section) can explain differences in the grammatical behaviour of factive and non-factive complements by considering the interpersonal value of the factive presupposition: factive complements are said to be interpersonally reduced, in that they do not have the grammatical potential for speaker-related modal positioning in the complement.

Dik (1997: 109, 113) proposes that factive complements generally do not take speaker-related modal marking.[7] As the potential for speaker-related modal marking is a characteristic feature of propositions (cf. (33) above), distinguishing them from states of affairs (cf. (32) above), this approach suggests that factive complements are grammatically close to representing states of affairs.

Later proposals similarly suggest that factive complements do not allow speaker-related modal positioning (Verstraete 2002, 2007; Haegeman 2006, 2012). Both authors originally set out to explain cases of clause combining as in (35)–(37) whereby the secondary clause can be characterized as more "coordinate" or more "subordinate" depending on the grammatical potential of that secondary clause and its relation to the primary clause. With reference to the theories of entity types and functional layers outlined above (Lyons 1977; Hengeveld 1989) and the grammatical restrictions these may entail (see examples (32)–(34)), they propose that the traditional categories of adverbial subordinate clauses and coordinate clauses cover different semantic and formal subtypes, amongst others depending on whether or not they allow for explicit markers of speaker-related modal positioning (see Chapter 4).

(35) *Since this island, most especially that part remaining in gloriously multicultural Britain, has had centuries of cultural and ethnic diversity, we of all people should beware of regarding such diversity as being of itself a sign of superiority; for* ***might*** *not North Belfast then be our role model?* (WB)

7 Dik considers factive complements to disallow modal marking both when they are considered to refer to states of affairs (complements of emotive predicates e.g. *surprise*), as when they are considered to refer to propositions (complements of cognitive predicates such as *grasp*). By definition, states of affairs cannot be qualified by speaker-related modals in the layered model. Propositions can, which is why Functional Grammar stipulates that factive complements of cognitive predicates have a fixed epistemic certainty operator, i.e. they have a fixed grammatical value for epistemic modality.

(36) a. *I don't quite understand that because **surely** it **must** have been them that called in the police in the first place.* (WB)
b. *I don't quite understand that because **weren't they** the ones that called in the police in the first place?*

(37) a. *What did you do when you **came** back to Chicago?* (WB)
b. * *What did you do when **did you** come back to Chicago?*
c. * *What did you do when you **must** have come back to Chicago?*

Both authors would agree that the secondary clauses introduced by *for* and *because* in (35) and (36) have a different grammatical status from the secondary clause in (37a), as reflected by the fact that the former allow interrogative subject-verb inversion in the secondary clause (illustrated in (35) and in (36b)) and modal markers signalling an epistemic position anchored in the speaker-hearer interaction (in (35) and (36a)), whereas this is not possible in the case of (37a), as illustrated by the oddity of (37b, c).

Verstraete (2002, 2007) and Haegeman (2006, 2012) propose that this account might be extended to the factive-reported contrast. They argue that, much like in (35) and (36) above, reported complements allow modal positioning as in (38) and even interrogative subject-verb inversion in directly reported speech as in (39).

(38) *But one former colleague Yuri Modin, who controlled the Cambridge spy ring of Philby, Burgess Maclean, Blunt and Cairncross, said that Strelnikov **must** have been an accomplished spy to spend 10 years at the embassy in London.* (WB; Verstraete 2007: 288)

(39) *He said **do you know** I've told her all about all Around the World for four hours and she listened to ... and she listened to every word.* (WB; Verstraete 2007: 288)

They contrast this with factive complements as in (40), which are proposed to be unable to show amongst others interrogative subject-verb inversion (41), or to contain speaker-related modal auxiliaries (42) or modal adverbs (43) indicating degrees of certainty (see Chapter 4).

(40) *The Slovaks have always resented that most of the decision-making took place in Prague.* (WB)

(41) * *To this day he regrets that* ***was(n't) the disappearance*** *of granny and grandpa into the old people's homes one of the unanticipated side effects.* (Verstraete 2007: 288)

(42) *? To this day he regrets that one of the unanticipated side effects* ***must*** *have been the disappearance of granny and grandpa into the old people's homes.* (Verstraete 2007: 288)

(43) * *John regrets that Mary* ***probably/obviously/unfortunately*** *did not attend the meeting.* (Haegeman 2006: 1664)

Haegeman (2006: 1663–1666) and Verstraete (2002, 2007: 101–102, 287–289) present this extension of their account of the internal interpersonal structure of secondary adverbial and coordinate clauses to the domain of complement clauses as a hypothesis for further research. As Verstraete mentions, one reason why complement clauses as in (38)–(40) deserve separate treatment is because they involve not one, but "two levels of interaction (current and represented interaction)" (2007: 102). While the modal positioning and the effect of the interrogative in (35) and (36) can be anchored directly in the interaction of the current speaker and hearer, the description of the internal interpersonal structure of complement clauses as in (38)–(40) is more complex, since the modal and speech functional contrasts expressed by the modal verb and the interrogative word order in (38) and (39) instead relate to the represented speaker and hearer. It is the central aim of Chapter 4 to subject their hypothesis of a reduced interpersonal structure in factive complements to empirical verification, and to examine the relation to the current and represented levels of speaker- and hearer-interaction.

In short, the proposal of what I refer to as the interpersonal account of the factive presupposition maintains the traditional definition which states that factive complements are presupposed to be true by the speaker. The difference from the logical semantic (2.1.1) and pragmatic (2.1.2) approach, however, is that this presupposed truth is translated into a grammatically reduced status for a factive complement clauses: unlike non-factive complements, factive complements do not have the grammatical potential to encode speaker-hearer positioning.

2.1.3.2.3 Asserted complement clauses and main clause phenomena

An important precursor for the interpersonal approach was the highly influential work of Hooper & Thompson (1973) and Hooper (1975). They propose a distinction between asserted and non-asserted complement clauses, based on differences in grammatical potential. The central point is that some complement clauses, which

Kiparsky & Kiparsky would consider non-factive, show grammatical behaviour characteristic of main clauses.

Hooper & Thompson point out that non-factive complements allow so-called main clause phenomena or "root transformations" (see Heycock 2006 for an overview), which Emonds (1969) originally proposed to be restricted to main clauses. The examples in (44) and (45) give two examples of main clause phenomena that produce emphasis by placing a verb phrase or negative polarity item in a position before the subject and the auxiliary. The main clause phenomena are said to be allowed for non-factive complements of predicates of speech or thought (in the a, b examples), but not for factive complements of predicates expressing emotions (in the c examples).

(44) VP preposing
   a. *Sally plans for Gary to marry her, and he vows that* ***marry her*** *he will* (Hooper 1975: 99)
   b. *Sally plans for Gary to marry her, and it seems that* ***marry her*** *he will* (Hooper 1975: 99)
   c. * *Sally plans for Gary to marry her, and he resents the fact that* ***marry her*** *he will* (Hooper 1975: 120)

(45) Negative constituent preposing (with subject-auxiliary inversion)
   a. *I exclaimed that* ***never in my life had I*** *seen such a crowd.* (Hooper & Thompson 1973: 474)
   b. *when Brodrick's friend ... had seen Lily for the first time at a luncheon, she had thought that* ***never in her entire life had she*** *encountered such a dreadful face* (WB)
   c. * *He was surprised that* ***never in my life had I*** *seen a hippopotamus.* (Hooper & Thompson 1973: 479)

The phenomenon Hooper & Thompson and Hooper consider criterial for identifying asserted clauses is the possibility for "complement preposing", illustrated in (46).

(46) Complement preposing
   a. *I think the wizard will deny your request.* (Hooper 1975: 94)
   b. *The wizard,* ***I think****, will deny your request.* (Hooper 1975: 94)
   c. *He wants to hire a woman,* ***he says****.* (Hooper 1975: 94)
   d. * *It was difficult to make ends meet,* ***they regretted****.* (Hooper 1975: 116)

In the case of complement preposing, the subject-predicate combination which forms the main clause in examples such as (46a) is placed in a position within a clause (46b) or appended to a clause (46c) that could function as its complement. Complement preposing is again predicted to be possible with non-factive complements of predicates of thought (46b) or speech (46c), but not with factive complements of predicates of emotion, as in (46d).

This phenomenon is said to show that complement clauses as in (46a) are assertions, because "the effect of complement preposing is to make the complement proposition the main assertion of the sentence, while reducing the original main clause to parenthetical or secondary status" (Hooper 1975: 95). Their point is thus that if non-factive complements can alternate between a status as main clauses (46b, c) or as complement clauses (46a), this shows that they are asserted.

As a final example, consider (47). Hooper (1975: 111–112) notes that complements of predicates of thought (47a) or speech (47c) can fall within the scope of a speaker-related adverbial in the main clause. Thus, in (47a), she proposes that it is not the mental process of thinking that is qualified as fortunate, but the assertion made in the complement clause. Similarly in (47b), the sentence adverbial *oddly enough* can qualify the assertion made in the complement clause *it is raining*. By contrast, the sentence adverbial can only qualify the main clause with factive complements as in (47c). Let me add the point that such sentence adverbs can also be placed *within* the non-factive complement clause, as in (47d); see also (34c) above.

(47) Within scope of sentence adverbial
   a. ***Fortunately**, I think he's already gone*. (Hooper 1975: 111)
   b. ***Oddly enough**, he says it's raining*. (Hooper 1975: 112)
   c. ***Oddly enough**, he resented that he was nominated for the award*.
   d. *I'm not sure I would be quite as minimal as to my interpretation of the role of Radio Sawa and Alhurra. I think that **frankly** we need so many different elements. We're dealing with a billion people in the Islamic world, we're dealing with close to a billion people in the West*. (WB)

What is the relevance of the potential for this type of phenomena to appear with certain types of complement clauses?[8] Haegeman (2006, 2012) considers main

8 Heycock (2006) points out that the set of main clause phenomena might be in need of subdivision to properly account for its functions. See also Verstraete (2007: 178–181), who divides them into phenomena (i) related to illocutions (e.g. the potential for interrogatives in the complement)

clause phenomena together with the potential for speaker-related modal markers, which was touched upon in the previous section (2.1.3.2.2). In her view, this supports the claim that factive complements are grammatically reduced complement clauses, because they "lack speaker deixis"; they "do not encode anchoring to a speaker" (2006: 1665).

On another account, main clause phenomena have explicitly been related to the potential for the complement clause to carry illocutionary force. Andersson (1975) proposed that main clause phenomena can occur in clauses that can realize utterances, e.g. by asking a question or by giving an order. This is amongst others supported by the fact that the potential for speaker-related adverbs such as *frankly* and *fortunately* in (47) are in Functional Grammar considered to be restricted to complements referring to the entity type of utterances (see (34) above). The distinct behaviour of non-factive and factive complements with respect to main clause phenomena can in this sense be taken to suggest that non-factive complements of speech and thought behave alike in that they have the potential for illocutionary force, i.e. their complements can refer to utterances (see 2.1.3.2.1). Factive complements, by contrast, cannot carry illocutionary force and can thus at most refer to propositions. This contrast, between non-factive complements that can have illocutionary force, and factive complements that cannot, has later been proposed to be central to the definition of factivity: de Cuba & Ürögdi (2010: 45) propose that true factive complements cannot introduce "a non-referential semantic object denoting a speech act, i.e. an unresolved proposition or an open question" (2010: 45). I agree with the idea that factive complements do not have illocutionary force, though it is not the central feature by means of which I define the contrast between factive and non-factive complements.

Finally, examples such as (46a–c) have also been taken as central arguments to argue for a radically interpersonal account of the function of main clauses. The examples in (46) show that the content of the complement clause can form the main point of the utterance, with subject-verb combinations such as *I think* or he says serving mainly to modify that content as hedges or markers of information source. Diessel & Tomasello (2001) argue that such non-descriptive, "formulaic" functions of traditional main clauses are the first function of complex sentences

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and (ii) related to speaker emphasis, and also indirectly, to modality (e.g. the preposing phenomena in (25) and (26)): a clausal environment that allows for speaker-related modal positioning is presented as challengeable in an interaction between a speaker and a hearer, and by consequence implies a discursive status of foregrounded information within that interaction. (Verstraete 2007: 180).

that is acquired by children. Thompson (2002) looks at complement-taking predicates (CTPs) and finite complements in spoken data and argues that "what speakers are doing with complement utterances is expressing stance or negotiating alignment with one another (what we vernacularly call arguing, agreeing, and disagreeing) with respect to some issue, where the issue being discussed is in the complement and the stance the speaker is taking toward that issue is expressed by the CTP and reference to onseself" (2002: 152); in other words, the function of what is traditionally considered a main clause in conversation is to express "epistemic, evidential, or evaluative stance" (2002: 132).

McGregor (1997, 2008) and Verhagen (2005) argue more broadly that the function of complement-taking predicates is an interpersonal one. According to McGregor and Verhagen, complement-taking predicates do not constitute representations of events, and complement clauses do not function as objects that have participant roles in these events. Instead, the function of complement-taking predicates is to specify how the content of "the complement clause is to be 'taken' interactively" "in the speech event" (McGregor 2008: 27), or, as Verhagen (2005: 79) puts it, "the matrix clause of a complementation sentence invites an addressee to identify with a particular perspective on an object of conceptualization that is itself represented in the embedded clause". The choice of matrix predicate, then, is what according to Verhagen (2005: 80) "allow[s] the speaker/writer to suggest various degrees of identification with the perspective that is 'put on stage' " and can be taken to explain the different argumentative interpretation of factive complements (2005: 117). The distinct grammatical status of factive complements is not really explained on these accounts. In what follows, I will argue that to fully account for the form-function relationships of the factive-reported distinction, we need an account that explains complementation constructions both in terms of their representational and interpersonal semantics (see 2.1.4).

2.1.4 The alternative approach: representational and interpersonal semantics

In the previous sections, I have given a concise description of (at least) three different views on the notion of presupposition. Over-all, it has been claimed that a factive complement clause (i) refers to a proposition that must hold true in order for the sentence containing it to have a truth value (2.1.1), (ii) contains information that is presented as given in the common ground between speaker and hearer (2.1.2), or (iii) is a grammatically reduced clause in that it cannot incorporate explicit speaker-hearer positioning (2.1.3). I have referred to these different

notions in terms of logical presupposition, pragmatic presupposition, and reduced interpersonal structure respectively.

In the following chapters, I will propose an alternative approach. It relies on a distinction between two facets of factive complementation constructions, involving their representational semantics and interpersonal semantics respectively.

The first facet of the factive presupposition relates to the level of the representational content of the matrix clause situation. The notion is inspired by Givón (1973) and Davidse (2003). Givón argued for a definition of presupposition "for which the time-axis is relevant" (1973: 907). This means that presuppositions can be defined relative to the situation type described by the matrix predicate. Givón proposed that presuppositions temporally precede the situation described by the (matrix) predicate, whereas entailments follow the described situation. Note that in contrast to prior approaches, this notion of presupposition is not defined in terms of a notion of truth, but in terms of being temporally prior or consequent to the main clause situation.

Davidse explicitly deals with the contrast between factive and reporting constructions. She proposes that factive complements are always "pre-existent to the relation in which [they] participate" (2003: 126), i.e. to the main clause situation. She further contrasts this to the semantics of reported speech and thought complements, which are created by the speech/thought act itself (Davidse 1994; Vandelanotte & Davidse 2009: 786). I build on these proposals in Chapter 3, where I propose an aspectual-semantic analysis of the situation described by factive and reporting matrices. I further show how the representational semantics of the main clause correlates with the distinct semantic and grammatical status of the complement in each of the two construction types.

The second facet of the factive presupposition relates to the level of interpersonal semantics, which deals with the way in which the communicative role of speaker and hearer is construed with respect to the representational content (Halliday 1970). It consists of a critical investigation of the claim that factive complements cannot contain grammatical markers of speaker-hearer positioning (see 2.1.3.2.2), i.e. the claim that they cannot be qualified in terms of degrees of epistemic likelihood, or in terms of a deontic position of desirability. I investigate the empirical validity of these claims in Chapter 4, where I set out my analyis of (i) the source of commitment to the content of the complement clause, and (ii) the potential for explicit modal qualification by means of speaker-hearer related modal auxiliaries. I further point out how differences in the interpersonal semantics of factive and non-factive constructions can be predicted from their representational semantics.

In short, I study two aspects of presupposition: the first one is relevant to the time-axis of the matrix situation (Givón 1973). The second one involves the commitment to (a modal stance in) the complement proposition, and is generally considered as "speaker-based" (Field 1997: 801). Givón (1973) and Field (1997) explicity proposed to systematically distinguish between two such definitions of presupposition, i.e. those that rest upon the relation to the semantics of the matrix predicate, and those that involve the notion of speaker commitment. However, in as far as I know, the possibility of an integrated two-faceted description along these lines, which explains each of the two notions individually besides explaining how they are interrelated, has not yet been explored. To do so will be my main objective.

2.2 Factive complement clauses as nominalized clauses

Kiparsky & Kiparsky (1970) correlate the semantic distinction between complements that are presupposed true by the speaker, and complements that are not, to a range of grammatical behaviour and grammatical alternates that tend to occur distinctively either in factive or in non-factive complementation constructions. Tables 2 to 4 are intended to give the reader an idea of these grammatical features. The tables illustrate a selection of phenomena, based on Halliday (1968), Kiparsky & Kiparsky (1970), Hooper (1973), Halliday & Hasan (1976) and Vandelanotte & Davidse (2009).

I grouped the grammatical phenomena into three sets, depending on whether they relate to (i) the potential for grammatical elements of main clauses to scope over (elements of) the complement clause (Table 2), (ii) the word order patterns that the complements allow (Table 3), and (iii) the alternate constructional patterns by means of which the complement clause can be expressed (Table 4). In the next two sections, I briefly point out how these grammatical phenomena have been dealt with in formal approaches (2.2.1) and in functional approaches (2.2.2). The two approaches essentially agree that unlike non-factive complements, factive complements are clearly nominalized clauses.

The main exception to this in the literature seems to relate to a more general view that finite complements should not be analyzed in parallel to noun phrase arguments, as finite complements have been argued to lack the critical formal marking, distributional and word order patterns characteristic of core objects (e.g. Huddleston & Pullum 2002: 1014–1022; Verhagen 2005: 81–94; McGregor 2008). These accounts usually do not address the different grammatical status of factive and non-factive complements. I will take the view that it is revealing to

highlight, besides the differences, the parallels between clausal and phrasal categories that occur in similar distributional contexts (in line with e.g. De Smet 2010 for the analysis of non-finite gerundial clauses in English). This will be particularly important for my analysis of the representational semantics of complement-taking predicates in Chapter 3.

Tab. 2: Factive and non-factive complements: scopal differences

Factive complements	**Non-factive complements**
unaffected by main clause negation *John regrets/doesn't regret that the door is closed.* (Kiparsky & Kiparsky 1970: 150)	affected by main clause negation *He thought/didn't think I'd make it.* *He said/didn't say I'd make it.*
no neg-raising *I regret that he can't help doing things like that* *≠ I don't regret that he can help doing things like that.* (Kiparsky & Kiparsky 1970: 162)	negation of the complement clause can be "raised" to the main clause *I believe that he can't help doing things like that* *≈ I don't believe that he can help doing things like that* (Kiparsky & Kiparsky 1970: 162)
certain types of complement NPIs not licensed by main clause ** He didn't regret that he'll be finished **until next month***	main clause negation licensing complement negative polarity items *the decorator does**n't** think he'll be **finished until next month*** (Hooper 1975: 107)
unaffected by main clause interrogation *Are you dismayed that our money is gone?* (Kiparsky & Kiparsky 1970: 151) => interrogation can only apply to emotional reaction	affected by main clause interrogation *Did you think/say your money was gone?* *(– Only my camera.)* => interrogation can apply to (part of) the complement clause
no main clause phenomena (MCP) ** It was difficult to make ends meet, they regretted* (Hooper 1975: 116)	allow MCP e.g. complement preposing *The wizard, I think, will deny your request.* (Hooper 1975: 94) *He wants to hire a woman, he says.* (Hooper 1975: 94)
not within the scope of illocution modifiers *Oddly enough, he resented that he was nominated for the award.*	within scope of illocution modifiers *Fortunately, I think he's already gone* (Hooper 1975: 111) *Oddly enough, he says it's raining* (Hooper 1975: 112)

Tab. 3: Factive and non-factive complement clauses: word order tendencies

Factive complements	**Non-factive complements**
ok in sentence-initial position *That John has come makes sense* (Kiparsky & Kiparsky 1970: 167)	marked in sentence-initial position * *That John has come seems* (Kiparsky & Kiparsky 1970: 167)
ok as subjects in passives *That the earth was spherical had been accepted by all informed opinion* (WB)	marked in subject position in passives ? *That Caesar was ambitious was thought/said by Brutus* (Halliday 1985: 244) * *That I would break my nails was laughed by them.*
fronted complement clause ok but marked (Vandelanotte & Davidse 2009: 783) *He disliked lies. …* ***That they were necessary for his work*** *he accepted, but never before had his work involved those close to him.* (WB)	fronted complement clause not marked as quote (Vandelanotte & Davidse 2009: 782) ***That all of this oil field "Initially, we were planning on going in this morning,"*** *Captain Shawn Blodgett said yesterday.* (WB)
can be focus of an *it*-cleft *It was that they were late that they regretted* (Halliday 1968: 194)	marked as focus of an *it*-cleft ? *It was that they were late that they said* (Halliday 1968: 164)

Tab. 4: Factive and non-factive complement clauses: constructional alternate tendencies

Factive complements	**Non-factive complements**
noun *fact* + sentential complement clause *I want to make clear the fact that I don't intend to participate.* (Kiparsky & Kiparsky 1970: 145)	no insertion of *fact* * *I assert the fact that I don't intend to participate.* (Kiparsky & Kiparsky 1970: 146)
gerund complements *I regret having agreed to the proposal* (Kiparsky & Kiparsky 1970: 146)	no gerund complements * *Everyone supposed Joan's being completely drunk* (Kiparsky & Kiparsky 1970: 146)
noun phrase alternate *Mark Anthony regretted the fact that Caesar was dead.* *Mark Anthony regretted Caesar's death.* (Halliday 1985: 245)	no noun phrase alternate * *Mark Anthony said/thought Caesar's death.*
object extraposition ("anticipatory it")	no object extraposition

Factive complements	Non-factive complements
They didn't mind it that a crowd was beginning to gather (Kiparsky & Kiparsky 1970: 165)	* *They supposed it that a crowd was beginning to gather* (Kiparsky & Kiparsky 1970: 165)
pronominal *it*, pronominal *this/that* *John regretted that Bill had done it, and Mary regretted it too* (Kiparsky & Kiparsky 1970: 166; see also Halliday 1967b: 240; Halliday & Hasan 1976)	pronominal *it* *John supposed that Bill had done it, and Mary supposed it too* (Kiparsky & Kiparsky 1970: 166)
no pronominal *so* * *John regretted that Bill had done it, and Mary regretted so too* (Kiparsky & Kiparsky 1970: 166)	pronominal *so*, pronominal *not* *John supposed that Bill had done it, and Mary supposed so too* (Kiparsky & Kiparsky 1970: 166) *Ought we to declare our winnings? – It says not* (Halliday & Hasan 1976: 133)
no accusative and infinitive construction * *I resent Mary to have been the one who did it* (Kiparsky & Kiparsky 1970: 146)	accusative and infinitive construction *I believe Mary to have been the one who did it* (Kiparsky & Kiparsky 1970: 146)
directly represented alternate * *Mary resented: John was late.* (Halliday & Hasan 1976: 132)	directly represented alternate *Mary said/thought: John's late* (Halliday & Hasan 1976: 132, see also Halliday 1968: 194)

2.2.1 Formal approaches

To explain the grammatical behaviour of factive and non-factive complements, Kiparsky & Kiparsky (1970) proposed to formalize the structure of the two types of complement clauses as follows. Factive sentential (S), i.e. finite, complements have a head noun *fact* in their underlying structure, as represented in Figure 1. Non-factive sentential complements, by contrast, are said to be directly selected by the predicate, as in Figure 2.[9]

9 At the time of Kiparsky & Kiparsky's paper, complement clauses were still generally formalized as noun phrase constituents that are complements of the matrix predicate.

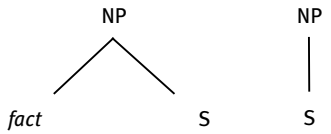

Fig. 1 and 2: Structure of factive (on the left in Fig. 1) and non-factive (on the right in Fig. 2) complements (Kiparsky & Kiparsky 1970: 157)

This means that Kiparsky & Kiparsky consider clauses preceded by the noun *fact* as in (48) to be the primary realization of factive complements. In line with the transformational framework current at the time, Kiparsky & Kiparsky propose a number of transformations by means of which other formal realization patterns (cf. Table 4) can be derived, e.g. that of leaving the head noun *fact* implicit, which would give an example as in (49).

(48) *As he felt the small weight of the enameled miniature case in his coat pocket, Nick briefly regretted the fact that he would have to return it to Radnor.* (WB)

(49) *Nick regretted that he would have to return the case to Radnor.*

This omission of *fact* is proposed to account for the realization pattern of factive complements as simple *that*-clauses. Another proposed transformation involves the reduction of *fact* to a pronoun *it*, which would give an example as in (50).

(50) *Nick regretted it that he would have to return the case to Radnor.*

The structural pattern in (50) is commonly referred to as object extraposition in the literature, because the complement clause is placed at the end of the sentence, while a co-referential pronoun *it* occupies the position in the clause that is associated with direct objects (see Chapter 5).

Kiparsky & Kiparsky further propose that the structure formalization in Figure 1 captures the distinct grammatical behaviour of factive complements with respect to scopal elements in the main clause (see Table 2). For example, Kiparsky & Kiparsky (1970) note that non-factive complements allow a so-called negative-raising transformation, by means of which negation of the complement clause is more or less equivalent to negation of the main clause. The two sentences in (51), for instance, are said to have a similar interpretation. This is not possible for factive complements, as illustrated in (52).

(51) *I believe that he can't help doing things like that*
≈ I don't believe that he can help doing things like that
(Kiparsky & Kiparsky 1970: 162)

(52) *I regret that he can't help doing things like that*
≠ I don't regret that he can help doing things like that
(Kiparsky & Kiparsky 1970: 162)

Kiparsky & Kiparsky (1970: 161) suggest that this is due to the "Complex Noun Phrase Constraint" proposed by Ross (1967), which stipulates that elements cannot be moved out of a clause when this clause is headed by a noun (as in Figure 1). This rule is taken to account generally for the "syntactic insulation of factive clauses" (1970: 159) as opposed to the accessibility of non-factive clauses to scopal expressions (but see Norrick 1978: 23–27 for criticism on this tranformational account).

More recent formal approaches (Haegeman 2006, 2012; de Cuba 2007; de Cuba & Ürögdi 2010) propose that a different formalization is more adequate. The formalization proposed by Kiparsky & Kiparsky (see Figure 1) suggested that factive complements have a noun phrase head, while non-factive complements are directly selected by the predicate. This gives factive complements "more structure", because they have an additional element causing recursion in their underlying structure. The new proposal, then, is that factive complements represent the "default", which should be reflected in a less complex structure. Haegeman and de Cuba & Ürögdi claim that non-factive complements have more functional structure because they can have illocutionary force and speaker deixis (see 2.1.3 above). They propose that factive complements are directly selected by the predicate, while non-factive complements are headed by a functional operator which predicts its non-factive interpretation, and gives it the potential for main clause or illocutionary phenomena (see Table 2). I aim to give a cognitive-functional account of the factive-reported distinction, and will not explore this issue further.

2.2.2 Cognitive-functional approaches

Cognitive-functional approaches have shown that, unlike non-factive complements, factive complements occur in word order patterns characteristic of true arguments of the verb (cf. Table 3). Their distinct grammatical behaviour was further correlated with a difference in their syntagmatic relation to the main clause. In this section, I will briefly summarize these two points.

Halliday (1968: 194) pointed out that "a fact can take on all the potentialities open to nominals in the theme systems, whereas a report is more restricted" (1968: 194).[10] He illustrates the different thematic possibilities of facts and reports in the environment of an *it*-cleft: factive complements can occur as the focus in an *it*-cleft, as in (53), while non-factive complements cannot, cf. (54) (Halliday 1968: 194–195).

(53) *it was that they were late that he regretted* (Halliday 1968: 195)

(54) *? it was that they were late that he said* (Halliday 1968: 195)

A second contrast he notes is that factive complements occur as subjects of a passive clause with agent (cf. (55)). Non-factive complements normally do not normally occur as subjects of a passive (cf. (56)), unless they receive a special interpretation in the sense of "these lines were spoken by…" (Halliday 1985: 244).

(55) *Contrary to one hoary myth, hardly any informed medieval Europeans were flat-earthers.* ***That the earth was spherical*** *had been accepted by all informed opinion since ancient times.* (WB)

(56) ***That Caesar was ambitious*** *was thought/said by Brutus*
(Halliday 1985: 244)

Davidse (1994: 263) pointed out that reporting constructions can even have strictly intransitive matrix predicates, e.g. *laugh* in (57), which do not allow passivization (cf. (58)). Factive clauses can moreover also function as subjects in the active, as in (59).

(57) *"At first the men didn't want me," says Angalene Kotze, who ran a mining house switchboard before being certified to analyze rock samples. "They laughed* ***that I would break my nails****."* (WB)
*– * What did they laugh?*

(58) **** That I would break my nails*** *was laughed by them.*

10 Halliday's theme-rheme system revolves around different word order patterns, and includes construction types which involve a marked word order (e.g. clefts, extraposition, inversion).

(59) ***That his side had to resort to such measures against a team from the opposite end of the table*** *must have unsettled McCall* (WB)

The fact that factive complements can occupy positions as true subjects and direct objects shows that they have undergone conceptual reification, i.e. that they function as nominalized clauses (Langacker 1991: 34–35, 148). Also semantically, factive complements have been characterized as true participants with respect to the situation described in the verb (Halliday 1985: 251; Langacker 1991; Davidse 1994). As Langacker (1991: 35) puts it, a factive complement is "construe[d] ... as an abstract object or proposition capable of being manipulated, evaluated and commented on. Instead of being asserted, this proposition is taken as one participant in a higher-order relationship (e.g. a relationship of belief, denial, evaluation, etc.)". In terms of syntagmatic relations, it has therefore been proposed that factive complements are true constituents of their matrix verbs, embedded in a nominal slot (Halliday 1985: 251; Davidse 1994; Vandelanotte & Davidse 2009).[11]

For non-factive clauses, it was shown that they do not normally function as subjects in a passive clause as in (56) or (58), at least not in the sense of reporting speech or thought (Halliday 1985: 244), and that they occur with intransitive matrix verbs as in (57) (Davidse 1994).[12] Moreover, the commitment to the content of a reported proposition, as well as the speech functional assignment of the responsibility for that content (which differs for instance in the case of a represented declarative versus a represented interrogative) both fall within the intensional domain created by the whole reporting clause (Davidse & Vandelanotte 2011).[13] As illustrated in (60a), it is the represented cognizer *they*, expressed in the matrix subject, with respect to which the declarative proposition that "a deposit was held in the Channel Islands" must be interpreted. As Davidse & Vandelanotte

11 As pointed out in 2.1.3.2.3, McGregor (2008) holds a different view, namely that complementation constructions generally involve interclausal syntagmatic relations, whereby the main clause expresses how the complement clause should be taken interactively (cf. also Verhagen (2005)).

12 As noted by Davidse (1994), Munro (1982) presents evidence that cross-linguistically, verbs of quoting in the matrix of non-factive complement constructions tend to be intransitive.

13 Davidse & Vandelanotte (2011) trace the notion of intensional domains back to Rigter (1982: 96), who distinguishes such interpretive domains on account of having their "own set of presuppositions and truth conditions". Davidse & Vandelanotte propose to replace this truth functional definition by a speech functional one, so that it "attributes both the illocution and the propositional content with all its presuppositions to the represented, rather than the actual, speaker. Intensional domains are not just created by reported statements, but by the full array of illocutions that can be reported, including questions and commands" (2011: 241). It is the latter definition of "intensional domains" that is assumed here.

(2011: 241) argue, a speech functional definition of intensional domains also captures that in (60b), the responsibility for the assessment of "whether the sick man might have eaten tainted food …" is transferred to an interlocutor in the represented speech situation.

(60) a. *they wrongly believed that, as a trust they held was in the Channel Islands, their deposit was also there.* (WB)
b. *she inquired whether the sick man might have eaten tainted food or some poisonous plant* (WB)

By contrast, factive complements as e.g. in (59) are traditionally defined as presupposed true by the actual speaker; the commitment to the complement proposition is not similarly seen to be restricted to represent that of the represented conceptualizer in the main clause (see Chapter 4). These various arguments suggest that unlike factive complements, non-factive complements cannot be seen as true constituents of their matrix verbs, on a par with the subject. Instead, non-factive complement constructions are probably best analysed as involving an interclausal relationship, whereby the non-factive clause is a complement of whole reporting clause [S+V], not of the reporting verb in itself (Vandelanotte 2008; Vandelanotte & Davidse 2009; cf. Halliday 1994; McGregor 1997).

2.3 The matching problem: complement types and complement-taking predicates

As Michael Noonan puts it, "[c]omplementation is basically a matter of matching a particular complement type to a particular complement-taking predicate" (2007: 101). This section deals with the question of how the two distinct grammatical paradigms discussed in section 2.2 have been tied up with specific semantic classes of complement-taking predicates. While the earlier approaches can be characterized as head-based, with the lexical predicates determining entirely which type of complement they select, more recent approaches acknowledge the importance of the grammatical semantics of the constructional patterns themselves.

Kiparsky & Kiparsky (1970) proposed that factivity is a lexico-semantic property, which is due to the choice of main clause predicate. They propose a list of lexemes which qualify as "factive predicates", e.g. *regret* or *grasp*, which trigger the presupposition of their complements, and a list of "non-factive predicates", e.g. *think* or *claim*, which do not. They further point out that certain predicates, e.g. *announce*, or *admit*, occur with constructional alternates of both the factive

and the non-factive paradigm. With respect to this, they state that "such verbs have no specification in the lexicon as to whether their complements are factive" (1970: 163).

Later work has nuanced this position, by making clear (i) that certain semantic classes of predicates, rather than particular lexemes, are associated with factive or non-factive complements, and (ii) that some complementation constructions are not strictly either factive or non-factive, but rather in-between the factive and non-factive complementation types.

The first point involves the identification of specific semantic classes of predicates that are associated either with factive or with non-factive complementation constructions. Karttunen (1971) was influential in this respect. He noted that within factive constructions, a distinction should be made between two types of predicates, which he dubs "true factives" and "semi-factives". In the first set, he groups verbs like *regret* and *resent*. These predicates, he says, always take complements that are presupposed to be true (see 2.1.1). The standard tests for logical presupposition predict that the content of the complement is presupposed true irrespective of main clause negation, interrogation, or in the context of a conditional. By means of examples (61) and (62), he illustrates that the truth presupposition of a complement to the verb *regret* is maintained with the logical operators of interrogation and conditionality.

(61) *Did you regret that you had not told the truth?* (Karttunen 1971: 63)

(62) *If I regret later that I have not told the truth, I will confess it to everyone.* (Karttunen 1971: 64)

He further shows that this is not the case for verbs like *see*, *notice*, and *discover*, as e.g. in (63) and (64): for these predicates, the truth presupposition is not necessarily maintained in the context of an interrogative or conditional. Thus, the speaker uttering (63) or (64) need not be committed to the veracity of the proposition that "he has not told the truth".

(63) *Did you discover that you had not told the truth?* (Karttunen 1971: 63)

(64) *If I discover later that I have not told the truth, I will confess it to everyone.* (Karttunen 1971: 64)

While Karttunen still selects specific verbs to make his point, Hooper & Thompson (1973) already translated this distinction to predicates that "express some

emotion or subjective attitude about a presupposed complement" (1973: 479) and those that express "the manner in which the subject came to know that the complement proposition is true" (1973: 480). I will propose a semantico-aspectual motivation for the different behaviour of emotive and cognitive factives in Chapter 3.

For non-factive constructions, Hooper (1975) proposes that her "assertive predicates" (see 2.1.3.2.3) form a "natural semantic class" in that "they imply in one manner or another that the speaker or subject of the sentence has an affirmative opinion regarding the truth value of the complement proposition" (1975: 95). She identifies two semantic subclasses within this group, those that "describe a[n affirmatory] verbal act with regard to the complement proposition", and those that "describe a mental act, process or attitude regarding the truth of the complement proposition" (1975: 95). In other words, she explicitly relates non-factivity with predicates expressing reported speech (e.g. *say*) and predicates expressing reported thought (e.g. *think*). The class of reporting predicates has further been elucidated by linking them to the abstract semantics of the creation of an utterance in a speech or thought act (Davidse 1994, 2003; Vandelanotte & Davidse 2009). I will discuss this account at length in Chapter 3, as it allows us to reveal the underlying motivation for why this class of predicates is associated with a different complementation construction than the emotive and cognitive class of predicates mentioned above.

Hooper & Thompson (1973: 478–479) and Hooper (1975: 112) further distinguish a small subclass of predicates which do not fully belong in their set of reporting predicates or factive predicates. The relevant predicate type describes a verbal act but is combined with a negative element, which may or may not be lexically incorporated in the predicate. They cite *deny*, *doubt*, or *not say* as examples. In their view, the negative element has the consequence that the proposition in the complement is not "asserted" (see 2.1.3.2.3), which is taken to explain why this class of predicates forms a separate set. I agree that such a semantic class in between factive and reporting predicates should be distinguished, and will do so in Chapter 3. I do not, however, see negation as a necessary requirement, and will thus propose a different description of what defines this class of predicates.

In fact, my analysis of the semantic class that is in-between factive and reporting predicates turned out to be much closer in spirit to Cattell's (1978) analysis. Cattell distinguishes between volunteered-stance verbs (e.g. *claim*, *think*) as in (65a), response-stance verbs (e.g. *agree*, *verify*, *deny*) as in (65b), and non-stance verbs (*forget*, *mention*, *doubt*, *regret*) as in (65c).

(65) a. *Why do they think (that) Sue killed Harry?* (Cattell 1978: 69)

b. *Why do they deny (that) Sue killed Harry?* (Cattell 1978: 69)
c. *Why did Richard comment that Sue killed Harry?* (Cattell 1978: 69)

His main objective is to explain in which contexts certain interrogative adverbs (e.g. *why*, *where*, *when*) positioned in the main clause can apply either to the content in the main clause, or to the content of the complement clause. He identifies the class of main clause verbs that allow for this ambiguity, e.g. *think* in (65a) as what he calls positive volunteered-stance verbs.

For the semantic characterization of predicates, he draws not on the notion of assertion, but on the notion of the relation of complement propositions to the conversational common ground (cf. also Verhagen 2005: 78–155): propositions that function as the complement of positive volunteered stance verbs such as *claim* in (66) "do not form part of the existing background of accepted belief, [moreover, C.G.] they take on a special significance by virtue of that very fact: in each case, the very reason for putting them forward is to nominate them as candidates for incorporation into that body of accepted belief" (Cattell 1978: 67).

(66) *Bill claimed that Sue was guilty, and Harry denied it* (Cattell 1978: 68)

Cattell refers to verbs such as *claim* in (66) as volunteered-stance verbs because, in the positive, "they seem to indicate that their subject accepts some kind of responsibility for the proposition that follows" (1978: 69). This semantic characterization is implied to account for the fact that in an example such as (65a), both the main clause stance, e.g. *Why do they think so?* and the complement proposition, e.g. *Why did Sue kill Harry?* can be interrogated by *why*. When these verbs occur in the negative, as in (67), Cattell maintains that the interrogative adverbs always lose their ambiguity (1978: 62), because "in such a context, the *that*-clause loses its status as the point of view of the speaker" (1978: 71).

(67) *Why don't they say/think/... (that) she killed him?* (Cattell 1978: 62)

The class of response-stance predicates, then, e.g. *deny* in (65b) and (66), involves those predicates that can be used as a "conversational or written response to the utterer of [a] proposition" that is or has been presented as a potential candidate for the shared common ground (1978: 71), as illustrated in (66). Cattell makes the important point that the notion of response-stance predicates as responding to a proposition that forms part of the interactants' common ground should be nuanced in that "response-stance verbs are not always used to report an actual re-

sponse" (1978: 68). Instead, response-stance predicates can present the complement proposition as if it were a stance that was already part of the conversational background. Cattell explains it as follows: "I can say I admit that democracy is difficult, even if no one has actually suggested that it is. What I am doing, of course, is meeting a possible proposition, which I can imagine someone putting forth; and in this sense I am still making a response, but making it to an imagined, rather than actual, stance" (1978: 68). With respect to cases as in (67), Cattell furthermore points out that "all the stance verbs that are negative are of the 'response' variety" (1978: 73).

Finally, non-stance predicates contain those verbs that do not "commit the subject … to some deictic stance on the truth of the complement, and hence on the desirability of its becoming commonly accepted" (1978: 67–68). This predicate class includes traditional non-factive predicates, e.g. *doubt*, *comment*, *point out*, but also traditional factive predicates like *regret*, *forget*. Like response-stance predicates, non-stance predicates are said to resist ambiguity for main clause interrogative adverbs (e.g. 65c), and also to resist postponing as a parenthetical clause, as in (68).

(68) * *Why did Sue kill Harry, do you regret/doubt/…. ?* (Cattell 1978: 76)

My account of the semantic classes of complement-taking predicates that is presented in Chapter 3 diverges from Cattell's in that it is not based on the notion of common ground, but on more abstract semantic features that can underlie the relation between predicates and their arguments in object position more generally. I will defend the position that it is necessary to describe both the representational status of the complement clause with respect to the event structure of the main clause, and the interpersonal status of the complement in the speaker-hearer interaction. Furthermore, I recognize a separate semantic class of factive constructions, unlike Cattell's mixed class of non-stance predicates.

And finally, and this will also be the next point in the discussion, I aim to give an account which allows constructional environments to carry meanings that can be harmonic with, or coercive with respect to, the meanings inherently associated with predicate classes. While Cattell recognizes that a verb such as *believe* can show different behaviour depending on whether its meaning relates to personal stance, or rather to the acceptance of a proposition assumed to be part of the common ground (1978: 64), he also proposes a relatively rigid classification of verbs as pertaining to one of his three classes. Let us take for instance the claim that "response-stance verbs … do not allow such postposings" (1978: 76), as illustrated in (69) – a point also made by Hooper & Thompson (1973) and

Hooper (1975). I agree that when the verb *deny* takes a complement proposition that is pre-existent to the reaction of denial (as in *I deny that Sue killed Harry*, which implies that I believe that Sue may *not* have killed Harry), such cases of complement preposing are generally not acceptable.

(69) * *Why did Sue kill Harry, do you deny?* (Cattell 1978: 76)

At the same time, however, I want my account to be able to explain instances as in (70): in this case, *deny* is attested in a case of complement preposing, and, importantly, this changes the meaning of *deny*: instead of implying the negated counterpart of the complement, the quote in (70) expresses the content of the denial without implying a polarity reversal of the content of the complement.

(70) *"So, the killer got it from your house," Gretchen said. Again. They'd been over this territory so many times since the envelope had arrived at the station it was like they were rehearsing for a play. "Possibly…" September murmured. "You're scared shitless someone in your family sent it to you." This was a new wrinkle. To date, Gretchen had left the Raffertys out of it. "No,"* ***she denied***. (COCA)

The second broad issue, which has just been introduced, thus relates to the combination of such classes of predicates with the constructional alternates related to the factive and non-factive paradigm. Kiparsky & Kiparsky propose that generally, the verbs they identified as factive can only be combined with the complement patterns they related to factivity, and their non-factive predicates are also seen to combine almost exclusively with constructional alternates from the non-factive paradigm. They make one exception: when complement clauses are the subject of a passive,[14] as in (72), they note that there seems to be "a more general tendency for sentence-initial clauses to get understood factively" (1970: 167). On their account, "the speaker takes no stand on the truth of the report" in (71), but when the complement is the subject of a passive as in (72), it is interpreted factively. The authors do not further explore the consequences of this statement for their account that relies on the classification of particular predicates as factive or non-factive.

14 See also Halliday (1985: 244) and Davidse (1994) on the shift in meaning when reporting constructions are passivized.

(71) *The UPI reported that Smith had arrived*
(Kiparsky & Kiparsky 1970: 167)

(72) *That Smith had arrived was reported by the UPI*
(Kiparsky & Kiparsky 1970: 167)

(73) *He definitely said it that he had been wrong* (Davidse 1994: 281)

Combinations of reporting predicates with a constructional alternate associated with the factive paradigm, e.g. as subject of a passive, or with object extraposition as in (73) (see Chapter 5), cannot be explained on the Kiparskian account. Their predicate-based account predicts that examples as in (73) would be ungrammatical.

A different position is taken by Davidse (1994). Davidse proposes that, firstly, each of the different constructional alternates surveyed in section 2.2 should be examined as form-meaning pairings in their own right. Only when it is properly understood what the grammatical value of each of these construction types is individually can we understand their exact relation to factive and non-factive complementation constructions (1994: 261). Secondly, Davidse notes that the combination of a reporting construction with a factive constructional alternate as e.g. in (72) and (73) can be exploited for specific effects. Example (72) is no longer interpreted as a true reporting construction that represents the creation of a proposition in a speech or thought act. Instead, (73) has the special sense of emphasizing "the speaker's assertion that this locution [i.e. the content of 'that he had been wrong', C.G.] *was* uttered by the Sayer" (1994: 281, original emphasis). In essence, Davidse's proposal is that combinations as e.g. in (73) can induce a reinterpretation of the default semantic and formal status of the complement, thereby making a construction of one type (in this case, a reporting construction) behave in analogy with that of the other (factive) type.

To account for such cases of unexpected verb-complement combinations and their specific interpretations, Davidse (1994) and Vandelanotte & Davidse (2009) explicitly call for a cognitive constructionist account of factive and non-factive constructions, whereby each instance of a factive or non-factive construction type involves the integration of each of its component structures (constituting form-meaning pairings by themselves) with the semantic and formal specifications of the larger constructional frame (Langacker 1987). Unlike the Kiparskys' predicate-based account, this constructionist approach can accommodate the formal and semantic changes that come about through the accommodation of "unexpected" properties of component structures as in (73). I will subscribe to

this approach, and aim to show in the following chapters that it allows for an explanation of both (i) default (harmonic) associations within complementation constructions of semantic predicate types with certain semantic complement types (see Chapter 3) and (ii) specific reinterpretations induced by marked (coercive) combinations as in (73) (see Chapters 3 to 7).

2.4 Aims

In this chapter, I have given an overview of the different ways in which factive complements have been defined in the literature, and of the main problems posed by these accounts. It highlights the need for a notion of factivity that integrates the answers to the following questions into a coherent account:

- What is the basis for the association of factive and reported complements with specific semantic classes of complement-taking predicates? This question forms the subject of Chapter 3, which proposes an analysis of the distinct representational semantics of the main clause situation in different types of complementation constructions. It shows how the different semantic and grammatical status of factive and reported complement clauses correlates with a difference in representational semantics of their main clauses.

- How do we explain the intuition that the factive-reported distinction can be captured in terms of different sources of commitment (i.e. actual speaker versus represented conceptualizer) to the content of the complement? I will deal with this question in Chapter 4, which sets out an analysis of the interpersonal status of the different types of complement clauses. I will show that the different complementation constructions can be characterized in terms of a difference in possible sources of commitment. This difference can be predicted from the representational semantics proposed in Chapter 3.

- What is the status of individual constructional alternates associated with either the factive or with the reported paradigm? I will focus on three specific alternates in Chapters 5 to 7: object extraposition, *the fact that*-clauses, and complement preposing (see Tables 2 and 4 above). The chapters describe the main defining features of each constructional alternate individually. The central aim of these chapters is to show how the different alternates can be exploited to shift a complementation construction of one type to that of another type (e.g. from factive to reporting), both synchronically and diachronically.

3 Representational semantics

3.1 Introduction

Factivity is commonly subsumed under the header of the "semantics of complementation".[15] For factive constructions, Kiparsky & Kiparsky proposed as distinctive semantic feature the "*presupposition* by the speaker that the complement of the sentence expresses a true proposition" (1970: 143, original emphasis). This semantic feature, in turn, was said to be "in large part predictable from the meaning of each [complement-taking] predicate" (1970: 172), as reflected in the lists they propose of those predicates that take factive complements and those that take non-factive complements (1970: 143, 145). The Kiparskian account does not, however, specify which semantic property of matrix predicates is responsible for factivity or how these predicate semantics relates to the interpretation of the complement.

This chapter aims to advance our understanding of those semantic underpinnings of the phenomenon of factivity. More specifically, I will contrast factive constructions with reporting constructions, and distinguish a third in-between construction type with characteristics of each. I will explicate the different semantics of these three complement constructions, and link these to the different semantic predicate classes they are associated with.

The semantic distinction that I argue is central to the classification is not that of assertion in contrast to presupposition, but that of creation versus pre-existence (following Davidse 1994, 2003; Vandelanotte & Davidse 2009), to which I add the distinction between manipulation versus unaffectedness. The semantics of (i) predicate classes and (ii) complement patterns are taken to be two separate features that work together in determining the semantics of the complex sentence. On the one hand, I take it that semantic types of predicates tend to combine with a specific semantic type of argument, which is what will be the main focus of this chapter. On the other hand, it will be shown that specific constructional patterns can be used specifically to construe one construction type in formal and semantic alignment with another construction type. Such semantic and formal shifts will be the main focus of the case studies presented in chapters 5 to 7.

15 This chapter expands on the semantic and aspectual analysis proposed in Gentens (2016b).

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3.2 A three-way semantic classification

This section proposes a three-way semantic classification of constructions with finite complement clauses. The focus is on complementation constructions with a personal subject, a verbal predicate, and a *that*-clause in object position (see Table 1 for what this excludes). I use the term *object* as a neutral term, without intending to make any claims as to the specific syntagmatic relation that the complement bears to a predicate or clause. The classification is based on two features underlying the semantic relation between a two-place verb and its complement in object position: (i) whether or not the object entity exists independently from the situation described in the verb, and (ii) whether or not a change (modification or re-creation) is predicated of the object entity. Discussion of these semantic parameters in the literature has hitherto largely been confined to simple clauses with two NP arguments. For this reason, I will briefly introduce the semantic features as they apply to simple clauses (3.2.1) before turning to complementation constructions with finite complements (3.2.2). I aim to show that it is revealing to highlight the parallels between the phrasal and clausal categories to come to a better understanding of the factive-reported distinction in English.

3.2.1 The semantic classification in simple clauses: creation and manipulation

3.2.1.1 Created vs. pre-existent objects

The first semantic parameter involves the distinction between created and pre-existent NP objects. Created objects such as *a house* in (74a) are objects that only come into existence as a result of the occurrence of the situation described in the predicate. The fact that the semantic status of created objects depends on the actualization of the verbal process is brought out most clearly when the latter are within the scope of a negative, modal, or interrogative marker (i.e. the "family of sentences" operators), as in (74b–d): if the actuality of the process of construction (expressed in *build*) is suspended, so is the actual existence of the referent of *a house*. Verbs that are typically used to express creation include *build* (a house), *write* (a book), *make* (a cake).

(74) a. *He built **a house**.*
b. *He has never built **a house**.*
c. *He may build **a house** if he can afford it.*
d. *Did he build **a house**?*

With pre-existent objects, then, prior existence of the object entity is a prerequisite for the occurrence of the verbal process. In (75a–d), for instance, the conceptualization of the act of eating an apple always requires the existence of an apple before one can eat it, irrespective of the actuality of the process of eating. Examples of verbs that tend to occur with pre-existent objects include *eat* (an apple), *touch* (a painting), *spot* (a squirrel).

(75) a. *He ate **an apple**.*
b. *He has never eaten **an apple**.*
c. *He may eat **an apple** if he feels like it.*
d. *Did he eat **an apple**?*

Depending on the context, the same verbal lexeme can occur with either a created object (76a) or with a pre-existent object (76b). Importantly, this shows how the semantics of creation/pre-existence cannot be established solely on the basis of the choice of a particular lexeme, but is co-determined by the semantic status of the complement in context.

(76) a. *She baked **a cake** for me.*
b. *All it takes now is to bake **the cake** (=the dough) in the oven.*

3.2.1.2 Manipulated vs. unaffected pre-existent objects

The second semantic distinction divides pre-existent objects into unaffected and what I call manipulated NP objects. Unaffected objects as in (77) are pre-existent objects that are not altered or substituted for by the situation expressed in the verb. In (77), for instance, the *old house* has to exist before it can be admired, and it will not undergo a change of state as a result of a person's admiration. Verbs taking unaffected objects are semantically diverse and include contact verbs, e.g. *touch* (a painting), perception verbs, e.g. *spot* (a squirrel), and reaction verbs, e.g. *admire* (a house).

(77) *She admired **an old house**.*

The second type of pre-existent objects is that of manipulated objects, i.e. objects that are transformed or re-created in some way by the verbal process. This class includes both objects of "verbs of change of state" (Dowty 1979: 69) and verbs taking "performance objects" (Dowty 1979: 69–70). Examples of objects undergoing a change of state include e.g. *renovate a house* in (78), and *bake the cake* in (76b). A process of renovation as in (78), for instance, presupposes that the object

entity *an old house* already existed before the process occurred, and that it changed to a "renovated" state as the process evolved.

(78) *She renovated **an old house** (into a modern guest house).*

The process described in (78) takes the object entity as input, and transforms it into a modified version, which can in certain contexts be made explicit in a result phrase, as in the prepositional phrase *into a modern guest house* in (78). Note that there is often the potential for ambiguity, e.g. with *bake a cake* in (76), between a transformation sense, "put it in the heated oven for 20 minutes" and a creation sense, as in "make one" in context.

Performance objects, e.g. in *print a report* in (79), similarly require a pre-existent version of the object entity. Unlike with objects changing state, however, the entity referred to by the object "does not undergo any change" (Dowty 1979: 70) as a result of the situation described in the predicate; "rather, a representation of that object is created" (1979: 70).

(79) *She printed (out) **the report**.*

For instance in (79), the process of printing a report requires that the report exists, and creates a duplicate of it by means of the printing process. There is again a close relationship with the class of created objects, as the example in (79) can be paraphrased by means of a creation verb as "she made a print out of the report", in which case the created object *a print* is in object position (Dowty 1991: 569). All-in all, manipulated objects include those objects that result in a changed or new version of a pre-existent entity, and typically occur with verbs of destruction/consumption, e.g. *eat* (an apple), verbs of change of state, e.g. *bake* (the dough/the cake), *renovate* (a house), and verbs of re-creation, e.g. *print* (a report).

3.2.1.3 The two parameters combined

For the purposes of my analysis, I will combine the two semantic features in 3.2.1.1 and 3.2.1.2 in a three-way classification, as summarized in Table 5.

Tab. 5: The semantic relation between verbs and objects: the two relevant semantic features

	Created objects e.g. *build a house*	**Manipulated objects e.g. *renovate a house, print a report***	**Unaffected objects e.g. *admire a house***
change of state (creation, modification or re-creation) predicated of object entity	+	+	-
pre-existence of object entity to situation expressed in the predicate	-	+	+

In the literature, especially the contrast between created and manipulated NP objects has been widely discussed, under the various headers of for instance "accusativus effectivus vs. accusativus affectivus" (Jacobsohn 1933), "effected vs. affected objects" (e.g. Hopper & Thompson 1980; Hopper 1985), "verbs of creation vs. verbs of change of state/of creation of a performance object" (Dowty 1979: 69–70) and that of "creative vs. transformative clauses" (Halliday & Matthiessen 2004: 184–189). The contrast has further been related to a number of formal distinctions, such as (i) the possibility to add an expression of result, (ii) transitivity, and (iii) the possibility for extraction.

(i) expression of the result of the situation described in the predicate

With created objects as in (80), the outcome of the process is fully contained in the object entity, and cannot be expressed in a separate element (Halliday & Matthiessen 2004: 184–185).

(80) a. *He was making **a cubby house** a minute ago.* (Halliday & Matthiessen 2004: 185)
b. *He cut **a slice of cake*** (Hopper 1985: 70)
c. *He tied **a knot*** (Hopper 1985: 71)

Manipulated objects as in (81), by contrast, can have the result expressed separately in an adjective, e.g. *paint* NP *red* in (81a), resultative phrase, or particle, e.g. *shut* NP *down*, *cut* NP *up* in (81b) (Hopper 1985; Halliday & Matthiessen 2004: 185–186).

(81) a. *She painted the house **red*** (Halliday & Matthiessen 2004: 185)

b. *He cut **up** a slice of cake* (Hopper 1985: 70)
c. *He **un**tied a knot /He **re**-painted a house* (Hopper 1985: 71)

As pointed out by Hopper (1985), the interpretation as a created object is excluded with the particle *up* as in (81b), while an interpretation as either a created or as a manipulated object may be possible when *up* is absent, as in *He painted a house* or as in *He cut a slice of cake* in (80b). Similarly, an interpretation as created object is excluded in the presence of a prefix specifying the result of the verbal process as in (81c) (Hopper 1985).

Unaffected objects do not undergo a specific change of state, so that patterns as in (80) or (81) do not express the outcome that the situation described by the verb effects on the object, cf. the unacceptability of e.g. ? *The manager admired the band to stardom*, on the reading that *to stardom* expresses the result of the act of admiration, affecting the band. Patterns as in (80) and (81) can, however, pertain to a resultant state affecting the subject, e.g. delimiting the subject's change of location in *He followed the signs up until the meeting point*, or can modify a degree inherent in the predicate, e.g. *I love her to pieces!*

(ii) transitivity

Across languages, verbs taking created objects are generally coded as less transitive than those with manipulated objects (Hopper 1985). Standard tests for transitive status in English include the fact that manipulated objects (83a), but not created objects (82a), can be probed by *do to*/*do with* (Hopper 1985: 72; Halliday & Matthiessen 2004: 186).

(82) a. * *What did he do to his autobiography? – He wrote it!* (Hopper 1985: 72)
b. * *What he did to his autobiography was write it*. (Hopper 1985: 72)
c. * *The book was written. (vs. The book was written last year/in 2005/by Chomsky.)* (Erteschik-Shir 2007: 189)

(83) a. *"What then should he do with the second wife?" he asked. Should he just turn **her** out to starve?* (LOB corpus; cited in Halliday & Matthiessen 2004: 186)
b. *What he did to his autobiography was tear it up*. (Hopper 1985: 72)
c. *The book was revised. / The book was destroyed*. (Erteschik-Shir 2007: 189)

As Halliday & Matthiessen (2004: 186) put it, *do to* or *do with* NP, i.e. what they refer to as "the 'manipulative' construction presupposes the prior existence of the 'done-to' ". Similarly, manipulated objects but not created objects can be probed by a pseudo-cleft as in (83b) but not in (82b) (Hopper 1985: 72, who attributes the observation to G. Lakoff). Creation objects have also been observed to yield highly marked short passives (82c), unlike manipulated objects (83c) (Erteschik-Shir 2007: 189, her grammaticality judgements).

Like created objects, unaffected objects tend to resist occurrence in the three contexts – not because they are not pre-existent, but because they are not affected, i.e. they are not a "done to", by the situation described in the predicate, cf. e.g. ? *What he did to the squirrel was spot it*. / ? *The book was liked*.

(iii) internal accessability

As shown by Erteschik-Shir (2007: 188), created objects allow extraction from a postmodifier of the created object NP, as in (84a), where the so-called "gap" is indicated by the underscore. Manipulated object NPs typically resist such extraction, as illustrated in (84b, c).

(84) a. ***What*** *did John write a book about _?* (Erteschik-Shir 2007: 188)
b. *?* ***What*** *did John revise a book about _?* (Erteschik-Shir 2007: 188)
c. * ***What*** *did John destroy a book about _?* (Erteschik-Shir 2007: 188)

Like manipulated objects, unaffected objects resist extraction, as reflected in e.g. * *What did John like a book about*?

The formal patterns in (i) to (iii) distribute unevenly across the three types of objects: manipulated object NPs stand out in their ability to co-occur with a separate expression describing the resultant state, and in their acceptability in environments associated with a high degree of transitivity and affectedness, while created object NPs are distinct from the other two types in their conduciveness to extraction from the created object NP. This seems to support my dealing with these semantic features in terms of a three-way classification instead of the more commonly made binary distinction.

A final point concerns the standard referential interpretations of the three semantic types of objects. Created objects especially stand out in this respect in that they require "uniqueness of events" (Krifka 1998): the same object can in principle only be brought into existence once, and is thus in a sense uniquely specified by the circumstances in which it was created. As a result, a statement

as in (85) logically entails the creation of two different cakes on different occasions. Manipulated and unaffected objects are not subject to the same restriction: a pre-existent object can unproblematically be modified or re-created (e.g. painted/printed), or reacted to (e.g. admired) on various occasions.

(85) *He made a cake twice.*

In the remainder of this chapter, I argue that the three-way semantic classification set out here can be applied to complementation constructions with finite *that*-clauses in object position, which have often been viewed as simply dividing into factive and reported constructions. I claim that this three-way semantic distinction motivates the distinct semantic and grammatical properties of factive and reporting constructions, and also accounts for a construction type that is in between factive and reporting constructions. The distinct semantic status of different complement types will be further shown to have an effect on their internal interpersonal status. This last point will be dealt with in Chapter 4.

3.2.2 The semantic classification of finite complement clauses

This section describes how the semantic distinctions set out in 3.2.1 can be applied to distinct types of finite complement clauses. The account given here builds on work by Davidse (1994, 2003) and Vandelanotte & Davidse (2009), who systematically relate the interpretative and formal differences between reported and factive complement clauses to a semantic distinction between created and pre-existent clauses.

In contrast to accounts that resist semantic and formal comparison between phrasal and clausal complements (e.g. Huddleston & Pullum 2002: 1014–1022; Verhagen 2005: 81–94; McGregor 2008), I aim to show how this distinction between created and pre-existent clauses is comparable to the differences between created and pre-existent NPs set out above. By analogy with the three-way classification in 3.2.1, I add a third category of manipulated clauses, which represent a subtype of pre-existent clauses that undergo a re-creation or qualitative change as a result of the occurrence of the process described by the matrix.

The addition of a third type of complement clauses in between factive and reported clauses is not unprecedented: see most notably Cattell's (1978) set of response-stance predicates as encoding responses to propositions or stances in the common ground. As described in 2.3 above, however, the defining features of my in-between category as set out here and in Chapter 4 are of a more abstract nature

that highlights the similarities to different types of NP objects in terms of their representational semantics. I consider it crucial to have an account of both the interpersonal and the representational status of the different types of complement clauses, and of how these two levels interact.

3.2.2.1 Created vs. pre-existent clauses

Non-factive, reporting constructions as in (86) and (87) describe the *creation* of a proposition in a speech or thought act.

(86) *He said that if war were to be declared right now, he, for one, wouldn't fight!* (WB)

(87) *She thought that she might never see her parents again* (WB)

This abstract semantic characterization is most clearly illustrated by reported speech constructions as in (86): their semantics involves the description of an activity of speaking that a referent is engaged in at a particular time and place (expressed by *he said*) and of a specific verbal utterance (conveyed by the *that*-clause) that is formed through this act of speaking and tied to its specific participants and deictic coordinates for its interpretation (cf. (74) above). It follows from the predicate's semantics of creation that the utterance represented by the complement clause only exists in the same form as a result of the occurrence of the matrix act of speaking and thinking; it is conceptualized as being dependent for its existence on the whole matrix clause.

The semantically dependent status of reported clauses is substantiated by their well-known behaviour under main clause negation (cf. the "family of sentences" test). When the main clause of a reporting construction is negated, as illustrated in (86') and (87'), it is asserted that the speech or thought act in which the complement proposition originated did not take place.

(86') *he didn't say that if war was to be declared right now, he, for one, wouldn't fight*.

(87') *she didn't think that she might never see her parents again.*

The main clause negation does not leave the semantic status of the reported complement unaffected. When the act of saying that "one would not fight if war were

to be declared" is negated, then no uttered locution with this content would exist – at least not as tied to the specific act of creation described in the main clause.

By contrast, factive constructions as in (88) and (89) are characterized by the fact that the complement proposition is conceptualized as being "*pre-existent* to" (Davidse 2003: 126) and, in my terminology, unaffected by the situation described in the matrix. The complement proposition functions as a reified, holistically conceived entity that exists independently from the matrix act.

(88) *he had grasped that the laughter on the faces of the French was because they thought him a fool* (WB)

(89) *Samantha gave birth to a girl ... He regretted that Carmen had not been by his side, the only person with whom he would have wanted to share the trials of those moments*. (WB)

The semantic status of factive complements as entities existing independently from the main clause process is corroborated by their distinct behaviour under negation: unlike reported complements, factive complements are not affected by main clause negation, as in (88') and (89').

(88') *he hadn't grasped that they laughed because they thought him a fool*

(89') *He didn't regret that Carmen had not been by his side*.

In such examples, the negation merely denies the cognitive acceptance or emotional reaction with respect to the complement proposition. The complement proposition is not affected by the negation.

The semantic contrast between created and pre-existent clauses is further reflected in a range of formal patterns and grammatical behaviour characteristic of either construction type. I will briefly present three constructional alternates with regard to which reported and factive clauses behave differently. As we will see, characteristic for reported clauses is that they allow for constructional alternates that highlight their clausal status and their dependence on the whole matrix clause. Factive clauses, in turn, distinctly function as nominalized clauses.

Firstly, reported clauses allow for clausal substitution by means of the proform *so* as in (90). As pointed out by Halliday & Hasan (1976), the use of the clausal substitute is restricted to environments in which the clausal content is semantically "hypothetical" and "dependent on another clause" (1976: 136); *so*

further maintains the clausal status of the element which is substituted rather than construing it as a nominalized clause.

(90) a. *He said so.*
b. *She thought so.*

Factive clauses as in (88)–(89) require a different type of cohesive relation: they don't allow clausal substitution by *so*, but can be referred to by reference items such as *it* or *that* (Halliday & Hasan 1976), as in (91).

(91) a. *He had grasped it/*so.*
b. *He regretted it/*so.*

These reference items crucially function in nominal environments (1976: 37), and thus signal the status of factive complements as nominalized clauses.

In certain contexts, reported clauses may also be referred to by reference items such as *it*, as in *He really said it, I swear*. As pointed out by Davidse (1994: 274, 280–282), these contexts involve a marked grammatical status for the reported clause as a nominalized clause, which moreover induces a reinterpretation of the semantics of the complex sentence: it "is not simply a representation of the Sayer's projection [i.e. of the content of the represented speech or thought act, C.G.], but the speaker's assertion that this locution *was* uttered by the Sayer" (1994: 281, original emphasis). As such cases are both formally and semantically distinct from prototypical reporting constructions, I will consider them as belonging in a separate third semantic category (see below).

Secondly, the clausal status of the reported clause is further reflected in the potential for the reporting clause to be positioned within, or at the end of, the reported clause as a so-called parenthetical or comment clause as in (92a–b).

(92) a. *If war were to be declared right now, he said, he, for one, wouldn't fight!*
b. *She might never see her parents again, she thought.*

Such cases of "complement preposing" (Hooper 1975) are generally considered a constructional alternate typical of reporting constructions (see Chapter 2 and 7). Reported clauses as in (86)–(87) thus allow for an alternate expression pattern in which they function as a main clause in their own right. This again confirms that reported clauses are not nominalized clauses, but maintain their clausal status. As cogently observed by Vandelanotte & Davidse (2009) and Vandelanotte

(2009), this pattern also underscores the unithood of the reporting clause in English, and validates their point that in English, the reported clause bears a specific type of syntagmatic relation to the matrix clause – the reported clause is not a constituent of the verb, on a par with the subject; rather, it is a dependent of the entire matrix clause (Davidse 1994: 268–273; Vandelanotte & Davidse 2009; Vandelanotte 2009).[16]

Factive clauses are, as was already pointed out, nominalized clauses; they do not normally allow an alternate construal in which the original matrix clause comes to function as a modifier to the factive clause (93a–b) (see Chapter 7).

(93) a. * *the laughter on their faces was because they thought him a fool, he had grasped.*
b. * *Carmen had not been by his side, he regretted.*

Thirdly, the fact that factive clauses are conceptualized as holistic entities, as reflected in their nominalized status, also explains the formal tendency for factive complements to be replaceable by noun phrases (as in e.g. *He had grasped their true intention/the fact that…* or *He regretted her absence* for examples (88) and (89)). The content of reported clauses, however, can generally not be expressed by means of an alternate nominal expression form (Davidse 1994: 271, cf. the reformulations **He said his decision* or **She thought their separation* for (86) and (87)).

In short, the distinction between factive and reporting constructions involves a different conceptualization of the semantic relation between the complement clause and the matrix: in factive constructions, the complement proposition has the semantic status of an entity that exists prior to, and independently from, the situation described in the matrix clause; in non-factive constructions, the represented proposition derives its existence from the occurrence of the matrix act in which it is created. On the formal plane, this semantic distinction is reflected in the distinct distribution of factive and reporting constructions in grammatical environments that are associated with a nominal or clausal status for the complement.

16 See Langacker (1987: Ch. 8) on the relevant notion of dependence.

3.2.2.2 Manipulated vs. unaffected clauses

As indicated above, I will add to this binary distinction a third category of manipulative constructions.[17] Manipulative constructions are to be placed in between reporting constructions and factive constructions, which is, I claim, due to their distinct semantics. As described in 3.2.1.2, my class of manipulative constructions semantically express either the change of state or re-creation of a pre-existent complement clause. Predicates typically associated with a change of state of the complement proposition include *confirm*, *establish*, or *deny*,[18] as illustrated in (94).

(94) *Petrie denied that the Pyramid incorporated calendar measurements* (WB)

Unlike a reported clause, the *that*-clause in (94) does not contain the content that was created through the occurrence of the matrix process; it contains a pre-existent proposition that was reacted to. In this respect, they are part of the factive class. The complementation construction does, however, logically entail a change of state for the complement proposition as a result of the matrix act. In the case of (94), for instance, the pre-existent proposition is that "the Pyramid incorporated calendar measurements", but the logical consequence of Petrie's act of denial is that he holds that "the Pyramid did not incorporate calendar measurements", i.e. it reverses the polarity of the complement proposition.

Predicates typically used to express a re-creation include *print*, *report*, or *restate* as in (95). An example as in (95) similarly involves a pre-existent proposition in the complement clause, which is said to have been reasserted, and thus re-created, in a speech act by the matrix subject.

(95) *Cheney restated that the goal of the new policy is to put an end to terror around the world, once and for all.* (WB)

17 Note that my use of the term "manipulative" is not related to Noonan's (2007) use of the term. Noonan calls "manipulative" those predicates that "encode situations where the agent attempts to manipulate the affectee into performing some action or assuming some state" (2007: 136), as e.g. *persuade* in *Max persuaded Nellie to run for mayor* (Noonan 2007: 136).

18 As pointed out above (2.3), this class is in some ways similar to Cattell's (1978) set of response-stance verbs, although my set is broader than his and has a different semantic basis. One important difference is that I find that some of Cattell's non-stance verbs (e.g. *doubt*, *emphasize*) must be grouped in a semantic class together with what he considers response-stance predicates (e.g. *deny*, *agree*) rather than with factive predicates.

In terms of formal behaviour, manipulated complements group together with factive complements in terms of the grammatical alternates proposed in 3.2.2.1: they consistently alternate with nominalized rather than clausal patterns (cf. *he denied it*/**so*; *he restated the policy goals*, cf. also Cattell (1978)). This suggests that the main grammatically relevant distinction in the realm of complement clauses is that of created versus pre-existent complements, at least with respect to the nominal or clausal status of the complement.

Manipulated complements do however stand out, I claim, in two ways. Firstly, manipulated complements tend to occur more naturally in agentless passives, as illustrated in (96a–b).[19]

(96) a. *That the Pyramid incorporated calendar measurements was denied.*
b. *That the goal was to put an end to terror in this worlds was restated.*

Compare in this respect an agentless passive for the factive construction in (89) ? *That Carmen had not been by his side was regretted*, or for the reported construction in (87) ? *That she might never see her parents again was thought*.

Secondly, manipulated complements behave differently with respect to negation: as pointed out above (see discussion of (94)), manipulated complements are pre-existent to the main clause situation, but undergo a change of state as a result of it. When the main clause is negated as in (97), the pre-existent complement proposition is not affected, but the logically entailed change of state is.

(97) *Petrie didn't deny that the Pyramid incorporated measurements.*

Thus, whereas (94) entails that Petrie holds that the Pyramid did *not* incorporate calendar measurements, the negated counterpart of (97) implies that Petrie holds that it *did*. This difference in entailed change of state is not the case with factive constructions (with and without negation) as in (89) and (89') above. This distinct grammatical behaviour highlights the importance of distinguishing manipulated clauses as a separate subcategory within the group of pre-existent clauses.

Up until now, I have been concerned with what I called default combinations of certain semantic predicate types with certain semantic types of complements. Constructional alternates that are traditionally associated with meanings of one construction type (e.g. with factive constructions) can however also be combined

19 I consider this to be in keeping with a tendency for passives to topicalize the entity that is "affected" by the predicate. The relation between affectedness and subjecthood in passives has also been corroborated in research on pathways of development (see Heine & Kuteva 2007: 80).

with a semantic predicate type that is conventionally associated with another construction type (e.g. expressing creation). Such constructional combinations (see also 2.3 above) have the effect of coercing the complex sentence into a different construction type, i.e. that of a manipulative construction. Such constructional reinterpretations will be the main focus of Chapters 5 to 7.

The central point here is that constructional alternates (see e.g. Table 7 below) carry meanings in themselves, so that their use as tests to see if a complementation construction belongs to a certain semantic type may in fact be used specifically to construe a construction of one type in alignment with that of a different semantic type (Davidse 1994: 261–262).

One example of such a constructional alternate concerns the above-mentioned potential for a reference item, e.g. *it*, instead of a clausal substitute, e.g. *so*, to stand for the content of the complement clause. As pointed out above, reporting constructions as in (86), repeated here in (98), can be represented with a clausal substitute for the reported clause: *He said so*.

(98) *He said that if war were to be declared right now, he, for one, wouldn't fight*! (WB)

But similar examples are also found with a reference item, as in (99a–c).

(99) a. *"Where to?" I demanded, but I knew the answer before he even said* ***it***. (WB)
b. *But she would never let go. Lester knew that, even though Beth had never said* ***it***. (WB)
c. *"You want to leave?" "No, ... And I'd never leave you in the lurch don't think* ***it***. *..."* (WB)

Such cases, however, are grammatically and semantically different from typical reporting constructions: *it* presents the complement as a nominalized clause, and as one that is semantically independent from the matrix act. Note that, as already observed above, *say* does not normally take a noun phrase object in English: we do not normally say ? *he said the answer*, cf. (99a). Moreover, the meaning of the reporting situation in the matrix shifts in this context from that of a mere creation verb to that of a re-creation, in the sense of "pronounce those words", as in (99a–b) or "consider, entertain the thought" in (99c). Examples as in (99), then, belong in my category of manipulated clauses rather than that of reported clauses.

3.2.2.3 The two parameters combined

As was pointed out for simple clauses in 3.2.1.3, the three semantic classes differ in the standard referential interpretations of their complements. It was observed that created complements carry a referential uniqueness presupposition, in that the same object can in principle only be brought into existence once, and is thus in a sense uniquely specified by the circumstances in which it was created. I believe that a similar point can be made for reported clauses, though the uniqueness interpretation operates on a different level, i.e. on the level of the interpersonal status of the complement clause.

With reported clauses, the commitment to the modal stance falls within the intensional domain created by the reporting clause (Davidse & Vandelanotte 2011), and thus represents the commitment of the represented speaker or cognizer (normally expressed in the matrix subject).[20] Factive and manipulated complement clauses do not bear the same restriction – the modal stance contained in them may relate to the actual speaker's stance or to that of another source echoed from the wider discourse context. These distinctions will be dealt with in detail in Chapter 4.

Table 6 sums up the three semantic classes that were distinguished so far. Table 7 gives an overview of the formal tendencies that relate to the three-way semantic distinction.

Tab. 6: Three semantic classes distinguished for finite complement clauses

	Reported, effected clauses e.g. *say/think p*	**Manipulated, affected clauses e.g. *restate/deny p***	**Factive, unaffected clauses e.g. *regret/grasp p***
change of state (creation, modification or re-creation) predicated of complement clause	+	+	-
pre-existence of complement clause to situation expressed in the predicate	-	+	+

20 Note that for reported clauses which involve a represented interrogative, the speech functional value of the interrogative (assigning responsibility to an interlocutor) falls within the evoked intensional domain (Davidse & Vandelanotte 2011: 241).

Tab. 7: Formal correlates of the three-way semantic classification

	Reported, effected complements	Manipulated, affected complements	Factive, unaffected complements
reference items, e.g. *it*	-	+	+
noun phrase alternate for content of complement clause	-	+	+
clausal substitution, e.g. *so*	+	-	-
parenthetical alternate for matrix clause	+	-	-
naturalness with agentless passives	-	+	-
complement proposition affected under main clause negation	+	±	-

Now that the three types of complementation constructions have been delineated on the basis of their distinct semantics and formal behaviour, I will in the following subsections elaborate on their semantic differences in more detail by means of an analysis of the lexical aspect, i.e. the situation type, associated with the matrix predicates, and of the aspectual properties of the complement types they tend to correlate with.

3.2.3 Aspectual analysis

In current work on event structure, one major goal has been to explain (cross-linguistic) regularities in argument realization, i.e. to determine which semantic factors underlie the grammatical realization of arguments as subjects, objects, or obliques. In this strand of research, aspect and causal structure are currently taken to be amongst the primary determinants of argument realization (see Levin & Rappaport Hovav 2005: 78–128 and Croft 2012 for a critical overview and further references). The aspectual and causal approach differ in the semantic factor they take to be essential for argument realization, viz. notions relating to the temporal delimitation of a situation as opposed to notions involving the force dynamic interaction between participants. However, they tend to converge on many points, probably because "both approaches agree that the representation of events must

impose a precedence order on the participants in the event" (Levin & Rappaport Hovav 2005: 126). As Levin & Rappaport Hovav point out, this order is one of temporal precedence in the aspectual approach, suggesting that "agents and patients are prototypical initiators and endpoints of events" (2005: 126), whereas the causal approach focuses on the relative precedence of participants on the causal chain, suggesting that "agents and patients are prototypical causes and effects" (2005: 126). In the previous section, I have argued, following Davidse (1994, 2003) and Vandelanotte & Davidse (2009), that the contrast between reporting and factive constructions is motivated by semantic notions such as creation and pre-existence. These semantic notions carry a sense of temporal (and causal) precedence in them, which makes them especially well-suited for an analysis in terms of their aspectual characteristics, as proposed below. Before going into the actual analysis, I will briefly introduce the causal and aspectual approach in somewhat more detail.

Work on causal structure studies the imbalance amongst the participants of a clause on a causal chain, which can be seen as a representation of the sequence of energetic interactions undergone by the various entities evoked in the clause. As Levin & Rappaport Hovav (2005: 117–127) point out, one of the major achievements of the causal approach is the finding that the relative positioning of participants on the causal chain is criterial in determining the choice of grammatical subject of a clause. This at least in part resolves the problem of providing a unified semantic motivation for the various semantic roles that can be found in the position of a grammatical subject. Nevertheless, some types of situations are notoriously difficult to describe in terms of a causing subject and causally affected object, either because they do not involve an asymmetric transfer of force, e.g. intransitive verbs of location such as *sit* or *stand* (Levin & Rappaport Hovav 2005: 121), or because they can be considered "bidirectional", allowing for the causal relation to be construed in two ways. The prime example is the semantic class of stative predicates with experiencer subjects, e.g. *see/be visible to*, or *like/please*. The fact that precisely these semantic classes show substantial crosslinguistic variation in argument patters is said to follow logically from the fact that they "hav[e] no a priori causal directionality" (Croft 1991: 219). This class is, however, crucial to the factive constructions discussed in this chapter. In the hope of explaining more of the semantic and formal characteristics of the essentially "non-causal" (Croft 1991: 213–225) factive constructions, I will mainly focus on an analysis of the lexical aspect, or situation type, of the matrix situation.

Aspect is the category in the verb phrase that describes different conceptualizations of "the internal temporal constituency of a situation" (Comrie 1976: 3). One of the main findings in aspectual studies dealing with argument realization

has been the point that different temporally defined situation types are interrelated, i.e. they can be derived from each other. In some cases, this derivation crucially depends on the nature of the object. One well-known example of the interaction between the situation type of the predicate and the type of object is the possibility to construe (non-telic) activities as (telic) accomplishments, by adding a count object, cf. the difference between *he ate all day long* (activity) and *he ate the sandwich in five minutes* (accomplishment). To capture such interactions, aspect can be studied on two separate dimensions: on the one hand, verbs can be classified into a default situation type based on their inherent meaning; on the other hand, the situation type expressed by a verb can shift to a non-default construal due to the specific linguistic context (argument status, grammatical pattern) in which the verb occurs. Such recurrent interactions make aspectual analyses a powerful heuristic to identify different semantic relationships between verbs and their arguments. This is why I will in the remainder of this chapter examine how the aspect of the different semantic types of main clause predicates interacts with the different semantic types of objects, and how different semantic subclasses of predicates with the same semantic type of object can be seen as aspectually interrelated.

My application of aspect differs from the broad strand of research that was just introduced in two ways. Firstly, my focus is not so much on the influence of differences in argument alternation patterns (e.g. the deletion or addition of an explicit argument, as with the example of *he ate (the sandwich)*) on situation types. Instead, I focus on the different semantic complementation types distinguished in 3.2.2 in one formal pattern, i.e. complementation constructions with a personal subject and a *that*-clause in object position. This allows me to compare the aspectual status of the situations and object types across the three semantic types of complementation constructions. Secondly, the literature on aspect and argument realization has hitherto focused on the analysis of simple clauses, i.e. on the relation of verbs to nominal or prepositional complements. With my analysis of complementation constructions, I hope to show that studies on aspect can also prove revealing with respect to the relation of verbs to finite complement clauses.

It should be noted at this point that the relation between a verb's default situation type on the one hand, and a contextually derived aspectual construal on the other has been captured in increasingly articulate theories of "aspectual coercion" (Moens & Steedman 1988; De Swart 1988; Michaelis 2004). Aspectual coercion refers to the process of semantic "enrichment" (Jackendoff 1997) that resolves "a conflict" between "the inherent meaning of the core [i.e. lexical] expression" and the meaning of "co-occurring linguistic expressions" (Moens &

Steedman 1988: 21, 26). One aspectual test for punctuality, for instance, involves the possibility to add a punctual adverb such as *suddenly* without a significant meaning change. In principle, we would thus expect *suddenly* to combine harmonically with predicate constellations that are, in and of themselves, punctual, e.g. in achievements such as *John (suddenly) recognized the man*. Such combinations involve "semantic concord" or "type-sensitivity" (Michaelis 2004) between the punctual adverbial construction and the lexical predicate that occurs in it: in such an example, the punctual adverbial construction "do[es] not change the aspectual class of the verb or its projection, but merely requires an argument of a given situation type" (Michaelis 2004: 7). The same punctual adverbial, however, can "coerce" a semantic reinterpretation of the lexical item it combines with, e.g. when it is combined with an otherwise durative predicate constellation such as the stative *know the answer*. In an example such as *Suddenly, Jeanne knew the answer* (De Swart 1988: 370), the conflicting features of punctuality and durativity result in an inchoative reading of the predicate *know* as *come to know*, *realize*. The semantic disagreement is resolved by shifting the predicate's aspectual type in favour of the meaning of the constructional context (Michaelis 2004: 29). These theories on aspectual and constructional coercion underlie my treatment of certain non-harmonic constructional combinations as coercive contexts (see Chapters 5 to 7).

In the following sections, I will first introduce the Vendler classes that formed the basis for the analysis of the situation types (3.2.3.1), before describing the results of the aspectual analysis (3.2.3.2), and discussing the conclusions that can be drawn from this (3.2.3.3).

3.2.3.1 Theoretical prerequisites: situation types

The semantic analysis of the matrix predicates relies in essence on the influential taxonomy of situation types proposed by Vendler (1957), which still forms the basis of more recent classifications (e.g. Dowty 1979, 1991; Smith 1997; Van Valin 2005: 31–49). Situation types are abstractly "conveyed by the verb constellation", i.e. "a main verb and its arguments" (Smith 1997: 2), irrespective of formal marking for the grammatical categories of tense, aspect, or mood. As they depend on the semantics of verbs and their argument types, situation types are also commonly referred to under the header of lexical aspect. Grammatical aspect, by contrast, is reserved for semantic distinctions that operate on verb constellations with their intrinsic situation type. Unlike lexical aspect, the expression of grammatical aspect is typically associated with overt morphological or periphrastic markers (e.g. the progressive *be V-ing* or habitual *used to V* in English) which, in

their presence or absence, always contrast with other members of a closed grammatical paradigm. The semantic distinctions expressed by grammatical aspect involve a focus on some (initial, middle, or final) phase of a situation, or rather on the situation in its entirety. For this reason, grammatical aspect is also called "viewpoint aspect" (cf. Smith 1997: 61). Lexical aspect, by contrast, involves distinctions not between different viewpoints on a particular situation, but between different types of situations in themselves. As the aim is in part to establish generalizations about the semantics of (non-)factivity, the analysis presented here takes traditional lexical-aspectual distinctions as its point of departure.

Vendler's (1957) classification distinguishes four basic situation types: states, activities, achievements and accomplishments, as exemplified in (100a–d) respectively. The classes are defined in terms of combinations of a set of features (which reflect the concepts of stativity/dynamism, telicity/atelicity, and punctuality/durativity) that can be tested by means of a set of patterns sensitive to these features. As these situation types have been widely adopted in the literature, I will restrict myself to a concise description of the semantic characterization of the four situation types. Dowty (1979: 60) offers a useful summary of the diagnostic tests, which involve the interaction of the semantics of the verb constellation with, amongst others, the standard interpretation of the present tense, the co-occurrence with temporal adverbials and the scope of degree adverbs.

(100) a. *He knew the address.*
b. *She sang all day long.*
c. *They won the race.*
d. *They built a house.*

States, as in (100a) *know the address*, contrast with the other three situation types in that they are not dynamic: they do not "consist of successive phases following one another in time" (Vendler 1957: 144), i.e. they do not involve a change from one subphase to the other. In (100a), this means that if the described situation of *knowing the address* is divided into various subintervals, each subinterval is qualitatively identical and refers to the same situation of *knowing the address*. Activities such as (100b) *sing* do imply change, as one portion of an act of singing may refer to the qualitatively different phases of taking a deep breath or of producing one of a subsequent series of sounds. Achievements as in (100c) and accomplishments as in (100d) also involve change, but, unlike activities, the latter two inherently "proceed toward a terminus" or inherent endpoint (Vendler 1957: 146), i.e. they are telic. Situations such as (100c) *win the race* or (100d) *build a house* semantically evoke a "telos" or endpoint beyond which the situation can no

longer continue. In these examples the point at which one crosses the finish line or completes the house constitutes a semantically evoked endpoint or (right) boundary that delimits the time span of the situation. While activities and states may also be interpreted in context to have an endpoint, they do not lexically specify one and are therefore atelic. A final criterion involves (lack of) duration, which is used to distinguish achievements from the other three types. Achievements are conceived of as punctual; they pertain "at a definite moment" (Vendler 1957: 146) whereas the other three situation types are durative. In other words, the situation described in (100c) *win the race* refers only to the decisive point in which the winner crosses the finish line. Accomplishments, by contrast, intrinsically refer to both a process (e.g. of construction) and an endpoint (e.g. a completed house).

In the following two sections, I will add an aspectual component to the semantic characterization of reporting constructions, manipulative constructions, and factive constructions in turn, by correlating them with an analysis of the typical situation type of their verbal predicates, and the correlation of this situation type with a default argument type.

To visualize the difference between the different situation types, I make use of the semantic representations proposed in Croft (2012).[21] Croft's representations (e.g. Figures 3 and 4) distinguish between semantic information that is profiled,[22] (in full lines) and information that forms the background for the portion that is profiled and can be brought to the fore as a result of aspectual construal (in dotted lines). In Figure 3, for instance, a state such as *be (on the table)* only profiles

21 Croft is in favour of the notion of "aspectual potential" rather than that of a default situation type: he holds that situation types (e.g. activities) are not inherently associated with predicates such as *eat*. Rather, activities are one of the potential construals (i.e. aspectual types in a specific grammatical and semantic context) that the predicate *eat* is conventionally associated with. The predicate *eat* also has the potential to be construed as an accomplishment (as in *he ate the sandwich*). Croft argues that there is no reason to consider one of the two construals as primary. I will for the most part continue to use the terminology associated with the traditional distinction between a default aspectual type and contextual derivation. The object type in the analysis presented here is consistently realized as a *that*-clause, which allows me to make generalizations about the default aspectual type of a predicate when combined with this specific argument type. Croft's classification also distinguishes more detailed aspectual subtypes (e.g. reversible and irreversible achievements), but I will start from Vendler's classes and only add more specific additional distinctions where necessary for the purposes of my analysis.

22 The term "profile" refers to the concept or "entity that an expression designates" (Langacker 1987: 551). An expression's profile contrasts to its broader semantic frame, which contains the "presupposed, 'background' semantic structure in which the concept is embedded." (Croft 2012: 11).

the internal, durative phase of the situation; it does not profile the beginning or end of the locative state.

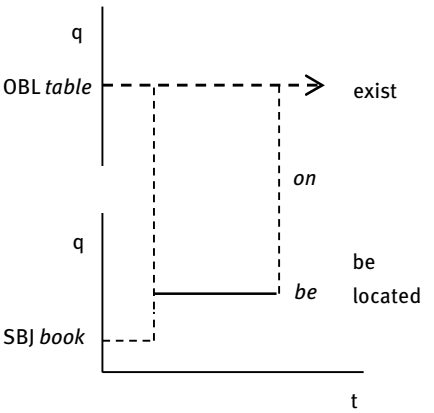

Fig. 3: Aspectual representation of *The book is on the table* (Croft 2012: 298)[23]

The representations include three dimensions of event structure. On the horizontal axis, they visualize the temporal dimension (t): a state, e.g. *be (on the table)* in Figure 3, is durative and is represented by an interval on the temporal axis, while a punctual transition, e.g. the endpoint of the process of *wiping the table clean* in Figure 4, is represented by a point on the temporal axis. On the vertical axis, they represent the qualitative states (q) associated with each of the different arguments involved in the semantic structure of the event. In Figure 3, the two arguments do not undergo a change of state, which is why their qualitative states are represented by means of a vertical line, i.e. they are stative.

23 The representations designed by Croft are reproduced with permission of Oxford Publishing Limited through PLSclear. Note that, for Figure 3, the argument *table* is marked as an "S.OBL" in the original Figure (Croft 2012: 298), i.e. as a subsequent oblique rather than as an antecedent oblique. As Croft defines it, "[a]n Antecedent Oblique is antecedent to the Object in the causal chain; a Subsequent Oblique is subsequent to the Object in the causal chain" (2012: 207).

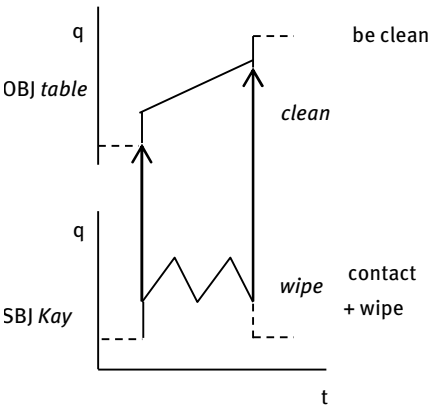

Fig. 4: Aspectual representation of *Kay wiped the table clean* (Croft 2012: 338)

In Figure 4, the argument *Kay* is involved in an activity, i.e. in a dynamic event that is not directed towards a specific endpoint. This qualitative state is represented by the lines going up and down, i.e. the change is cyclic rather than directed. The argument *table* in Figure 4 undergoes a directed change of state (from *not clean* to *clean*), which is represented by means of the ascending line. One advantage of representations as in Figures 3 and 4 for the analysis presented below is thus that the semantic-aspectual status of the object clause itself is also explicitly represented. More specifically, the figures indicate whether an argument undergoes a change (e.g. from *not being clean* to *being clean* in Figure 4) or does not undergo a change (as in Figure 3). The change can be gradual (as in Figure 4), but it can also be punctual (see below). The third dimension, then, involves force dynamics, i.e. the interaction between the different arguments and the situation type, represented e.g. in Figures 3 and 4 by the lines mapping the relation of the object to the situation described by the verb.

3.2.3.2 Analysis

3.2.3.2.1 Reporting constructions

Non-factive, reporting, constructions have traditionally been associated with two semantic classes of verbs, i.e. with verbs of verbal communication (e.g. *say*, *claim*) and verbs of propositional attitude (e.g. *think*, *assume*). In terms of situation type, verbs of verbal communication can be analyzed as accomplishments:

they inherently refer to a complex event consisting of both a process and the culmination point of that process. The event structure for *say* in (101), visually represented in Figure 5, thus denotes the activity of uttering a speech act, which naturally comes to an end as soon as the speech act is completed.

(101) *I asked him why a challenge was important to him, and he said that that was what life was about – meeting a challenge and winning.* (WB)

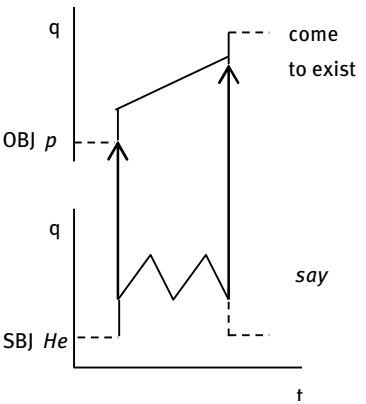

Fig. 5: Aspectual representation of the accomplishment *He said p*

The complement clause can be argued to function as an "incremental theme" (Dowty 1991: 567–571): the event of saying is co-extensive with, and delimited by, the extent of the utterance represented in the complement. In other words, the gradual progression along the act of uttering the reported complement goes hand in hand with progression of the event of saying towards its endpoint. Among incremental theme verbs, verbs such as *say* and *write* are part of the more specific group of creation verbs (Hopper 1985: 73–73; cf. Levin & Rappaport Hovav 2005: 93–94 on creation verbs), in that the progression along the event of saying correlates with the coming into existence of the utterance contained in the complement clause.

How can the analysis of verb semantics contribute to the description of nonfactive complements? Firstly, it can be logically predicted from the verbal semantics of creation verbs that the prototypical semantic status of the reported speech complement is that of an effected information object, i.e. as one that is brought

into existence by the occurrence of the matrix act. Secondly, I argue that the verbal semantics of incremental creation also affects the accessibility of the internal structure of the complement clause, e.g. for extraction or for being within the scope of adverbial modifiers in the main clause.

Accomplishments are traditionally seen as 'complex events',[24] because they present events as consisting of a process and an outcome, which can be regarded as two separate subevents. Event complexity is standardly recognised on account of scope ambiguity with adverbials such as *almost*.[25] It is characteristic for complex events (and thus for accomplishments, cf. fn. 25) that the adverbial can take either the whole complex event (process and outcome) or only the result state in its scope. The sentence in (102), for instance, has two distinct interpretations.

(102) *They had almost built a house.*

On a first reading, *almost* takes scope over the entire complex event, i.e. *it was almost the case that they decided/started to build a house*. On a second reading, the adverb modifies only the completion of the event, i.e. the change of state of the house as being built in its entirety. This reading implies that some activity of building has already taken place, as in *they almost finished building the house*.

An event of saying as in (101) can similarly be considered a complex event that consists of tracking both the represented speaker's activity of uttering sounds and the concomitant coming into existence of the complement clause. The test with *almost* (see (103)) shows that the same ambiguity arises: either the adverbial takes the whole complex event in its scope, suggesting that the event of saying in its entirety did not occur, i.e. the represented speaker remained silent, or it modifies the completion of the complex event, which means that an

24 But see Levin & Rappaport Hovav (2005: 112–117) for a different approach to event complexity.
25 These tests for adverbial scope are said to take up on the property of "(non-)detachability", which is taken to be criterial for the distinction between achievements and accomplishments. One test involves the interpretation of added completive adverbials, e.g. *in an hour and 14 minutes* (Smith 1997: 43–44, 177). In the case of achievements, the added adverbial in for instance *win the race in an hour and 14 minutes* has an inceptive, punctual interpretation: the punctual event of winning takes place after a time interval of an hour and 14 minutes. In accomplishments, e.g. in *build a house in 2 months*, the adverbial specifies the duration of the entire event of building, containing both the process and the endpoint. The different scope of the adverbial thus shows that in achievements, the preparatory phases or process preceding the punctual event can be detached from their endpoint, whereas in accomplishments, process and outcome are non-detachable components of one complex event.

event of saying occurred but the complement was not uttered in its entirety, i.e. some part was left out.

(103) *She had almost said that if Campfire Girls brought flowers to the Old Ladies' Home, the visit would count one extra point* (WB)
a. *... but she remained silent.*
b. *... but she got interrupted before she could finish.*

Also related to this potential ambiguity is the well-known fact that reported complements, but not factive complements, allow adjunct extraction, as in (104). In (104), the manner adverb *how* can modify the main clause act of saying, or it can modify the content of the complement clause. [y] and [z] refer to the clausal positions in which an adverb of manner, corresponding to the answer of *how*, could be expected to be found in a declarative.

(104) *How did you say* [y] *that happened* [z]*?* (WB)

The characterization of speech events as complex events thus means that they consist of both an activity and a result state (i.e. the created utterance), and that the second subevent can be affected independently by some main clause modifiers such as adverbials or negation.

Besides verbs of verbal communication, reported complements are also traditionally associated with verbs of propositional attitude, e.g. *think* in (105).

(105) *She thinks that basically he's a good man and I'm not.* (WB)

In terms of situation aspect, these predicates are states, (just like factive states e.g. *love* or *hate* (see below)). The difference, I suggest, may lie in the fact that non-factive states such as *think* presuppose an activity of mental creation (cf. *I was thinking out loud*), but profile only the result state when they take finite complements (see Figure 6).

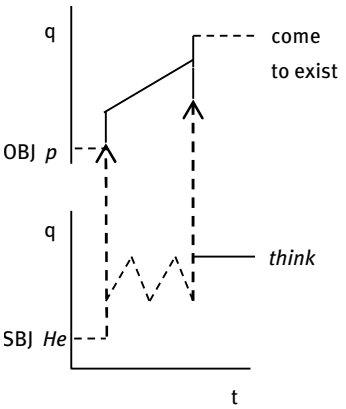

Fig. 6: Aspectual representation of the state *She thought p*

Non-factive states can be argued to be similar to the non-factive accomplishments (Figure 5) in that both take incrementally created complements as their objects. The best evidence for positing this complex event structure is that non-factive states allow the same scope ambiguities that are characteristic of accomplishments: the approximation expressed by *almost* in (106) can scope over the inception of the state of thinking or over the content of the complement clause (even if it is most naturally interpreted as modifying the complement proposition); and the same goes for interrogative adjuncts such as *when* in (107) (see also Cattell 1978 on this scope ambiguity of interrogative adverbs).

(106) *For a moment they almost thought they might win.* (WB)

(107) *When did he think* [y] *the world would end* [z]*?* (WB)

3.2.3.2.2 Manipulative constructions

The class of manipulative constructions contains those situations that express the modification or re-creation of a pre-existent complement clause, as in the examples reproduced in (108)–(109).

(108) *Petrie denied that the Pyramid incorporated calendar measurements* (WB)

(109) *Cheney restated that the goal of the new policy is to put an end to terror around the world, once and for all.* (WB)

They differ from reporting constructions with respect to the semantic status of the complement clause: in reporting constructions, the complement clause represents the utterance that resulted from an act of speech or thought. In manipulative constructions, the complement clause contains a pre-existent entity that formed the input for the verbal manipulation or re-creation described in the matrix act, which is especially clear with a predicate such as *deny* in (108): the complement clause does not represent any content created by the denial; rather, it represents the proposition that was reacted to by means of a denial.

Due to the nominalized status of the complement clause in this type of construction (see above), manipulated clauses are construed as holistic entities and therefore do not allow for adjuncts to be extracted from them, as (110) illustrates.

(110) *How did he deny* [y] *he killed him* *[z]*?*

The manner adverb *how* can only be interpreted as modifying the act of denying; it cannot modify the content of the complement clause.

In terms of situation type, examples such as (108)–(110) initially proved especially difficult to categorize. This is because (i) they can be construed as either punctual or durative events, cf. *He instantly denied that …* (punctual) as in Figure 7 vs. *For years*, *he denied that …* (durative) as in Figure 8 and (ii) unlike the accomplishments in 3.2.3.2.1, they fail telicity tests, cf. ?*It took him ten minutes to deny that …* I propose they can be adequately analysed as "semelfactives" (Smith 1997), a situation type that was not yet recognized by Vendler (1957). Semelfactives are characterized by Smith as "single-stage events with no result or outcome. They have the features Dynamic, Atelic, Instantaneous" (1997: 29). Typical examples of semelfactives in simple clauses include *cough*, *tap the window* (once), *hammer a nail* (once) (Smith 1997: 30).

This analysis accounts, firstly, for the fact that the main clause situations described in examples such as (108)–(110) are essentially conceived of as punctual situations, and that they lack a clear result state delimiting the main clause situation (the pre-existent entity in the complement can, for instance, be involved in an act of mere re-creation or contact). They involve change, i.e. are dynamic, but only "result in point states, which then revert to the rest state" (Croft 2012: 60). They are "single-stage events", not complex events, and thus do not show the scope ambiguity with *almost* that was proposed for reporting constructions: cf. *He almost denied that…*, in which *almost* modifies the punctual act of denying,

not the content of the complement clause. Secondly, the analysis as semelfactives also explains why the examples can take durative adverbials. Semelfactives tend to allow an iterative reading, i.e. as a sequence of punctual events, in which case they have the temporal characteristics of activities (Smith 1997: 30; cf. also Croft 2012: 40, 94). When one has denied a claim for years, this is indeed interpreted as a sequence of momentary denials on various occasions within that period. Figures 7 and 8 represent the punctual and iterative construals respectively.

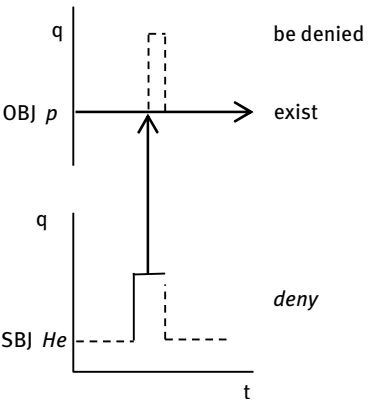

Fig. 7: Aspectual representation of the semelfactive *He denied p*

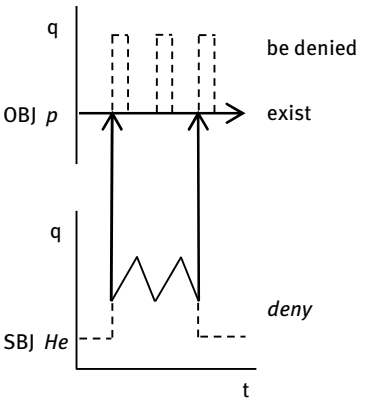

Fig. 8: Aspectual representation of the derived activity construal *He denied p*

3.2.3.2.3 Factive constructions

Factive constructions have traditionally been associated with predicates of emotion, knowledge state, and knowledge acquisition or perception. These three semantic predicate classes are typically associated with the stative or achievement situation type, as illustrated in (111) and (112).

(111) *I love that you can drive it [a scooter, C.G.] straight up on to the footpath, so it's really easy to park.* (WB)

(112) *I was still gripping Jessica and I noticed that my fingers had left little red marks on her shoulder.* (WB)

Predicates such as *love p* in (111) typically designate states, that is, they describe situations as non-dynamic, atelic, and durative. A second group of predicates, illustrated with *notice p* in (112), is typically construed as an achievement: achievements do not profile a simple state; instead they profile the punctual event that forms the transition to a state.

As was the case with the manipulative constructions, factive constructions are simple, not complex events. Hence, the addition of an adverbial such as *almost*, e.g. in *I almost love p* (cf. (111)) or *I almost noticed p* (cf. (112) cannot take the complement in its scope. Instead, such an adverbial is either interpreted as diminishing the degree inherent in the emotive state (with *love*) or modifies only the change of state expressed by the predicate (with *notice*). Further, the nominalized status of factive complement clauses construes them as holistic entities that are not internally accessible for e.g. adjunct extraction. Unlike with reported clauses, the adjunct can thus not be interpreted as modifying the content of the complement clause in examples such as *Where did you love* [y] *that you can drive a scooter* *[z]*?* (cf. (111)) or *Where did you notice* [y] *that your fingers had left little red marks* *[z] (cf. (112))?

Figures 9 and 10 visualize the difference between these two situation types: the state of loving in (111), represented in Figure 9, presents a situation that does not involve change – each temporal component phase of the state of loving is conceived of as qualitatively identical. States do not include reference to their beginning (i.e. initial or left boundary), nor are they conceived of as directed towards an inherent endpoint (right boundary). The achievement expressed by *notice p* in (112), represented in Figure 10, expresses a punctual act of noticing, which entails a resultant state of knowledge of the perceived situation described in the complement proposition.

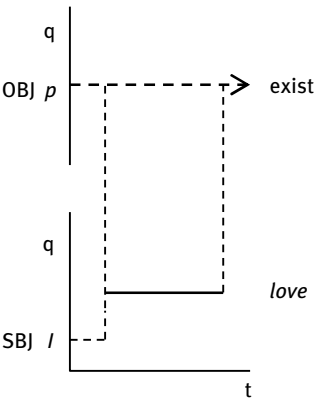

Fig. 9: Aspectual representation of the state *I love p*

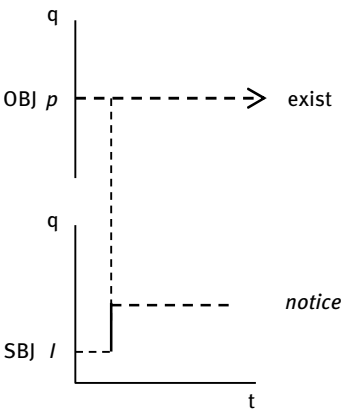

Fig. 10: Aspectual representation of the achievement *I noticed p*

In both the stative and the achievement situation types, the three semantic classes (emotive, knowledge state, knowledge acquisition) do not effect a change of state in the complement proposition, which is conceived as an entity that exists independently and can be interacted with at any time.

In my view, the two situation types represented in Figures 9 and 10 further allow us to capture the semantic interrelations between the three semantic classes of predicates. Figure 11 visually represents the situation type of the three se-

mantic classes. It represents a different kind of analysis from the preceding aspectual representations, as I will explain below: it represents an analysis of the semantic frame of the semantic predicate classes.

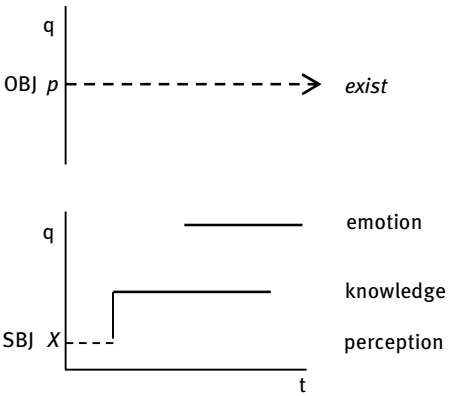

Fig. 11: Temporally contiguous phases of (i) perception as inception of knowledge state, (ii) knowledge state, and (iii) emotive state

The situation type associated with predicates of emotion (e.g. *love*) and knowledge (e.g. *know*) is that of a state, whereas knowledge acquisition predicates (e.g. *notice*) are typically achievements. Taken together, I argue that each of the three classes represents one of three temporally contiguous stages in a complex semantic structure, associated primarily with emotive states (represented at the rightmost end of Figure 9). Emotive states are semantically the most complex since the emotional reaction towards a proposition presupposes prior knowledge of the proposition that is reacted to. A state of cognitive awareness of a proposition in turn presupposes a prior moment of inception, i.e. of cognitive perception of that proposition. Knowledge acquisition, or "perception", predicates, finally, semantically designate the transition towards, or inception of, a knowledge state – this resultant state is only entailed (and thus no longer implied under a negative, interrogative or hypothetical modifier).

The figure can also be read from left to right to signal the increasing semantic complexity of the three classes, as summarized in the semantic cline in (113). Knowledge acquisition predicates such as *realize* semantically only convey the transition towards a potential knowledge state. A knowledge state, then, presupposes a prior moment of acquiring knowledge, and has the potential to trigger an

emotive reaction. Emotive predicates, finally, inherently presuppose a prior knowledge state, and inception of that knowledge state, with respect to the complement proposition that is reacted to.

(113) *REALIZE p < KNOW p < LOVE p*

Parts of the cline have been pointed out previously. Givón points out the contingent relation between the inceptive (perception) and knowledge phases when he states that "*realize* involves the presupposition that, at the time BEFORE the time-axis, the subject of *realize* was not aware of the truth/falsity of the complement sentence … In addition, *realize* has the implications of 'gaining knowledge', and those pertain to the time FOLLOWING the time-axis." (1973: 907–908). Field, in turn, observed the relation between emotive and knowledge states: "[a]ffective factive predicates … overtly encode affective stance on the part of grammatical subject in addition to indexing epistemic stance" (1997: 804).[26] [27]

The fact that the actualization of the situation expressed by a factive emotive predicate presupposes a prior knowledge state and inception of that knowledge state is not explicitly profiled in each complex sentence with an emotive predicate: as pointed out above, their situation aspect typically involves only one semantic phase, i.e. that of the emotive state itself. Rather than pertaining to the actual situation aspect, then, the grouping of the three semantic phases as in Figure 11 represents the more abstract *semantic frame* for emotive predicates. I owe the notion of a semantic frame and its distinction with the situation type of particular utterances in context to Croft (2012: 11–13), who attributes it to Fillmore's frame semantics (1982, 1985). "In frame semantics", Croft says, "a semantic representation of a concept denoted by a word or construction must include also a

26 Both authors moreover distinguish between the lexical presuppositions referred to here, i.e. those "for which the time-axis is relevant" (Givón 1973: 907), and another type of presuppositions, i.e. those that are "timeless" (Givón 1973: 907) and "pragmatic, speaker-based" (Field 1997: 801).

27 Norrick (1978: 12) criticizes Todt and Guhl (1975), who are reported to "maintain that a predicate like *regret* can be lexically decomposed into *believe* plus some emotive indicating remorse". It should be noted that the account proposed here, in which traditional factively presupposed complements are analyzed as pre-existent to and unaffected by the main clause situation does not involve necessary *belief* in the complement proposition – not on the part of the main clause conceptualizer nor on the part of the actual speaker. This will be argued for in Chapter 4. The actualization of a main clause situation of regret with respect to a pre-existent complement proposition does, however, require prior awareness of the existence of that proposition.

presupposed, "background" semantic structure in which the concept is embedded" (2012: 11).

I will borrow the term semantic frame to give a name to semantic interrelations as in (113) and Figure 11, but my use of it is more restricted than it was probably intended to be in its original frame-semantic sense. Firstly, there are clear restrictions on the relations that can obtain between different semantic phases in a semantic frame of event structure. I follow Moens & Steedman in this respect, who restrict the relevant semantic interrelations between events to those that involve "something more than mere temporal coincidence, that is, some *contingent* relation such as a causal link or an enablement relation between the two events" (1988: 16, my emphasis). A second, minor, difference from the short definition cited above is that the components of the semantic frame that go beyond the aspect of a particular utterance can not only be "presupposed", they can also be entailed. The distinction between presuppositions (which are maintained under negation) and entailments (which are not maintained under negation) in relation to what is here called the semantic frame was shown already in Givón (1973), who argued that presuppositions temporally precede the described situation, whereas entailments follow the described situation.

The semantic interrelations also account for the polysemy between predicates associated with these semantic classes. Depending on the grammatical context, predicates of knowledge may be construed as states (114a) or as inceptives (114b).

(114) a. *We have always known he leads from the front and makes others follow.* (WB)
b. *It was essential, he had been told, to relive the moment of his birth, but he suddenly knew that this was impossible.* (WB)
c. *Bill learned Greek* (Smith 1997: 35)

If we consider the shift in the opposite direction, we see that the interpretation of inceptive predicates can imply an inferred resultant knowledge state, as in (114c). As Smith puts it, "[i]n the direct presentation of a state, the verb constellation focuses lexically on that state, e.g. *Mary is tall*. States can also be presented indirectly, through a change of state (inchoative)" (1997: 34). She gives the example in (114c) to show that "[i]nchoatives often allow the inference that the resultant state continues, unless there is information to the contrary" (1997: 34). Givón (1982: 115) notes that such inferences are subject to lexicalization over time, with cases of "the perfect-resultative 'having seen' bec[oming] re-analyzed as 'having

seen and thus know' ". He cites German *wissen* (*know*) as related to Indo-European **woida* (*having seen*) (1982: 115).

This relation between knowledge acquisition and knowledge state predicates has also been pointed out, amongst others, by Croft (2012), who explicitly states – with reference to Vendler (1967: 113) – that predicates such as "*see* and *know*, and English perception and cognition predicates in general, have an aspectual potential to be construed as either a state or an achievement in the appropriate semantic and grammatical context" (2012: 38). For this reason, he groups together the inceptive (perception) and resultant state (knowledge state) aspectual types in a class including predicates that have the "aspectual potential" for both situation types, the class of "inceptive states".[28] Inceptive states (acquisition and state of knowledge) thus seem to group together as distinct from emotive predicates, which generally involve stative situation aspect.

3.3 Conclusion

In this chapter, I have distinguished three types of complementation constructions based on their semantics, formal behaviour, and referential interpretations. I have also added an aspectual analysis to provide more insight into the abstract semantics of factive, manipulative and reporting constructions. In this section, I will summarize and discuss the main findings with respect to (i) the semantics of the situation described in the matrix, (ii) the correlation of the matrix situation types with a different aspectual status for the complement, and (iii) the interrelations between semantic subclasses of main clause predicates that can be distinguished within the three construction types. I will end with a final reflection on how the three construction types can be placed on a continuum that forms the basis for the (diachronic or synchronic) shifts that will be the main focus of the case studies in Chapters 5 to 7.

Firstly, as regards the situation described in the matrices of the three construction types, I proposed that these do involve a distinct abstract semantics. Reporting constructions (illustrated with *say* and *think* above) were said to share the core semantic feature of creation: they describe, or presuppose, the verbal or mental creation of the utterance contained in the complement clause (see also

28 Field (1997: 808) makes the point that it is precisely this ambivalent group of inceptive states that in the literature has been called "semi-factive" (Karttunen 1971): they allow variable scope of interrogative, negative or modal operators, which may or may not affect the complement proposition, and can thus give rise to so-called presupposition cancellation.

Davidse 1994; Vandelanotte & Davidse 2009). In factive constructions with complement clauses in object positions (illustrated with *love*, *know* and *realize* above), I contend that the core semantic feature is that of (non-causative) reaction or contact: they describe the reaction to, knowledge of, or acquisition of knowledge of, a pre-existent complement proposition. Manipulative constructions (illustrated with *restate* and *deny* above) are similar to factive constructions in that they too involve contact with, or reaction to, a pre-existent complement clause. The difference lies in the fact that the restatement or denial of a pre-existent proposition involves causation – it involves an actual participant "acting on" the pre-existent complement proposition, and effecting a change by re-creating or modifying it in an implied consequent speech or thought act.

Secondly, in the aspectual analysis, I proposed that factive and manipulative constructions have a simplex event structure (typically that of a state, achievement, or semelfactive), while reporting constructions are associated with the complex event structure of accomplishments. Complex events consist of two subevents, one consisting of the process referred to by the predicate (e.g. the activity of speaking) and the other consisting of the endpoint of that process (e.g. the utterance in the complement being fully created). Characteristically, complex events show scope ambiguity: adverbials can take either the process and consequent result state in its scope, or only the result state. Reporting constructions show the same scope ambiguity in their potential for adjunct extraction from the complement clause and for a (negative, modal, or interrogative) modifier in the main clause to scope over the utterance contained in the complement clause.

Importantly, the differences in situation type also involve a different relation to the complement: in reporting constructions, the reported clause can be analysed as an "incremental theme" that delimits the main clause process of creation and thereby defines a separate subevent, i.e. the second subevent of the complex event. In factive constructions, the complement functions as an independently existing participant that can be interacted with at any time, and that is itself stable over time, i.e. is in itself conceptualized as stative. The same goes for manipulative constructions. The difference between the factive and manipulative constructions lies in the fact that the manipulative constructions (e.g. the denial, restatement) effect a change in the complement proposition, and thus involve a necessarily transitory and dynamic relation between the matrix and the complement proposition. The non-causative factive constructions, by contrast, involve a purely stative relation between the matrix (e.g. a person's knowledge state or emotion) and the complement proposition that is interacted with. The difference shows in the distinct interpretation of durative factive and durative manipulative

constructions: when one loves or knows something for years, the relation between the state of loving/knowing and the complement entity is conceptualized as stable over time. By contrast, when it is said that one denies something for years, this is interpreted in terms of a sequence of punctual events of denying (see Figure 8 above).

Thirdly, within each of the three construction types, I proposed that different semantic and aspectual subtypes can be seen as interrelated. For reporting constructions, I have proposed that these essentially involve a similar aspectual structure: reported speech and thought both involve a process of verbal or mental creation as well as a represented utterance that is the result of the act of creation in the main clause. The two types differ in that reported speech matrices profile the activity described in the matrix, whereas reported thought profiles the result state of an act of creation described in the matrix (see Figures 5 and 6 above). For manipulative constructions, I have argued (following Smith 1997) that the punctual and durative construals are related in that the former represents a single, punctual event, whereas the latter involves the iteration of multiple punctual events (see Figures 7 and 8 above). For factive constructions, finally, I have argued that the three semantic classes of predicates (emotion, knowledge state and knowledge acquistion) can be placed on a cline of decreasing semantic complexity whereby the former classes presuppose the latter, i.e. an emotional reaction to a proposition presupposes a prior knowledge state with respect to that proposition, and a knowledge state presupposes a prior start of the knowledge state. Note that on my account, this knowledge state requires awareness of the existence of the proposition as an entity; it does not require a commitment to the truth of the proposition (see also Chapter 4).

Finally, we can consider how the three different types of complementation constructions relate to each other with respect to their semantic-aspectual chacterization. I propose that the three construction types can be placed next to each other on a continuum as represented here in Figures 9, 8 and 5, reproduced here as Figures 12 to 14. The relation between the three construction types is an important factor in explaining the shifts from one construction type to another. The abstract interrelations that are outlined here will be illustrated by means of the three cases studies presented in Chapters 5 to 7.

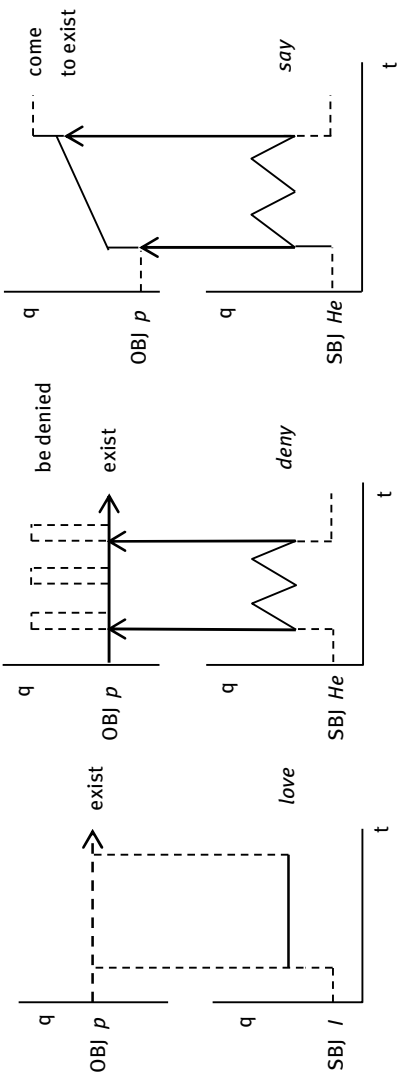

Fig. 12 to 14: From factive state over manipulative activity to reporting accomplishment

Factive constructions as in Figure 12 differ from the manipulative constructions illustrated in Figure 13 in that manipulative constructions are causative, while factives are not: the latter do not effect a change on the complement. One way to derive a manipulative construction from an emotive factive construction is to re-

conceptualize the emotion as a modifier of manner to the causative activity affecting the complement proposition. Manipulative constructions, then, differ from reporting constructions in the semantic status of the complement clause: in manipulative constructions, the complement clause represents an entity that exists independently from the matrix situation. In reporting constructions, the complement entity is dependent for its existence on the main clause occurrence. Deriving a reporting construction from a manipulative construction thus involves a reconceptualization of the semantic status of the complement. In Chapter 7, we will discuss a diachronic development that derives a reporting construction from a factive construction in the section on *regret (to say)* constructions. The shift can also work in the opposite direction, i.e. from reporting to manipulative. As pointed out, this involves a reconceptualization of the complement proposition as an independently existing entity that can be interacted with. Such cases will be discussed in Chapters 5 and 6.

Before going into these case studies, however, I will focus on the interpersonal semantics associated with the three types of complementation constructions that were distinguished. This is the subject matter of Chapter 4.

4 Interpersonal semantics. Modality

4.1 Introduction

This chapter examines the potential for speaker-related modal marking[29] in the different types of complement clauses described in Chapter 3. In essence, I will propose that it is crucial to a correct understanding of (non-)factivity to distinguish between two levels of analysis, which have typically been confused and conflated ever since Kiparsky & Kiparsky's (1970) "Fact". The distinction that is central here was made specifically with respect to factivity by Givón (1973) and Field (1997), but seems to have been overlooked in the subsequent literature. Givón and Field called for a distinction between two concepts that have been referred to as presuppositions: those presuppositions "for which the time-axis is relevant" (Givón 1973: 907), and those that are "timeless" (Givón 1973: 907) and "speaker-based" (Field 1997: 801). The two notions of presupposition relate more generally to the distinction between the representational and the interpersonal meanings of an utterance (Halliday 1970; Hengeveld 1989). The representational content gives a description of the situation that is referred to, while the interpersonal dimension conveys the communicative role of speaker and hearer with respect to that representational content: it involves expressions of speaker attitude and speaker-hearer interaction.

The first notion of presupposition relates to the level of the representational semantics of the matrix clause situation. Chapter 3 was devoted to this level of analysis. It was proposed that factive and reporting constructions can be distinguished based on temporal notions that underlie the semantics of the matrix clause. More specifically, I argued that reporting matrices semantically express the creation of the reported utterance, whereas factive and manipulative matrices describe the contact with, or reaction to, a semantically pre-existent proposition. It follows from this semantic characterization that reported complements represent content that originated with the represented speaker or cognizer identified in the main clause, whereas factive and manipulative complements are not subject to this restriction. Semantically, the latter encode acquisition of, prior knowledge of, and/or a reaction to, the content of the pre-existent proposition by the conceptualizer represented in the matrix (see Chapter 3).

The second notion of presupposition relates to the level of interpersonal semantics, which deals with the way in which the communicative role of speaker

29 This chapter expands on the proposals made in Gentens & Davidse (2014, 2017).

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and hearer is construed with respect to the representational content (Halliday 1970). The traditional definition of factivity in terms of a truth presupposition on the part of the actual speaker, not the represented speaker or cognizer (Kiparsky & Kiparsky 1970), with regard to the complement proposition foregrounds the relevance of investigating this interactional layer. I will do so in this chapter by focusing on one grammatical domain that is central to interpersonal semantics, namely the system of modality (Halliday 1970; Verstraete 2007). It is on this interpersonal level that we can distinguish between different contextual, i.e. "speaker-based" (Field 1997: 801) sources of complement-internal modal positions, as an additional layer of complexity on top of the position (e.g. emotional reaction, etc.) which is lexically ascribed to a represented speaker or conceptualizer in the main clause.

The chapter will be structured as follows. In 4.2, I give a brief overview of how the expression of modality in the verbal domain has been described in functional approaches. The discussion focuses on the distinction of speaker-related ("interpersonal") uses from non-speaker-related ("descriptive") uses of modality, as it is only the former that have been argued to truly relate to the interactional here-and-now. In 4.3, I describe different proposals that have been advanced for the study of speaker-related modal markers in complement clauses. In 4.4, the validity of these proposals is investigated on the basis of actual attestations of modalized complement clauses. The aim is to give a descriptive account of the potential modal stance patterns in each of the three construction types distinguished in Chapter 3 (reporting, factive, and manipulative constructions). Finally, in 4.5, I discuss the theoretical relevance of the findings.

To establish which speaker-related modal stance patterns are possible in different types of complement clauses, I have looked for modal auxiliaries in complement clauses in object position, and considered whether these modal auxiliaries were used in a speaker-related way, which level of interaction they related to (represented or current speaker-hearer interaction), and which type of complementation construction they were found in. That means that for the description in 4.4 of the attested stance patterns for each construction type, I started from queries in the Collins Wordbanks Online Corpus (WB) for lexical verbs followed by the complementizer *that* with a modal auxiliary in a context of 8 words to the right, which were then supplemented with manually filtered tokens from the Internet. This proved especially important to test for actual attestations of possible modal stance patterns in factive and manipulative constructions, as I found that these were generally much less frequent in corpora than reporting constructions (cf. also Thompson 2002). To illustrate this point: in a small corpus sample of 150

tokens from the British Spoken subcorpus of the Collins Wordbanks Online Corpus, which focused on *that*-complement clauses in the object position of personal lexical predicates in the present tense, 131 (87%) could be seen as instances of reporting constructions, 9 as instances of manipulative constructions, and 10 as instances of factive constructions (with only 2 emotive factives). The internet data thus formed an important additional data source to check whether speaker-related modal auxiliaries were naturally attested in the less frequent construction types.

4.2 Modality

Three types of modality are commonly distinguished in functional approaches (Palmer 1990). Epistemic modality expresses a degree of likelihood (e.g. certainty or possibility), as illustrated in (115), where *might* encodes the speaker's tentative assessment that the person on TV is probably Ronseal. Deontic modality expresses a degree of desirability (e.g. obligation, permission). Example (116) illustrates a deontic modal by means of which a speaker grants permission to leave. Dynamic modality (see also below) roughly expresses a potentiality or necessity as inherent in a participant or in a situation, as in (117), where the ability to swim is presented as a skill that cats inherently have the potential for.

(115) *A: Is that the advert on TV?*
B: Yeah.
A: Is it Ronseal?
B: I think it ***might*** *be Ronseal yeah.* (WB)

(116) *Andrew McClintock nodded his head to the girl. "You* ***may*** *go."* (WB)

(117) *Cats* ***can*** *swim – but only do so in an emergency if they fall in.* (WB)

These three semantic modal categories can further be specified in terms of their interpersonal or representational function, i.e. in terms of whether they have speaker-related or non-speaker-related uses. The remainder of this section will be devoted to discussing the main criteria that have been advanced for making this distinction in main clauses, so that it can be extended and applied to the analysis of modal markers in complement clauses.

The view presented here, which will be restricted to modality in the verbal domain, is substantially indebted to the insights and arguments offered by Verstraete (2001, 2002, 2007). Importantly, Verstraete shows that speaker-related

modal meaning is not only realized by modal auxiliaries (4.2.1) but also by moods such as the indicative (4.2.2). The two components form an integrated model of modal positioning as it is expressed both in explicitly modalized and in modally unmarked indicative clauses. For expository purposes, in my analysis of modal positioning in complement clauses (4.4) I will focus solely on complement clauses with explicit modal auxiliaries, but it is important to point out that this analysis can also be applied to complements in the indicative, and to expressions of modality outside the verbal domain, e.g. by epistemic adverbs such as *maybe* (see Nuyts 2001), thereby making it a promising tool to account for modal positioning in all (explicitly or non-explicitly modalized) complement clauses.

4.2.1 The interpersonal status of modal auxiliaries

According to Verstraete (2001: 1506, 1523 and 2007: 13), the fundamental distinction between speaker- and non-speaker-related modal auxiliaries in English resides in the contrast between the auxiliary either

- being used by the speaker to construe a hic et nunc modal position, either epistemic or deontic, with regard to the propositional material in the scope of the auxiliary;
- expressing a relation internal to the proposition such as need, necessity, ability, or possibility.

This section will set out his argument that these distinct semantics motivate the differential grammatical features and behaviour of speaker-related and non-speaker-related modal auxiliaries. I will focus on two key features that bear out the distinct speaker-related vs. non-speaker-related semantics: (i) the relationship of the modal auxiliaries to tense, and (ii) the effect on modal auxiliaries of declarative-interrogative contrasts.[30]

A first key component of speaker-related modal uses lies in the way they interact with tense distinctions: speaker-related modals such as *might* and *may* in (115) and (116) encode a judgement that is directly anchored to the time of speaking; they create a position of (epistemic or deontic) commitment in the here and now of the context of utterance. This ties in with their core function of "modal

30 Further grammatical contrasts include the behaviour of the modals in conditionals, or restrictions on the linear combination of more than one modal auxiliary. I refer to Verstraete (2001, 2007) for discussion.

performativity" (Verstraete 2001). A consequence is that speaker-related modal assessments cannot be temporally divorced from the temporal zero-point (Declerck 1991: 14–16) defined by the deictic origo. As Verstraete (2001: 1524) puts it, speaker-related modal auxiliaries "can be morphologically past, but this morphological marking does not express the speaker's past judgement". Thus, a form like *might* instead of *may* in (115) does not locate the speaker's assessment of likelihood in the past; instead, it is used to express tentativeness (Palmer 1990: 10). As we will see below, non-speaker-related modals can be used to locate abilities, needs, necessities, or possibilities in the past.

A second key component involves the way in which speaker-related modals interact with declarative-interrogative contrasts (Verstraete 2001, 2007). For speaker-related modals, both speech act participants (speaker and interlocutor) can be construed as the source of the modality. In declaratives, it is the speaker who is the modal source, while in interrogatives the responsibility for the modal position is transferred to the hearer. This systematic distinction applies both to epistemic and deontic speaker-related judgements, as in (115) and (118) and in (116) and (119) respectively.

(118) [talking about what subjects to choose courses from]
A: Right. What about computing? ***Might*** *you take that?*
B: I might do yeah if it's fun. (WB)

(119) *The girl stood and curtsied. "Thank you for your kindness.* ***May*** *I go back after I eat, then?" "Certainly," Verna said.* (WB)

In (115), the modal assessment of likelihood is clearly made by the speaker (B in this case). In (118), speaker A asks hearer B for his modal assessment of the proposition that "he would take computing classes". The effect of the interrogative on the epistemic modal is thus to make the hearer the modal source: "do you think it is likely that you would choose to take computing classes?". With the declarative with deontic *may* in (116), the quoted speaker, Andrew McLintock, invokes his own authority to give permission to the girl to leave. This speaker-oriented use of deontic *may* conveys the meaning "I grant you permission". In (119), then, a girl asks Verna for permission to go, recognizing the addressee's authority to grant permission. The interrogative thus has the effect of construing the deontic modal position as hearer-oriented: "will you grant me permission?". This second

characteristic feature involves the way in which speaker-related modal uses establish social relations in the dynamics of speech exchange, which is why Verstraete (2001) dubs it "interactive performativity".[31]

So far, we have seen that speaker-related modal uses are characterized by (i) modal performativity, i.e. by the temporal coincidence of the modal judgement with the context of utterance, and by (ii) interactive performativity, i.e. by their intrinsic reference to speech participants, depending on the basic clause type they occur in. Now that these characteristic semantic and formal features of speaker-related uses have been established, we can turn to the way they distribute over the three categories of modal meanings (epistemic, deontic, and dynamic) introduced in (115) to (117).

It has been argued extensively that epistemic modal auxiliaries are always speaker-related (Halliday 1970; Nuyts 2001; Verstraete 2001, 2007). They inherently involve the speaker or interlocutor "associat[ing] with the thesis an indication of its status and validity" (Halliday 1970: 335), as in (115) and (118).

Within deontic modality, there is a long tradition of authors distinguishing speaker-related from non-speaker-related uses (e.g. Halliday 1970; Palmer 1990; Declerck 1991; Verstraete 2001, 2007). The distinction between the two types of uses can be demonstrated by applying the semantic and formal criteria discussed above. With speaker-related deontic uses, as explicated above, the shift from declarative *You may go* (116) to interrogative *May I go back then* (119) reorients the modal from the speaker to the hearer: in (116), the speaker assumes responsibility for the permission granted ("I allow you"), whereas in (119), the responsibility for granting the permission is transferred to the hearer ("will you allow me to?"). The paraphrases furthermore reflect that the modal assessment is anchored to the speech participants and to the temporal origo.

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31 This interaction with declarative-interrogative contrasts is not found in the same form for complement clauses, and will not be explicitly discussed below. Note that there are interrogative complementizers (cf. Dik 1997), e.g. *whether* in (i), but that these do not transfer the modal authority for the complement-internal position to the hearer in the ongoing speaker-hearer interaction. Rather, (i) involves a represented question, used to invite a response from the represented interlocutor (*Russ*) in the represented speech situation. Nye (2013) describes how the grammatical behaviour of *wh*-complements supports their division into represented interrogatives as in (i) and factive resolutives as in (ii).

(i) *I saw Russ the next morning and asked* ***whether he'd had a good time****. He just grinned – he didn't need to say anything.* (WB)

(ii) *He forgot* ***when she was born****.*

With non-speaker-related deontic uses this is not the case, as illustrated by (120) and (121). The two examples involve notions of permission and obligation, but here information is negotiated about the existence of legal permission or necessity.

(120) [from a phone-in programme]
A: I had a letter from a catalogue. ***Can*** *I say the name?*
B: Why not.
A: Er Burlington catalogue. (WB)

(121) *To stand a chance of winning just answer the following question: Who will replace Benson and Hedges Jordan Honda driver Jarno Trulli next season? Then ring 09063 660 470 (1550 927 770 in Rep of Ireland) and leave your answer, together with your name, age, address and daytime telephone number. ... All entrants* ***must*** *have a valid passport and winners will be responsible for their own travel to and from London Heathrow.* (WB)

In (120) the speaker asks the hearer if there is legal permission to name a company in a phone-in programme. The interrogative does not put the responsibility to decide on the permission with the hearer, i.e. it does not convey the meaning "will you allow me?" but rather asks what is generally accepted according to the regulations of the programme. Similarly in (121), the speaker does not assume the authority to express obligation in the sense of "I require/order you to have a valid passport". Instead, the speaker merely describes the existence of a rule that requires all participants in the contest to have a valid passport in order for their entry to be taken into consideration.

Non-speaker-related deontic modality, which is concerned with the existence of obligations and permissions, is located in time relative to the temporal origo, as simultaneous, anterior or posterior to it. Whereas in (120) the permission to mention the catalogue name exists at the time of speaking, in (122) for instance, the permission to run around naked (once, as a child) is located in time before the now of adulthood.

(122) *the child is asked to give up quite a few of its privileges. ... Once you* ***could*** *run around naked, now you are told off for doing so.* (WB)

Finally, we come to the category of dynamic modality, which was introduced only cursorily in the discussion of example (117). Following Palmer's description of this modal category, it can be argued that dynamic modality covers a range of

modal notions, namely need/necessity, commonly coded by *need to*, volition/tendency, often coded by *will*, and ability/theoretical possibility, which is strongly associated with *can* (Palmer 1990, 2001). The distinction between the two elements of each dyad correlates roughly with a participant-inherent concept (need, volition, ability) and a more circumstantial, or situation-inherent, notion (necessity, tendency/law, possibility). In all of them, the modal concept is a relation internal to the proposition, which entails that it is part of a description rather than constituting a speaker judgement. In other words, clauses with dynamic modals describe the existence (or non-existence) of needs, necessities, abilities, possibilities, etc..

Importantly, such dynamic modal notions can be located in time. For instance, in (123) *could* locates the theoretical possibility of Newcombe substituting for Woodford in the past; "late yesterday" that possibility still existed (Declerck 1991). In (124) *would* describes the past habit of the speaker's family camping in Noosa.

(123) *Late yesterday Newcombe* ***could*** *still have substituted Mark Woodford.* (WB)

(124) *Every summer as a kid, Milton and his family would drive to Queensland in their Valiant Pacer to spend six weeks at the beach with relatives, to surf, fish and enjoy the sunshine. Back then they* ***would*** *camp at the old camping ground at the end of Hastings Street in Noosa.* (WB)

The effect of the interrogative in such cases (see also 4.2.2 below), e.g. *Could he still have substituted MF?* for (123) is to ask the hearer for their epistemic commitment to the existence of a possibility, necessity, or volition at a certain time, e.g. as in *Is it the case that it was still possible for him to substitue MF yesterday?*. Non-speaker-related modals pattern with the indicative in this respect (Verstraete 2001, 2007). I will come back to this point in more detail in the next section, which deals with modal positioning as it is expressed by the indicative (and by non-speaker-related modals).

4.2.2 Modality as expressed by the indicative

Besides modal auxiliaries, basic moods or sentence types (e.g. indicative, imperative) have been suggested to be part of the English modal systems as their unmarked expression type (e.g. Palmer 1986: 23–32). Regarding the indicative

mood, Palmer has argued that it represents the formally unmarked and semantically neutral speaker-related value in the system of epistemic modality. This claim is further developed by Verstraete (2001, 2007). Verstraete (2007: Ch. 1) points out that the indicative occupies a specific position in the paradigm of modal expressions. In contrast with the epistemic modal auxiliaries that express various degrees of commitment, the indicative indicates full commitment to the truth of proposition, or 100% certainty (Davies 2001: 230). Verstraete (2007: 50–51) argues that the indicative can be seen as the unmarked member in the paradigm of modal verbal expressions because it has a wider distributional range than the other members of paradigm. Functionally, it is less specific, as, besides signalling complete speaker commitment to the proposition, it can be used in contexts where speaker-positioning is suspended (e.g. in conditional protases) and it also co-occurs with non-speaker-related modal auxiliaries.

Fully analogous to the behaviour of speaker-related modals, the epistemic stance conveyed by the indicative shifts from speaker- to hearer-oriented with a change from declarative to interrogative. This is illustrated by examples (125) and (126).

(125) *My trip was in the first week in May. It* ***rained*** *on day one and thereafter the weather was glorious.* (WB)

(126) ***Did it rain*** *on Saturday?* (WB)

In the declarative in (125) the speaker is fully committed to the truth of the proposition, but in the interrogative (126), the responsibility for the assessment of the truth status of the proposition is transferred to the hearer.

What element of the indicative realizes this epistemic stance? With reference to Halliday (1985: 75), McGregor (1997: 236–239) and Langacker (2002: 7, 2015), it can be proposed (Kristin Davidse, p.c.) that this function is served by the tensed finite element of the VP, which ties the proposition to the speech exchange, or ground (Langacker 2002: 7), with positive and negative polarity conveying more specific epistemic modal positions (Halliday 1985; Davies 2001).

As Halliday puts it, the tensed finite gives the proposition "a point of reference in the here and now" (1985: 75) by locating it relative to the "now", i.e. "the temporal zero-point" (Declerck 1991a) of the speech exchange. In this way, the proposition is turned into "something that can be argued about" (Halliday 1985: 75). In a declarative indicative like (125) the speaker is presented as 100% committed to the proposition that it rained on the specific day in the past indicated. In an interrogative indicative like (126), the speaker asks the hearer to indicate

their modal position about the proposition that it rained on Saturday. Polarity further construes the speaker's epistemic position with respect to a proposition being the case: positive and negative polarity add the specific meanings "it is so" and "it isn't so" respectively (Halliday 1985: 75; Davies 2001: 218).

The function of tensed VPs in indicatives, giving the proposition a reference point in the here and now, is analogous to that of speaker-related modal auxiliaries, which give the proposition a reference point in the speaker's – or hearer's – judgement "of the probabilities, or the obligations, involved" (Halliday 1985: 75). Both construe what is ultimately a modal position with regard to the proposition. This point is most clearly expressed by Langacker (2015), when he states that grounding a clause by means of tense "offers a rudimentary assessment of its epistemic status vis-à-vis the interlocutors" (2015: 6).

Verstraete (2007: 38, 52–57) further makes the important point that non-speaker-related modals, such as deontic *can*, *must* and *could* in (120)–(122) and dynamic *could* and *would* in (123) and (124), which express the existence of permission, obligation, theoretical possibility and past habits respectively, pattern with the indicative mood in their semantic and formal behaviour. That is, they encode an epistemic position of commitment with respect to the existence of a permission, necessity, etc. Moreover, the speaker assumes this modal position in the declarative and transfers it to the hearer in the interrogative hic et nunc, at the time of speaking. The point about an example like (120), *Can I say the name?*, is not simply that it does not ask permission of the hearer but that it does ask the hearer to assume a modal position, viz. an epistemic position regarding the proposition that "it is legally permitted to mention a brand name on the radio". In indicatives with non-speaker-related modal auxiliaries, the modal position at issue in declaratives and interrogatives is coded by tense and polarity (just as in simple indicatives). For instance, while in (120) the existence of permission at the time of speaking is at stake, in (122) the existence of permission at a specific point or period in the past is at stake. This is wholly compatible with the intrinsically tensed nature of non-speaker-related modals, by which they distinguish themselves from speaker-related modals.

4.3 Speaker-related modal auxiliaries in complement clauses

In studies on complementation constructions, the potential for speaker-related modality (as distinguished from non-speaker-related modality in the previous section) in complement clauses is traditionally seen to be restricted by the type

of matrix predicate.[32] In a nutshell, it has been proposed that attestations of speaker-related modal markers tend to occur only in complements of reported speech and thought, in which case it is not the actual speaker that is responsible for the modal assessment, but the represented speaker or cognizer identified in the main clause. This claim essentially ties in with traditional definitions of factivity in terms of speaker commitment, which stipulate that factive complements are presupposed true by the actual speaker, whereas reported complements are asserted by the main clause agent (Kiparsky & Kiparsky 1970; Hooper & Thompson 1973; see also Chapter 3). In terms of modal value, the assertion-presupposition contrast can be interpreted as follows: asserted complements involve the commitment of the matrix subject to the variable epistemic or deontic modal value of reported complements, while presupposed complements involve speaker commitment to the truth, i.e. the fixed epistemic certainty, of factive complements. In the remainder of this section, I will give a more detailed account of earlier studies on the topic of speaker-related modal marking in complement clauses.

The idea that factive and reported complements differ with respect to complement-internal modal marking dates back at least to Lyons (1977: 787–809). In line with a distinction drawn by Halliday (1970), Lyons (1977) was among the first to highlight the distinction between a speaker-related, subjective use of modal markers, and a non-speaker-related, objective use (see 4.2.1).

32 In this section I will be concerned with speaker-related modal auxiliaries that have in main clause environments been described as encoding speaker-related modal assessments. It is argued that their distribution and use in complement clauses, which has received comparatively little attention, is not yet properly understood.

There are, of course, different types of grammatical expressions that have been argued to encode modal meanings in the specific environment of complement clauses. These include (i) complementizers, e.g. *that* vs. *if*, which have been argued to encode factual/potential, and hypothetical/uncertain epistemic meanings respectively in Germanic languages (Nordström 2010), and (ii) dependent mood contrasts, e.g. indicative vs. subjunctive, which are said to denote similar meaning contrasts such as realis vs. irrealis or factuality vs. non-factuality crosslinguistically (Palmer 2001; Noonan 2007; Nordström 2010). I will not be concerned with these dependent markers, mainly because complementizer and mood selection have already been studied in great detail, and have not been proposed to be directly relevant to the factive-reported distinction in English (in contrast to what has been claimed for complement-internal speaker-related modal auxiliaries; see 4.3). Moreover, the subjunctive has largely disappeared in English (Palmer 1986: 43), although we occasionally find it in (non-factive) mandative complements (e.g. *The school director ordered that John be suspended*) and find subjunctive-like uses of *should* in (factive) complements of emotive predicates (e.g. *I hate that you should feel this way; I'd do anything to make it better*).

While it was argued above that epistemic modal auxiliaries are inherently speaker-related, Lyons holds a different view: he argues that an epistemic modal auxiliary as in (127) can be either speaker-related or non-speaker-related.

(127) *Alfred may be unmarried* (Lyons 1977: 797)

On one interpretation, Lyons argues, the auxiliary *may* in (127) simply reflects the speaker's uncertain statement of opinion with respect to the marital status of Alfred. This is the speaker-related, subjective use. According to Lyons, a second interpretation of (127) represents a non-speaker-related, objective interpretation of the epistemic modal: if the speaker for instance has knowledge on the community of people that Alfred belongs to, and on the proportions of married and unmarried people within that community, the epistemic modal *may* can represent a calculated estimation of the chance that Alfred is married. Lyons considers this to be the non-speaker-related, objective interpretation of the epistemic modal, which he says is close to the traditional category of alethic modality (involving logical possibilities or logical necessities). As Nuyts (2001: 33–35), however, has argued, the second interpretation is more plausibly due to an added dimension related to evidentiality: a speaker-related epistemic assessment may be based on different types of evidence, and evidence that is for instance available to a wider group of people is likely to be assessed as stronger evidence, which may explain Lyons' notion of objective epistemic modality.

As regards the specific environment of complement clauses, Lyons first introduces the Kiparskys' distinction of factivity and non-factivity in terms of logical presupposition (1977: 793–795; see 2.1.1): the complements of "factive predicates" such as *know* are said to involve a speaker commitment to the truth of the proposition, which is maintained under negation, whereas complements of "non-factive predicates" such as *believe* do not involve any truth presupposition. He gives the example in (128) to explain the concept of factivity, and proposes that "X knows that *p*" can be represented by the logical formula K*x* (p), in which K*x* relates to *p* as an "operator of epistemic necessity" (Lyons 1977: 794).

(128) *He knows/doesn't know that Edinburgh is the capital of Scotland*. (Lyons 1977: 794)

When he comes to the question of epistemic modality in factive complements, Lyons (1977: 797–799) proposes more specifically that utterances containing factive complements as in (128) refer to (rather than represent) "categorical assertions" (1977: 797), which are "epistemically non-modal", i.e. they have what he

refers to as an unqualified I-say-so and it-is-so component (Lyons 1977: 797). Factive complements can be non-modalized, or, as Lyons suggests, they can also contain epistemic modal markers as in (129).

(129) *I knew that Alfred must be unmarried* (Lyons 1977: 799)

Such cases, Lyons argues, involve objective modalization and therefore also involve an unqualified I-say-so component (1977: 799). Note that this interpretation is based on Lyons' view, as set out above (cf. example (127)), that epistemic modality can involve both speaker-related and non-speaker-related uses.

"Subjectively modalized utterances", by contrast, involve the speaker's explicit qualification of a degree of commitment to the modal assessment, and are not compatible with Lyons' characterization of factive complements. Subjective modalization can, however, be reported as such, which Lyons illustrates with the example in (130). The example is argued to contain a truly subjective modal marker *might*, which represents the opinion of the represented speaker.

(130) *He said that it might be raining in London* (Lyons 1977: 799)

In short, Lyons proposes that factive complements can either be non-modalized or modalized in a non-speaker-related way, while non-factive complement clauses can contain speaker-related modal markers, but the modal stance they express relates to the main clause represented speaker or cognizer rather than the actual speaker.

This line of thinking has informed most of the subsequent literature on the topic of speaker-related modal marking in complement clauses. Lyons' distinction between subjective and objective modality, together with his distinction between first, second, and third-order entities (1977: 442–445; see 2.1.3) laid the grounds for the later development of functional layered models such as Functional Grammar (Dik 1978, 1989, 1997; Hengeveld 1989; Dik & Hengeveld 1991). In Functional Grammar, speaker-related and non-speaker-related modality are explicitly paired with different functional layers: speaker-related modal markers pertain to the level of propositions, i.e. third-order entities, whereas non-speaker-related modal markers take states of affairs, i.e. second-order entities, in their scope (Hengeveld 1989: 138). In this respect, Lyons' proposal that factive complements only take non-speaker-related modals can be taken to suggest that factive complements represent states of affairs, not propositions.

This is precisely what is suggested by Dik for the specific subclass of emotive factive predicates: emotives as in (131) are said to take states of affairs as their complements (1997: 113).

(131) *It is funny that you are in Holland too.* (Dik 1997: 113)

A different proposal is made for factive predicates that involve knowledge and acquisition of knowledge as in (132): these are said to take propositional complements with a "fixed attitudinal operator which cannot be varied at will" (1997: 109), more specifically a "fixed operator for certainty" (Dik & Hengeveld 1991: 246).

(132) *John learned that Mary was ill* (Dik 1997: 107)

Finally, non-factive predicates such as *believe* in (133) are "compatible with any choice of attitudinal operator in the complement"; they are said to allow subjective modal marking that relates to the matrix subject as source of the modal assessment (Dik 1997: 110).

(133) *John believes that Mary is pregnant, but in fact she isn't.* (Dik 1997: 108)

The distinctions made in Functional Grammar are thus in line with Lyons' argument that reported complements, but not factive complements, can contain subjective modal markers. What is added is a distinction between two types of factive constructions: emotive factives are argued to take states of affairs as their complements, while knowledge predicates are said to take propositions with a fixed certainty operator as their complements.

Verstraete (2002, 2007) and Haegeman (2006, 2012) can be broadly situated within the same tradition. Both authors set out to account for the range of different subtypes found within the traditional category of adverbial clauses, and propose that the distinctions hinge on a "gradual reduction of the internal interpersonal structure of the secondary clause" (Verstraete 2007: 288).

Verstraete's typology distinguishes four constructional subtypes of clause combining, illustrated in (134)–(137).

(134) *Since this island, most especially that part remaining in gloriously multicultural Britain, has had centuries of cultural and ethnic diversity, we of all people should beware of regarding such diversity as being of itself a sign of superiority;* ***for might not North Belfast then be our role model****?* (WB)

(135) a. *I want to draw attention to the fact that different variables may be used by the community to mark functions of higher and lower levels of generality. For example, some variables (or variants of them) may be markers of gender-difference in the close communities,* ***whereas others may not show fine-grained internal differentiation****, but may be best interpreted as variables that mark Belfast vernacular as a whole as different from other varieties.* (BNC)
b. * *whereas* ***may others*** *(not) show fine-grained internal differentiation?*

(136) a. *"You were again removed from Stremnish?" "Yes." "Why?" "They wanted the land for sheep." "And* ***when you were put out of Stremnish*** *where did you go?" "We came to Port Ellen."* (BNC)
b. * *when* ***were you*** *put out of Stremnish where did you go?*
c. * *when you* ***must*** *have been put out of Stremnish, where did you go?*
d. ≠ *was it when you were put out of Stremnish that you went there?*

(137) a. *"How did you know where I was staying?"... "Signor Candiano must have mentioned it* ***when I saw him this afternoon****."* (BNC)
b. * *He must have mentioned it when* ***did I see*** *him this afternoon?*
c. * *He must have mentioned it when I* ***must*** *have seen him earlier.*
d. *It was when I saw him this afternoon that he mentioned it.*

Verstraete proposes three main criteria to distinguish the four construction types, which I will touch upon briefly in relation to these examples. The first criterion involves the potential for different clause types (e.g. declarative-interrogative contrasts), which is only possible for the type illustrated in (134), not for (135)–(137); see the b examples). The second criterion checks for the potential for speaker-related modal markers in the secondary clause, which is possible for (134)–(135), but not for (136)–(137); see the c examples). The third criterion, then, looks at whether the secondary clause can be within the scope of the interpersonal devices (e.g. interrogation, modal marking) of the primary clause (which is only the case for (137)): in (137a), the *when*-clause is already the focus of the modalization expressed by *must*, and can for instance also be the focus of an *it*-cleft, as in (137d).

Haegeman (2006) distinguishes between what she calls central, or event-related adverbials, and peripheral, or discourse-related adverbials. She considers amongst others the potential for speaker-related modal adverbials such as *probably*, for markers of illocutionary force, and for a range of main clause phenomena (see Emonds 1970; Hooper & Thompson 1973; Heycock 2006; see 2.1.3.2.3)

such as argument fronting or negative inversion in the secondary clause. What unites these phenomena, she says, is that they are "manifestations of speaker anchoring" (Haegeman 2006: 1655), which are compatible with peripheral adverbials as in (134)–(135), but not with central adverbials.

On the basis of their hypotheses with respect to the domain of clause combining, Verstraete (2002, 2007) and Haegeman (2006, 2012) propose that the difference between reporting and factive constructions could similarly be captured in terms of a reduction of interpersonal structure. It is suggested that speaker-related modal markers, main clause phenomena, and different clause types are possible in (directly and/or indirectly) reported clauses as in (138)–(139), but not in factive clauses as in (140)–(141).

(138) *He said **do you know** I've told her all about all Around the World for four hours and she listened to … and she listened to every word.* (WB; Verstraete 2007: 288)

(139) *But one former colleague Yuri Modin, who controlled the Cambridge spy ring of Philby, Burgess Maclean, Blunt and Cairncross, said that Strelnikov **must** have been an accomplished spy to spend 10 years at the embassy in London.* (WB; Verstraete 2007: 288)

(140) * *To this day he regrets that **was(n't) the disappearance** of granny and grandpa into the old people's homes one of the unanticipated side effects.* (Verstraete 2007: 288)

(141) * *John regrets that Mary **probably/obviously/unfortunately** did not attend the meeting.* (Haegeman 2006: 1664)

On the basis of the proposed similarities between clause combining and complementation constructions, Haegeman concludes that factive complements "lack speaker deixis"; they characteristically "do not encode anchoring to a speaker" (2006: 1665). Note that this seems to run counter to the traditional definition of factive complements in terms of (actual) speaker commitment; I will come back to this point below. The two authors present this similarity in terms of internal interpersonal structure as "speculations on the complements of factive predicates" (Haegeman 2006: 1663) and point out that the question merits separate treatment in further studies, since, as Verstraete points out, the interpersonal structure in complementation constructions involves not one, but "two levels of

interaction (current and represented interaction)" (2007: 102).[33] That is, while the effect of the interrogative and the modal positioning in (134) and (135) can be anchored directly in the interaction of the current speaker and hearer, the description of the internal interpersonal structure of complement clauses as in (138)–(139) is more complex, since the modal and speech functional contrasts expressed by the modal verb and the interrogative word order instead relate to the represented speaker and hearer.

Verstraete (2001, 2007) further makes a point that will prove crucial to the analysis proposed below. While he suggests the possibility that factive complements may be similar to certain types of adverbial clauses in constituting an environment with no structural potential for truly speaker-related modal markers (2007: 215–218, 287–289), i.e. an environment which "inherently suspends any positioning of the speaker" (2001: 1520), he does not preclude the possibility for speaker-related modal markers to occur in them (cf. also Haegeman 2006: 1655–1656).

In such contexts, however, the modal markers are argued to "receive a special echoic interpretation (Palmer, 1990: 182)" (Verstraete 2001: 1520). They "do not express the current speaker's opinion, as they do in normal main clauses" (2001: 1518). Rather, the speaker in such a context "merely echoes an opinion expressed or implied in the preceding discourse" (2001: 1520). Verstraete himself illustrates such echoic uses in the context of the protasis of a conditional (142), a context which is similarly argued to suspend speaker commitment.

(142) *In distilling a statement of theme from a rich and complicated story, we have, of course, no more encompassed the whole story than a paleontologist taking a plaster mold of a petrified footprint has captured a living brontosaurus. A writer (other than a fabulist) does not usually set out with theme in hand, determined to make every detail in the story work to demonstrate it. Well then, the skeptical reader may ask, if only some stories have themes, if those themes* ***may*** *be hard to sum up, and if readers will probably disagree in their summations, why bother to state themes?* (WB, Verstraete 2001: 1519)

33 Note that the opposite has also been argued (but to the same effect), namely that the content of the complement clause is indeed the primary object of conceptualization in the current rather than the represented speaker-hearer interaction, with the main clause indicating the particular perspective on the complement clause that the speaker and addressee intend to converge on (Verhagen 2005: 78–155) and thereby also specifying how the interpersonal markers of modality etc. within that complement clause should be taken interactively.

With respect to example (142), he argues that

> The "skeptical reader" who uses the conditional in (20) [i.e. (142) here, C.G.] is not necessarily committed to the opinion realized by *may*, but simply introduces it as another speaker's opinion into his own argument, in this case with a polemic purpose, to show how the conclusions that could be drawn from that opinion contradict the other speaker's position.
>
> (Verstraete 2001: 1520)

The argument is thus that it is indeed possible to find speaker-related modals in commitment-suspending contexts, such as factive complements or conditional protases. Such attestations, however, are argued to be restricted to contexts in which the modal stance is echoed for rhetorical purposes rather than performatively assumed by the speaker.

So far, I have shown that there is a long-standing tradition of claiming that factive complements cannot incorporate truly speaker-related modal markers. It dates back (at least) to Lyons (1977), who explicitly linked up the Kiparskys' notion of factive presupposition with the absence of modal qualification, and the notion of non-factive assertion with the potential for modal marking. It has been acknowledged that actual attestations of factive complements with modal markers can be found, but these have been suggested to function as non-speaker-related, objective modals (Lyons 1977) or as speaker-related modals that require a special echoic interpretation (Verstraete 2001, 2007).

In the remainder of this chapter I will argue that these claims are not in keeping with the empirical facts, and that factive complements in fact stand out in that they can contain modal assessments that relate to the actual speaker, which reported complements cannot. Before doing so, I will point out two further observations which depart from the common view given above, which laid the foundations for the approach that is taken here.

The first point relates to a very different interpretation of the Kiparskian contrast between factive presuppositions by the speaker, and reported assertions on the part of the main clause represented speaker or cognizer. As pointed out, the authors cited above mainly focus on the presumed incompatibility of presupposition and speaker-related modal marking. A different perspective is assumed by Davidse (1991, 1999a) and Field (1997). With respect to the semantic value of factive clauses, Davidse proposes that they should be defined as "metaphenomena [i.e., propositions] created by the speaker" (1999a: 373), and that, unlike reported clauses, "[f]acts are not represented as originating in the consciousness of the Processor [i.e. represented speaker or cognizer] of that mental process" (1999a: 373). Her proposal shifts the emphasis to the source of commitment to the infor-

mation contained in the complement proposition. Importantly, this proposal suggests that factive clauses by definition encode speaker deixis: they are "grounded [i.e. specified for tense and modality] directly with respect to the speaker-now" (1999a: 387). A similar position is taken by Field (1997). Field proposes to redefine the factive presupposition as being "equivalent to certainty as a type of epistemic stance" on the part of the speaker (1997: 803), which similarly suggests that the modal value of factive clauses bears a direct relation to the actual speaker.

The second point involves the observation (Halliday 1985: 243–251; Davidse 1999a: 381) that complements dealing with degrees of certainty (144) and with (the existence of) obligations (145) – i.e. with epistemic and (objectively construed) deontic meanings – show the same grammatical behaviour as complements in the indicative as in (143) which are generally accepted to be factive, such as occurrence in subject position as in (144), or reference by the pronoun *it*, as in *He resented it* for (145), etc. (see Chapter 2 and 3).

(143) *She regrets that he hasn't accepted the offer.* (Davidse 1999a: 381)

(144) *That he* ***may*** *have overborrowed worries them.* (Davidse 1999a: 381)

(145) *He resented (the rule) that they* ***had to*** *wait in line.* (Halliday 1985: 247)

Taken together with Davidse's and Field's point that the commitment to factive propositions relates directly to the speaker-now, this observation calls for a radically different conceptualization of modality in factive complements: they can involve a modal assessment that relates directly to the speaker, and the modal stance can relate to a degree of epistemic certainty, as expressed by *may* in (144), or to an epistemic position on the existence of a particular deontic status as in (145). A further question is whether factive complements can also involve speaker-related modal assessments of particular deontic statuses. These observations form the point of departure for the analysis that is proposed in the remainder of this chapter.

The aim of the following sections is to subject the different theoretical proposals outlined here to empirical verification. By focusing on actual attestations of complement clauses with modal auxiliaries, I will determine:

– whether such complement-internal modal auxiliaries can truly be speaker-related

- if they can be speaker-related, whether they primarily relate to the main clause represented speaker or cognizer, to the actual speaker, or to an echoed speaker as the source of the modal assessment
- whether the speaker-related modal stance can pertain to only epistemic or also to deontic modality
- what generalizations can be drawn from this with respect to the factive-reported distinction in terms of the interpersonal status of the complement

I will first set out the terminological distinctions that will be made use of (4.4.1), before focusing on the potential stance patterns found in actual modalized attestations of reporting (4.4.2), factive (4.4.3), and manipulative (4.4.4) constructions respectively. The main findings of the descriptive subsections are then discussed with respect to their theoretical relevance in 4.5.

Note that in the remainder I will focus only on (potentially) speaker-related modal markers in complement clauses, not on non-speaker-related modal markers. Only speaker-related modal markers have been proposed to be restricted to those types of complement clauses which have interpersonal structure. Non-speaker-related modal markers function analogously to the indicative (see 4.2.2) and can unproblematically occur in the different complement types.

4.4 Modalized attestations of reporting, manipulative, and factive complement clauses

4.4.1 Analysis of modal stance patterns: introduction

Speaker-related modal markers typically encode modal assessments relating directly to the ongoing speaker-hearer interaction (see 4.2). In the terminology adopted here, they are typically actual speaker-related. In complementation constructions, however, the situation is more complex, as they involve at least one additional layer of participant interaction besides that of the actual speaker and hearer, i.e. that of the speaker or cognizer represented in the main clause. An analysis of modal assessments in complement clauses thus requires a more elaborate descriptive apparatus, which I will introduce in the following paragraphs. The distinctions drawn in this section were inspired by previous proposals on modal marking in complement clauses (see 4.3) and by Field's (1997) discussion of single and dual stance patterns in factive constructions.

A first distinction to be made relates to the potential source of modal assessments encoded in complement clauses. As pointed out in 4.3, it has been suggested in the literature that complement-internal modal marking can relate either

to a represented speaker or cognizer in the main clause, to the actual speaker or to an echoed speaker or cognizer as the source of the modal assessment. Let us briefly consider a few examples that illustrate this variability in modal sources. Firstly, the modal assessment in the complement can stem from a represented speaker or cognizer in the main clause, as in the reported complement in (146).

(146) *I have even been told by Chris Wyatt that the corner I scored in, is his corner. He has said I* ***must NOT*** *score there again.* (WB)

In this case, it is the main clause subject *he*, not the actual speaker, who is modally responsible for the deontic status of prohibition. I will use the terms represented speaker and cognizer to refer to the (explicit or implicit) main clause participant who is performing or experiencing the verbal or mental situation described in the main clause, and do not restrict it in this sense to reported speech contexts as in (146); I will also use it to refer to the main clause conceptualizer in factive and manipulative constructions (see 4.4.3 and 4.4.4).

Secondly, complement-internal modal markers can indeed, it will be argued, relate to the actual speaker, as is the case for instance in the factive complement in (147).

(147) [in the context of a loyal blog reader having reported that her name is no longer remembered in the comment section]
D: BTW On totally [sic] unrelated note. Since you changed to new time [i.e. theme] I have to enter name/email/website for comment every time. It's not remembered anymore. …
A: Oh gosh, that's annoying, I'm so sorry! I'll look into that. Are you sure it was since I changed my theme and didn't start before then? The theme change shouldn't have affected anything (theoretically) but I did move to a new server set up in like February or March which could have affected it. … I do think it's a server issue. …
Thanks so much for letting me know. I hate that this ***must*** *have been a problem for aaages!*[34]

In this example, *must* expresses the actual speaker's personal conviction in the here-and-now that a problem on her blog has been going on for about two months before she even found out.

34 Source: https://www.nosegraze.com/posts-dates-piss-off/

Thirdly, the modal stance in the complement clause can also be echoed from another voice in the discourse. In (148), for instance, the speaker recounts how her former teacher displayed neo-imperialist tendencies in their denial of the cruelties of the Apartheid regime. The modal auxiliary *might* echoes the teacher's epistemic commitment, only for it to be rejected by the matrix subject.

(148) ***My Geography teacher*** *of whom I was very fond had actually told us that the African people were enjoying an harmonious existence under Apartheid. Even with my limited knowledge I could not accept that this* ***might*** *be true; did not all men want to be free especially in their own country?*[35]

The modal position encoded in a complement clause can thus derive from at least three different sources, i.e. from the current interaction between speaker and hearer, from the represented speech or thought situation implied in the matrix, or from another voice in the discourse that is echoed.

A second point that is crucial to the analysis has to do with the potential incorporation of modal positioning on the part of more than one conceptualizer. Complementation constructions as a whole can convey a modal stance as related to a single conceptualizer, i.e. the modal position in the complement can relate solely to the main clause represented speaker or cognizer. They can also convey a position on the part of (at least) two distinct conceptualizers, namely in cases where the complement-internal modal source does not coincide with the represented speaker of the main clause. This distinction can be captured with the notions of single and dual modal stance patterns (Field 1997). The examples in (146) and (147), for instance, involve single stance. In (147), the modal position expressed by *must* relates to the actual speaker, which coincides with the represented speaker *I* in the main clause. By contrast, the deontic status expressed by *must* in (146) is ascribed to the represented speaker *he* only; it does not directly encode a rejection or acceptance of this modal status on the part of the actual speaker. Example (148), by contrast, involves dual stance. It involves, on the one hand, a complement-internal epistemic position that stems from an echoed speaker ("the Geography teacher"), and on the other hand a lexically ascribed rejection or non-acceptance of this modal position by the represented speaker ("I could not accept this").

Such dual stance patterns can be exploited specifically to express disalignment, i.e. a different position is held by two individual conceptualizers as in (148), but they can also involve alignment of stance (Field 1997), with two distinct

35 Source: www.teacherworld.org.uk/casestudy/case2.pdf

conceptualizers being presented as endorsing a modal position. Example (149) illustrates such a case of alignment.

(149) *Musa's appeal against the decision to grant him no more than Exceptional Leave to Remain was heard not in the centre of town as his cousin's had been eight months before, but at York House … The new location seemed symbolic of the government's hardening attitude towards refugees. … Mata explained that since the summer, successful appeals against ELR had depended on counsel's ability to demonstrate what was known as differential impact. This meant proving that Musa was no ordinary Afghan, that were he to be returned to Afghanistan he would be at risk of persecution over and above the norm, and was thus deserving of full refugee status. … The hearing went badly at first. … The adjudicator scribbled notes, visibly unimpressed. … Once Lionel and I testified, however, little signs began to emerge that he was being won round. … We were probably the most expert witnesses in an appeal hearing that he had ever seen. – I accept that Mazar [i.e. Musa's hometown, where his family was persecuted by an ethnic group before being arrested by the Taliban, C.G.] or other regions* ***might*** *be dangerous for him, the adjudicator said, but are you really saying that even Kabul is unsafe for Pashtuns?* (WB)

The epistemic position expressed by *might* arguably relates to an echoed source, i.e. to the testimony of the two witnesses. The speaker, who is acting as a judge, explicitly accepts this epistemic stance. The construction as a whole thus expresses alignment of stance on the part of the *I*-persona (the judge) with the echoed source.

The examples further show that even in contexts with a first-person subject in the matrix, we can have either single or dual stance. Example (147), for instance, illustrates a first-person, present tense context, in which the represented *I*-cognizer essentially coincides with the actual speaker, who is also the source of the modal stance in the complement. In this case, the complementation construction as a whole expresses single stance on the part of the actual speaker (see Field 1997: 805). First-person matrices can also be part of complementation constructions expressing dual stance, in two different types of contexts. A first scenario involves complementation constructions as in (148) and (149), where the first-person subject is reacting to an echoed modal stance in the complement. Such cases evoke two distinct conceptualizers taking on a position with respect to the modal stance in the complement – the echoed source and the *I*-persona referred

to by the matrix subject. A second scenario of dual stance with first-person matrices involves those cases where there is a (e.g. temporal or cognitive) distance between the represented *I*-cognizer and the actual *I*-speaker (Field 1997: 803–804). Example (150), for instance, involves dual stance because there is a distinction between the *I*-then (the represented cognizer) and the *I*-now (the actual speaker).

(150) *When we were roaming about town with the group, I continued on with my normal daygame routine. I hadn't realized that this behaviour* ***might*** *be annoying, even rude, to people who hadn't seen it before. I was after all, bouncing off like an attention deficit headless chicken every time I saw something (or someone) interesting. It never occurred to me before. Surely it was my responsibility to keep up with any group I decide to hang around with?*[36]

The actual speaker (or *I*-now) is aware that his past behaviour could be deemed socially unacceptable, though the represented *I*-cognizer (or *I*-then) "hadn't realized" it at that time. The function of the complementation construction in (150) is precisely to distinguish between the current and past position of the speaker.

As was pointed out most explicitly by Field (1997), dual modal stance patterns are possible in some complementation constructions because they operate on two distinct levels of semantics (see also 4.1). On the representational level, they (sometimes implicitly) convey a position that is lexically ascribed to the represented speaker or cognizer identified in the main clause (see Chapter 3). On the interpersonal level, we will see that the complement-internal modal position can relate to other sources than the represented speaker in the main clause, e.g. to the actual speaker. Field further argues that the potential for dual stance patterns is in fact characteristic for factive constructions (1997: 803–805). In the following sections, I will investigate this claim by comparing the three construction types distinguished in Chapter 3 in terms of their potential for single and dual stance patterns.

The analysis draws heavily on Field's proposals that factive constructions can express single or dual stance, in patterns of alignment and disalignment. However, Field only discusses complement-internal modal stances conveyed by means of the indicative mood. In contrast to the common idea that factive complements cannot incorporate explicit speaker-related modal markers (see 4.3), I will focus on examples of complements that contain explicit modal auxiliaries to

36 Source: http://twobitsofluggage.com/category/uncategorized/

show that there are attestations of performatively modalized factive complements. The analysis further also factors in Verstraete's (2002, 2007) suggestion that speaker-related modal markers in factive complements may convey modal positions that are not construed directly in the communicative interaction of the speech event, but rather echo "some position voiced or implied in the preceding discourse" (2007: 216).

Before discussing the possible stance patterns for each of the three types of complementation constructions, two preliminary remarks are in order. Firstly, I will restrict myself in this section to an analysis of the modal source for the position assumed in different complement types. More specifically, I will not go into what Palmer (1986: 147) calls the "wider issue ... of deixis in the subordinate clause", which includes person reference as well as spatial and temporal deictics. To make this point clearly, I refer to Vandelanotte's (2016, 2019) distinction between "deictic" and "cognitive" perspective markers. An analysis of deictic perspective markers in complement clauses examines to which deictic center a range of phenomena relate (e.g. absolute tense, personal pronouns such as *I* and *you*, and spatial/temporal adverbials such as *here* and *now*). An analysis of cognitive perspectives in complement clauses investigates whose mental states or attitudes are being represented. The two types of perspectives, Vandelanotte argues, are distinct parameters of analysis as they can be combined into more fine-grained typologies of complement types.

In earlier work, Vandelanotte (2004, 2009) distinguished four types of reported speech and thought constructions, which arguably all involve a cognitive perspective shift: they represent content that originated with a (potentially implicit) represented speaker or cognizer rather than with the actual speaker. He proposed that the four types show – besides syntactic differences – differences in terms of the deictic perspective shifts they allow. Direct speech as in (151), for instance, characteristically shows a full deictic shift to the here-and-now of the represented speaker he: the referent of the pronoun *I* and the temporal zero-point for the present tense e.g. in *am* relate to the deictic center of the represented speech event. Example (152), then, shows that free indirect speech shows a partial deictic shift, with the past tense in *was* anchored to the actual speaker, but the temporal adverbial *now* relating to the deictic center of the represented cognizer *she*. Still other types of speech and thought representation, e.g. indirect speech and thought, but also the less well-known "echoic" or "distancing indirect" speech as in (153), construe all deictic expressions from the point of view of the current speaker (Vandelanotte 2004, 2009).

(151) *last night he said: "**I am** delighted Sir Alex has agreed to lend his support. Having such a well-respected figure on board **will** lend weight to the bid."* (WB)

(152) *How her heart **was** beating **now**! she thought.* (Vandelanotte 2004: 495)

(153) *Pierre holds an incredible grudge against me: **I've** always hated **him**, I always **will** hate **him**.* (cited from Ducrot 1991 in Vandelanotte 2004: 507)

This is particularly clear in (153) from the fact that the first-person pronouns refer directly to the current speaker. The deictic perspective presents the utterance in italics as if it were a statement on the part of the actual speaker, whereas it is actually a represented version of Pierre's statement, more or less equivalent to *You've always hated me, you always will hate me* in direct speech. As Vandelanotte argues, it is only in recognizing the cognitive perspective shift to Pierre that the construction realizes its potential: it is interpreted as an appropriation, or "echo", by the speaker of an utterance attributed to Pierre, for the purpose of expressing the speaker's reaction (e.g. of irony and distance) towards the echoed statement.

Without going into further details, the point that is directly relevant here is that when a clause is characterized in terms of a cognitive perspective shift to the represented speaker, there are still variable options to have a full, partial, or no deictic shift to the here-and-now of that represented speaker, so that the two types of perspectives should be distinguished analytically (Vandelanotte 2016, 2019). My analysis will focus on the source of the complement-internal modal position, which relates to the cognitive type of perspective.

As a second remark, it should be pointed out that the source of the complement-internal modal stance can remain underspecified, i.e. it can be vague between different modal sources in the absence of clear contextual evidence. Let us consider example (154), which involves the represented speaker's rejection of, i.e. disalignment with, the modal stance flagged by *must* in the complement. The latter modal stance, however, is underspecified as to whether it relates to an echoed source (e.g. others' allegations) or to the actual speaker's conviction, or even to both (with the actual speaker being understood as implicitly endorsing the echoed stance).

(154) *Speaking exclusively to Cyclingnews at the gates of his villa on the outskirts of Lucca, Cecchini claimed he has not even studied riders' blood values since*

1998. Cecchini is not mentioned in Gazzetta dello Sport's report on Cipollini's link to Dr. Fuentes but he is widely known to have worked with Cipollini. ... He flatly denied that he ***must*** *have known if his riders were doping or not.*[37]

This vagueness, however, is only at issue in dual stance contexts, which in turn will be argued to be restricted to certain construction types. As such, this vagueness can essentially be seen to underscore the potential for certain constructions to convey modal positions as related to variable modal sources. Note, moreover, that certain nominal construction types with a semiotic noun can be used specifically to impose or disambiguate an interpretation with respect to the source of the modal position, e.g. as echoic in (155), or as speaker-related in (156).

(155) *Syria denied* ***claims*** *by Israeli Prime Minister Ariel Sharon that Iraq may be transferring chemical and biological weapons to Syria, saying yesterday that the accusation aims to divert attention from Israel's arsenal.* (WB)

(156) *the Chinese authorities accepted* ***my proposal*** *that this mission* ***should*** *be followed by three more.* (WB)

While the internal interpersonal value of such instances in which a semiotic noun introduces the content of a clause arguably merits separate investigation, the point here is that they are harmonically compatible only with certain higher construction types, and that these higher construction types are exactly those that would allow different sources for the complement-internal modal stance in the first place, even without the presence of the semiotic noun.

In any case, the goal of this chapter is to investigate the possible sources of complement-internal modal marking, and to see whether the possibilities distribute unevenly over different complement types. In this respect, it is already particularly telling if the modal stance of the proposition in the complement can relate directly to the actual speaker, as was argued for e.g. (147), since this goes against the common view, initiated by Lyons (1977), that speaker-related modal marking either relates to the represented speaker or cognizer of the main clause (in reporting constructions), or is excluded from certain types of complement clauses (i.e. in factive complements) (see 4.3). To establish which speaker-related modal stance patterns are possible in the different complement types, I have

37 Source: http://www.cyclingnews.com/news/cecchini-denies-sending-cipollini-to-dr-fuentes/

looked for modal auxiliaries in complement clauses in object position, and considered whether they were used in a speaker-related way, and to which level of interaction they related (actual, represented, or echoed speaker-related). I started from queries in the Collins Wordbanks Online Corpus (WB), which were then supplemented with manually filtered tokens from the Internet to gather additional naturally occurring data with explicit modal auxiliaries for the less frequent construction types. In the following, I will describe modal stance patterns as they can be found in indirect speech constructions, manipulative constructions, and factive constructions respectively.

4.4.2 Indirect speech or thought constructions

Unlike in main clauses, speaker-related modal markers contained in indirectly reported complements do not pertain to the actual speaker, but to the represented speaker or cognizer that is associated with the act of speaking or thinking in the main clause. In other words, the modal assessment relates to the conceptualizer that is responsible for the creation of the utterance contained in the reported complement (see Chapter 3). The represented speaker or cognizer is typically expressed explicitly as the main clause subject as in (157)–(158), but may also be left implicit, e.g. with an agentless passive matrix as in (159).

(157) *I have even been told by Chris Wyatt that the corner I scored in, is his corner. He has said I **must NOT** score there again.* (WB)

(158) *"Did Dr. Canfield find you?" Mrs. Kreutzer was holding her head down slightly, looking at him through the top half of her bifocals. "No ma'am. I haven't seen Jeremy for two or three days." ... "He wanted you to talk to a woman," Mrs. Kreutzer said. "I think you just missed her." "O. K.," McKee said. "What about?" ... "Something about the Navajo Reservation," Mrs Kreutzer said. "She's trying to locate someone working out there. Dr. Canfield thought you **might** know where she could look."* (WB)

(159) *I saw the chick pop out from underneath Biscuit. I had no idea any of the eggs would be fertile. I was told it **may** be because a cockerel was with the flock.* (WB)

Thus, it has been argued that the modal stance contained in complement clauses as in (157)–(158) "report[s] the attitudes and opinions of the subject of the main

clauses, who are presented as the original speakers who expressed, or may be thought to have expressed, some kind of modality" (Palmer 1986: 126). The feature is well-known and has variably been referred to in terms of "subject commitment" (Palmer 1986), "agent-binding" (Verstraete 2008), or "intensional performative modality" (Davidse & Vandelanotte 2011).

Indirect speech or thought is moreover "compatible with any choice of attitudinal operator in the complement" (Dik 1997: 110; cf. Palmer 1986: 136–137). Reported complements can contain both deontic, as in (157), and epistemic (158)–(159), assessments relating to a represented speaker or cognizer. Thus, in example (157), it is the represented speaker *he* – not the current speaker referred to by *I* – who is modally responsible for the prohibition expressed in *must not*. Similarly in (158), the main clause subject Dr. Canfield is the source of the epistemic assessment contained in *might* and in (159), the source of the epistemic assessment in *may* is an implied speaker (cf. *I was told by…*). In terms of stance patterns, reporting constructions thus typically involve single stance which is not related to the actual speaker, but rather represented speaker-related. Let us briefly consider two contexts which seem to differ from this stance pattern.

One context in which modality in reported complements can be argued to relate to the actual (i.e. current) speaker is that of first-person, present tense matrices as in (160) and (161), in which the actual speaker and the represented speaker or cognizer coincide. Note that for this context, it has extensively been argued (a.o. Halliday 1985: 332–334; Palmer 1986: 126, 168; Davidse 1999a: 333–335; Vandelanotte 2009: 280–331) that expressions such as *I think* (160) or *I'm saying* (161) often no longer describe a speech or thought act; instead, they modify a speech act that is contained in the co-occurring anchor clause. In Palmer's words, such examples "are not reports about what the subject is doing …: they actually express the subject's modal attitude or opinion, with a condition that, as here, the subject is also the speaker" (1986: 168).

(160) *I think that I **may** have made a mistake.* (WB)

(161) *I'm not saying that you'll ever know the whole truth, which is God's truth. I'm saying that you **may** have a good chance of grasping that part of the truth which God has made available for you to know.* (WB)

In an example such as (160), for instance, *I think* would typically be argued to have the function of a mitigating, i.e. hedging, epistemic modifier, which takes

the speech act *I may have made a mistake* in its scope (e.g. Urmson 1952; Thompson & Mulac 1991; see also Palmer 1986: 63, 137).[38] In examples as in (161), *I'm saying* is typically taken to function as an explicit performative, "in which the speaker names the speech act" and thus "explicitly state[s] what actions are being performed" (Palmer 1986: 168). There is, in other words, only one asserted proposition in the sentences with *I think* and *I'm saying* in (160)–(161), and that is the utterance contained in the *that*-clause (Hooper & Thompson 1973). Such examples are in any case no counterexample to the proposal that reporting constructions generally involve represented speaker-related single stance, even if this represented speaker can coincide with the actual speaker.

A second context in which reporting constructions seem to deviate from the represented speaker-related stance pattern is illustrated in (162) and (163).

(162) *Over the years, many people have written both positively and negatively about the NCFIC. Here are the seven most common mischaracterizations.*
... The NCFIC believes that the whole family must always be together for all gatherings.
False. We have never said that the whole family ***must*** *be together for all gatherings nor have we said that "the church has no right to teach its members and the children of its members in situations where the entire family is not present."*[39]

In (162), the speaker echoes (see Verstraete 2001, 2007) a modal position that has been ascribed to them in earlier discourse, only to distance themselves from it. Thus, the speaker first points out that are a number of misconceptions about the religious community they represent, and cites an example "The NCFIC believes that ...". He then echoes the deontic modal position (*must*) that has been ascribed to them by others, so that he can point out that they have not endorsed such a claim. The stance pattern in this case is one of dual stance, which involves a represented speaker interacting with an echoic modal stance in the proposition.

A similar example is given in (163), in which the speaker echoes a claim mentioned previously in the discourse (i.e. only a registered nurse should be in charge in a cath lab), so that he can explicitly reject this modal stance ("I don't believe that it must be" a registered nurse).

38 See e.g. Halliday (1970), Palmer (1986: 63–64, 169) and Boye (2012: 257–274) on combinations of multiple epistemic expressions such as *I think* and *may* in (160).
39 Source: https://ncfic.org/resources/view/some-answers-for-critics

(163) *So…now that we have cleared up that all three professions: the RN [i.e. "Registered Nurse"], RT [i.e. "Radiologic Technologist"] and RCIS [i.e. "Registered Cardiovascular Invasive Specialist"] belong in the cath lab, who should be in charge?* ***There is a school of thought that says that only an RN should be in charge.*** *I have no issues with an RN being in charge, as long as they have experience (5 years or more) in the cath lab. No one can manage a procedure area if they haven't worked there (IMHO). However, I don't believe that it* ***must*** *be an RN. I believe that any of the professions with appropriate experience (5 years or more) is capable of leading the team; the real question is, are they able to lead and manage people?*[40]

In the previous chapters, however, I have argued that these types of constructions do not have the semantics of a true reported speech construction: (162) and (163) are examples of the category of manipulative constructions proposed in Chapter 3, in which a pre-existent proposition is (denied to have been) re-created in a speech or thought act on the part of the represented speaker or cognizer. Also grammatically, such examples pattern with manipulative constructions, e.g. in their tendency to alternate with nominal complements, cf. *We have never said that / those words*; *I don't believe it*.

Similar examples can be found in which the modal stance in the complement arguably relates to the actual speaker, as in (164), in which the writer adds a personal comment (*it might have had a special meaning for Fitzgerald*), which was not mentioned in the explanation given by "Mankiewicz" (*he did not say (it)*). These too belong in the category of manipulative constructions, not in that of reporting constructions. It follows that cases as in (162)–(164) do not counter the claim that true reporting constructions involve represented speaker-related modal stances.

(164) *Later on, Mankiewicz would say: I personally have been attacked as if I had spat on the American flag because it happened once that I rewrote some dialogue by F. Scott Fitzgerald. But indeed it needed it! The actors, among them Margaret Sullavan, absolutely could not read the lines. It was very literary dialogue, novelistic dialogue that lacked all the qualities required for screen dialogue. The latter must be "spoken". Scott Fitzgerald wrote very bad spoken dialogue. According to Mankiewicz, Fitzgerald had been put on the film because of his supposed "feel" for Europe in the twenties (he did not*

40 Source: http://www.cathlabdigest.com/articles/The-Ten-Minute-Interview-with%E2%80%A6-Jennifer-Titzer-RN-RT-RCIS

say that Three Comrades ***might*** *have had a special meaning for Fitzgerald because it ends with the heroine languishing in an Alpine sanitarium).* (WB)

Note that the actual speaker can still show various degrees of speaker involvement in the use of deictic expressions in the reported complement (e.g. Palmer 1986: 163–167; Vandelanotte 2004, 2009). For this point, I refer back to the discussion of examples (151)–(153) above. Other phenomena that may indicate the actual speaker's stance with respect to a reported utterance involve speaker-related adverbs (e.g. *wrongly*) in the main clause and tags, but also extralinguistic cues such as e.g. prosodically marked stress on the reporting verb or a specific voice quality with which the complex sentence is expressed (McGregor 1997: 252–266; Spronck 2012). The crucial point here is however that the actual speaker in reporting constructions cannot normally be seen as the source that created the modal position in the complement unless s/he is coreferential with the reported speaker.

4.4.3 Factive constructions

In Chapter 3, I proposed that factive constructions semantically describe an experiencer's emotive reaction to, acquisition of knowledge of, or stable awareness of a pre-existent complement proposition. It was moreover argued that emotive predicates are semantically most complex, because they presuppose that the participant who experiences an emotive reaction with respect to the content of a proposition necessarily has prior knowledge of the existence of that proposition. Following Davidse (2003), the semantic value of the factive presupposition was taken to be one of (temporal) pre-existence of the complement proposition to the situation described in the matrix (see Chapter 3).

In the classic approach, however, factivity was defined in terms of the speaker's commitment to the truth of the complement (Kiparsky & Kiparsky 1970). In terms of modality, this definition has sometimes been translated into a modal position of unmarked epistemic certainty on the part of the speaker as signalled by the indicative in the factive complement (Field 1997). More generally, the traditional definition has given rise to the common view that factive complements resist explicit speaker-related modal marking because they are presupposed true, i.e. certain, by the speaker, and thus suspend further speaker positioning (e.g. Lyons 1977; Dik & Hengeveld 1991; Dik 1997; Verstraete 2002, 2007; Haegeman 2006, 2012; see 4.3). This section aims to readdress those claims on

the basis of attested modalized examples of factive complements. I will first discuss examples with factive constructions with cognitive predicates such as *notice*, *know* in 4.4.3.1, before turning to emotive factives, e.g. *resent*, in 4.4.3.2. We will see that the two subtypes show similar stance patterns, which are more variable than what has traditionally been proposed in the literature – they do not always and only relate to the actual speaker, and they can encode degrees of epistemic modality and deontic positions besides epistemic certainty.

4.4.3.1 Factive constructions with cognitive predicates

It has been proposed in the literature that factive constructions with cognitive predicates (e.g. *notice*, *know*) cannot take complement-internal speaker-related modal markers, because the predicate lexically specifies a fixed operator of epistemic certainty that applies to the complement proposition (Dik & Hengeveld 1991; see 4.3).

We do, however, find modalized attestations, which can involve not only commitment to an epistemic position, as in (165), but also to a deontic status of desirability as in (166). Both examples realise a dual stance pattern, conveying positions on the part of two conceptualizers, in these cases (i) a lexically ascribed position of non-awareness (and lack of commitment) on the part of the represented speaker in the matrix ("Norris", or "the Americans") with respect to (ii) a grammatically encoded complement-internal modal position that is assumed by the actual speaker that thought (165) or uttered (166) the utterance containing the complex sentence.

(165) *Did Norris not know that the damage **must** surely already be done? [Kenworthy thought]* (WB)

(166) *"So you punish America to put pressure on Israel?" Reza Mohammed nodded. "The Americans have no business interfering in our part of the world. They have to learn that they **must** stop. They do not understand us so they should leave us alone. I don't hate Israelis. I don't hate Americans. I just hate the people who keep destroying me."* (WB)

The position on the part of the represented speaker or cognizer can be seen to relate to the semantics of the main clause situation (Field 1997; see Chapter 3 for my analysis of this semantic level), whereas the complement-internal position in these cases relates to the interpersonal semantics of the complex sentence, as it allows the speaker to performatively assume a position.

In narrative contexts, we also find examples of single stance, represented cognizer-related modality in the complement, as in (167).

(167) *Women in the distance appeared to beckon him forward but Paolo knew that it* ***must*** *surely be a mirage, a dream within a dream from which he could not wake.* (WB)

In such examples, the represented cognizer can be argued to function as a type of hidden *I*-cognizer, represented in the third person within free indirect speech; that is, the utterance can be considered a represented equivalent of a single stance pattern with first-person, present tense matrices where the actual speaker and *I*-cognizer overlap. Example (167) is such a context where a narrator is representing Paulo's internal thoughts, from a presumed original "Women in the distance appear to beckon me forward but I know that it must surely be a mirage" (Paolo thought). The epistemic position encoded in *must* relates only to the represented cognizer as modal source, and in this respect resembles the stance pattern associated with reporting constructions. See also (174) below for a similar example in which an emotive factive construction is within the scope of an (implicit) reporting construction.

Finally, a further possibility is for cognitive factives to be used with a dual stance pattern which involves an echoed modal stance in the complement. Echoic modal markers echo a stance inferrable from, or explicitly mentioned in, the preceding discourse, and that is typically understood to stem from a third party other than the actual speaker or represented cognizer. Examples (168) and (169) illustrate such cases with an echoed stance in the complement. Both examples revolve around a discussion, with respect to the issue of whether or not a character in the story line has a special type of ring (168) or whether an app-driven board game is faulty because it has doors that lead to nowhere (169). In both examples, the speaker echoes the modal position assumed previously on the topic by another discussant (*it may not be ring*; *it may work for some*) to state that he is aware of the others' position (*It's not that I ignore…*; *I realize*) – even if he still essentially holds the opposite opinion.

(168) *A: I doubt he has a ring. …*
B: Well, I don't see any difference. His index finger isn't covered. It is not like I completely ignore that it ***may*** *not be a ring; but I personally think it seems like one.*[41]

41 Source: http://www.narutoforums.com/threads/sasukes-akatsuki-ring.396318/

(169) *A: Sometimes it [i.e. the game] properly adds a wall over doors that don't exist in the scenario … sometimes it doesn't. Seems (after hearing about more serious bugs) that the app really wasn't ready for release. …*
B: This isn't a bug. When you play you'll notice that usually the monsters spawn on the map on those spaces with doors leading off the map. That's by design. …
C: No bug here. 'this is working as intended. …
A: All of the apologies for the ghost doors above strike me as unsatisfactory, particularly since one of the stated goals was to increase the narrative nature of the game. Doors that aren't doors aren't taking us in that direction. Why even have the wall tokens at all? … So yes, I realize that it ***may*** *work for some folks but it seems misguided to me.*[42]

Unlike in the dual stance patterns in (165) and (166), the echoic cases in (168)–(169) do not involve a complement-internal position that was originally created in the here-and-now of the utterance by the speaker. Nonetheless, both the actual speaker-related and the echoed speaker-related dual stance patterns have a shared rhetorical potential: they allow the actual speaker to contrast one conceptualizer's position (encoded in the complement) with the position on the part of another conceptualizer (as described in the semantics of the matrix).

Note, however, that the complements with echoed stances seem to prefer the indicative mood, as in (170). This is to be expected, since it was argued in 4.2.2, following Verstraete (2007), that the indicative provides the unmarked option in the epistemic system. This unmarked option is typically the preferred option in contexts where the commitment is suspended, as in an echoic context which expresses lack of commitment to another speaker's modal stance (170).

(170) *A: we are actually we're a little island out on the fringe as far as mainland Europe And that's our that's our basic trouble [person B's name] isn't it.*
B: Well I don't know that it ***is*** *a problem.* (WB)

Examples such as (170) have traditionally been considered problematic cases of presupposition cancellation (see Levinson 1983: 186) on the account that a semifactive such as *know* presupposes the truth of its complement, but not in first-person negative contexts as in (170). Echoic examples are not problematic on the approach taken here. Factive complements were characterized as semantically

42 Source: https://boardgamegeek.com/thread/1617329/app-unreliabilityanother-bug

pre-existent to the main clause situation. In (170), for instance, the *I*-cognizer expresses his cognitive non-acceptance in the here and now of the complement proposition that is prior to this non-acceptance. It is argued here and in the following sections that it is precisely this pre-existence that allows the complement proposition to relate to a variety of modal sources, as the proposition is not uniquely specified by the coordinates provided in the main clause act (in contrast to complements resulting from agent-bound creation; see Chapter 3).

4.4.3.2 Factive constructions with emotive predicates

It has been proposed in the literature that factive constructions with emotive predicates cannot take complement-internal modal marking, which suggests that the complement has the status of a state of affairs, and not of a full proposition (Dik 1997: 113; see 4.3). While it is true that finite complements of emotive predicates do not occur in high absolute frequencies in corpora, and even less frequently so with explicit speaker-related modal markers, the examples given here show that we do find explicitly modalized attestations, involving both what can be considered as involving deontic (171)–(172) and epistemic (173) modal positions.

(171) *I just faxed twelve pages to the Office of Public Protection, Department of Public Health, Division of Licensure. As you know, I can be a voracious advocate for Pearlsky [i.e. the writer's daughter]. How dare the school nurses violate her civil rights and violate their own rules on neglect. But this action is bothering me. I am, after all, going after her license, her livelihood. Not that she does not deserve it, this has been going on for years, but I hate that I* ***must*** *do this. As for why they do not give Pearlsky her amino acid that keeps her alive and the seizures at bay? No one knows. The last explanation given, really, was "we don't feed disabled students." Note, this is 10 cc of a medication given at the same time as other medications. The state is now obligated to investigate, maybe we will learn more.*[43]

(172) *Leaning close, letting his hand rest on hers, he said in an insinuating, confidential way, "Now that I have admitted that I am a spy, you will not mind that I* ***must*** *do some spying now. Yes? Good."* (WB)

43 Source: http://disableddaughter.com/you-cant-help-that-were-all-mad-here-the-cheshire-cat/

(173) *D: BTW On totally unrelated note. Since you changed to new time [i.e. theme] I have to enter name/email/website for comment every time. It's not remembered anymore. …*
A: Oh gosh, that's annoying, I'm so sorry! I'll look into that. Are you sure it was since I changed my theme and didn't start before then? The theme change shouldn't have affected anything (theoretically) but I did move to a new server set up in like February or March which could have affected it. [i.e. 2 to 3 months ago] …
A: Okay I've made an adjustment. Let me know if that fixes it! …
D: Yep it's fixed. …
A: Yaaay! Thanks so much for letting me know. I hate that this ***must*** *have been a problem for aaages!*[44]

Examples (171)–(173) present instances of complement-internal modal auxiliaries that can be seen to relate to the actual speaker (who is also the represented *I*-cognizer in (171) and (173)). In (171), for instance, a father relates how he just filed a complaint against a school nurse, because she refused to give his disabled daughter her medication. The father doesn't like the fact that this complaint could have the nurse fired, but still, he states that he feels he has the moral obligation to do this now (after years of pleading), as encoded in "I hate that I must do this". The deontic position encoded in *must* can be seen to be performatively assumed by the actual speaker. Similarly in (172), the deontic modal can be seen to involve a self-imposed obligation that is performatively assumed by the speaker in the here and now.

An example involving an epistemic position in the complement is given in (173), repeated from (147). In this example, a loyal blog reader remarked that her personal details are no longer remembered in the comment section. It appears the issue was caused by a server change, which had taken place two to three months before. The epistemic position encoded in *must* in this example relates to the actual speaker, who expresses her own conviction in the here-and-now that the problem has been going on for about two months already before she found out.

As was the case with cognitive factives, in narrative contexts emotive factives can occur with complement-internal positions that relate to a represented cognizer in the main clause. As example (174) illustrates, these involve a hidden *I*-cognizer's internal thoughts, which are represented by a (covert) narrator.

44 Source: https://www.nosegraze.com/posts-dates-piss-off/

(174) *Dammit, he didn't want her to cry, and anger crawled up inside him. He hated himself for doing this to her. Hated that he didn't know exactly how he'd felt that night, because his wisps of memory only got him so far. Hated that he* ***might****'ve just been stringing her along, as he'd reportedly done with other women. So why was there something buzzing around in his chest?* (WB)

Where the modal judgements encoded in the complements in (171)–(173) relate the stance of the actual speaker at the time of speaking, the example in (174) is a passage of free indirect speech/thought: it involves backshifted third-person, past tense forms as structured by the narrator, while expressivity (e.g. the interjection *Dammit!*) and mood distinctions (e.g. the interrogative at the end vs. declaratives) are controlled by the represented cognizer (cf. Vandelanotte 2004: 493). As such, the passage in (174) represents a shifted, narrative form of an utterance originally involving a first-person cognizer: ... *I hate myself for doing this to her. Hate that I don't know exactly how I felt that night ... Hate that I might have just been stringing her along, as I've reportedly done with other women.*

The fact that we find factive complements (both with cognitive and emotive predicates) which do not involve the commitment of the actual speaker, but only of the represented cognizer is relevant because it poses a problem for the traditional definition of factive complements: they were defined in terms of speaker commitment only. It has in fact been pointed out previously that (non-modalized) factive complements can be committed to only by a represented cognizer. The point dates back at least to Delacruz (1976: 195), who suggested that an utterance like *Bill regretted that John had resigned* can be interpreted as "believing that John had resigned, Bill regretted that John had resigned". Davidse (2003) further elaborated Delacruz's suggestion in a three-way distinction for *the fact that*-clauses between what she calls "Processor-facts", "speaker-facts" and "speaker- and Processor-facts",[45] with the term "Processor" referring to what is here called the represented cognizer. Davidse's analysis confirmed Delacruz's suggestion that factive commitments can be subscribed to only by the main clause cognizer, as was also found here. As Davidse concludes, such cases crucially show that "not all [factive complements] have the feature 'pre-supposed true by the speaker' " (2003: 126) and that the factive presupposition is thus in need of reconceptualization.

45 Davidse's "speaker- and Processor-facts" involve what is here called "alignment" of stance, following Field (1997).

That a definition in terms of speaker commitment does not account for all factive complements is further supported by the possibility (also with cognitive factives) to have an echoed modal stance in the complement. Example (175) makes this echoicity explicit. It describes a negative emotive position on the part of the main clause conceptualizer (Melissa), who is also presented as having knowledge of the content of the complement proposition (see Chapter 3). The complement-internal epistemic position relates to insinuations made by the police, which she refuses to endorse.

(175) *The parents of 12-year-old Amber Harris criticized Omaha police Saturday over the handling of their slain daughter's case and said racism was behind the officers' response. … Michael Harris has four drunken-driving convictions in Douglas County, but Melissa Harris told the Omaha World-Herald in a December story that she "wouldn't stay married to some kook who was going to drink and beat everybody up." Michael Harris told the newspaper that his was not a perfect family but that he and his wife loved their children. Melissa Harris said Saturday she resented* ***implications*** *that family members may have been involved in their daughter's disappearance.*[46]

Example (176) arguably also presents a dual stance pattern with an echoed position. The text is directed towards the writer's partner, who is the modal source for the prohibition expressed in *must not*. The writer echoes this deontic status to express her aversion, and implicit disagreement with it.

(176) *Am I the only female who sometimes wishes she can pick up the PS3/XBox game console and smash it on the wall? … I hate that I cease to exist when you start playing your boring games. I hate that I* ***must not*** *stand/pass in front of the TV if u [are] playing your game.*[47]

All in all, the examples presented here show that factive complements can contain not just echoic but also actual speaker-related modal markers, and that these can involve both epistemic positions and deontic statuses. This is not to say that there are no restrictions on the modal positioning that can be expressed in the complement. It seems that especially the occurrence of speaker-related deontic modals in factive complements is restricted. The actual speaker-related examples we found (e.g. (171) and (172)) notably involved commitment to self-imposed or

46 Source: http://www.wowt.com/news/headlines/2839701.html
47 Source: http://jaguda.com/2011/02/05/11-things-i-hate-when-you-start-playing-ps3xbox/

moral obligation rather than acts of granting permission or imposing obligation or prohibition on the hearer (cf. (146)). No instances were found, for instance, of a complement directly imposing obligation on the hearer, e.g., in the intended sense, **I hate that you must clean up your room now*! (but see Chapter 7 on *regret to say*).

A plausible explanation for this is that the traditional category of deontic modals is heterogeneous in terms of its semantics. Nuyts, Byloo & Diepeveen (2010) argued that subjective deontic modality proper involves the assessment of "(degrees of) moral or ethical acceptability or necessity" (2010: 32). These deontic uses are distinct, they argue, from the directive uses in terms of which deontic modality is traditionally defined, namely those involving speech acts of giving permission or imposing obligation. The findings for factive complements seem to support this division. The fact that we only found the former type of deontic modals (involving moral obligation) but not the latter (involving directive speech acts) is in line with the generally accepted idea that a factive complement "denotes a proposition without illocutionary force" (de Cuba & Ürögdi 2010: 45), i.e. that it does not carry true interrogative, exclamative or imperative force – even if it does, as I have argued, allow for speaker deixis.

4.4.4 Manipulative constructions

Manipulative constructions semantically express the modification (e.g. *deny*, *doubt*) or re-creation (e.g. *restate*, *print*) of a pre-existent complement clause by a main clause agent (see Chapter 3). The class also contains those uses of otherwise typically reporting predicates (e.g. *say*) which are combined with a nominalized and semantically pre-existent complement clause. It was argued that the combination coerces them as it were into a different semantic and grammatical construction (see Chapter 3, 5 and 6). In this section, it will be argued that besides semantic and grammatical differences, manipulative constructions also show discursive differences in comparison with true indirect reporting constructions: they allow a greater variety in complement-internal modal sources, much like in factive constructions.

Manipulative constructions are used for dual stance patterns, which often involve a conceptualizer's reaction to an echoed modal stance. Echoic modal markers were defined above as markers of speaker-related modality which are not construed in the here-and-now of the speech event, but rather echo a stance inferrable from, or explicitly mentioned in, the preceding discourse (Verstraete

2001, 2007). Examples (177) and (178) illustrate such modal stances relating to an echoed source in the complement.

(177) *A group of British Members of Parliament is considering a visit to Syria later this year, amid continuing speculation about moves towards restoring diplomatic relations between London and Damascus. The possibility, disclosed by the chairman of the Britain-Syria parliamentary group, Mr Robert Adley, MP, came as London newspapers, quoting Arab sources, reported that a secret meeting had taken place last week between British and Syrian diplomats at the United Nations in New York. The Foreign Office today declined to confirm or deny that such a meeting* ***might*** *have taken place.* (WB)

In (177), the modal stance encoded in *might* can be seen to relate to a primary source other than the represented speaker (The Foreign Office) or the actual speaker, viz. to the newspaper reports that were explicitly mentioned as a source of a rumour. The represented speaker is described as having expressed neither alignment (confirmation) or disalignment (denial) with respect to this echoed modal stance.

(178) *Conclusions from the heart protection study were premature With reference to the news item by Kmietowicz, in their press release the directors of the heart protection study did not mention that their results were substantially worse than in the previous Scandinavian simvastatin survival study (4S) (table). The way the results were presented exaggerates the benefit for the individual patient. The most interesting figure is survival because most myocardial infarctions heal with minimal cardiac dysfunction, if any. Tell a patient that his chance not to die in five years without statin treatment is 85.4% and that simvastatin treatment can increase this to 87.1%. With these figures in hand I doubt that anyone* ***should*** *accept a treatment whose long term effects are unknown. For example, it was claimed that the study presented uniquely reliable evidence that simvastatin is not carcinogenic. But the study went on for about five years only, just like other statin trials. It is not possible to say anything about the risk of cancer because it takes decades to disclose chemical carcinogenesis in human beings.* (WB)

Example (178), then, provides an even clearer example, as it involves an echoed stance that is explicitly rejected by the actual speaker. The text from which the example is taken offers a critique on a medical study proposing a specific treat-

ment. The deontic commitment encoded in *should* relates to the confident proposal in the study under scrutiny, and is rejected by the *I*-cognizer. Similar examples of a rejection of an echoed modal stance with specific construals of *say/believe* were presented in (162) and (163) above.

Manipulative constructions can also involve an agent's reaction to a modal stance that was previously assumed by themselves; i.e. they can describe an agent's (dis)alignment with a modal stance echoed from him- or herself in the past. Example (179) illustrates this point. The construction describes how Howard Dean expressed his alignment with the deontic position encoded in *must*, which he performatively assumed a month earlier.

(179) *Vermont governor Howard Dean, caused a controversy last month when he said he wanted to be a candidate for "guys with Confederate flags on their pickup trucks." He apologized for his reference to the flag but reiterated that Democrats* ***must*** *attract more support from men, especially blue-collar workers.* (WB)

A second dual stance pattern that manipulative constructions can convey is one in which the conceptualizer reacts to a modal position which arguably stems from the actual speaker. In (180), for instance, the speaker, who is an Irish politician, assumes the responsibility for the deontic position she pleads for throughout her entire speech. The main clause describes her expectation that her fellow politicians will align with this position.

(180) *Children benefit from meeting and getting to know children from various backgrounds and religions. Diversity in our schools is an opportunity for our society, not something we should feel threatened by. All members of this house will have heard the anecdotal evidence of parents feeling forced to baptise their children to secure a school place. I find it unlikely that any member of this House would deny that this* ***must*** *come to an end.*[48]

A similar case (cf. also (164) above) can be made for example (181), in which the actual speaker is arguably responsible for the assessment of epistemic certainty (181).

48 Source: https://www.labour.ie/news/2016/06/21/burton-moves-labours-school-admissions-bill-to-com/

(181) *My father and Richard talked earnestly about the progress of the war. "Everything has changed since Pearl Harbor," said Richard. "Even the most pessimistic can't doubt that we* ***shall*** *win."* (WB)

A final important point, which was already touched upon in the discussion of example (154), reproduced here in (182), is that the source of the complement-internal modal stance can remain underspecified. The example, which stems from an interview described in a sports journal, does not contextually specify an authority for the position encoded in *must*. The modal stance is most naturally interpreted as echoic, i.e. as relating to general claims issued against doctor Cecchini, but it can equally well be seen to stem from the interviewer and actual writer of the article, or even to both (i.e. with the interviewer taken to explicitly endorse an echoed modal stance).

(182) *Speaking exclusively to Cyclingnews at the gates of his villa on the outskirts of Lucca, Cecchini claimed he has not even studied riders' blood values since 1998. Cecchini is not mentioned in Gazzetta dello Sport's report on Cipollini's link to Dr. Fuentes but he is widely known to have worked with Cipollini. … He flatly denied that he* ***must*** *have known if his riders were doping or not.*[49]

Let's consider another example. In (183), the statement *my sister denies that her child may be autistic* arguably contains a modal stance that is endorsed by the actual speaker. Besides the actual speaker, the excerpt suggests that this modal position is shared with a number of other modal authorities, amongst which can be counted the child's doctor, and representatives of the child's school.

(183) *My sister denies that her child* ***may*** *be autistic. … My nephew is 11, almost 12. For as long as we can remember he's had autistic traits, even his pediatrician told my sister that he should be evaluated for autism because he was showing signs. My sister flat out said No, he does not have autism and refused to have him assessed. … it finally got to a point where someone at his school said Look, he needs more help etc. So now she's paying $20k a year*

49 Source: http://www.cyclingnews.com/news/cecchini-denies-sending-cipollini-to-dr-fuentes/

on a special school that he should of [sic] had years ago. But whatever, I know I know, not my child.[50]

Except for contexts in which the actual speaker explicitly rejects the complement-internal modal stance as in (178), manipulative constructions thus often seem to allow for vagueness between actual speaker- and echoed speaker-related modal stances, or a combination of the two. The same essentially goes for factive constructions, which often express alignment of stance and therefore may be unclear as to the source of the complement-internal modal stance. What does this vagueness tell us about the potential modal stance patterns of manipulative (and factive) constructions?

Firstly, it suggests that echoed and actual speaker-related modal stances show similarities in contrast to represented speaker-related modal stances. The point has in fact frequently been made that linguistic echoes[51] are used to express rhetorical effects on the part of the actual speaker: they allow a speaker to appropriate (part of) someone else's utterance specifically to express a reaction to it. Verstraete (2001, 2007), for instance, argued that echoic conditionals as in (184) – with or without echoic modality – allow the speaker to contrast his or her stance with that of the echoed speaker, thereby expressing a covert reaction (e.g. of disagreement) to the echoed stance.

(184) *the skeptical reader may ask, if only some stories have themes, if those themes **may** be hard to sum up, and if readers will probably disagree in their summations, why bother to state themes?* (WB, Verstraete 2001: 1519)

Similar claims have been made with respect to different phenomena, such as certain perspective shifts in echoic speech constructions as in (185) (Vandelanotte 2004, 2009): while the content represented in *I've always hated him, I always will hate him* is attributed to Pierre; all deictic features (e.g. pronoun reference, tense) are aligned with the actual speaker's deictic center. The contrast between the deictic appropriation by the actual speaker and the attribution of the content to the represented speaker is typically used by the actual speaker for similar rhetorical purposes, e.g. to express sarcasm.

50 Source: http://community.babycenter.com/post/a50272135/ot_vent_my_sister_denies_that_her_child_may_be_autistic

51 The notion of "echo" has a long tradition in Relevance-theoretical analyses of echo questions and expressions of irony, where echoicity is interpreted as a the expression of both a metarepresentation and an attitude with respect to that metarepresentation.

(185) *Pierre holds an incredible grudge against me: I'**ve** always hated **him**, I always **will** hate **him**.* (cited from Ducrot 1991 in Vandelanotte 2004: 507)

Thus, echoicity is related to evaluations that stem from the actual speaker, because it is typically exploited by the actual speaker to express a covert reaction on his or her part. In the context of manipulative constructions, the dual stance echoic patterns in (177)–(179) and the dual stance actual speaker-related patterns in (180)–(181) have similar discursive purposes: they allow the actual speaker to express the reaction of one conceptualizer (the main clause agent, which may coincide with the actual speaker) with respect to the modal position of another conceptualizer (the echoed or actual speaker).

Secondly, the vagueness underscores the fact that the modal source is contextually determined, i.e. that it is truly construed in interaction rather than fully conventionalized by the constructional frame. True reporting constructions, by contrast, were argued in the previous section to inherently express single stance, containing modal positions created by the represented speaker or cognizer in the main clause. In other words, factive and manipulative constructions stand out precisely in the rich variability of modal sources they allow. The source of commitment to a complement-internal modal stance is not, as implied in Kiparsky & Kiparsky (1970), fully specified on the basis of the semantics of the main predicate, e.g. as always actual speaker-related in factive constructions. Rather, the semantically pre-existent status of the complement clause allows it to stem from various contextual sources, besides describing a position (e.g. of acceptance, rejection, and/or reaction) on the part of the main clause agent.

4.5 Conclusion

This chapter centered on explicit modal positioning in the grammatical environment of complementation constructions. Despite the growing body of research on modality in general, the topic has received comparatively little attention in studies on various types of complementation constructions, which inherently involve multiple conceptualizers interacting with the content of the complement (the actual speaker/interlocutor in the discourse context, but also the represented speaker/cognizer mentioned in the main clause). The aim here was to determine, on the basis of attested modalized complement clauses, what differences in modal positioning we can find across distinct types of complementation patterns and how these differences feed into a reconceptualization of the defining properties of factive complements in particular.

In essence, the findings presented in this chapter run counter to two central claims that have been made in the literature with respect to factive complements. The first claim posits that factive complements cannot incorporate explicit speaker-related modal marking, and can thus in layered models be considered to refer to states of affairs, rather than propositions (e.g. Dik 1997; see 4.3). The second claim relates to the original definition of factive constructions in terms of speaker commitment to the complement (Kiparsky & Kiparsky 1970).

The first issue involves the entity type (propositions or states of affairs) that factive complements can be said to refer to from the point of view of layered functional models. Traditionally, a distinction is made between three types of entities that linguistic expressions can refer to. First-order entities typically refer to "physical objects" which are characteristically perceivable through the senses and located in "a three-dimensional space" (Lyons 1977: 443). Second-order entities refer to states of affairs, "which are located in time and ... said to occur or take place" (Lyons 1977: 443). Third-order entities refer to "such abstract entities as propositions, which are outside space and time" (1977: 443). The three entity types, as a shorthand called *things*, *states of affairs*, and *propositions*, have prototypical realizations in the form of noun phrases, non-finite clauses, and finite clauses respectively. Functional Grammar (Dik 1978, 1989, 1997; Hengeveld 1989) includes a fourth entity type, that of speech acts, i.e. *utterances*, which are dependent on a specific deictic center (time, place, speaker and interlocutor) for their interpretation, and involve their own illocutions. The layers are hierarchically structured, so that the highest layer can be seen to contain each of the lower-level layers (speech act > proposition > state of affairs > thing) but not vice versa.

Importantly, each of the four layers is in Functional Grammar associated with a set of grammatical operators or modifiers that can be applied to them. As regards modality, the crucial cut-off point is seen to be located between the levels of states of affairs and propositions: speaker-related modality belongs to the set of proposition operators, while non-speaker-related modals (see 4.2) scope over a state of affairs (Hengeveld 1989). This is reflected for instance in the fact that speaker-related-modals have wider scope than non-speaker-related-modals (e.g. speaker-related *might* holding non-speaker-related *be able to* in its scope in *He might be able to finish the marathon*). The relationship between speaker-related modality and propositions implies not only that speaker-related modals take propositions in their scope, but also that they can be used as a so-called test to identify propositions: a clause represents at least a proposition (potentially a speech act) if it can contain speaker-related modals.

In this respect, it is not surprising that the traditional definition of factivity as presupposing the truth, i.e. epistemic certainty, of the complement has led to

claims that factive complements represent states of affairs (e.g. Dik 1997: 113) and that they cannot incorporate speaker-related modal marking (Lyons 1977; Dik & Hengeveld 1991; Dik 1997; Verstraete 2002, 2007; Haegeman 2006, 2012). In this chapter, however, I hope to have shown that factive complements, like manipulated complements, can contain speaker-related modal markers as e.g. in (147) *I hate that this must have been a problem for aaages!*, which shows that they do represent propositions. In line with the proposals made by Halliday (1985) and Davidse (1991, 1999a), I further assume the position that factive complements can contain speaker-related deontic statuses of moral or ethical desirability, as in (171) *I hate that I must do this*, besides epistemic assessments as in (147), and include both of these in what I call propositions. Crucially, however, factive complements have no illocutionary force (de Cuba & Ürögdi 2010), which is also reflected in the fact that they were not found to be used to directly grant permission or impose obligation on the hearer, e.g., in the intended sense, **I hate that you must clean up your room now!* For reported complements, then, there seems to be agreement that these contain represented utterances, which involve their own represented illocutions (Dik 1997: 96–105; McGregor 1994, 1997: 264–252; Davidse & Vandelanotte 2011).

The second issue relates to the source of the complement-internal modal position. It was proposed that reported complements involve represented speaker-related modal stances: the modal stance in the reported complement is ascribed to the speaker or cognizer identified in the main clause. This follows logically from the semantic characterization proposed in Chapter 3: as reported complements represent utterances uniquely created in the main clause speech or thought act, the positions they encode stem from the agent responsible for that main clause act. Factive and manipulative complements were shown to be more flexible in terms of modal sources: unlike reported complements, they can contain modal positions that relate to the actual speaker, or to an echoed speaker.

This is further borne out by the fact that the actual speaker-related or echoic modal source can be made explicit, as in e.g. (156) *the Chinese authorities accepted my proposal that this mission should be followed by three more* and (175) *she resented implications that family members may have been involved in their daughter's disappearance*. The point that what I call factive and manipulative matrices can take such constructions as their complements has similarly been noted by Cattell, who further suggests that such cases of nouns introducing content clauses cannot function as the complement of true reporting predicates like *think* or *claim* in the positive (1978: 64). The reason for this, he argues, is that when nouns such as *claim* or *fact* introduce a content clause as in "Why do you believe

the claim that…" (1978: 64), these evoke the notion that the content clause introduced by the abstract noun "has a source outside yourself" (Cattell 1978: 64).

Similarly, Bogal-Allbritten & Moulton (2018) describe how in Korean, for the same predicate *mit* 'believe', three different interpretations are possible for the complement: speaker-presupposed complements tend to occur with the nominalizing complementizer *kes*, whereas non-factive reported complements occur with the complementizer *ko* and a declarative marker *ta* in the complement. The same predicate can however also take complements which combine the nominalizing complementizer *kes* with a declarative mood marker *ta/la* in the complement, in which case they do not require speaker commitment, and receive an interpretation in the sense of "believe the claim that…". They argue that the latter marking is preferred generally in Cattell's (1978) set of response-stance predicates (e.g. with verbs such as *acknowledge* or *deny*), which is similar to my manipulative clauses (see 2.3 for discussion), and conclude from this that the latter set of predicates may be characterized as taking complements that "do not denote propositions but instead definite descriptions of assertion events that carry propositional content" (2018: 216).

This proposal seems to be in line with the variable modal source and propensity for dual stance patterns that I have described for manipulative constructions, as well as with an account that allows for the same predicate to be used in the different types of complementation constructions. Further research would have to make out how the relation between echoed speaker-related stances (see e.g. (179)) and cases of actual speaker-related stances (see e.g. (180)–(181)) in manipulative constructions are construed in Korean, in comparison to similar cases in factive constructions, to establish whether their traditional definition of factive constructions as only being felicitous if the complement proposition is true still holds, and how it relates to the manipulative constructions more specifically in terms of marking and delineation. The findings generally call for an investigation of the possible combinations across the three complement types of complement-internal modal positions with other interpersonal markers (e.g. evidential, illocutionary) that may affect the interpretation of the source of the complement-internal modal position.

Over-all, the fact that the modal source in factive and manipulative complements need not coincide with the conceptualizer identified in the main clause endows the complementation types with a specific rhetorical potential: they can be used to contrast one conceptualizer's position (encoded in the complement) with the position on the part of another conceptualizer (as described in the matrix). This is fully in line with the semantics of factive and manipulative matrices as expressing contact with, or a reaction to, a pre-existent proposition.

Note that the findings call for a more nuanced view of the interpersonal status of factive complements than has traditionally been assumed. Factive complements have been defined in terms of speaker commitment, while reported complements are said to involve commitment on the part of the represented speaker or cognizer. The findings presented in this chapter show that factive complements do stand out in that they allow actual speaker-related modal stances, but that they are not restricted to it, as I also found echoic and represented speaker-related modal stances. It is thus more accurate to distinguish between reporting and factive complement clauses as involving fixed (represented speaker-related) or variable (speaker-related, echoic, or represented conceptualizer-related) modal sources respectively.

5 Object extraposition

5.1 Introduction

This case study deals with object extraposition constructions as in (186a), in which a finite complement clause is anticipated by, and co-referential with, the pronoun *it* in object position.[52] Extraposed *that*-complement clauses as in (186a) can occur in contexts very similar to those of non-extraposed complement clauses as in (186b), but the linguistic motivation for extraposition in such contexts is not yet fully understood.

(186) a. *Seigl hated **it** that people talked of him behind his back* (WB)
b. *Union hated that her family treated her like a fragile piece of china* (WB)

Extraposition of object clauses is highly infrequent, especially compared to that of subject clauses as in (187) (Quirk et al. 1985: 1062; Kaltenböck 2004: 65).[53][54]

(187) *In view of the antagonism between the national groups in Kosovo, **it** is surprising that there has been so little violence in recent weeks* (WB)

To explain actual occurrences of object extraposition, as well as potential interpretative differences between extraposed and non-extraposed structures as in (186a–b), the construction has been claimed to make explicit the factive and/or contextually given status of the extraposed clause (see 5.2). On a first account, object extraposition has been proposed as a test for factivity (Kiparsky & Kiparsky 1970). On this account, object extraposition is a formal reflex of the semantically "presupposed true" (or rather, pre-existent, see Chapter 3) status of the extraposed clause. This led to the proposal that object extraposition is restricted in occurrence to complements of "factive matrix predicates" such as *resent* in

52 This chapter is in part derived from Gentens (2016a), published in *Journal of Pragmatics*, reproduced with the kind permission of Elsevier B.V., and from Gentens (2016b).
53 I follow common terminological practice in referring to "object complements" as opposed to subject complements, without further implications regarding potential differences in syntagmatic relation to the matrix.
54 Considering all 1,808 instances of *it*-extraposition in the one-million-word ICE-GB corpus, Kaltenböck (2004: 73) found that "subject *it*-extraposition clearly outnumbers object *it*-extraposition by a ratio of roughly 1:16, marking the 107 instances of extraposed object clauses as marginal cases of extraposition."

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(188a). "Non-factive predicates" such as *claim* in (188b) are predicted to disallow object extraposition (Kiparsky & Kiparsky 1970: 165).

(188) a. *Bill resents it that people are always comparing him to Mozart* (Kiparsky & Kiparsky 1970: 165)
b. * *Bill claims it that people are always comparing him to Mozart* (Kiparsky & Kiparsky 1970: 165)

On a second account, the pronoun *it* is an explicit marker of the contextually given nature of the proposition contained in the extraposed clause (Bolinger 1977; Hegarty 1992; de Cuba & Ürögdi 2010). This predicts that the content of the extraposed clause in (186a, 188a) must be retrievable or accessible to the hearer, while non-extraposed clauses as in (186b) are not subject to such a condition.

In this case study, I aim to give a detailed account of the differences between extraposed and non-extraposed contexts, both to explain the function of the construction in itself and to assess its relation to factivity and givenness. I will propose that the function of object extraposition as a construction is to assert the occurrence of an abstract complement proposition in a specific domain of conceptualization, i.e. in an act of perception or creation that is implied by the matrix clause (5.5.5). This function is exploited in actual usage for discursive effects (5.5.3), and moreover induces a specific aspectual construal of the main clause situation (5.5.4). The tendency for object extraposition to occur with factive construction patterns can be explained on account of the grammatical and semantic properties of the construction (see Davidse 1994): extraposed object clauses are presented as nominalized clauses which exist independently of the main clause situation (5.5.2). When they are combined with non-factive construction types (5.5.1), this induces a reinterpretation of the status of the complement which formally and semantically aligns them with factive complements (Davidse 1994). That is, object extraposition can be used to construe reporting constructions as manipulative constructions. Before going into all this, I critically address, and reject, the claim that object extraposition constructions are not in any way related to factivity, but rather explicitize the contextual givenness of the extraposed clause.

The structure of this chapter will be as follows. In 5.2, I introduce prior accounts of object extraposition, which propose that the construction makes explicit the status of the complement clause as being (i) presupposed true by the speaker and/or (ii) given in context. In 5.3, I delineate the data set used for the study. In 5.4, I first address the claim that object extraposition occurs only with

complement clauses that are contextually given. This account is rejected on empirical grounds, for various notions of givenness. In 5.5, I turn to the proposal that object extraposition is restricted to factive constructions, and show that this does not account for the data either. I then work out an alternative proposal, which incorporates the grammatical features that object extraposition shares with factive constructions, but also accounts for the aspectual and discursive interpretations specific to the object extraposition itself. Section 5.6 rounds off this first case study by means of conclusion.

5.2 Theoretical background: factivity and/or givenness

Kiparsky & Kiparsky (1970) consider object extraposition as one of the syntactic manifestations of the semantic feature of factivity. As a result, they predict that while predicates that are considered factive will tend to allow for extraposition of their clausal complements (as is the case for *resent* in (188a)), predicates that are considered non-factive (such as *claim* in (188b)) will not.[55] The Kiparskian account raises a central question to be addressed, namely, the question of whether or not object extraposition is truly restricted to factive constructions.

Recall that traditionally, factivity has been defined in terms of a speaker presupposition triggered by particular lexical items (Kiparsky & Kiparsky 1970): with "factive predicates" such as *regret* (189), the complement proposition is presupposed to be true by the actual speaker.

(189) *in due time, Raeder would have good reason to regret that he had not done more to dampen Hitler's enthusiasm for an aggressive foreign policy* (WB)

The approach taken here (see Chapter 3) is different in that factive complements were defined in terms of their semantic pre-existence to, and unaffectedness by, the matrix situation, which correlates with their grammatically nominalized status. The semantic complement type (factive, manipulated, or reported) is ultimately construed in context by means of the whole complementation construction, instead of being fully specified by the matrix predicate. In this view, it can be expected that object extraposition provides a constructional environment that

55 To formalize the factive/non-factive distinction, Kiparsky & Kiparsky (1970) propose that factive complement clauses are selected by an intermediary layer with *the fact* as nominal head in their deep structure (see also Chapter 6), which may, in the case of extraposition, surface in a reduced form *it*.

shares certain semantic and grammatical features with factive constructions (without precluding it from having its own function distinct from factivity), which would give the construction the potential to construe reporting constructions as manipulative constructions. This is what will be proposed in 5.5.

Besides proposals of a relationship to factivity, other accounts have associated object extraposition with information status. According to Bolinger (1977), the use of *it* in object extraposition relates to its nature as an anaphoric pronoun; *it* therefore appears in "sentences [that] are about a topic that has already been introduced" (1977: 67). He considers object extraposition to be obligatory with typical emotive predicates such as *love* and *hate*,[56] which are traditionally seen to be "true factives" since Karttunen (1971),[57] but, importantly, also signals its occurrence with for instance verbs of reporting as in (190).

(190) a. *You might at least have announced that you were moving in on us* (Bolinger 1977: 69)
b. *You might at least have announced it that you were moving in on us* (Bolinger 1977: 69)

In such cases, Bolinger suggests that "the contrast [i.e. the difference in interpretation between the non-extraposed (in 190a) and the extraposed (in 190b) version, C.G.] is between something previously unknown and something already settled" (1977: 69). While Bolinger considers factivity to "impl[y] the factuality of its complement in the mind of the speaker", allowing it to "still be used for something that the hearer may be learning for the first time" (1977: 69), his explanation for object extraposition comes close to givenness.

56 In his terms, Bolinger (1977: 68) states that "emotional factives such as *love*, *hate*, *admire*, and *welcome*, which (with *that* clauses) are limited to what is already present to the mind, require *it*". As examples, he marks as infelicitous **I just love that you are moving in with us* (his example (27)), against the felicitous *I just love it that…* (his example (28)). Bolinger apparently considers this restriction to apply only to particular predicates, as he later points out (1977: 69) that "emotional factives that broach something new do not use *it*", a.o. giving an example with *regret*: "If he asks you to help him, just say you regret (*it) that you can't". I checked the Wordbanks Online Corpus for attestations of the four verbs cited, and found that the proposed restriction to extraposed complement clauses was not valid for any of them.

57 Bolinger (1977), incidentally, has a different view of what "true factives" are. He considers verbs that are metaphorically extended to take complement clauses (e.g. *swallow*) to be true factives.

In a similar vein, de Cuba & Ürögdi (2010), citing Hegarty (1992), claim that object extraposition does not indicate factivity in itself but rather signals the additional feature of givenness: they state that "givenness and presupposition are independent", but that object extraposition as in (191) indicates "a clear difference in pragmatics" with respect to non-extraposition, i.e. that of being given (2010: 45).

(191) *I was talking to our agents in Russia yesterday…*
a. *–…and they noticed that Max went to Moscow last week*
b. *–…and they noticed* ***it*** *that Max went to Moscow last week*
(Hegarty (1992: 6), cited in de Cuba & Ürögdi (2010: 45))

In the light of the proposals made by Bolinger (1977), de Cuba & Ürögdi (2010), and Hegarty (1992), a second question to be addressed will be whether actual attestations of extraposed object clauses can always be considered "given" in context.

A third and final type of approach combines, and potentially even conflates, the notions of both the factive presupposition and givenness to account for object extraposition. Kallulli (2006, 2010), for instance, considers object extraposition to be a trigger for factivity, even for predicates that are typically used as non-factives such as *believe* in (192), besides being a marker of what she calls the "topichood/givenness" of the extraposed clause (2006: 212, her fn. 4).

(192) *I didn't believe it that John left. […in the sense: It's incredible that John left.]*
* *In fact he didn't.* (Kallulli 2006: 212)

This suggested double function of object extraposition – triggering factivity on the one hand and marking a type of givenness on the other – poses the question of the exact relationship of givenness to factivity in general, i.e. even outside the specific context of object extraposition. Kallulli (2010) states that

> to say that a sentence is presupposed can mean one of two things: either it is assumed to be true, or the proposition expressed by the sentence has been mentioned before. … Crucially, however, *the distinction between presupposition and givenness mostly seems to be blurred*, since propositions that are presupposed (i.e., assumed to be true) are *given* (*either in the immediate context, or via world knowledge*), and contextually given propositions are most often taken to be true.
>
> (Kallulli 2010: 206, my emphasis)

Her account invites further investigation into the relation between the factive presupposition and "contextual" givenness, i.e. discourse givenness, and logically

begs the question of whether semantically pre-existent complements are always discursively given (see also 2.1.2 on "pragmatic presupposition"). As we will see, the results of the data analysis suggest that this is not the case, which emphasizes the need to deal with factivity and givenness as two distinct notions.

5.3 Methodology: data

Object extraposition as in (193) was defined as a construction in which a complement clause is anticipated by the pronoun *it* in object position, with the clause itself placed further towards the end of the sentence. The complement clause in (193), for instance, realized in the *that*-clause, is placed after the "anticipatory" and co-referential pronoun *it*.

(193) *Seigl hated **it** that people talked of him behind his back* (WB)

(194) *Union hated that her family treated her like a fragile piece of china* (WB)

Extraposed complement clauses as in (193) can occur in contexts very similar to those of non-extraposed complement clauses as in (194). As the omission of the pronoun *it* in (193) does not make the complex sentence ungrammatical or difficult to process, such cases of object extraposition can be referred to as optional object extraposition.[58] In the remainder of this section, I will delineate optional object extraposition constructions from three other contexts in which object extraposition is obligatory due to information processing or constraints of a grammatical or lexical nature.

First and foremost, the occurrence of extraposed object clauses has been associated with contexts containing a co-occurring object complement (195a) or intervening adverbial (195b) in which extraposition is said to be obligatory (Quirk et al. 1985: 1050, 1393).

(195) a. *I find **it** surprising **that figurative art still seems underrated*** (WB)

58 The term "optional" is used in a non-technical sense here, as referring to the fact that the clause in object position in principle allows for alternation between a simple *that*-clause and an extraposed variant. Following McGregor (2013) I will discuss a more technical sense of optionality in 5.5.2 below, which restricts strictly optional elements to those which convey added interpersonal meanings without changing the grammatical structure of the linguistic environment they occur in.

b. *He denied **it** until the very last minute **that he WOULD become the Club's new trainer***

The strong tendency to have extraposed (195) rather than non-extraposed (195') structures in such contexts is usually accounted for with reference to the principles of end-weight or end-focus: long or complex constituents tend to occur at the end (cf. (195a)), as do constituents that carry the information focus of the sentence (cf. (195b)) (Quirk et al. 1985: 1356–1362).

(195')a. *? I find **that figurative art still seems underrated** surprising*
b. *? He denied **that he WOULD become the Club's new trainer** until the very last minute*

Note that the factors of end-weight and end-focus cannot account for extraposed clauses without intervening elements, as in (193). In that example, the anticipatory pronoun *it* can unproblematically be left out, and its occurrence is not dependent on any intervening constituents; rather, the anticipatory pronoun *it* and the *that*-clause are adjacent to each other in object position.

Secondly, extraposition is obligatory for objects to prepositional or phrasal-prepositional verbs as in (196). This is due to a general constraint in English that a preposition cannot directly introduce a *that*-clause as its complement (Quirk et al. 1985: 1049).

(196) a. *You can **depend on** it that your close relationship will be no secret* (WB)
b. *David **came right out with** it that there'd been a fight* (WB)

Finally, there is a small but highly frequent set of semi-fixed expressions mainly expressing hearsay (197a) or inference (197b), for which the pronoun *it* can be seen to have become lexicalized as an inherent part of the main clause.[59]

59 Gentens (2016a) gives an idea of the relative frequency of the different types of object extraposition constructions without intervening constituents as in (193) and (196)–(197). She considered a data set of 1,987 cases of complex sentences with object extraposition. The data set is based on an exhaustive search in the synchronic Collins Wordbanks Online Corpus (WB) for examples in which a lexical predicate is immediately followed by the pronoun *it* and a co-referential complement clause introduced by *that*. Of the three patterns without intervening constituents, the semi-fixed expression pattern was the most frequent, as it represented 56,0% or 1112 tokens. Next in line was the prepositional or phrasal-prepositional pattern, which made up 32,1% of the data (638 tokens). Least frequent was the optional extraposition pattern, with only 11,9% of the data (237 tokens).

(197) a. ***Rumours had it*** *that he and his family were possessed by the devil* (WB)
b. ***I take it*** *that you'll be at the rendezvous* (WB)

In all three cases illustrated in (195)–(197), the pronoun *it* cannot freely be omitted. Since the aim is to explain the potential contrast in function between the presence or absence of *it* in object extraposition, such instances in which the pronoun cannot be left out are not dealt with in the analyses presented below.

In the remainder of this chapter, I will thus focus on optional object extraposition as in (193), the occurrence of which has been related to the notions of factivity and/or givenness. The analyses are based on a data set of 237 tokens of optional object extraposition extracted from the synchronic Collins Wordbanks Online Corpus (WB). The corpus contains over 445 million words, with texts from a wide range of regional varieties, text styles and registers useful for the analysis of both written and spoken Present-day English. The data set is based on an exhaustive search for complex sentences with object extraposition in which a verbal predicate is immediately followed by an anticipatory *it* and a co-referential complement clause introduced by *that*.[60] A small random sample of 60 non-extraposed *that*-clauses with the predicates *love* and *hate* was also analysed for comparison with the 60 instances of *love* and *hate* with extraposition. By analysing the extraposed set (in comparison with the non-extraposed set), I will test the prior hypotheses that optionally extraposed clauses are always given and/or presupposed true by the speaker, and will formulate my own proposals with respect to the function of object extraposition in itself. The first question to be addressed is that of whether extraposed object clauses are always given in context, which is what we will turn to in the next section.

5.4 Object extraposition and givenness

Various notions of givenness have been proposed in the literature. In my investigation into the givenness of extraposed object clauses, I start from the well-known distinction between referential and relational givenness (Gundel 1988; cf. also Reinhart 1981: 61). In the referential dimension, the entity a speaker refers to by a particular linguistic expression can be seen as given or assumed known to

60 Besides instances with intervening constituents between the pronoun and the extraposed clause, the search thus also excludes instances with other clause types that can be extraposed, or with complement clauses without an explicit complementizer. Object extraposition can apply to *that*-clauses with and without an overt complementizer *that*, to (*for*) *to*-infinitives, to gerundial clauses or to *wh*- or *if*-clauses (Kaltenböck 2004: 66).

the hearer from the discourse context, or from the knowledge shared by speaker and addressee. The referential dimension thus deals with the reference of a linguistic expression to some extra-linguistic concept or entity. By contrast, relational givenness is concerned with the division of the propositional content of a clause into two parts, i.e. one part that expresses given material with respect to the information contained in the other part, or with respect to the entire proposition expressed. The relational dimension involves notions such as topic-comment or focus-background structure.

5.4.1 Referential givenness

Referential givenness subsumes the notions of discourse givenness, assumed familiarity, and common ground. Depending on which of two basic approaches to the analysis of discourse is taken, these notions fall into two categories: the point of departure for linguistic analysis can be either the text as a finished product of communication, or rather the intentions and assumptions underlying the creation of that text, i.e. the production process itself (Mackenzie & Keizer 1991). I will first discuss discourse givenness, which falls under the former, empiricist point of view and then go on to the notions of assumed familiarity and common ground, which relate to the latter, cognitivist perspective on discourse analysis (Kaltenböck 2004: 157–158).

5.4.1.1 Discourse givenness

The precise model and criteria for distinguishing discourse-given and new information were adopted from Kaltenböck (2004, 2005). Its appeal as a model for discourse givenness stems mainly from the fact that it adapts Prince's (1981) influential taxonomy to the purposes of a purely discourse-based study. As emphasized by Kaltenböck, Prince's original taxonomy is subclassified according to a combination of the notions of discourse givenness and hearer givenness (cf. Prince 1992). It merges the two distinct notions of discourse pointed out by Mackenzie & Keizer (1991): while hearer givenness pertains to the cognitivist perspective as it draws on speaker assumptions about the hearer's knowledge state, discourse givenness is a text-as-product-oriented notion and is arguably the most suitable approach for the analysis of actual corpus data (Kaltenböck 2004: 157–

158). Kaltenböck reinterprets Prince's mixed model into a model of "discourse familiarity" (a term he borrows from Birner 1992) focused on textual and situational retrievability.[61]

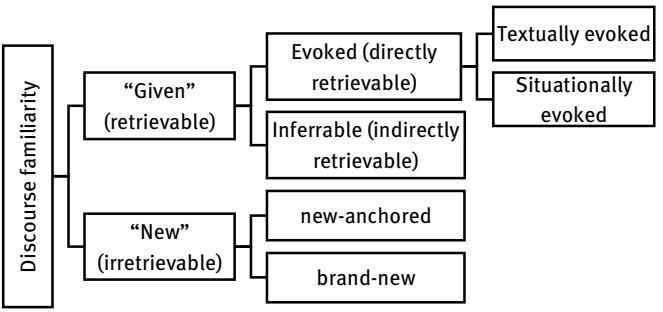

Fig. 15: Kaltenböck's (2005: 127) model of "discourse familiarity" as adapted mainly from Prince (1981)

Figure 15 shows that the model makes a primary distinction between those clauses that can be considered to convey information that is given in the discourse, i.e. "information that is retrievable (recoverable) from the preceding co(n)text" (Kaltenböck 2005: 126) and those conveying new or irretrievable information. Within those two broad categories, further subcategories are distinguished to accommodate the different nature of the retrieval process or the variation in degree of givenness. In what follows, each of the model's subcategories will be described and illustrated with examples from both the extraposed and non-extraposed data set.

Given information, firstly, can be retrieved either directly from the textual or situational context or indirectly via logical inferences. A first subset contains those rare cases for which the propositional content of the extraposed clause is

61 Prince's (1981) original model makes a three-way distinction, taking inferrables to be a separate intermediate category. Kaltenböck groups inferrables together with evoked information on account of their link to "some 'trigger entity' (Prince 1992: 305) in the discourse", which makes them essentially "discourse-bound" (2004: 160). Kaltenböck does not include Prince's "unused" category, which she intended to account for e.g. proper names such as *Noam Chomsky* that can be newly introduced into the discourse and yet are "taken for granted" (Prince 1981: 235) as the referent is presumed known from the hearer's background knowledge. The latter category is defined in terms of both discourse givenness and hearer givenness and thus has no place in a purely discourse-based model (Kaltenböck 2004: 161).

directly retrievable because it has been explicitly mentioned in the preceding discourse. This set of textually evoked *that*-clauses includes cases where the wording is near-synonymous to a prior mention, as in (198a), where *scare* and *be frightening* refer to the same emotional state experienced by the speaker, besides cases where the same lexemes are repeated, as is the case for *be a cop* in (198b).

(198) Textually evoked
a. *Even though giving birth **scares me** to death, I like it **that it's frightening*** (WB)
b. *"They were saying back in the office that **you used to be a cop** in New York before you got into this game. Is that right?" … They all loved **that she'd been a cop*** (WB)

Besides the textual context, information can also be retrievable directly from the situational context, i.e. the here-and-now against the background of which a speaker or character formulates the utterance. In (199a), for instance, the fact that people are staring at the naked boy is partly textually evoked by the exclamation *look!*, but wholly retrievable to the character from his immediate surroundings. In (199b), similarly, the complement clause doesn't convey new content that pushes forward the information flow; instead, it simply sums up and refers to the entire discourse context.

(199) Situationally evoked
a. ***"Look!"** One of them pointed. "This boy is naked!" Bardo made his way carefully among the petitioners. …"You're naked, by God! – do you understand me, boy?…" Danlo nodded his head. … He hated it **that everyone was looking at him*** (WB)
b. *"I'm not staying." After a pause she said: "I wish you would." He shook his head. "I hate **that it's happening like this**"* (WB)

The category of inferrables covers those states of affairs that are not directly recoverable from the immediate textual or situational context, but that are derivable from it via a relationship of inference. In such cases, a so-called "trigger" in the preceding discourse licenses the inferential relationship with the content conveyed in the complement clause. The types of inferential relations include, amongst others, relations of logical entailment, part-whole or entity-attribute relations (Birner & Ward 1998). For instance, if one person wins a one-to-one match as envisaged in (200a), this logically entails that the other person loses. In (200b),

the conceptualization of a Super Bowl game in terms of its end point simply highlights a subpart of the event of its occurrence.

(200) Inferrable

a. *they stood the bottles on the split-rail fence posts bordering the front lawn: five posts, two bottles side by side to a post. "One point for the bottle that goes down first, and minus three points for missing altogether" … She desperately wanted* ***William to win****, but she could not bear it* ***that her father should be beaten*** (WB)

b. *Dejected fans orderly shuffled out of bars and homes in the Charlotte area* ***after the Super Bowl****, with most saying they were proud of the Carolina Panthers' performance in a 32–29 loss to the New England Patriots. … "I hate* ***that it ended this way****. But it was a great season"* (WB)

New information, secondly, can be either brand-new or new-anchored. The category of new-anchored clauses, illustrated in (201a–b), contains *that*-clauses that, as a whole, introduce a new state of affairs into the discourse, but do contain some link to the previous context which prevents them from being interpretable "outside of context". Example (201a), for instance, contains a noun *positiveness* derived from the adjective mentioned above, and explicitly refers back to that quality of being positive by means of a demonstrative pronoun. The complement clause in (201b), then, cannot stand on its own either, as *the profession* refers back to the earlier discourse topic of *being a lawyer*; similarly, the subject referred to by *they* anaphorically refers to *the public*.

(201) New-anchored

a. *Speaking publicly for the first time since being appointed captain, Wilkinson spelled out his vision of the way ahead for the World Cup winners at a press conference* ***in London*** *… "****The outlook is incredibly positive*** *and we've got time to build towards the next big thing." "My team would have to be totally prepared, very thorough, committed, excited and enthusiastic." … "Pride comes with that thoroughness. It culminated for me in the World Cup final. I love it* ***that every time I come down here (to England's training camp) I feel that positiveness****"* (WB)

b. *What's the difference between a woman lawyer and a pit bull? Lipstick. … Despite the punch lines, Judy couldn't laugh. She hated that* ***the public*** *made jokes about* ***lawyers****, hated* ***that they didn't understand the nobility of the profession, or of the law itself*** (WB)

In contrast to new-anchored clauses, the second type of new clauses can be interpreted without reference to the preceding context. Hence, these "brand-new" clauses can be used to start a new paragraph, as in (202a), and they don't contain elements that restate or anaphorically refer back to the prior discourse except for personal or possessive pronouns that refer to the speech participants (Kaltenböck 2005: 150, his fn. 13), such as *I* in (202b).

(202) Brand new

a. *De Pouzilhac … was born in Sete in the south of France. … One of five siblings, he hated school. But his father, a director of a wine company, held lunches with interesting businessman [sic] and felt his children learnt more there. "I love it* ***that in life if you choose the wrong way you pay a penalty****," he says. "But in school all you did was learn and repeat - that's French education* (WB)

b. *It took an hour for me to finally make myself get up, put on a shirt, and get ready for work. … I hated being back in L.A. I hated* ***that I hadn't had a drink in months.*** *I hated that I was losing my hair. I hated my job. I hated filtered cigarettes and rap music and Tom Cruise's big, stupid white teeth* (WB)

Figure 16 visualizes the relative proportions of the different categories of discourse givenness for all 237 extraposed object clauses. As was already clear from the examples given in (201)–(202), extraposed object clauses need not be discourse-given; they can be used to convey the whole range from brand-new to textually given information. In fact, the largest subcategory in the data is that of new-anchored clauses, which makes up 46% of the data. This is in itself not surprising, as we are dealing with the givenness of the state of affairs expressed by an *entire* clausal information unit, which can be expected to contain a combination of given and new elements (cf. Kaltenböck 2004: 164). The high proportion of new clauses is, however, unexpected when compared to earlier suggestions that object extraposition might indicate the "given" status of the extraposed clause (see 5.2). With only half (51.5%) of the extraposed data set being discourse-given, this explanation is clearly not sufficient to account for all the data.

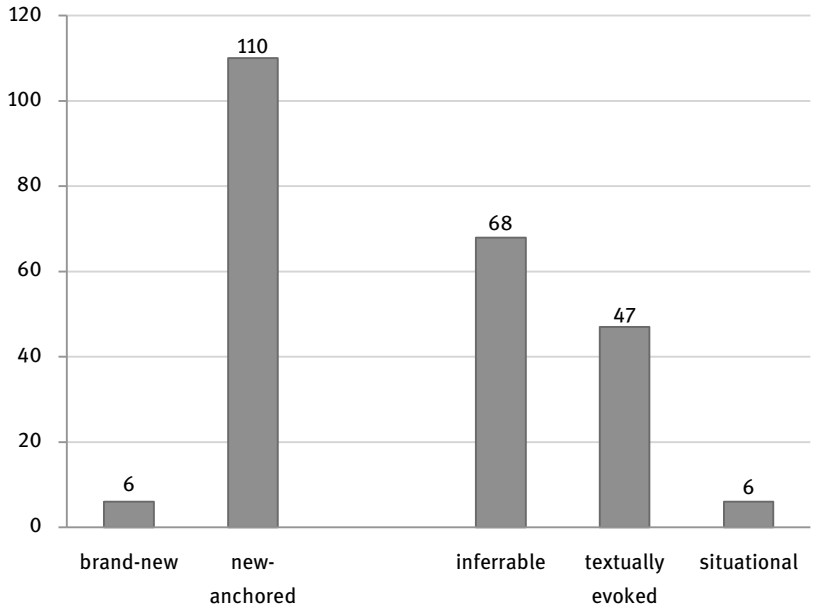

Fig. 16: Discourse givenness of extraposed object clauses (raw frequencies)

The suggested correlation between object extraposition and givenness would in addition require significant differences in the degree of givenness of extraposed and non-extraposed object clauses. To verify this, I compared all 60 instances of extraposed object clauses with the predicates *love* or *hate* to a random sample of 60 non-extraposed object clauses with the same predicates. Figure 17 shows the comparison of the 2 sets in terms of discourse givenness. The proportion of given clauses was somewhat higher for extraposed clauses (51.7% given) than for non-extraposed clauses (40.0% given), but the difference was not statistically significant (Fischer's Exact Test: p=0.2638). Hence, we can conclude that object extraposition does not signal discourse givenness, nor does the factive presupposition itself necessarily coincide with discourse givenness (cf. e.g. the examples in (202), which contain factive and yet discourse-new complements).

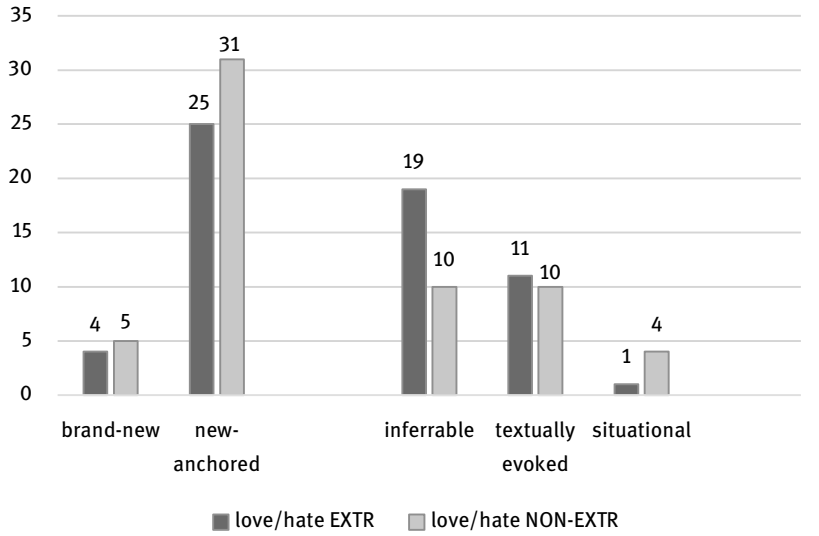

Fig. 17: Comparison of discourse givenness of object clauses to the factive predicates *love* and *hate* with and without extraposition (raw frequencies)

5.4.1.2 Hearer givenness

The notions of assumed familiarity (e.g. Prince 1981) and shared knowledge or common ground (e.g. Stalnaker 1974) take as a common point of departure their definition in terms of the speaker's assumptions with respect to the hearer's knowledge state. To verify whether object extraposition can signal the hearer givenness of the extraposed clause, the relevant question to ask is thus whether the speaker may expect the information in the object clause to be familiar to the hearer (on account of its already being introduced into the discourse, its status as "world knowledge", or its status as given from prior experiences shared by the discourse participants). Example (203) illustrates such a case where the information contained in the extraposed object clause can readily be taken to be known to the addressee.

(203) *"I said I'd help you pack. And I will help you pack," She put a stack of Anastasia's paperback books into a carton, half-heartedly. "But boy, Anastasia. I really hate it that you're moving* (WB)

There are, however, at least 3 contexts in which this is not the case. Firstly, there are (mainly narrative) discourse contexts in which it doesn't seem to make sense to determine what the speaker considers to be present or activated within the hearer's consciousness, or part of a shared knowledge basis between them, as there may not even be a direct hearer. Examples (204)–(205), for instance, contain passages of free indirect speech that describe the thoughts of a character rather than a communicative event between a direct speaker and hearer. A potential counterargument could be that the content of the extraposed clause could be given not to the actual hearer of the utterance, but to the reader of the text. This is however not always the case: in (205), for instance, the extraposed clause does not express information that can be assumed known to the reader.

(204) *He turned his attention to the laptop. She didn't even have it password protected, he noted contemptuously. … She'd done her homework, though she hadn't left many clues as to where her information came from. He didn't like it that an outsider could know even this much about them. And now she wanted to probe further into their business. He didn't like it one little bit* (WB)

(205) *She was as suspicious of that tradition as her farmer father had taught her to be; and though it was her livelihood, she resented it that city people bought out the farmers and invited the lumber companies in to clear away the hardwood, made pastures for the cattle they had shipped in to fatten, planted even-rowed pecan orchards, mowed the wild flowers, dug up the milkweek, the Queen Anne's lace, the sedge, the palmettos – treated them as if they were worthless, had never glistened with dew in the early morning, had never given pleasure and peace. The old families in the area complained that the landmarks of their counties were disappearing, and she knew that was true* (WB)

In a second type of context, the aim of the utterance containing the extraposed clause seems to be precisely to introduce new information to the addressee. Example (206), for instance, involves a speaker presenting himself and the situation he finds himself in. The extraposed complement clause, which deals with the background of the speaker's girlfriend, represents discourse-new (new-anchored) information. The specific background that is attributed to the girl in the complement clause as a whole cannot be considered familiar to the hearer that has only just been introduced to the speaker and his situation, nor can it be considered to be shared knowledge or active in the hearer's consciousness. Example

(207) similarly defies analysis as hearer-given, as it introduces a new point into the discourse.

(206) *I'm 16 and at college. I have been going out with my girlfriend for four months. ... She told me she was pregnant just over a week ago. ... Neither of us has told our parents. My mum and dad are going to be really shocked. Not just because of the pregnancy but because this girl is only 14. To add insult to injury, they don't like it that she comes from a rundown council estate on the other side of town* (WB)

(207) *Chef and owner Eric Aubriot seized an opportunity to refresh and revitalize his intimate restaurant. It appears to be working ... I like the fact that I am not asked if I want "sparkling water or tap water." Frankly, I have never had a problem drinking Chicago's tap water. ... I also like it that Escargot has six white wines and seven red wines by the glass, none of them higher than $7, and that these wines are from top producers* (WB)

In a third context, finally, the information contained in the extraposed clause is deliberately controversial for the addressee. Example (208) illustrates such a context where the speaker intends to be provocative, and the extraposed clause cannot be assumed to convey information that is known or subscribed to by the hearer.

(208) *When I decided to leave KCM, I thought you'd be pleased to get rid of the competition, but I remember thinking you acted like you resented me more than ever. Now I know why. It's this isn't it?" I gestured around. "Maybe it's rinky-dink, maybe we don't have a pot to piss in, but you hate it that I have something you never did. ... And all the time you were climbing that greasy corporate pole I bet you hated it that I didn't have to kiss ass to get ahead the way you always have* (WB)

The fact that such examples resist analyses as assumed familiar could be explained on account of the rhetorical potential of given-new relations: as Halliday & Matthiesen (2004: 93) pointed out, "the speaker can exploit the potential that the situation defines, using thematic and information structure to produce an astonishing variety of rhetorical effects." However, taken together with the contexts where there is no direct hearer, as in (204)–(205), or the point is exactly to convey new information, as in (206)–(207), this rhetorical potential can be applied in an almost unconstrained way to explain all cases that are not strictly

hearer-given. Thus, from an empirical perspective at least, hearer givenness does not apply to all occurrences of extraposed object clauses.

5.4.2 Relational givenness

While discourse givenness and hearer givenness deal with the givenness of the referent situation described by the extraposed clause with respect to the discourse context or the hearer's mental state, relational givenness is concerned with the division of the information expressed within a single proposition (typically expressed by a clause) into a part that is given with respect to a complementary part that is new. In this section, I will focus on the pragmatic relation of "aboutness" that is said to characterize topic-comment relations (e.g. Reinhart 1981).

In a given discourse context, a linguistic expression can serve as the topic "only if it is pragmatically referential" (Reinhart 1981: 67), i.e. if it can be considered to constitute a concept in the hearer's mental knowledge base with respect to which new information can be added. The comment is then identified as the part of the clause that contains the added information with respect to the topic. Gundel (1988: 210) defines the concepts of topic and comment as follows:

> An entity, E, is the topic of a sentence, S, iff in using S the speaker intends to increase the addressee's knowledge about, request information about, or otherwise get the addressee to act with respect to E. ... A predication, P, is the comment of a sentence, S, iff in using S the speaker intends P to be assessed relative to the topic of S.

When this definition is applied to the set of extraposed object clauses, there certainly are cases where the extraposed clause can be seen to function as the topic, and the main clause as the comment, i.e. the added information with respect to this topic. In (209), for instance, Anastasia's move is an established concept to both speaker and addressee; what is said about this situation is that the speaker has a negative emotive stance towards it. Similarly, example (210) illustrates how the emotional reaction expressed in the main clause can express the new information with respect to a topical, and in this case also discourse-given, extraposed object clause.

(209) *"I said I'd help you pack. ... But ... I really hate it that you're moving* (WB)

(210) *One of Tarnower's major attractions was that he took charge. She loved it that he made all the decisions* (WB)

Again, however, not all cases of extraposed object clauses can straightforwardly be accounted for by applying this notion of givenness. Apart from the extraposed clause, there are various other constituents that regularly function as the topic in my data set, namely the main clause subject (211), the subject of the extraposed clause (212) and the main clause proposition (213). Yet another option with respect to topicality is to have no aboutness topic, i.e. corresponding to a sentence-focus structure (Lambrecht 1994: 233–235), as in (214). As was the case for various notions of givenness, topicality is thus not a valid generalization for the functional-discursive value of optional object extraposition.

(211) *Marianne started talking about getting married, was I really serious about it? I said I was. … "I may go down to Montargues the weekend after next then, she continued, there'll be a lot to organise.* ***The priest*** *will be a pain,* ***he****'s not going to like it that we've already got Jessica* (WB)

(212) *Meet Keith Worman, 46, single, a warehouse manager who lives in Ballard and works on Airport Way South. Although he's a committed bicyclist who's been pedaling to work for four years, I included him because Keith is willing to go whole hog and extend it beyond just the commute. I also liked it that* ***he*** *has what sometimes is called an "edgy attitude". He owns a truck …* (WB)

(213) *At first she thought maybe she was carsick. Then she realized what it was. It was because she liked what she was seeing through the windows of the car. She liked the trees and the lawns and the flowers. She liked the idea of running through a sprinkler, even with stupid Sam.* ***She liked*** *it that there were dogs and kids and bikes and a kind of nice-smelling quiet out here* (WB)

(214) *Having disappeared for years, Kip finally slips back on to the scene and beckons Brice to their old neighbourhood where, in lengthy conversation, he explains what he has learned and how he has basically worked everything out – from the bomb to Vietnam. As Kip says: "I started to get it that 1945 only began to perish in 1975, it took that long. Just as you fight fire with fire, it took one kind of shame to begin to erase another, Brice* (WB)

5.5 Object extraposition and factivity

Kiparsky & Kiparsky (1970) predicted that extraposed object clauses tend to occur with factive predicates, but not with non-factive predicates (see 5.2). On their account, this implies that extraposed object clauses inherently evoke the speaker's

commitment to the truth of the complement proposition. In this section, I will investigate the proposed relationship of object extraposition to factivity, and further draw on my findings to propose a new characterization of the object extraposition construction in itself.

The structure of this section is as follows. In 5.5.1, I show that the predictions made by Kiparsky & Kiparsky (1970) for object extraposition are disproven by my data: extraposed object clauses are not necessarily presented as true by the speaker, and they do occur with predicates such as e.g. *think* and *say*, which Kiparsky & Kiparsky classify as non-factive. In 5.5.2, I describe the grammatical and semantic status of extraposed object clauses. It is proposed that object extraposition presents the extraposed clause as a clause that is nominalized and conceptually independent of the main clause situation. This accounts for the fact that when object extraposition is combined with a typical reporting predicate, the grammatical status of the reported complement clause is aligned with that of a factive complement (Davidse 1994), thereby construing it as a manipulated complement. In 5.5.3, I show that the construction further has a specific discursive effect: it expresses the speaker's emphatic assertion of the relation between the complement and the main clause. In 5.5.4, this discursive effect is further elucidated by means of an analysis of the aspectual construal of the main clause situation. This builds on the aspectual analyses elaborated in Chapter 3. It is proposed that object extraposition foregrounds an (implicit) boundary in the internal structure of the event, which induces a more dynamic and punctual interpretation. In 5.5.5, I draw on (i) the proposed grammatical and semantic features shared with factive complements and (ii) the discursive and aspectual effects specific for object extraposition to propose an abstract constructional semantics for the object extraposition construction in itself.

5.5.1 Object extraposition: only in factive constructions?

It has been pointed out (e.g. by Bolinger 1977; Davidse 1994; see also 5.2) that, contra Kiparsky & Kiparsky's (1970) predictions, extraposed object clauses also occur with predicates of reported speech and thought, which are typically associated with the reporting rather than the factive paradigm. Kallulli (2006, 2010) takes such examples to suggest that anticipatory *it* is a trigger for factivity; i.e. that it causes non-factive constructions to acquire a factive interpretation. As far as I know, however, these observations always pertained to a number of isolated examples rather than to a proportion of a corpus-based data set. My data set con-

firms their intuitions: when the main clause polarity is reversed (as in the traditional negation test), a fifth (47 out of 237) of the extraposed complement clauses are entailed to have a different outcome as a result of the main clause situation, and are thus not strictly factive complements.[62]

The data set indeed contains examples of object extraposition with predicates that would traditionally be associated with reported speech and thought, as in (215) (see also below).

(215) A: *we've been talking for half an hour and we [B: Yeah.] haven't mentioned your your Olympic Games yet. ... Well I want to know When you first thought that you'd got ... got a chance of going to the Olympic Games.*
B: *well ... the the funny thing ... funny idea I might be able to make the Irish team. ... Never thinking I was good enough to run for Great Britain ... So straight away ... I said I've made my mind up ... I'm going to run in the Olympic Games. ...*
A: *Well everybody thought you was nuts ...*
B: *Yes. Yes. Yeah.*
A: *And er er never* ***thinking it*** *that it'd come to fruition for Great Britain*
B: *Yes*. (WB, speaker markup replaced by letters A and B)

Further evidence for the fact that extraposed object clauses are not restricted in occurrence to "factive predicates" as predicted by Kiparsky & Kiparsky comes from their potential to occur with counterfactual (216) predicates, which entail the falsity of the complement proposition, and with volitional (217) predicates, which typically occur with virtual events that are yet to be realized.

(216) *Gwen Stefani, 34, fibbed that she played the piccolo to get into her school band – but preferred sex games with her drummer lover instead. She said: "I* ***faked it*** *that I played. I spent most of the time in the drum room making out with my boyfriend."* (WB)

62 Recall that in Chapter 3 I have proposed a different definition of the semantics of the factive-reported distinction, which is not based on commitment to the truth value of the complement proposition. I proposed that factive complements are unaffected by the main clause situation (irrespective of main clause polarity), whilst manipulated and reported complements are affected or effected respectively by the main clause situation, and therefore entail a specific outcome as a result of the main clause situation. As a result, manipulative and reporting constructions have a different entailment for the complement proposition if the polarity of the main clause is reversed.

(217) *Richardson warned a players' strike would give some clubs the "perfect excuse" to cut costs by cancelling contracts. … "Do they really* ***want it*** *that clubs can terminate contracts?"* (WB)

Another type of complement-taking predicate that I found in my data and which is not strictly factive refers to an activity that is interpreted as a causative process ('bringing about that *p*'), as in (218).

(218) *At this point, I was to bend down and pick up the tortoise. Like most of Alastair's ideas this was easier said than done. I got out of the car and, bearing the indignantly hissing tortoise in my arms, I approached the giraffe. He watched my approach with an expression of complete incredulity on his face. During his long and happy life, fate had never* ***engineered it*** *that his lunch would be interrupted by a human being carrying a vociferous tortoise, and he was not at all sure that this was an experience he wanted.* (WB)

These different contexts of attestation show that object extraposition is not restricted to occur in strictly factive constructions. Note that when extraposition is combined with the predicate types in (215)–(218), this may induce a reading in which the construction entails the speaker's commitment to the truth of the complement, as suggested by Kallulli (2006, 2010). This is illustrated in examples (215) and (218). It is important to note, however, that this commitment is not maintained if the polarity of the main clause situation is reversed. Compare e.g. (215), where the negated main clause implies that the speaker's participation did have positive results for Great Britain. By contrast, the positive main clause counterpart *and thinking (it) that it would come to fruition for Great Britain (but it didn't)* entails a counterfactual reading of the complement proposition. For (218), compare the present perfect assertive reading in *fate had (never before) engineered it that p* to the negative counterpart *fate did never engineer it that p*. The former entails that the situation described in the *that*-clause was actualized, whereas the latter entails that it was not. This entailed truth-committal reading can moreover not be generalized to all cases of object extraposition that are not combined with a strictly factive complementation construction. In the examples with *fake* and *want* in (216) and (217), for instance, extraposition does not trigger commitment to the truth of the complement proposition. Extraposed object clauses are thus not always presupposed true by the speaker, contrary to what is predicted by Kiparsky & Kiparsky.

In the next section, I will propose that the object extraposition construction does have crucial semantic and grammatical features of factivity as it was defined

in Chapter 3. More specifically, it is argued that the combination of object extraposition with predicates typically associated with reporting constructions can be used to construe them as manipulative constructions, in semantic and grammatical alignment with factive constructions (see Davidse 1994). This is what we will turn to now.

5.5.2 The grammar and form of extraposed object clauses

In 5.5.1, it was shown that object extraposition can be combined with complement constructions that are not strictly factive, even if this combination is less frequent (19,8%) than occurrences with factive constructions (80,2%). This uneven distribution can be explained on the basis of the grammatical and semantic characteristics of object extraposition, and the extent to which they are compatible with the grammatical and semantic characteristics of typical non-factive, indirectly reported, clauses and of factive complements.

Davidse (1994) already pointed out that object extraposition is a marked option for indirectly reported clauses, as it changes the semantics and grammatical behaviour of reporting constructions. She indicated that utterances such as "He definitely said it that he had been wrong" (1994: 281) or "Everyone simply assumed it [[that she was guilty]]" (1994: 281) do not describe the act of speaking or thinking in which a reported proposition is created. Instead, the locution or idea conveyed in the reported clause is conceptually reified (i.e. nominalized) by the speaker to allow him or her to assert that the locution or idea was really uttered or thought. She further points out that complement clauses of factively used predicates are inherently nominalized clauses, in contrast to the reported clauses for which it is an exceptional use. Hence, it should always be possible for factive complements to be preceded by anticipatory *it*, as object extraposition correlates with the nominalized status of factive complement clauses. Object extraposition thus makes explicit the *nominalized* status of a complement clause and thereby signals that semantically the complement clause functions as a "conceptually autonomous" (Langacker 2008: 104), i.e. independently existent, entity.

When object extraposition is combined with a reporting construction, it has the effect of imposing this nominalized construal on the complement clause, and thereby alters the construction type to that of a manipulative construction (see Chapter 3). By contrast, the nominalized and semantically independent status of the complement is an inherent part of the semantics and grammar of factive constructions, which is made explicit by the object extraposition construction. In short, the relation of object extraposition to nominalized complement clauses

presents an important grammatical motivation why the construction combines naturally and most frequently – though not exclusively – with factive constructions.

The different semantico-grammatical status of factive and reported complements also has its bearing on the optionality of anticipatory *it* when it is combined with either of the two complement types. McGregor (2013) presents a theory of optionality that restricts the concept to apply to those cases where speakers have the choice to add or omit the optional element (in this case, anticipatory *it*), but, crucially, the presence or absence of that element does not fundamentally change the grammatical structure. He further proposes that optionality is motivated semantically, as the presence or absence of the item in question is usually accompanied by a semantic difference in terms of interpersonal meanings. The explanatory power of this theory is brought to the fore when we consider the optionality of anticipatory *it* in object extraposition constructions.

In factive constructions, I argue that object extraposition can positively be considered "optional" in McGregor's intended sense: the presence of anticipatory *it* does not change the grammatical structure; it merely highlights the nominalized and conceptually autonomous character of the factive complement. Importantly, the theory captures the fact that in spite of the apparent grammatical redundancy, the construction still has an important functional-discursive value: the presence of anticipatory *it* conveys additional interpersonal meanings (see below). Since object extraposition is optional in factive constructions, and generally is very rare (see fn. 54), the speaker's choice to make explicit the nominalized character of the factive complement by adding *it* can be considered emphatic in nature. By contrast, object extraposition in combination with indirectly reported speech and thought constructions effects a marked grammatical construal: object extraposition can be used to construe a reported clause as a nominalized clause (see Davidse 1994 for detailed discussion) and thereby allows a reporting construction to be construed a manipulative construction. This highlights the importance in McGregor's theory of adequately delineating and restricting the category of optional elements, also with respect to subtypes within one larger construction: anticipatory *it* cannot be considered "optional" across the board, as it amounts to a different grammatical relation when combined with reported speech and thought.

The grammatical characteristics of object extraposition are, I argue, also reflected in the formal properties of the construction, both in its surface form (i.e. in the presence or absence of *it*) and in its prosodic properties. The presence of anticipatory it can be seen to have a general functional motivation related to the

principle of conceptual distance, as suggested in Smith (2000).[63] The notion of *conceptual distance* has been elaborated most explicitly in theories on the iconic (rather than arbitrary) motivation of linguistic form. One of the central predictions is that "the linguistic distance between expressions corresponds to the conceptual distance between them" (Haiman 1983: 782). This prediction is relevant to object extraposition in that (i) when *it* is inserted between the main and the complement clause, this increases the linguistic distance between them, and (ii) this linguistic distance may be taken to iconically reflect a greater conceptual distance between the two linguistic units. More specifically, the added linguistic distance serves to individuate the entire complement clause as a separate unit that exists independently of the main clause event and conceptualizer. This also ties in with the differential semantico-grammatical behaviour of extraposed reported clauses mentioned above: in the absence of extraposition, reported speech and thought matrices express the creation of a proposition in the speech or thought act; the proposition contained in the reported clause thus exists only by virtue of its having been said or thought (Davidse 1994: 265–266, cf. Chapter 3). However, when a reporting construction is combined with object extraposition, the complement clause is construed as an entity existing independently from the matrix event, which conflicts with the inherent semantics of reported speech and thought and hence induces the reinterpretation as a manipulative construction.

The specific formal pattern expressing the conceptual distance in object extraposition constructions obeys the grammatical Principle of the Separation of Reference and Role coined by Lambrecht (1994: 184–189). Similarly to what Lambrecht proposed for presentational *there*-constructions and detachment constructions, object extraposition constructions result in a separate symbolization of the lexical information that singles out a referent situation (in the *that*-clause)

63 I do not follow Smith (2000) in his proposal to consider the expletive *it* in object extraposition as a schematic space-designator, designating and referring to the mental space set up by the verb. In my view, anticipatory *it* can be seen to refer to the mental space in which the complement proposition should be interpreted, but, crucially, this mental space is presented as disjunct from the one opened up by the space-building matrix verb. Only in this way can we explain the preference for factively used predicates, and the distinct interpretation with reporting predicates. In this respect, anticipatory *it* seems more of an ordinary space-builder than a space-designator. This is also brought out by the effect of negation: in factive constructions, negation of the matrix can convey that this matrix act with respect to the complement proposition did not take place, without thereby affecting the status of the complement proposition. Hence, the proposition contained in the factive complement and that of the matrix are situated in two different mental spaces.

and the grammatical role of that referent situation as an argument in a proposition (expressed by the unaccented pronominal *it*). Such a separation, Lambrecht argues, essentially facilitates processing.[64] The separate symbolization of reference and role makes it easier for a hearer to carry out the two consecutive cognitive tasks associated with these two separate symbolizations, i.e. that of recognizing an intended discourse referent, and that of interpreting the assertion that is made in the clause in which it is a constituent. These "are two cognitive tasks which for processing reasons are best carried out separately, i.e. not within the same minimal clausal unit" (1994: 188). As a result of these "two independent judgments or cognitive acts" (1994: 188), object extraposition constructions explicitly draw attention to the relation of the (conceptually autonomous) complement situation to the main clause assertion, in which it is a constituent. This is what I will call the "relational" aspect of the construction.

The relational aspect of object extraposition constructions appears to be reflected in their prosody as well. Kallulli (2006) called attention to the fact that object extraposition seems to require nuclear pitch accent on the matrix verb (compare Figures 18 and 19).[65] As she points out (2006: 215), the presence of this nuclear accent is in itself not unexpected: expletive *it* is normally not accented, so the tendency for the predicate preceding it to be accented may partly be due to rhythmic conventions (see also Halliday 1967: 238). What is interesting is that, in the example with extraposition (Figure 19), the verb also clearly receives additional prominence due to the height of the pitch accent, and possibly also through additional stress and final lengthening.[66] The complete tonal contour and final lengthening in Figure 19 further indicate that the matrix of the extraposed complement clearly constitutes a separate intonation unit (Dehé & Wichmann 2010). This clear prosodic boundary contributes to the construction's effect of "information chunking" (Gunther Kaltenböck, p.c.): the complement clause and main clause are processed as two independent units of information.

64 Lambrecht's principle was coined specifically to account for certain properties of topic expressions. My use of the principle here is not similarly restricted.

65 Figures 18 and 19 were reproduced with the kind permission of Cascadilla Press and Dalina Kallulli.

66 I am grateful to Ditte Kimps for discussing this with me.

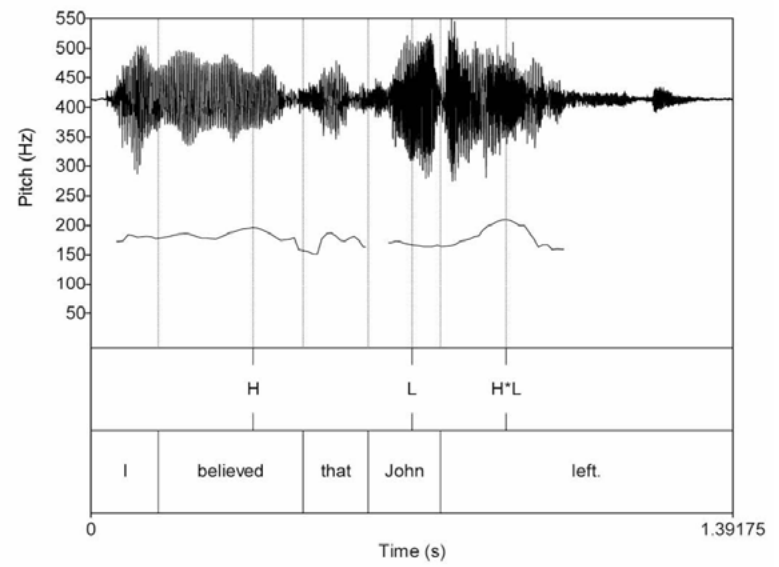

Fig. 18: Prosodic structure of *I believed that John left.* (Kallulli 2006: 214, her Fig. 1)

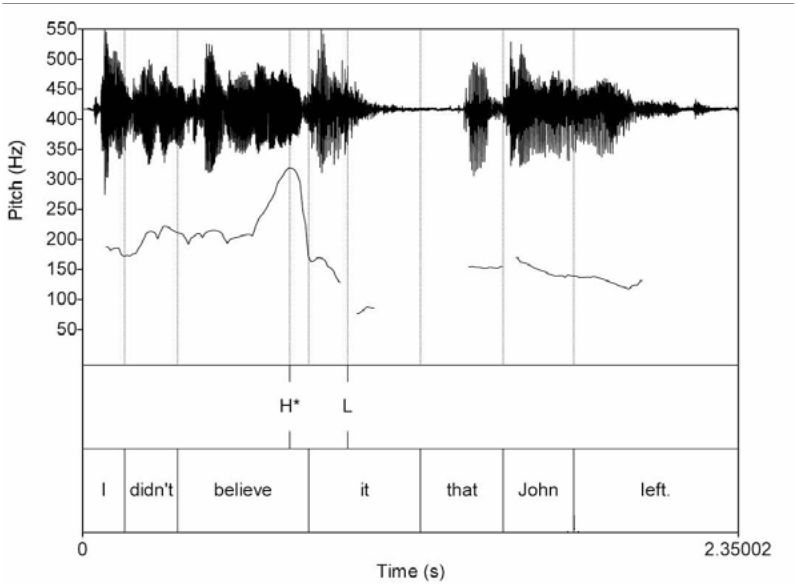

Fig. 19: Prosodic structure of *I didn't believe it that John left.* (Kallulli 2006: 214, her Fig. 2)

Now that we have considered the abstract grammatical and formal properties of object extraposition, and the way these relate to factive constructions, I will in the following three sections further elaborate on the function of the object extraposition construction. I will first discuss the discursive contexts in which object extraposition is used (5.5.3), then relate this to the specific aspectual construal (5.5.4) that is triggered by the grammatical and formal characteristics of the construction, and then combine these insights into an abstract constructional semantics for object extraposition (5.5.5).

5.5.3 Discursive meaning: emphatic assertion

In terms of discursive function, Davidse (1994) had already pointed out that, when combined with reported speech and thought constructions, object extraposition allows the speaker to assert that the locution or idea contained in the complement clause was really uttered or thought. My claim is that object extraposition generally – also in factive constructions – involves an emphatic speaker assertion that the main clause predication holds.[67] Where does this emphatic assertion come from? As was just pointed out, object extraposition involves the explicit presentation of the two entities involved in the main clause situation, i.e. the main clause subject and the nominalized complement clause, as conceptually distinct (as reflected in the grammatical and prosodic "separation" effect of the construction). By means of the relational marker *it*, these two entities are then explicitly related as two constituents of the main clause situation, which furthermore carries additional prosodic prominence and seems to specify the information focus. This focus on the relating of two maximally distinct entities lends itself to the emphatic assertion that the construction brings about (see also below). As pointed out by Davidse (1994: 281), this type of speaker assertion may be contextually supported by means of speaker-related adverbs such as *just*, *actually*, *certainly*, or *really*, as in (219), (220), (203) and (217). On my account, object extraposition is thus a property of the entire complex sentence rather than of the complement clause by itself. The fact that the emphatic assertion of the main

67 Emphatic assertion or denial is the default, occurring with declarative sentences. In the less frequent case of interrogative sentences, there is an emphatic relational interrogation rather than assertion. For instance in (217) *Do they really want it that clubs can terminate contracts?*, what is questioned is whether the possibility that clubs can terminate contracts is really what the represented cognizers desire; the interrogation cannot for example scope over a part of the complement clause.

clause predication involves the entire complex sentence is also brought out by the fact is referred back to in its entirety as in (219).

(219) *"You should have helped me, Frank. ..." "I tried to help you, Eleanor. I wasn't very happy either." ... "I really don't blame you," she said. "**You just couldn't bear it that I wasn't what you thought**. That's what made you unhappy. You couldn't bear it that I wasn't perfect* (WB)

(220) *Nurse Manning ... stared at Helen a moment longer, then shook her head to convey a sense of standards not lived up to and left again. "She doesn't see what you see in me," Jacob said. "Yes, she does. ... She **just** hates it that it's out of reach* (WB)

Importantly, this emphatic assertion is discursively motivated, in that it allows the speaker to convey interpersonal (i.e. speaker-hearer related) rather than descriptive meanings. In ordinary (descriptive) declaratives, the main clause predication is by default taken to be asserted. The speaker's choice to explicitly draw attention to this assertion highlights the current contextual relevance[68] of the assertion and can hence be expected to involve additional non-descriptive meanings. By opting for the use of object extraposition, the speaker can thus express a (covert) reaction to, or comment on, the asserted matrix act (Delestrait 2015).

Let us consider a few examples that illustrate the discursive meanings this emphatic assertion can imply. First and foremost, the emphatic assertion often indicates that what is asserted somehow contrasts with the discourse participants' expectations or with information conveyed in the neighbouring discourse context. Consider for instance example (216), *I faked it that I played [the instrument]*. The non-extraposed variant *I faked that I played* would in a neutral context be interpreted as merely describing a past activity of "faking", without necessarily implying additional speaker-related meaning. In the example with extraposition, however, the speaker signals that she assumes the hearer believes that she actually played the instrument. The example conveys interpersonal meaning in that it evokes a contrast between the interlocutor's supposed assumption and the new assertion that it was "only fake". In this example, the status of the complement clause as assumed known information can be considered a contextual motivation for the use of extraposition, as predicted on the givenness account.

68 The term "current relevance" is chosen here by analogy to the discursive effects of using a perfect (cf. Comrie 1976: Ch. 3).

The givenness of the information contained in the complement clause is however only one factor that may motivate the emphatic assertion of the main clause.

As a second example, let's consider (202a), *I love it that in life if you choose the wrong way you pay a penalty … But in school all you did was learn and repeat – that's French education*. In this example, the complement clause contains brand-new information. The emphasis on *I love it* in this case draws attention to the fact that this argument will be elaborated on in the next utterance, with which it contrasts: the speaker emphasizes his appreciation of life's general principle of trial and error precisely to indicate the contrast with his dislike of the spirit of mindless reproduction he associates with his educational background. As a result, the emphatic assertion is interpreted as relevant to the current elaboration of an argument, namely that the speaker does not consider high school education to be the only way to acquire knowledge and skills in life. Usually, the use of extraposition to indicate the further elaboration of a current argument is found in the reversed order, whereby the general argument is given first, and the complex sentence with extraposition that provides further support follows it. This is found for instance in example (220), *"She doesn't see what you see in me" – "Yes, she does. … She just hates it that it's out of reach*. The speaker counters the interlocutor's interpretation of the nurse's behaviour by *Yes, she does* and then provides the explanation for this statement. This cohesive effect of object extraposition in argumentative contexts is very frequent, and is often indicated by means of explicit linking devices, e.g. *but* (202a), (208), *also* (207), (212), *to add insult to injury* (206).

Besides drawing attention to the relevance of the new assertion with respect to the discourse participants' expectations, or with respect to other assertions in the discourse context, the emphatic assertion may also convey the conceptualizer's surprise at the occurrence of an unexpected state of affairs (as in (215) *never thinking it that it'd come to fruition for Great Britain*) or may be used to emphasize the strength of the reaction already expressed in the matrix predicate (as in (203) *I really hate it that you're moving* or in (204) *He didn't like it that an outsider could know even this much about them. … He didn't like it one little bit*.) All in all, object extraposition is thus a useful tool to overlay descriptive meanings with a speaker-related layer.

What these different discursive meanings share is that they evoke a dimension of contrast – contrast with respect to the discourse participants' assumed or explicitly given expectations, with respect to the content of another utterance in the neighbouring discourse context, or with respect to a weaker or stronger degree assessment of intensity. In this respect, the additional prosodic prominence on the tonic segment can be interpreted as contrastive. Contrastive focus signals

that the focused element is "contrary to some predicted or stated alternative" (Halliday 1967: 206), i.e. it specifies the focused element (in this case the matrix verb) in relation to a paradigm of alternative (or weaker) values that might have been expected. The contrastive focus involves the speaker's emphatic assertion of the focused element, with (implicit) contrast to a range of alternatives, thereby expressing additional speaker-related meanings. Previous explanations seem to have mainly picked up on a side-effect of a contrastive focus on the main clause predication, namely that the constituent following is likely to be informationally backgrounded with respect to the focus.

In short, I proposed in this section that instances of object extraposition always involve the speaker's emphatic assertion that the main clause predication holds, and that this emphatic assertion allows the speaker to implicitly convey additional, contextually variable, interpersonal meanings. This explains the general intuition that the interpretation of utterances with object extraposition is more contextually restrained than their non-extraposed counterparts: implicit speaker-related meanings are, by definition, inherently tied to the discourse context and its participants; their correct interpretation is dependent on the specific circumstances in which they are produced. In the next section, I will show that this discursive function is in line with a specific aspectual construal of the main clause situation that is induced by object extraposition.

5.5.4 The aspectual construal induced by object extraposition

In Chapter 3, I proposed an aspectual characterization of factive, manipulative, and reporting constructions (without object extraposition). In this section, I propose that the addition of the anticipatory *it* of object extraposition to these complementation patterns induces a specific aspectual construal of the main clause situation. I will first discuss the aspectual effect that is obtained when object extraposition is combined with factive constructions, before turning to the aspectual construal of reporting constructions that are construed as manipulative constructions.

5.5.4.1 Factive constructions: aspectual construal by object extraposition

Table 8 classifies the different complement-taking predicates in the factive data set with extraposition according to their default situation type when taking simple *that*-complement clauses. In terms of frequency, the main predicates in the set of factive constructions that occur with object extraposition are the emotive

predicates *hate*, *love*, and *like* (134 tokens, 56,5% of the entire, i.e. factive and non-factive, data set).

Tab. 8: Default situation type of predicates in the factive data set with object extraposition

	frequency	**predicates combined with a complement *p***
state	tokens: 169	like, hate, love, can't help, can't bear, can't stand, resent, regret, not mind, can't take, dig, not buy, enjoy, can't handle, know
achievement	tokens: 22	get, can't have (accept), see, accept, believe, face, realize, connect (realize), notice, feel, sense

The data set represents the three different semantic verb classes that have traditionally been associated with factivity: predicates of emotion, knowledge state, and knowledge acquisition or perception. Recall that in Chapter 3 I proposed that these three semantic classes of predicates can be placed on a cline of decreasing semantic complexity as in (221), whereby the former classes presuppose the latter, i.e. reaction to a proposition requires knowledge of that proposition, and knowledge of a proposition is preceded by acquisition of knowledge. This was visually represented by means of Figure 11 in Chapter 3.

(221) REALIZE p < KNOW p < LOVE p

Object extraposition was in turn characterized as a construction that explicitly indicates the grammatical status of the complement as a nominalized clause that exists independently from the matrix act. Object extraposition is thus a construction that fits the mould of factive constructions easily, as it makes explicit the characteristic semantic and grammatical status of the factive complement within the construction (see 5.5.2). In this section, I will propose that the construction nevertheless induces, besides discursive meanings (see 5.5.3), a difference in aspectual interpretation, one that complies with the semantic cline proposed in (221). In the following, I will first describe the aspectual effect in the stative class of factive predicates, which contains the large majority of the factive data (89%). I will then briefly turn to the smaller set of achievements, which do not show the same aspectual difference.

In Chapter 3 it was shown that the aspectual interpretation of emotive predicates such as *love* as in (222) is typically that of a simple state, without reference to initial or final endpoints (see Figure 20).

(222) *I love that you can drive it [a scooter] straight up on to the footpath, so it's really easy to park* (WB)

In complex sentences with object extraposition, e.g. in (223)–(225), I argue that the interpretation of the state is more *episodic*: the construction occasions a focus on the momentary inception of the emotive state (see Figure 21).

(223) *Anastasia was beginning to feel very odd. At first she thought maybe she was carsick. Then she realized what it was. It was because she liked what she was seeing through the windows of the car. She liked the trees and the lawns and the flowers. ... She liked it that there were dogs and kids and bikes and a kind of nice-smelling quiet out here* (WB)

(224) *The priest will be a pain, he's not going to like it that we've already got Jessica* (WB)

(225) *"She dribbles cranberry sauce on her dress, and she talks with her mouth full. I hate that." Her mother didn't say anything. "And she forgets my name. I hate that, too." ... Anastasia started to cry. ... "I don't hate Grandmother," she said in a voice that had to find its way out lopsided, around the tears. "But I hate it that she's so old. It makes my heart hurt."* (WB)

How does this specific aspectual interpretation come about? Due to the fact that object extraposition makes explicit the independent existence of the complement proposition, the construction places emphasis on the semantic phase in which the interaction between the conceptualizer and the complement proposition first begins. In the larger semantic frame of an emotive predicate (see Figure 11 and example (221)), this is the inceptive phase of perception. This aspectual effect of object extraposition is captured in Figure 21 by turning the dotted line that relates the subject to the complement proposition into a full line, so as to indicate that it is profiled. As a result, object extraposition evokes a left, or inceptive, boundary to the emotive state. This makes the aspectual interpretation more dynamic, as it is interpreted as similar to that of achievements rather than to simple states.

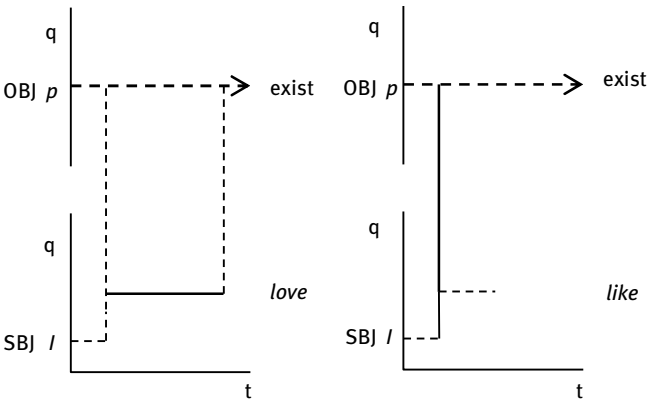

Fig. 20 and 21: Aspectual representation of emotive without (left) and with (right) extraposition

The proposal is thus that emotive states with object extraposition encode reference to the conceptualizer's momentary perception of the proposition before their relatively immediate emotive reaction. Either there is reference to a single event of perception, as in (223)–(224), or the perception is interpreted as iterative, i.e. as referring to the conceptualizer's perception of multiple manifestations of the complement proposition as in (225), which does not so much refer to a simple state of hating, but rather to a momentary emotion that is triggered each time the subject is confronted with a manifestation of the grandmother's being old (see Figure 22, (225')).

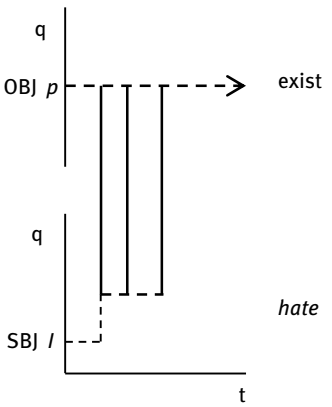

Fig. 22: Aspectual representation of (iterative) emotive with extraposition

Evidence for this encoded reference comes from the fact that sentences as in (223)–(225) are functionally equivalent to reformulations in which the perception phase is made explicit. The reference to the (recurrent) momentary perception of the proposition can be explicitly stated either by means of a *to*-infinitive (e.g. *to see*, *to hear* as in (223')) or by means of a *when*-or *if*-clause that is interpreted as the initial (i.e. inceptive) endpoint for the main clause situation (e.g. (224')–(225')). With respect to states, Smith (1983) argued that these do not normally semantically incorporate reference to initial endpoints. However, in specific contexts – e.g. with *when*-clauses that provide an explicit initial boundary/endpoint – Smith showed that states can have an inceptive reading, which includes a left boundary. My argument is that object extraposition is such a context, and that it can do so because the initial perception phase is part of their larger semantic frame, which was represented in (221) and Figure 11.

(223') *She liked **to see** that there were dogs and kids and bikes out here.*

(224') *The priest is not going to like it **when he hears** we've already got Jessica.*

(225') *I hate it **whenever I notice** that she's so old.*

We will now briefly turn to the smaller set within the factive data, that of achievements (11,5% of the factive data set), e.g. *notice* in (226). When these achievements are combined with object extraposition, as in (227), there is no such clear aspectual difference with non-extraposed achievements (226) as was proposed for the factive states. What is emphatically brought to the fore by the extraposition structure is again the initial perception phase, i.e. the semantic phase in which the complement proposition and the conceptualizer which is implied by the matrix begin their interaction. Since this semantic phase is what factive achievements normally refer to in the absence of extraposition, the lack of aspectual difference with achievements is fully in line with the effect of object extraposition as proposed above.

(226) *I was still gripping Jessica and I **noticed** that my fingers had left little red marks on her shoulder.* (WB)

(227) *I stood and then walked to the door of my room. I shut it completely, not loudly, but not caring if he **noticed** it that it had been ajar.* (WB)

5.5.4.2 Manipulative constructions: aspectual construal by object extraposition

It was argued that the remainder of the data with object extraposition (46 tokens) realize a manipulative construction. In comparison, the construal of these complex sentences with a non-extraposed clause would be associated either with manipulative constructions (3 tokens), as was found for *print*, *justify*, and *question*, cf. (228), or rather with reporting constructions, e.g. with *think* or *say* (43 tokens). In the remainder of this section, I present an analysis of how shifting a reporting construction to a manipulative construction also changes its default aspectual construal.

(228) a. *Nobody **questioned** that women weren't allowed in the bar until I was vice-president and I questioned it.* (WB)
b. *I have no reason to **question** it that the world is coming to an end.* (WB)

Tab. 9: Default situation type of predicates in the manipulative data set with object extraposition

	frequency	**predicates combined with a complement *p***
dynamic	tokens: 21	will (command), say, assess (verbally), explain, rationalize, fake, see (to), engineer (so that), settle, get, swing, spin (present as if), identify (verbally), maintain, make (conclude), plan, justify, print, question
stative	tokens: 25	[see, think, consider, picture, visualize] ('be of opinion, imagine'), mean, tell ('mean, show'), book (rest assured), perceive (as if), treat (consider), expect, need, want, intend, prefer, rather have (prefer)

Table 9 gives an overview of the predicates attested in the manipulative data set with extraposition. In their default construal with a simple *that*-clause as complement, they are associated with the situation type of a *state*, as with *think* in (230) (see Figure 25), or of an *accomplishment*, as with *say* in (232) (see Figure 23). Since there are also rare instances of e.g. predicates that typically designate activities, cf. *fake* in (229), the table is subdivided into stative and dynamic predicates.

(229) a. *We had to **fake** that he got beaten in that battle.*[69]
b. *I **faked** it that I played. I spent most of the time in the drum room making out with my boyfriend.* (WB)

(230) *She **thinks** that basically he's a good man and I'm not.* (WB)

(231) *I said ... I'm going to run in the Olympic Games. ... Well everybody thought you was nuts ... And er er never **thinking** it that it'd come to fruition for Great Britain* (WB)

(232) *I asked him why a challenge was important to him, and he **said** that that was what life was about – meeting a challenge and winning.* (WB)

(233) *That's the real story. And it was in the papers, because Peter Weller actually **said** it that if I hadn't come to the set that day, there wouldn't be a RoboCop.*[70]

When reporting constructions as in (230) and (232) are combined with object extraposition, as in (231) and (233), it induces a two-step change in event structure. Firstly, object extraposition alters the argument type of the complement so as to align it with that of factive constructions. As pointed out above, object extraposition brings out the semantic status of the complement clause as a nominalized clause that exists independently from the matrix act. This conflicts with the default semantic status of reported complements, i.e. that of an incrementally created object. The status of the complement is thus shifted from (i) a concrete utterance that is the result of an act of verbal/mental creation to (ii) an abstract proposition that can be concretized in various acts of verbal or mental manipulation. The shift also entails a shift in semantics for the main clause verb. Without extraposition, reporting predicates are (covert) *creation* verbs, which are at least partially delimited by a clear result state, i.e. the utterance being verbally or mentally created in its entirety. With extraposition, then, the creation event becomes a *performance* event (Dowty 1979: 69–70, 186–187): the creation event still has an inherent endpoint, defined by the change of state of the complement clause, but it is not entirely clear what the result state for the pre-existent entity will be – it

69 Source: http://kjpyahootv.tumblr.com/post/138581536490/outsiders-postmortem-howd-they-film-that-atv
70 Source: http://www.blastr.com/2012/03/little_known_sci_fi_fact_4.php

can, for instance, be involved in an act of mere "re-creation", cf. *perform the play* (Dowty 1991: 70) or of modification, cf. *revise the book*.

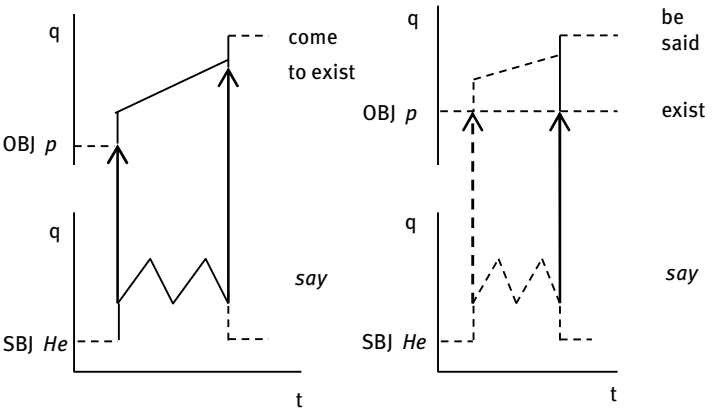

Fig. 23 and 24: Aspectual representation of accomplishment, without (left) and with (right) extraposition

Besides the shift in argument status, I propose that object extraposition also shifts the aspectual construal of the reporting matrices it combines with to that of a manipulative construction. For both dynamic and stative non-factive predicates, the combination with object extraposition induces a near-punctual reading, more specifically, that of a semelfactive, which allows an interpretation as either punctual or iterative (see Chapter 3). The shift in argument status to a holistically conceived, and nominalized construal prevents the complement clause from being accessible for adverbials such as *almost*. As a result, object extraposition annuls the scope ambiguity characteristic for accomplishments and the focus comes to lie on the transition phase, i.e. the point at which the abstract proposition has been concretized in an act of saying or thinking. For the non-factive accomplishments, the result is thus a completive construction as in Figure 24, i.e. one which profiles the endpoint of the process expressed in the matrix that forms the transition to the ensuing result state. Compare in this respect the felicity of durative *He spent ten minutes saying that he was right* and *I was wrong* as opposed to **He spent ten minutes saying it that he was right* and *I was wrong*. The complex sentence with extraposition profiles the transition phase (the point at which the utterance is fully said or thought), which is why the temporal interval cannot apply to the event of saying itself. When such instances do combine with durative adverbials, as in *I've actually been wanting to do this for a long time and I've said*

it for years that I was going to,[71] they are interpreted as a sequence of punctual events, as is characteristic for semelfactives. With non-factive states as in (231) (see Figure 26) it is similarly the end of the implicit creation phase that is profiled, i.e. the transition which forms the inception of the non-factive state.

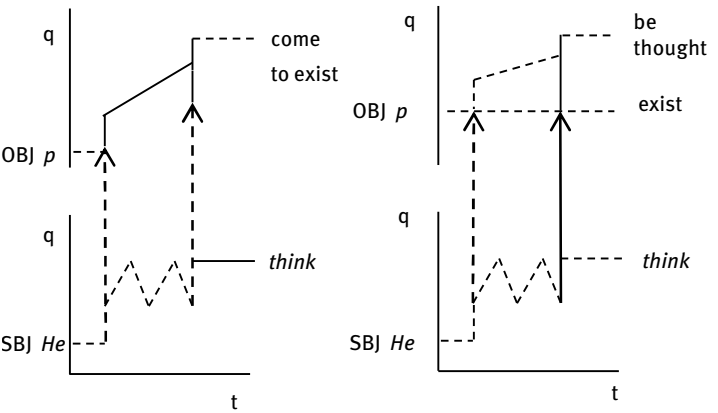

Fig. 25 and 26: Aspectual representation of a directed state without (left) and with (right) extraposition

In short, I argued that in the context of object extraposition, main clause situations receive a near-punctual construal. Stative matrices in factive constructions have an inceptive interpretation in the context of object extraposition, as they make reference to a perception phase that marks the beginning of a knowledge state or emotive reaction. Accomplishment matrices in non-factive constructions evoke the completive phase of the process of creation, i.e. the point at which the utterance contained in the complement was entirely created.

5.5.5 A constructional semantics for object extraposition: occurrential *it*

In this section, I build on the grammatical (5.5.2), discursive (5.5.3), aspectual (5.5.4) properties discussed in the previous sections to propose a new and integrated account of the abstract semantics of the object extraposition construction,

71 Source: http://colbiecaillat.com/bio/

for which I draw on notions of Cognitive Grammar (Langacker 1987, 1991). In essence I will propose that object extraposition asserts the occurrence of the abstract situation type expressed by the verb and its arguments. More specifically, object extraposition asserts the manifestation of the abstract complement proposition through an act of perception or creation that is implied by the matrix clause. I argue that the effect of object extraposition requires two cognitive operations. Firstly, the complement proposition is presented as an abstract, impersonal proposition, i.e. one that is not yet tied to a specific deictic center for the interpretation of tense and modality. Secondly, the construction asserts the occurrence of an assessment of that proposition, i.e. ties the proposition to a deictic center, by asserting the assessment of this abstract proposition within the domain that is implied by the matrix clause. At the end of this section, I will also briefly turn to the aspectual interpretations proposed in 5.5.4, and show how they link up with the specific construal that object extraposition effects on the complement proposition.

Crucial to the understanding of object extraposition is the fact that the complement clause functions as a *nominalized* clause within the construction (Davidse 1994). Support of this claim comes in part from the external distribution of extraposed complement clauses. They occur in environments that are restricted to nominals in English, e.g. as the object of a preposition in (234).

(234) *I've only your word* ***for*** *it that she is dead.* (WB)

But also conceptually, extraposed complement clauses have characteristics of nominals. In Cognitive Grammar, the basic categories of nouns and verbs have distinct characterisations in terms of their schematic conceptual import. A noun profiles a "thing" which can be conceived of holistically, that is, the different component parts making up its internal configuration are subordinated to its conception as a unitary whole. The noun *house*, for instance, refers to a type of entity which is conventionally made up of several rooms extending over multiple storeys. The thing *house* designates, however, is conceived of primarily in its entirety (hence the term "holistic" view or summary scanning), drawing less attention to its individual component parts. A verb, then, profiles a process, i.e. a series of relationships between entities that can be tracked sequentially, one component state at a time. The verb *build*, for instance, profiles a process that manifests itself through the interaction of other entities, e.g. *neighbours* and *house*. The process is typically scanned sequentially, and tracks the development over time of the building process that gradually leads to the completion of the house. The highly schematic characterization of nouns and verbs is meant to be sufficiently

flexible to accommodate for non-prototypical members of the categories such as nominalizations (Langacker 1991: 13–35).

Extraposed complement clauses can be considered to be nominalized clauses in terms of their conceptual characterization. In themselves, the finite *that*-clauses designate relationships and are inherently clausally grounded (Langacker 1991), i.e. they contain, amongst others, markers of tense and/or modality that locate the designated process in time and reality with respect to the speech event and its participants. The verbal process these clauses designate has the potential to be scanned sequentially, with the different component states being tracked individually through time, together amounting to the over-all conception of an event or situation. Despite their clausal nature, however, the extraposed complement clauses are on a higher level of abstraction conceived of as holistic, atemporalized entities, and are "construe[d] … as an abstract object or proposition capable of being manipulated, evaluated and commented on" (Langacker 1991: 35).

Let us consider in more detail the examples of extraposed complement clauses in e.g. (186a) and (233), which are repeated here in (235) and (236).

(235) *Seigl* ***hated*** *it that people talked of him behind his back.*

(236) *Weller actually* ***said*** *it that if I hadn't come to the set that day, there wouldn't be a RoboCop.*

In themselves, the *that*-clauses in (235) and (236) are grounded, i.e. they designate instances of the process type that are located in time and reality with respect to the speech event. The conceptualization they evoke can nonetheless be argued to function on a higher level of abstraction than that of the process type, i.e. on that of the complement proposition itself, which "consists of both a process (p) and its epistemic assessment by a conceptualizer, as indicated by the grounding element" (Langacker 2009: 293). Independently of their use, propositions can be seen as autonomous linguistic objects, that can be entertained by an infinite number of conceptualizers, from different perspectives and in different circumstances (Langacker 2009: 268, 294, 298). In this sense, the proposition and the grounding predications it incorporates function as "virtual entities" that are not yet anchored to a deictic center associated with a particular conceptualizer (2009: 266); "the process *p* is actually grounded [only] when C is identified with an actual conceptualizer" (2009: 268). The *that*-clauses in (235)–(236), I propose, are in the first place subject to such an impersonal construal, as non-instantiated propositions that are instantiated whenever they are apprehended by a particular

conceptualizer. They make reference to the abstract set of potential instances in which the proposition is assessed by a conceptualizer through an act of perception or creation.

Since the extraposed *that*-clauses are subject to a marked "non-instantiated", or impersonal, construal, they require a separate marker indicating quantity or identifiability for them to be coded as instantiated (through a specific act of assessment by a conceptualizer). This quantificational and identificational function is, I propose, fulfilled by *it* on the level of the combination of the two clauses: *it* expresses the actual instantiation of the abstract proposition in a specific domain, namely that described by the main clause process and its location in time and reality. In other words, object extraposition asserts the existence, or occurrence, of one or more instances of the assessment of the abstract proposition by a particular conceptualizer.[72] This "occurrential" interpretation of the complement clause is in line with a general existential semantics, which involves the expression of the quantified instantiation of an abstraction in some search domain (Davidse 1999b).[73] The pronoun *it* further effects the grounding of the instances of the complement proposition: it marks the instantiation as definite, i.e. as identifiable within the current discourse context. The identifiability stems

72 My point here is that the abstract existential semantics, i.e. the expression of the quantified instantiation of an abstraction in some search domain (Davidse 1999), applies to different levels of linguistic organization.

Most prototypically, reference to existential semantics relates to the level of the noun phrase. A sentence such as *There is a bug in my coffee* for instance expresses the existence of an instance of the abstract type "bug" in the specific domain implied in the present tense and in the prepositional phrase "in my coffee" (Davidse 1999).

On the level of the verb phrase, then, the "experiential perfect", also called "occurrential" or "existential" perfect (Comrie 1976: 58), "indicates that a given situation has held at least once during some time in the past leading up to the present." (Comrie 1976: 58). Thus, in an example such as *Bill has been to America since the war* (Comrie 1976: 59), the sentence asserts that at least one occurrence of the abstract process "Bill go to America" has occurred in the time period up to now since the war.

Finally, I argue that "occurrence" can also be predicated of propositions, i.e. on the level of the clause. For an example as in (233), *Weller actually said it that if I hadn't come to the set that day, there wouldn't be a RoboCop*, I argued that the complex sentence asserts the instantiation of the abstract complement proposition in a prior act of speaking that is associated with Weller.

73 Note in this respect that Achard (1998), in his discussion of impersonal constructions such as *it is possible that p*, has made the point that impersonal constructions are fundamentally existential in nature, and "pertain to the existence of events or propositions in some conceptualizer's conception of reality" (1998: 269).

from the fact that the main clause functions as a reference point: the relevant instances of the abstract proposition are identifiable through their participation in the domain defined by the main clause. On the whole, object extraposition thus asserts the manifestation of one or more instances of apprehending the complement proposition, which are identifiable with respect to the act of perception or creation implied in the main clause. Since the main clause determines the identification of the actual instances, the construction indirectly has the effect of asserting the main clause act with respect to these instances well.

In short, object extraposition has a function both on the level of the complement proposition itself (actual instantiation of an abstraction) as on the level of the main clause (reference point for identification of the instances). This bidirectional effect is also what underlies the discursive meaning of "relational assertion" proposed in 5.5.3, i.e. the emphatic assertion by the speaker that the relation between main and complement clause holds.

How then, do we explain the aspectual effects proposed in 5.5.4, i.e. the episodic interpretation of the main clause act? It was argued above that the abstract proposition can be multiply instantiated whenever it participates in an act of apprehension associated with a particular conceptualizer. As such, the domain of instantiation is time, and the specific instances that are identified through their participation in the main clause act are represented as point-like instances in time. The actual instantiation of these occurrences in the domain established by the main clause indirectly asserts the main clause as well, since this main clause is responsible for the occurrence of the assessment of the complement proposition. In order for the instances referred to to be identified through the main clause act, there has to be at least one instance in which the main clause process occurred within the domain of time and reality specified by its grounding. The assertion of the occurrence of the event described in the main clause results in an existential construal of the main clause (see also fn. 72). Existential construals pertaining to clauses (typically associated with the existential present perfect) require that the situation type expressed by the verb and its arguments can be repeated (e.g. McCawley 1981; Mittwoch 2008). Compare in this respect the naturalness of extraposition in (235') and (237), as the preferred option over their non-extraposed counterparts in the context of reiteration.

(235') *Seigl hated it **every time** that people talked of him behind his back.*

(237) *The Iraqi officials, (Prime Minister Ayad) Mr. Alawi, (Foreign Minister Hoshyar) Mr. Zebari, they mention it **many times** that the neighboring countries are not the best option for them to bring troops.* (WB)

Existential construals of clauses have moreover been argued to evoke a punctual construal, referring to the transition between "event not occurred" and "event occurred" (Croft 2012: 162–163). This transition is also profiled by the completive and inceptive readings proposed above. More specifically, I argued that for non-factive predicates, object extraposition highlights the completive phase of a dynamic subevent of creation (see 5.5.4.2). Firstly, this is to be expected from the characterization of the extraposed complement clause as referring to a specific, punctual manifestation of the abstract complement proposition. An instance of the proposition is only created in its entirety when the creation process is wholly completed. Secondly, I argued that object extraposition asserts the occurrence of the main clause act as well. To assert the occurrence of the event described by accomplishment predicates such as verbs of creation, one has to assert that the inherent endpoint implied by the predicate has been reached. In other words, the assertion of a telic predicate necessarily makes reference to the completion of the event it refers to. By contrast, the (inceptive) states expressed by factive predicates (see 5.5.4.1) have the well-known "subinterval property": when a state of knowledge or emotion holds for some interval, it also holds for every proper subinterval of that interval. Inceptive readings "imply that the following state or process occurs, at least briefly" (Croft 2012: 106) and are thus sufficient to assert the existence of the resultant emotive or knowledge state.

5.6 Conclusion

In this chapter, I have presented a corpus-based analysis of extraposed *that*-complement clauses in object position. In the literature, the extraposition of object *that*-clauses has been associated with specific interpretive properties: it has been claimed that the extraposed complement clauses are typically presupposed true by the speaker (Kiparsky & Kiparsky 1970), given (Bolinger 1977; Hegarty 1992; de Cuba & Ürögdi 2010), or at least either of these (Kallulli 2006, 2010). The results of the analyses presented in sections 5.4 and 5.5 show that neither of these proposals can account for all instances of extraposed object clauses: the extraposed complement clauses are not generally given (see 5.4), nor are they always presupposed true (see 5.5.1). Moreover, truth presupposition and givenness do not necessarily coincide: presupposed complements need not be given (as e.g. in (202) *I love it that in life if you choose the wrong way you pay a penalty*), and given complements need not be presupposed true (as e.g. in (216) *I faked it that I played*). This pleads against proposals to replace the notion of semantic presupposition with that of "pragmatic presupposition", i.e. information that is part of common ground (Stalnaker 1974, 1978, 2002; see also Chapter 2). Instead, the

data provide further empirical justification for calls (e.g. Abbott 2000) that semantic presupposition and various notions of givenness should be seen as two distinct notions. Finally, the data also show that the notions of truth presupposition and givenness can also not be used to supplement each other in accounting for object extraposition, as I found cases which are not presupposed true, but still discursively new-anchored (as e.g. in *I won the piercing and tattoo round – I threatened and meant it that I'd match them stud for stud, tattoo for tattoo*. or in *I would have thought it that the geriatrics getting round to that geriatric medicine really started with FX*.) Taken together, the analyses show that object extraposition is not a formal reflex of the status of the complement clause as being given and/or presupposed true, and thus call for an alternative explanation of the difference between extraposed and non-extraposed variants.

It was proposed that a different approach to factivity does bear out its relation to the use of object extraposition. In Chapter 3, factive complements were characterized as nominalized clauses, which are not necessarily presupposed true, but rather semantically pre-existent to (Davidse 2003), and unaffected by, the situation described in the main clause. Object extraposition makes explicit the nominalized and pre-existent status of the complement clause, and is as such easily compatible with factive complements. Reported complements, by contrast, inherently alternate with clausal substitutes, and have the semantic status of a unique utterance created by means of the main clause situation (see Chapter 3). Therefore, when object extraposition is combined with a reporting construction, it effects a marked construal which changes the grammatical structure by aligning the grammatical and semantic status of the complement clause to that of factive constructions (Davidse 1994). In other words, object extraposition can be used to shift a reporting construction to a manipulative construction, which expresses not the creation, but the re-creation or modification of a pre-existent proposition in a speech or thought act (see Chapter 3).

I further proposed that besides the grammatical and semantic similarity to factivity, the object extraposition construction also has a function of its own (5.5.5): it asserts the actual instantiation, or "occurrence", of the abstract proposition within the domain established by the main clause. This account explains the discursive value of the construction (5.5.3), i.e. the added speaker-related meanings conveyed as a result of the emphatic assertion of the relation between main and complement clause. It also supports the proposed aspectual construal effected on the main clause situation (5.5.4): when factive states occur with object extraposition, they receive an episodic interpretation that evokes the inception of the factive state in an act of perception. When non-factive accomplishments are combined with object extraposition, they profile the completion of the act of

creating the utterance contained in the complement. Object extraposition thus induces a near-punctual construal, as it highlights the phase in which the abstract proposition is fully instantiated in the act of perception or creation implied by the matrix clause.

It would be interesting for further research to investigate whether the proposed semantics of object extraposition, i.e. the instantiation of an abstraction in a specific domain, is relevant to other uses specific to the pronoun *it* (see Kaltenböck 2004: 47, who places different uses on a scale of gradience). It could then possibly be taken to refer to the instantiation of an abstract category on various levels, i.e. of the abstract category

(i) referred to by a head noun, singling out individual entities, as in *The cookie, I want* ***it***
(ii) referred to by the predicate, yielding the interpretation of a temporary manifestation of the described state or process as in ***It****'s hot in here / **It** rains*
(iii) referred to by a complement clause, singling out its instantiation in the domain established by the main clause, i.e. through a specific act of assessment by some conceptualizer, as in *The priest is not going to like* ***it*** *that we've already got Jessica*.

6 The diachrony of *the fact that*-clauses

6.1 Introduction

This case study focuses on *the fact that*-clauses as in (238), in which the abstract noun *fact* introduces the content of a finite clause.[74]

(238) *people sort of resent **the fact** that the France they grew up in isn't the France that they're seeing today*. (WB)

In their seminal paper on factivity, Kiparsky & Kiparsky (1970) accorded a central place to this complement pattern: *the fact that*-clauses were seen as the primary realization of any factive complement. In their proposal, the semantic presupposition of factive complements was reflected in the representation of their deep structure: contrary to non-factive complements, all factive complements were considered to be part of a complex NP containing the head noun *fact*. They represented this underlying structure for factive complements as in Figure 1, repeated here as Figure 27 (1970: 157).

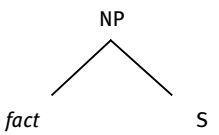

Fig. 27: Structure of factive complements (Kiparsky & Kiparsky 1970: 157)

In accordance with the transformational framework which was current at the time, other realization patterns associated with factivity were explained as transformations of the original deep structure in Figure 27.[75] In object extraposition

74 This chapter is derived in part from Gentens (2019), published in *English Studies*, available online: https://www.tandfonline.com/doi/abs/10.1080/0013838X.2019.1566853.

75 The explanatory power of this for a transformational account has been criticized in later work (e.g. Norrick 1978: 23–27). As pointed out in Chapter 2, the Kiparskys proposed that if factive complements were always overtly or covertly headed by a head noun *fact*, then this nominal head would naturally account for the fact that factive complements do not allow raising transformations, as stipulated in Ross's (1967) Complex Noun Phrase Constraint. After the transformation of raising had been blocked, the rule of *fact*-deletion could still be applied to derive non-

https://doi.org/10.1515/9783110669695-006

constructions (239) (see Chapter 5), for instance, the anticipatory *it* was seen as a reduced form of *the fact* (1970: 165). The realization of the head noun *fact* was seen to be optional, so that it was proposed to be implicit in simple *that*-clauses as in (240).

(239) *though it was her livelihood, she resented* ***it*** *that city people bought out the farmers and invited the lumber companies in to clear away the hardwood* (WB)

(240) *The Slovaks have always resented that most of the decision-making took place in Prague. There are still many unresolved problems between the two nations.* (WB)

The Kiparskian account makes a number of predictions with respect to the contexts of occurrence for this type of complement. Firstly, they predict that *the fact that*-clauses can occur as complements of factive predicates, but not of non-factive predicates. They suggest that this complement pattern is the prototypical realization of factive complements, which could therefore be used as a test for establishing which predicates are factive. Secondly, the semantic value of *the fact that*-clauses should always involve a truth presupposition on the part of the speaker. Thirdly, the Kiparskian account predicts that *the fact that*-clauses have the same distribution as other realization patterns such as object extraposition.

In this chapter, I aim to address these questions on the basis of a corpus-based analysis of the diachronic distribution and spread of this complement pattern. I will propose that in Late Modern English, content clauses introduced by *the fact* were first used either in contexts where simple *that*-clauses as in (240) are generally dispreferred (e.g. following a preposition) or in contexts were the nominalized status overtly expressed by the noun *fact* imposed a different interpretation on the complement clause, most typically in the context of predicates expressing specific types of verbalization, such as *mention*, *admit*, *conceal*, etc.. Cases with (inceptive) knowledge predicates or emotive predicates as in (238) – which are viewed as typically associated with factive constructions – seem to be a slightly later development. The data suggest that *the fact that*-clauses were not

introduced *that*-clauses as in (240) (Kiparsky & Kiparsky 1970: 161–162). Against this, Norrick (1978: 23) argues that the relative ordering of the transformations of *fact*-deletion and raising with respect to equi-NP deletion in fact contradict this analysis: *fact*-deletion is said to apply before raising transformations, and thus the head noun cannot act as a barrier for raising transformations in factive complements.

originally used to make the semantic value of an "inherently" factive (i.e. presupposed true) complement explicit. Rather, it is argued that they started off being used to combine reporting predicates with a nominalized and semantically pre-existent complement clause, i.e. to construe them as manipulative predicates, which I do not view as factive (see Chapter 3). Moreover, I show that there are some contexts in which *the fact that*-clauses can be found, but which were not attested for object extraposition and vice versa (see Chapter 5).

The structure of this chapter will be as follows. Section 6.2 describes the data that was extracted for the purposes of this study. Section 6.3 briefly discusses prior accounts of the phenomenon. Section 6.4 sets out the main findings of the diachronic corpus study. In section 6.4.1, I first list a number of contexts in which *the fact that*-clauses are generally preferred over non-introduced *that*-clauses. In section 6.4.2, I look into the classification of alternating contexts as factive, manipulative, or reporting, with a focus on clauses in object position. In section 6.4.3, I consider the semantic value of the noun *fact* in the construction, by focusing on its relation to entity types and truth presupposition. Section 6.5, finally, offers concluding remarks.

6.2 Methodology: data

The *Oxford English Dictionary* (OED) dates the first attestation of *fact* + content clause, reproduced in (241), back to 1803. This can be taken to suggest that the pattern gained currency in the course of the Late Modern English period, and indeed, I found no instances of *fact* with a following content clause in the Early Modern English subsection of the Helsinki Corpus. The diachronic analysis is therefore focused on the Late Modern English period.

(241) *I would not agree to the fact that ennui prevailed more in England than in France.* (OED 2nd ed., "fact, n.", 4b).

The data were extracted from two distinct corpora of Late Modern English, which can be seen to complement each other as they are representative of different registers. The *Corpus of Late Modern English Texts*, version 3.0 (henceforth CLMET; see De Smet 2005; Diller et al. 2011) consists largely of narrative texts, supplemented with a small portion of drama and letters. It is mostly representative of literary, and written, language use. The *Old Bailey Corpus* (henceforth OBC; see Huber et al. 2012), by contrast, consists of transcribed court proceedings. On the one hand, the corpus is thus restricted in terms of genre: the transcribed utter-

ances were all made in a judicial context. At the same time, however, the transcriptions provide us, in their written form, with a very close approximation of spoken language use at the time.

In both corpora, all instances of the string "fact that" were extracted.[76] As the search returned a large number of hits for the third subperiod of CLMET, the results for this period were randomized and a sample of 500 hits was analyzed. Note that the data includes examples in which the noun *fact* is preceded by determiners other than *the*, and/or by adjectival modifiers as in (242), even if I use the shorthand term "*the fact that*-clauses".

(242) *But is not the state of the country, is not the hellishness of the system, all depicted in* ***this one disgraceful and damning*** *fact, that the magistrates, who settle on what the labouring poor ought to have to live on, allow them less than is allowed to felons in the gaols, and allow them nothing for clothing and fuel, and house-rent!* (CLMET-2)

Instances of superficially similar, but distinct constructions were manually filtered out, e.g. *fact* + relative clause as in (243), or *fact* + extraposed clause (see Chapter 5 on extraposition) as in (244). Tables 10 and 11 give an overview of the data sets extracted from the two corpora.

(243) *I am not guilty of the fact that I am charged with.* (OBC 1)

76 This means that cases with (i) an element other than *that* introducing the clause, (ii) inserted material between *fact* and *that*, and (iii) plural forms of *fact* are not included in the data set. Such cases, illustrated in (i) to (iii), are rare in comparison to the instances with "fact that" that were extracted.

(i) *an unknown multitude … of other influencing circumstances, the mere fact* ***of*** *their being influencing circumstances implies that they disguise the effect of the mercury* (CLMET-2)

(ii) *In truth, even amidst all his pomposity, of which he had so enormous a share, this poor creature could not conceal the fact* ***from any one****, that he had not the slightest confidence in himself* (CLMET-2)

(iii) *What wise Man, I say, would subject himself to these Vexations and common Incidents in the Law, … Where legal Proofs must be given to the plainest* ***Facts****; that a living Man is living, and identically himself; and that a dead Man is dead, and buried by Certificate* (CLMET-1)

(244) *It is not a fact that another officer was called to take me to the station because I was so drunk* (OBC 3)

Tab. 10: Overview of CLMET data (* indicates sample values)

Corpus subperiod	**Extracted**	**Relevant instances: *fact that*-clauses**	
	n (abs)	n (abs)	N (pmw)
CLMET-1 (1710–1780)	43	10	0.95
CLMET-2 (1780–1850)	375	241	21.35
CLMET-3 (1850–1920)	1427 (500*)	442*	99.96
Over-all	**1845**	**693***	**53.66**

Tab. 11: Overview of OBC data

Corpus subperiod	**Extracted**	**Relevant instances: *fact that*-clauses**	
	n (abs)	n (abs)	N (pmw)
OBC 1 (1720–1780)	46	12	1.09
OBC 2 (1780–1850)	23	12	0.85
OBC 3 (1850–1920)	99	72	12.96
Over-all	**168**	**96**	**3.13**

6.3 Theoretical background

Prior research has studied the position of *the fact that*-clauses in a wider paradigm of nouns taking content clauses in Present-day English, including e.g. the nouns *claim* or *astonishment* as in (245) and (246). It has shown that *the fact that*-clauses are extremely common; in fact, they represent the most frequently attested type of the noun + content clause pattern in Present-day English (Biber et al. 1999: 649; Schmid 2000: 35).[77]

77 Biber et al. (1999: 649) report on frequencies of over 50 occurrences per million words in academic registers, and Schmid (2000: 55) found 26,106 instances in the British section of the *Bank*

(245) *As colonists, they had long resented the **claims** that certain Englishmen made to special privilege simply because of noble birth*. (WB)

(246) *I can readily think what Heidegger means by Being and Angst. ... Think, for example, of the **astonishment** that anything exists*. (WB)

Recent accounts have focused on the heterogeneity of this paradigm of nouns introducing content clauses, both with respect to the syntagmatic relation between the noun and the content clause, as to the semantic subtypes of nouns. In terms of syntagmatic relations, Davidse (2018) provides strong arguments for an analysis of the internal structure of *the fact that*-clauses in terms of a categorizing premodifier (*fact*) and a clausal head (the *that*-clause). Cases as in (245) and (246), she argues, instantiate a different structural type, in which a de-verbal or de-adjectival head noun takes a complement clause, much like their non-derived counterparts (cf. *They claimed that certain Englishmen had a right to special privilege because of noble birth*). Her account thereby calls into question the mainstream proposals that group together all noun + content clause constructions as realizing a relation of either apposition between a head noun and a postmodifying clause (Quirk et al. 1985), or of complementation between a head noun and a complement clause (e.g. Biber et al. 1999; Huddleston & Pullum 2002).

In terms of the semantic range of introductory nouns, Halliday (1985: 240–241, 244), Francis (1993: 148–152), and Davidse (2018) propose increasingly detailed classifications of semantic types. The introductory nouns in (245)–(246), for instance, are classified as relating to distinct semantic sets of nouns, with the nominalization *claims* in (245) relating to a process of verbal creation of an utterance, but *astonishment* in (246) belonging to a set of nouns expressing emotions and attitudes. There seems to be general agreement that the noun *fact* belongs to a semantic type of epistemic nouns, expressing a high degree of epistemic certainty. With regard to the external distribution of *the fact that*-clauses, synchronic studies seem to agree that the pattern "serves as a device for nominalising clauses by incorporating them into an NP that can occupy any ordinary NP position" (Huddleston & Pullum 2002: 965).

The approach taken here differs from the prior accounts just outlined in two ways. Firstly, I propose a diachronic analysis, which examines how *the fact that*-clauses were used in the first periods of occurrence, before they became as overwhelmingly frequent as they are in Present-day English (see fn. 77). Secondly, my

of English (now *Wordbanks Online*). The corpus he consulted contained 225 million words when the data were extracted, so this would amount to a frequency of 116 tokens per million words.

analysis will not focus on the internal structure of *the fact that*-clauses, but on their external distribution, i.e. I will concentrate on the semantic and formal contexts in which content clauses introduced by *fact* appear and may spread to increasingly over the course of time. Specific attention will be accorded to the semantics of the verbal predicates with respect to which they can function as a complement. This specific focus is motivated by the interest in establishing the relevance of the grammatical pattern for factivity, as predicted by Kiparsky & Kiparsky (see 6.1): is it the case that *the fact that*-clauses only occur as complements of "factive predicates"? Does this pattern then provide a valid test for factivity?

6.4 The diachrony of *the fact that*-clauses

Similarly to what was the case for object extraposition, there are certain environments in which *the fact that*-clauses cannot alternate with non-introduced *that*-clauses, namely those structural environments which strictly require noun phrase constituents. It is crucial to recognize these contexts, as they require the occurrence of *the fact that*-clauses on formal and semantic grounds, and therefore cannot be used to verify the validity of insertion of *the fact* as a "test" for the semantically "factive" status of a simple *that*-clause. Before going into the questions of the matching problem (6.4.2) and the semantic value of the noun *fact* in the construction (6.4.3), I will therefore briefly sum up the contexts in which *the fact that*-clauses cannot generally be substituted for by non-introduced *that*-clauses (6.4.1).

6.4.1 Contexts with restricted alternation

To identify these contexts, I draw upon Davidse (2003), who gives a detailed synchronic description of the contexts of occurrence of 110 *the fact that*-clauses, which she extracted from the spoken British subsection of the Collins Wordbanks Online Corpus. The set of environments she proposed in which *the fact that*-clauses cannot be alternated with a simple *that*-clause (2003: 116–119) are summarized in the four types illustrated below. I will add other restrictions attested in my data where relevant.

Firstly, non-introduced *that*-clauses cannot normally appear as the object of a (potentially complex) preposition, as in (247), or of a phrasal verb, as in (248) (see also Chapter 5).

(247) *He would write a sentence beginning thus: "She took a book with a look of – ;" or thus: "A revision of this decision would have made him an object of derision." Or, if the period were otherwise inoffensive, it ran in a rhythmic gallop which was torment to the ear. All this,* ***in spite of*** *the fact that his former books had been noticeably good in style.* (CLMET-3)

(248) *it appeared a difficult matter to* ***account for*** *the fact that the forest should end at an irregular but definite line, and that at that boundary grassy savannahs should commence.* (CLMET-3)

Secondly, *the fact that*-clauses are normally not interchangeable with simple *that*-clauses when they occur as subject in the semantic environment of material clauses (Halliday 1985), which describe activities or causal/force-dynamic, interactions as in (249), i.e. which construe *the fact that*-clause as an agent-like entity bringing about a change.

(249) *The fact that it was eleven o'clock* ***destroyed*** *the remains of her self-confidence.* (CLMET-3)

Thirdly, substitution by a simple *that*-clause is resisted in contexts of coordination to another noun phrase, as in (250).

(250) ***The sight of the picture***, ***the reading of the preface to it***, ***and*** *the fact that it was the last effort of the man; altogether make it difficult to prevent tears from starting from the eyes of any one not uncommonly steeled with insensibility.* (CLMET-2)

A similar context which I would like to add on the basis of my own data is that *the fact* cannot be omitted when it forms part of a subject clause that is itself part of a complement clause introduced by a complementizer, as illustrated in (251). In other words, we do not find *[He expressed the hope [that [that the prisoner was not sentenced to hard labour] would be taken into consideration]]*, which would have two complementizers (*that that*) in a row, as this would be less clear for the hearer/reader in terms of processing, and moreover dispreferred as an "horror aequi" phenomenon, in which the same form is repeated in (near-)adjacent positions (see e.g. Vosberg 2003).

(251) *Judge Lumley Smith* ***expressing the hope that*** *the fact that prisoner was not sentenced to hard labour* ***would be taken into consideration*** *by the military authorities when they came to deal with the matter.* (OBC 3)

I also found that non-introduced *that*-clauses are dispreferred following a conjunction e.g. *but*, or *while* as in (252).

(252) ***While*** *the fact that they cannot be so used, proves that in consciousness the Unlimited and the Indivisible are qualitatively distinct, and therefore positive or real; since distinction cannot exist between nothings.* (CLMET-3)

Fourthly and finally, Davidse notes that non-introduced *that*-clauses are generally dispreferred as subjects or subject complements in the context of some relational clauses which typically express identification, as in (253a) or attribution, as in (253b).

(253) a. *This quarrel with Sidney Herbert was, however, an exceptional incident. Alike by him, and by Lord Panmure, his successor at the War Office, she was firmly supported; and the fact that during the whole of her stay at Scutari she had the Home Government at her back,* ***was her trump card*** *in her dealings with the hospital authorities.* (CLMET-3)
b. *MR. JUSTICE A. L. SMITH, ruled that the fact that there was another indictment against Breese and Brenner* ***was immaterial*** (OBC 3)

I add to this the context of existential clauses as e.g. instantiated by the *there*-cleft in (254), from which non-introduced *that*-clauses generally seem to be barred.

(254) *The evidences may be put in three groups.* ***There is*** *the familiar fact that a plant has its formative changes arrested by cutting off the supply of water: the primary redistribution continues – it withers and shrinks or becomes more integrated – but the secondary re-distributions cease.* ***There is*** *the less familiar fact that the like result occurs in animals …* (CLMET-3)

Besides the four formal and semantic context types delineated here, *the fact that*-clauses occur in contexts similar to simple *that*-clauses as in e.g. (255) and in (238) above, i.e. the type of contexts with respect to which Kiparsky & Kiparsky made their predictions with respect to factivity. These contexts are the main focus of the analysis reported on in the following sections.

(255) *The invoice was for 11 guineas. Prisoner handed me a cheque for 12 guineas. I pointed out to him that he had evidently forgotten* ***the fact*** *that I had told him that if the machine were paid for within seven days there would be a guinea discount. I accordingly gave him a guinea in cash.* (OBC 3)

The Late Modern English data were first analyzed for the formal contexts of occurrence of *the fact that*-clauses, to take into account those contexts that heavily restrict alternation with non-introduced *that*-clauses. Tables 3 and 4 give an overview of the quantitative distribution of four general types of formal contexts in absolute frequencies (the asterisk indicates sample values).

Tab. 12: *The fact that*-clauses in CLMET (in absolute frequencies)

	subject of lexical verb	direct object	object of prepositional / phrasal V	subject (complement) of copula	Total period
CLMET-1	1	3	5	1	10
CLMET-2	15	60	145	21	241
CLMET-3	47*	70*	277*	48*	442*
Over-all	**63***	**133***	**427***	**70***	**693***

Tab. 13: *The fact that*-clauses in OBC (in absolute frequencies)

	subject of lexical verb	direct object	object of prepositional / phrasal V	subject (complement) of copula	Total period
OBC 1		10	2		12
OBC 2		5	6	1	12
OBC 3	10	18	36	8	72
Over-all	**10**	**33**	**44**	**9**	**96**

In both corpora, the most frequent context by far (60% of all instances) is the one in which *the fact that*-clauses are the object of a preposition or phrasal verb, as in (256) and (247)–(248) above. In this context, the overtly nominal form of the pattern is typically required for structural purposes.

(256) *I am aware of an objection that may be urged against this mode of viewing the subject, namely, that it is an unnecessary multiplication of original principles. I am not inclined to dispute respecting the term, original principles. I only* ***contend for*** *the fact, that there are certain feelings or propensities which are found to operate in the whole of mankind; and, with regard to these, I consider our object to be, simply to view man as he is.* (CLMET-2)

The fact that-clauses are also preferred over non-introduced *that*-clauses when they function as the subject (253b) or subject complement (253a) in an attributive or identifying copular clause with *be*, or in existential clauses with *be* (254) or *have* (257).

(257) *Secondly, we* ***have*** *the fact that "the Lord's Day" is a Christian institution.* (CLMET-3)

Moreover, as subjects to more lexically specific verbs, *the fact that*-clauses are also often not interchangeable with *that*-clauses, as in over half of these instances (45 out of 73 instances), the subject is coordinated with another NP (250), or preceded by another complementizer e.g. (258) or conjunction (252).

(258) *Do you not see* ***that*** *the very fact that he might marry infinitely more advantageously now would deter him from such a step.* (CLMET-3)

In the majority of the data, the nominal pattern introduced by *fact* is thus strongly preferred due to the formal context in which it occurs. This finding is in line with the suggestion made in the OED (2nd ed., "fact, n.", 4b) that these early content clauses introduced by *fact* are typically "used where the earlier lang. would have employed a clause or gerundial phrase as subject or as the regimen of a preposition", i.e. in contexts where Late Modern and Present-day English do not typically select a clause without giving it a nominalized form.

The main context in which *the fact that*-clauses are not strongly preferred over *that*-clauses is then in direct object position (21% of all data). Note that even in this context, there are exceptions to this interchangeability, as the pattern is sometimes used to allow predicates to take a complement referring to a proposition. Example (259) illustrates such a case: *blink* could be used transitively in the 18th and 19th centure in the sense of 'shut ones eyes to, evade' (OED 2nd ed., "blink, v.", 6a.). In this sense, it normally takes a complement referring to things or states of affairs. In (259), *blink* is construed with a proposition in *the fact that*-clause, and concomitantly shifts to meaning "ignore".

(259) *You may minimise the difficulty every way, and it is your duty to do so, but no amount of hopefulness can make us* ***blink*** *the fact that when all has been done and every chance has been offered, when you have forgiven your brother not only seven times but seventy times seven, when you have fished him up from the mire and put him on firm ground only to see him relapse and again relapse until you have no strength left to pull him out once more, there will still remain a residuum of men and women who have, whether from heredity or custom, or hopeless demoralisation, become reprobates. … There are some cases within our knowledge which seem to confirm the somewhat dreadful verdict by which a man appears to be a lost soul on this side of the grave*. (CLMET-3)

6.4.2 The matching problem: factive, manipulative, or reporting contexts

As pointed out in 6.1, Kiparsky & Kiparsky (1970) considered content clauses introduced by *fact* as the prototypical realization of factive complements in PDE, and predicted that this pattern can only occur as complements of factive predicates, but not of non-factive predicates. To verify whether this claim holds for the Late Modern English data, I have classified *the fact that*-clauses in direct object position according to whether the predicate-complement combinations instantiate a factive, manipulative, or reporting construction in context, i.e. as to whether they present the content of *the fact that*-clause as unaffected, affected, or effected by the main clause situation (see Chapter 3). I will restrict myself to those instances in direct object position with a lexical predicate (not *be* or *have*), as this is the main context with respect to which the model in Chapters 3 and 4 is designed.

Tables 14 and 15 illustrate the range of predicates which take *the fact that*-clauses in direct object position in the two corpora of Late Modern English and their absolute frequencies. The most striking feature we get from these tables is that in both corpora, traditional cognitive and emotive factive predicates, i.e. those that are used to express the cognitive perception of, or emotional reaction to, a pre-existent proposition (see Chapter 3), are very much in the minority.

Tab. 14: *The fact that*-clauses as direct objects in the CLMET

	manipulative constructions		factive constructions		Total period
	n (abs)	Attested predicates	n (abs)	Attested predicates	n (abs)
CLMET-1	3	ascertain (2), attribute X to			3
CLMET-2	56	explain (6), overlook ('neglect') (4), add (3), admit (2), believe (2), disguise (2), establish (2), mention (2), observe (2), record (2), state (2), adduce, affect, announce, assert, communicate, consider, declare, deny, disclose, dispute, draw ('be told'), have in view, find X in ('interpret'), indicate, learn ('be informed'), mark ('observe'), mark as miracle, mean, omit, prove ('testify to'), reassert, relate, reverse, show, suppress, undo, write	4	overlook ('not see') (2), forget, grasp	60
CLMET-3	60	explain (4), illustrate (3), recognize ('admit') (3), add (2), alter (2), conceal (2), express (2), ignore (2), mention (2), neglect (2), recognize (2), reveal (2), admit, affect, blink, call to mind, cite, confide (to), contradict, denote, deny, disprove, distinguish X from, emphasize, hail, have on their side, hide, impress upon ('convince'), indicate, instance, introduce, lament, leave untouched, mark, make public, note, omit, overlook ('neglect'), point out, put, state, suggest, take for example	10	realize (2); appreciate ('fully grasp'), discover ('see'), hate, notice, overlook ('not see'), perceive, register, understand ('grasp')	70
Total	**119**		**14**		**133**

Tab. 15: *The fact that*-clauses as direct objects in the OBC

	manipulative constructions		factive constructions		Total period
	n (abs)	Attested predicates	n (abs)	Attested predicates	
OBC 1	10	confess (5), own (2), confirm, deny, state			10
OBC 2	5	ascertain ('verify'), bring to my recollection, conceal, establish, state ('confirm')			5
OBC 3	14	disclose (6), know (3), bear in mind, conceal, emphasize, learn ('be informed'), suppress	4	overlook (2), discover, forget	18
Total	**29**		**4**		**33**

The small set of occurrences with factively used predicates mainly involve expressions of the cognitive loss or discovery of a pre-existent proposition, as in (260), or the absence thereof, with only one instance of an emotive reaction to a pre-existent proposition at the end of the Late Modern English period, illustrated in (261).

(260) *The theory that general demand and supply are identical is his most important contribution to the study. Although he translated Ricardo's book, he did not* ***grasp*** *the fact that rent did not enter into price.* (CLMET-2)

(261) *"I can't help this jealousy over you! It is my nature, and must be so, and I* ***HATE*** *the fact that you have been caressed before: yes hate it"* (CLMET-3)

The majority of the attested predicates with a *the fact that*-clause in direct object position is used to express the re-creation or modification of a pre-existent proposition, and thereby instantiate what I refer to as a manipulative construction (see Chapter 3). The set of manipulatively used predicates predominantly involves predicates expressing the re-creation of a pre-existent proposition by means of an act of verbalization, as expressed by predicates such as *mention*, *communicate*, or *own* in (262), as well as expressions of not verbalizing a pre-existent proposition, as expressed by predicates such as *omit*, *suppress*, or *conceal* as in (263).

(262) *he **own'd** the Fact; that he had lifted the Boy, Thomas James Grundy's over the Wall, put him in at the Window, and he open'd the Street Door, and himself and Joanna Grundy's came in, and they carried off the Goods; and he desired to be made an Evidence against the Grundy's. The Prisoner at last own'd at the Bar that he was guilty of the Fact* (OBC 1)

(263) *In this book I was hardly able to **conceal** the fact that, in spite of the obligations under which we must always remain to Mr. Darwin, I had lost my respect for him and for his work.* (CLMET-3)

The manipulative set also contains expressions of mental consideration, as in (264), and processes of mental (re-)categorization of a pre-existent proposition as having a certain property, as in (265).

(264) *Mr. Mill now goes on to **consider** the suggestive fact that wages are higher in England than on the Continent, and yet that the English have no difficulty in underselling their Continental rivals. Before examining this opinion on grounds of principle, it is worth while to bestow a moment's consideration upon it as a question of fact.* (CLMET-2)

(265) *Should I, he said, "**attribute** to instinct or to some kind of illusion the fact that when we see those places in which we are told notable men spent much of their time, we are more powerfully affected than when we hear of the exploits of the men themselves or read something written?* (CLMET-1)

And finally, manipulatively used predicates can also express a modification of the content of the complement clause, either in a speech or thought act as with for instance *disprove*, or *deny* in (266), or with a more general process of a change induced with respect to the complement proposition, expressed for instance by predicates such as *affect*, *reverse*, *alter*, or *undo* in (267).

(266) *I went down with the Prosecutor to his Vault, where we found the Prisoner at the Bar; and he own'd he had drank about a Dozen. But the Prisoner upon his Trial, **deny'd** the Fact, that he had ever taken any away, but what he had drank, together with the Prosecutor's Servants.* (OBC 1)

(267) *If unity lies in the Apostolical succession, an act of schism is from the nature of the case impossible; for as no one can reverse his parentage, so no Church*

*can **undo** the fact that its clergy have come by lineal descent from the Apostles.* (CLMET-2)

Note that the latter type of predicates as in (267) tend to take things or states of affairs (see 2.1.3.1 on entity types) as their direct objects, rather than propositions expressed by finite clauses. As argued by Davidse (2018: 27), "the noun *fact* gives a base-level categorisation of the proposition: it designates the specific third-order entity status of the following clause". As a result, "they allow the speaker/writer to insert nominalised clauses into NPs that can take on any semantic role in a clause, construing the various ways in which we cognitively interact with abstract propositions" (Davidse 2018: 35). In such contexts, *the fact that*-clauses are thus a useful tool to allow certain predicates to take propositional complements.

The analysis shows that in terms of distribution, *the fact that*-clauses in direct object position were not limited to occur with factive predicates in Late Modern English. In section 6.4.3, we will see that also in terms of their semantics, the Late Modern English *fact that*-clauses were not presupposed true by the speaker. Over the course of the Late Modern English period, however, the relative share of occurrences in manipulative constructions has already diminished by the third period of Late Modern English, as *the fact that*-clauses increasingly seem to be found in the context of factive constructions.

From the model proposed in Chapters 3 and 4, however, it need not be surprising that the majority of the Late Modern English *fact that*-clauses in object position is found in manipulative constructions. It was suggested in Chapter 4, and similarly argued by Cattell (1978), that the range of nouns introducing content clauses (e.g. *fact*, *claim*, *denial*) can in terms of external distribution occur in the nominal slots associated with the object position of factive and manipulative constructions, but not in truly reporting constructions, and that they can be used to make a specific modal source for the complement explicit. The inserted abstract noun can also impose a certain interpretation, as we have already seen with predicates that are associated with non-propositional complements (e.g. in (267)). Many of the complement-taking predicates moreover allow distinct uses, which can be "disambiguated" (Cattell 1978: 64) by the insertion of nouns such as *fact*. The predicate *state*, for instance, can for instance be used either as a manipulative predicate as in (268), where it presents the complement as a pre-existent proposition that is re-instantiated in an act of verbal communication, or as a reporting predicate as in (269), where it presents the complement as an utterance created in a speech act on the part of the represented speaker. In (268) and (269),

the different interpretations are clearly brought out due to the specific constructional contexts.

(268) *I shall, therefore, as I go along, place the circumstances fairly and honestly before the public, and leave them to draw their own conclusions, as to the correctness, not to say any thing of the honesty, of the base assertions which are made by the tools of my political adversaries. At this moment, however, I will merely* ***state*** *briefly this fact, that, in the year 1802, more than eighteen years ago, I was separated from my wife by mutual consent.* (CLMET-2)

(269) *The Policeman listened attentively, as though by rights he ought to enter these sentences laboriously in his notebook. "That's it, per'aps," he* ***stated****. "It takes 'em longer, but they finds out in the end ..."* (CLMET-3)

6.4.3 The semantic value of *fact* in Late Modern English: truth presupposition?

Now that we have considered the external distribution of *the fact that*-clauses by considering the semantic classes of predicates with which they can occur, we can turn to their internal semantics. In Present-day English, the semantic value of the abstract noun *fact* is generally taken to be one of epistemic certainty, and a *fact that*-clause is seen to be "used by speakers to construe states of affairs not just as being the case, but as being real and 'true' " (Schmid 2000: 97). Kiparsky & Kiparsky (1970) implied that positing an overt or covert noun *fact* in the underlying structure of all factive complement clauses might account for their formal behaviour in terms of blocking extractions from and scope over (parts of) the complement proposition, while at the same time indicating their semantic value of being presupposed true by the speaker. In this section, I argue that the semantics of *fact* in Late Modern English cannot be characterized in this way: *the fact that*-clauses were not generally presented as epistemically certain. I show that this can be explained by early uses of *fact* as an action noun, before it developed propositional uses.

A first point that can be noted, also pointed out by Davidse (2018: 41), is that *the fact that*-clauses can contain speaker-related markers indicating, rather than full epistemic certainty, degrees of epistemic certainty, as in (270)–(272), or deontic statuses, as in (273).

(270) *For a few nights there was a sneer or a laugh when he knelt down, but this passed off soon … I fear that this was in some measure owing to the fact that Tom could* ***probably*** *have thrashed any boy in the room* (CLMET-3)

(271) *Her brother, who loved her tenderly, was appalled at this fantastic preference. Leaving aside the degradation of an alliance with a nameless man, and the* ***possible*** *fact that his property, in default of heirs male,* ***might*** *pass into such a one's power, he had sense to comprehend Heathcliff's disposition: to know that, though his exterior was altered, his mind was unchangeable and unchanged.* (CLMET-2)

(272) *I have been told, and believe the fact, that houses, in Cheltenham,* ***will*** *now sell for only just about one-third as much as the same would have sold for only in last October.* (CLMET-2)

(273) *The local paper saw the connection between the lynching and the broader attempt to intimidate blacks out of asserting their Court-won rights: Reprehensible as the act of lynching is, it served to emphasize again the fact that force* ***must not*** *be used in pushing revolutionary change in social custom.* (WB)

In line with my analysis in Chapter 4, these modal markers can be argued to relate either to the actual speaker (270), to the represented conceptualizer in the narrative context in (271), or to an echoed source, as in (272)–(273). Besides that, it is clear from the contextualized examples that the propositions contained in *the fact that*-clauses need not be presupposed true by the speaker: firstly, there are in examples in which *fact* was explicitly accompanied by a modifier such as *incredible*, *possible* (271), or *strange* (274).

(274) *Some person was relating to the Earl of Coventry the* ***strange*** *fact that the Earl of Devon's harriers last week gave chase, in his demesne, to an unhappy donkey, whom they tore to pieces before they could be called off; upon which his lordship asked for a piece of chalk and a slate, and composed the following jeu d'esprit on the circumstance* (CLMET-2)

Secondly, attestations in the context of a predicate meaning *verify*, *confirm to be true*, as in (275) and (276), or even in the explicit context of *not being certain of a fact, and even doubting it* as in (277), clearly indicate that the person who uttered these sentences did not intend for them to be presented as presupposed true.

(275) *My question is, whether you had any medical man to* ***ascertain*** *the fact, that he was not able to give parol evidence against the prisoner* (OBC 2)

(276) *Q. How near were they to you. – A. I cannot say, there were no one near enough to take it out of my pocket but Smith. Q. Are you able to* ***state*** *that fact, that nobody was near enough. – A. I can speak to the best of my recollection. Q. You were not quite sober to speak positively. – A. Yes, I do particularly recollect that.* (OBC 2)

(277) *on November 9th Peach sent me a cablegram from New York in a letter he had received; it was in relation to some property that he had asked me to look out for him? I hardly know now what it was? I did not look out for any property? I told him he might go and inquire in Regent Street? I* ***don't know*** *the fact that he wanted premises,* ***I doubted it****? he told me he did?* (OBC 3)

To explain this difference in usage between Late Modern and Present-day English, we need to take a closer look at the sense development of the noun *fact* as it is described in the OED, and attested in my own data. As noted in the OED, *fact* was borrowed from Latin. From about 1500 to 1675, it was used in English predominantly as an action noun, roughly meaning "deed" or, with negative connotations, "crime". Clear examples of this sense were still found in my data, as in *commit the fact* (278) or *do the fact* (279).

(278) *The Prosecutor deposed that her Window was broke and a bundle of Muslin taken out about 8 a Clock … James Reading deposed that the Prisoner and himself* ***committed the Fact****; that he held the Door whilst the Prisoner broke the Glass and took the Goods; that he sold them to Elizabeth Norman in Newtoner's Lane and brought him (this Evidence) his Share.* (OBC 1)

(279) *I had so much Sight of the 2 Men when they* ***did the Fact****, that I thought I should know them and their Horses, when I saw them again.* (OBC 1)

In a later sense, *fact* can introduce a clause and, as the OED notes, it is in this sense equivalent to the noun *circumstance* introducing a clause (280) in Late Modern English. Similarly to the noun *circumstance*, *the fact* was then used to refer either to an occurrence (281) or to a piece of information (282) as a detail that is part of some narrative. This use can be seen as derived from the action noun, but crucially allows a content clause that contains a proposition rather than a

state of affairs, which makes it apt to be used in the context of verbalization predicates (cf. e.g. *commit the deed* > *confess the fact*).

(280) *Ever since the prisoner was apprehended did your sister tell this* ***circumstance*** *that she heard the watchman call half past twelve?* (OBC 2)

(281) *How came you to declare to this court, that he was riding with fire arms before him? How can you be positive to* ***the fact of*** *his riding with fire arms, when you said before the Justice that he had none?* (OBC 1)

(282) *Then he confess'd* ***the fact****, that he was the person that stole the things mention'd.* (OBC 1)

Besides the use of *fact* to recount some occurrence or introduce a piece of information, it increasingly came to be used to present the content clause as certain, i.e. to stress the truth of the content clause, which is also the way it is generally used in Present-day English. This semantic development, then, may account for the fact that in Present-day English, the occurrence of *the fact that*-clauses in the context of explicit indications of doubt with respect to the content clause (e.g. in (275)–(277)) are no longer commonly used.

6.5 Conclusion

In this chapter, I presented an analysis of the formal and semantic contexts of occurrence of *the fact that*-clauses as they came to be used and spread during the course of the Late Modern English period. It was shown that *the fact that*-clauses were originally used in contexts which require an overtly nominal form on formal grounds, e.g. following a preposition, or in which a nominalized clause is preferred for semantic reasons, e.g. in manipulative constructions with verbalization predicates, in which the nominalized clause is presented as an event or proposition which is merely recounted by the Sayer, without necessarily emphasizing the speaker's certainty with respect to the content clause. In Late Modern English, the semantic value of *fact* can thus not be generalized over as expressing "emphatics for epistemic necessity" as it has been characterized for Present-day English (Schmidt 2000: 97). Rather, it seems to have been used as a nominalizing device with a more variable meaning, ranging from what would in PDE be expressed as *act*/*deed*, to *claim* and *fact*.

Instances where *the fact* is part of a manipulative construction with for instance a verbalization predicate may no longer be the predominant use in Present-day English, but they do still occur, as in (283). It is important to recognize that the alternation with *the fact that*-clauses construes meanings in itself, i.e. it can induce a reinterpretation of a reporting predicate as a manipulative predicate. This should be taken as a word of caution in considering the possible alternation of a *that*-clause with a *the fact that*-clause as a test for factivity.

(283) *During this mandate, he **asserted** the fact that there could be no competitiveness for European businesses as long as external trade relations are not balanced.* (from Wikipedia.org, entry for Franck Proust)

A final point which I briefly want to touch upon is the Kiparskys' claim that the object extraposition construction ("anticipatory it"; see Chapter 5) is a reduced form of *the fact that*-clauses, and is thus expected to show the same grammatical and semantic features. It is true that object extraposition and *the fact that*-clauses share a number of semantic and grammatical features: both constructions involve nominalized clauses, and present the proposition in the *that*-clause as existing independently from the main clause situation. I do want to point out, however, that there are also differences between the two constructions. Firstly, I noted in 5.5.1 that object extraposition can occur in the context of counterfactual or volitional predicates (e.g. *Do they really want it that clubs can terminate contracts?* and *I faked it that I played*). I did not find any attestations of *the fact that*-clauses in such contexts. Secondly, I proposed in Chapter 5 that object extraposition induces a near-punctual construal of the matrix situation. I did not find such an aspectual effect induced by *the fact that*-clauses; the latter are presented as stable referents, rather than as punctual occurrences. Thirdly, *the fact that-clauses* can occur in existential clauses that introduce a new referent into the discourse, e.g. *There's the fact that…* in (254) above. This is not possible for object extraposition, which has a semantic component of exhaustive identification (see 5.5.5). My intuition with respect to these differences is that *the fact that*-clauses have a function at the NP level, while object extraposition has a function on the level of the higher verb phrase, i.e. it applies to the relation between main and complement clause. This will need to be examined in more detail in further research. The differences listed above do nonetheless suggest that object extraposition cannot simply be considered a reduction of a *the fact that*-clause as the Kiparskys proposed.

7 *I regret (to say)*. From factive to reporting construction

7.1 Introduction

In Chapters 5 and 6 I have discussed two constructions which have been viewed as diagnostic tests of factive complements, i.e. their ability to alternate with object extraposition and *the fact that*-clauses. I have shown that this alleged correlation in fact has to be nuanced, as object extraposition is also an alternate of the type I refer to as manipulative complementation constructions and *the fact that*-clauses were diachronically primarily associated with manipulative constructions. In this chapter, I will look at a construction type whose inability to alternate with factive constructions has been put forward as a recognition test for reporting constructions, viz. parentheticals or "comment clauses".[78] The verb *regret*, which occupies a prominent place on traditional lists of factive predicates has already been observed in the literature to occur in parenthetical constructions, admittedly with a different meaning as "regret to say" (e.g. Heyvaert & Cuyckens 2010). I will address this specific issue diachronically, by focusing on the question of how and when *regret* developed parenthetical uses. This will also allow me once more to illustrate an important point made in this study, viz. that it is not predicates as such, but verb meanings, which are compatible with factive or reporting constructions, and that both verb meanings and paradigms of complementation constructions can change through time.

Parenthetical constructions have traditionally been considered a constructional alternate characteristic of reporting constructions: "true factives"[79] such as *regret* in (284a) and (285) are claimed not to have a parenthetical variant (Hooper 1975). Reporting predicates, e.g. *claim* or *suppose* (see (284b) and (289) below), by contrast, can typically be appended to their anchor in a parenthetical clause. This differential behaviour probably relates to the fact that factive complements have no illocutionary force (de Cuba & Ürögdi 2010: 45): true factives cannot introduce "a non-referential semantic object denoting a speech act, i.e. an unresolved proposition or an open question" (2010: 45). Reported complements, by

78 This chapter is derived in part from Gentens (2015), published in *Journal of Historical Pragmatics*. Reproduced with kind permission from John Benjamins Publishing Company.

79 The distinction between true factive and semi-factive predicates was first made in Karttunen (1971). Karttunen classified emotive predicates e.g. *regret* as true factives, in contrast to cognition predicates e.g. *know*, *realize*, which he calls semi-factive predicates. Only the latter are said to allow presupposition cancellation in certain contexts, e.g. in conditionals (see Chapter 2).

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contrast, can contain represented utterances, for which the illocutionary force relates to the represented speech or thought situation (e.g. McGregor 1994, 1997: 264–252; Dik 1997: 96–105). This allows the reporting clause to function as an interpersonal modifier to the illocution, which is not possible in truly factive constructions.

(284) a. *I regret that it is raining* (factive) (Kiparsky & Kiparsky 1970: 147)
b. *I suppose that it is raining* (non-factive) (Kiparsky & Kiparsky 1970: 147)

(285) *Manufacturers DMF Sportswear are in the first year of a three-year deal with Third Division Barnet, who have three weeks to come up with the cash or face High Court action. "**I regret** that we have had to take this step," said DMF managing director Neil Friar.* (BNC)

The examples in (286), however, show that *regret* can figure in structurally detached positions in Present-day English (PDE), either when it is supplemented by a *to*-infinitival verb of saying (286a) or, less frequently, as a bare parenthetical (286b). In its parenthetical use, *regret* does not express its lexical meaning of an emotion of sorrow or disappointment but rather functions as a modifier (similar to "say with regret") of the illocution of the reported utterance contained in its host clause. In such uses, the complement thus no longer has the status of a factive proposition (which has no illocutionary force layer), but has acquired the status of a reported utterance, which does have an illocution layer. This is clear from the fact that reported utterances, including those co-occurring with reporting uses of emotive predicates such as *be sorry* (287b), can be marked for the imperative mood as in (287a–b), which factive complements as in (284a) and (285) cannot.

(286) a. *Many of the owners were sympathetic but the majority, **I regret to say**, were not so inclined.* (BNC)
b. *If you produce a proposal, the first thing a lot of British engineers will do is tell you what's wrong with it. That, **I regret**, is a British characteristic.* (BNC)

(287) a. *Having grown up on Irish music Josh Groban **thought**: "Let's give this a try"*[80]

80 Source: http://www.newstalk.ie/Having-grown-up-on-Irish-music-I-thought-Lets-give-it-a-try-Josh-Groban-)

b. *A new relationship starting off long-distance is normally a bad idea. Its [sic] hard enough getting a new relationship started and on its feet without having to deal with distance.* ***Sorry to say****, let it go.*[81]

While the addition of *to say* has been mentioned as a means to create parenthetical constructions from normally non-parenthetical verbs (Urmson 1952: 493–494), the existence of *I regret* as a bare parenthetical has to my knowledge not been discussed in the prior literature. This chapter sets out to fill this gap. Firstly, I will provide a synchronic analysis of the discourse contexts in which *I regret* and *I regret to say* function as parentheticals modifying the illocutionary force of their host clauses. Secondly, I will investigate the diachronic rise of *to*-infinitival clauses following *regret* that are argued to have led to these parentheticals.

In PDE, *I regret (to say)* can function as a parenthetical both in structurally detached positions (286a–b) and in clause-initial positions where it is structurally ambiguous to matrix clause uses (288a–b). In either case, the illocution modifier can take the form of a clause containing the simple predicate *regret* ((286b) and (288b)) or rather of a clause with a composite predicate composed of *regret* followed by a (potentially complex, as it can be accompanied by a semi-modal auxiliary as in (288a)) *to*-infinitival verb of speaking ((286a) and (288a)).

(288) a. *Ladies and gentlemen,* ***I regret to have to inform you*** *that, due to an accident to Mr. Banks, we will be unable to continue the performance* (BNC)

b. *Your request in the 9 February letter was not specific in respect of Lochbridge Road. As there is already a stop in approximately the location you describe* ***I regret*** *that I am still unclear as to what your request comprises.* (BNC)

The fact that in PDE *regret* can pattern either with factive complements ((284a) and (285)) or reported utterances[82] ((286a–b) and (288a–b)) is suggestive of a diachronic development in which factive constructions with *regret* gradually came to occur with reported clauses, a use that may have started to spread from the construction of *to*-infinitival complements with an explicit verb of saying in Late

81 Source: http://dating.anewmode.com/viewtopic.php?f=2&t=3712

82 To capture all non-factive uses, I will use the general term "reported utterance" in a broad sense in this chapter, as covering both reported complements that are structurally integrated with respect to a matrix clause, e.g. *I regret to say I disagree* and cases where the clause is the host clause to a structurally detached parenthetical (and thus the matrix clause), as in e.g. *Your request, I regret to say, has been declined.*

Modern English (Heyvaert & Cuyckens 2010). I will investigate this hypothesis in a diachronic corpus study tracing the changes in the complementation patterns of *I regret*.

This case study will be presented as follows. I will first introduce the theoretical (7.2) and methodological (7.3) background to the study. I will then present the results of the synchronic (7.4) and diachronic (7.5) analyses and the general conclusions that can be drawn from them (7.6).

7.2 Theoretical background

7.2.1 Parentheticals

Parenthetical clauses or "comment clauses" (Quirk et al. 1985: 1112; Brinton 2008) have generally been associated with processes of grammaticalization and (inter)subjectification. Structurally, the syntactic mobility of clauses such as *I suppose* in (289a–c) suggests that the original matrix subject and verb have been reanalysed into an adverbial element modifying the original subordinate clause ("complement preposing"), now the matrix clause (called the host clause or anchor clause). Semantically, the verb loses part of its propositional meaning of, in the case of *suppose*, expressing a mental state ("semantic bleaching"). Instead, it comes to express speaker-related attitudes, comments or evaluations ("subjectification") or more intersubjective functions such as attention-drawing, agreement marking or politeness that focus on the perspective of the hearer ("intersubjectification"). In (289), for instance, *I suppose* comes to function as an epistemic adverbial expressing a degree of uncertainty on the part of the speaker.

(289) a. ***I suppose*** *that your house is very old.*
b. *Your house is,* ***I suppose****, very old.*
c. *Your house is very old,* ***I suppose****.* (Urmson 1952: 481)

I will adopt a functional definition of the term "parenthetical". This means that besides structurally detached instances (289b–c) that are "unambiguously parenthetical" (Brinton 2008: 12), I assume that clause-initial subject-verb combinations as in (289a) can also be interpreted as a parenthetical, a view that is now widely accepted (see, amongst others, Urmson 1952; Quirk et al. 1985: 1112–1117; Huddleston & Pullum 2002: 895–897; Kaltenböck 2009; Dehé & Wichmann 2010). Initial instances can be identified as parentheticals rather than matrix clauses on grounds of their "non-addressability" (Boye & Harder 2007, 2012). Parenthetical clauses can for instance not be questioned in subsequent discourse by means of

a tag question or follow-up question *really?*. In (288b) above, the utterance implies a request for clarification. A follow-up question *really?* would thus naturally apply to the clause *that I am still unclear as to what your request comprises* (*are you really still unclear as to what my request comprises?*) rather than to the predicate *regret* (**do you really regret it?*).

7.2.2 The case of *regret*

Regret has in synchronic descriptions traditionally been considered a true factive verb that always embeds presupposed true propositions and does not occur in parenthetical constructions. Various authors have however pointed out that *regret* has acquired non-factive "metalinguistic" uses (Green 1976: 388; Davidse 1999a: 367, her fn. 1; Haegeman 2006: 1664, her fn. 28; Boye & Harder 2007: 588; Heyvaert & Cuyckens 2010).

In a detailed diachronic study of competition amongst complementation patterns (*that*-complement clauses vs. gerundive complement clauses in *-ing*), Heyvaert & Cuyckens (2010) identified two contexts in which the verb *regret* "expresses the projected content of what is basically a process of saying" (2010: 153). On the one hand, *regret* or, similarly, *be sorry* can be equivalent to the complex predicate *regret*/*be sorry to say* (290) and functions as an expression of speaker stance with respect to the implied speech act in the *that*-clause: it expresses the subject's reluctance to make a particular statement. Heyvaert & Cuyckens note that in cases where the infinitive *to say* is explicitly added, *regret to say* can be inserted in or appended to a clause and "appears to have acquired the value of a fixed phrase with parenthetical status" (2010: 153).

(290) ***I'm sorry*** *[that I can't be at the meeting this Friday]. (*WB, cited in Heyvaert & Cuyckens 2010: 153)

The second use which Heyvaert & Cuyckens distinguish, illustrated in (291a), can, they argue, be paraphrased as *say with some regret*, or as *say that (one regrets that) something is the case* (2010: 154). They argue that in contexts of reported speech, the verb's lexical, i.e. emotive, meaning can be backgrounded to the point that it merely serves to introduce the actual content of a particular speech act. This use of the verb *regret* to refer to an act of verbally expressing one's regret about a situation, similar to verbs such as *lament* and *bemoan*, turned out to be amongst the earliest uses of the verb, as illustrated in the early examples with complement clauses in (291b–c). These uses can in fact not be alternated with a

mere verb of speaking, as this would still require the reinterpretation of the pre-existent complement proposition as a created utterance (compare (291a) to *she had to say that he had not come a little earlier*).

(291) a. *my mother came in, and created a diversion in my favour by her loquacious and animated welcome of the reverend guest. She* ***regretted deeply*** *[that he had not come a little earlier, in time for tea], but offered to have some immediately prepared.* (Corpus of Late Modern English Texts, version 1 (1780–1850), cited in Heyvaert & Cuyckens 2010: 154)

b. [after a sentence was pronounced "against God's true religion"] *But I abhor to gest in matter so deeply rinning upon our salvation, with sorrowful heart* ***regretting*** *that in matters of conscience not only access and audience should be this way refused but also that men should be limited in such high matters within the compass of fourty days* (EEBO, 1602, spelling modernized)

c. *i have heard some of the wisest and gravest of the Ministrie of scotland at that time, who did heavily* ***regrate*** *that the church of scotland was mightily abused by this penry* (EEBO, 1641)

Similarly, Boye & Harder remark that "expressions of 'speech-act-oriented' regret about conveying bad news, as in *I regret to say*, are naturally used with a secondary, 'mitigating' function" (2007: 588). In functional layered models, the precise scope of these mitigating uses is argued to apply to the illocutionary force of the utterance: mitigation is an illocution operator according to Hengeveld (1989) (see also Caffi 1999), and "speech-act-oriented" expressions are considered "modifiers" of "illocutionary force indicating devices" by McGregor (1997: 209–283).

Following up on the observations made by Heyvaert and Cuyckens (2010), the study reported on here set out to fulfill two goals. Firstly, it presents a synchronic analysis of the discourse contexts in which the non-factive use of *I regret (to say)* occurs – with the important inclusion of bare parenthetical uses. Secondly, it aims to provide more insight into the precise historical development of this "metalinguistic" use by examining new data, with a focus on the development of *to*-infinitival complements following *regret*.

7.3 Methodology: Corpora and data extraction

Various electronic corpora were consulted to examine the synchronic usage and diachronic developments in the complementation patterns of *I regret*. For the

synchronic discursive analysis, I extracted all 200 hits of the string "I regret" in the 100-million-word *British National Corpus Online* (BNC; Davies 2004–).

The diachronic data were more difficult to gather due to the low frequency of the verb *regret*. The earliest instance of the verb *regret* in the OED dates back to about 1400. As Heyvaert & Cuyckens (2010) found however, there were no instances of the verb *regret* with a complement clause in the Helsinki Corpus or the Corpus of Early English Correspondence. Based on their investigation, then, I started the search for *regret* in Late Modern English.

To arrive at a sufficiently large amount of relevant hits, I opted for the *Old Bailey Proceedings Online* (OBO; Hitchcock et al. 2012). All 1,029 hits for the search term "regr*" were manually selected and sorted. The 127-million-word corpus – the largest corpus of Late Modern British English (LModE) to date – is nevertheless restricted in terms of genre: it mainly consists of court proceedings and therefore only represents an approximation of spoken language in a law-bound context.

To compensate for the genre bias of the OBO, data for Late Modern English were also extracted from the extended version of the *Corpus of Late Modern English Texts* (CLMETEV). The search for "regr*" in the context of *I* up to ten words to the left resulted in 321 occurrences in the CLMETEV. This 15-million-word corpus (De Smet 2005; De Smet 2012) consists of a more representative sample of text types and genres, albeit with a somewhat higher proportion of formal, literary texts. The corpus is subdivided in three sub-periods of 70 years; for purposes of comparison, the OBO data were subdivided in three sub-periods corresponding to the CLMETEV periodisation (see Table 16). The different subperiods for the two corpora will be abbreviated as CLMETEV1, CLMETEV2 and CLMETEV3 and OBO1, OBO2 and OBO3 respectively.

To cover the gap for the Early Modern English (EModE) period, additional data were drawn from the licensed *Early English Books Online database* (EEBO; available online at http://eebo.chadwyck.com/home) to document the earliest uses of the verb with *to*-infinitival or gerundial complements, based on the query "regr*". EEBO is a collection of over 125,000 works printed in English in the period between 1473 and 1700. Further examples have also been taken from the Internet and the *Collins Wordbanks Online Corpus* (WB).

All first-person instances of the verb *regret* accompanied by a clausal constituent were selected for analysis (absolute numbers for these instances are given under the heading "relevant hits" in Table 16). This means that noun phrase or pronoun complements, intransitive uses or instances of *regret* that did not have a first-person subject are not included in the table counts. Rare examples of *the fact that*-clauses, extraposed object clauses, or *wh*-clauses as complements were

also excluded from further analysis. In short, the analysis is centered on first-person instances of *regret* that are structurally detached or complemented by a *that*-complement clause, gerund or *to*-infinitive. The only exception is that for the Early Modern English data, other verb forms were taken into account as well due to the scarcity of data for this period. For both the synchronic and diachronic analyses, the analysis starts from a structural categorization (in terms of different complement types) before introducing (pragmatic or semantic) functional categories that are not restricted to a particular structural type.

The focus on first-person instances is motivated by the fact that in the parenthetical use of *regret*, they differ from non-first person instances in terms of subjective speaker stance. In first-person present tense instances, the modifying expression relates to the actual speaker and the speech event coincides with the time of utterance. By contrast, the non-first person instances of the parenthetical use are actually shifted first-person uses that are reported by the actual speaker, but that relate to another, represented speaker in terms of speaker stance. Examples (292a–b) are instances of such reported modifying uses, with a probable version of the originally uttered counterparts given in (293a–b).

(292) a. *But Indian naan, **he regrets**, can never ever be compared to a good Parisian baguette* (BNC)
b. *The princess's maid and confidante, **he regretted to state**, was incorruptible* (CLMETEV3)

(293) a. *But Indian naan, **I regret**, can never be compared to a good Parisian baguette.*
b. *The princess's maid and confidante, **I regret to state**, is (or was) incorruptible*

The fact that the first-person uses are more basic for the modifying uses of *regret* – which was to be expected, as parentheticals occur most frequently in first-person, present tense forms – is also borne out historically: the *regret to say*-construction first occurs in first-person instances in the data. By the end of the Late Modern English period, the construction has become increasingly conventionalized and spreads to (manually filtered out) non-first person instances such as (292b) in contexts of free indirect speech.

Tab. 16: Overview of corpora and data extraction for *(I) regret*

Corpus	Time Span/ [Sub-periods]	Approximate Corpus Size	Query	Relevant hits
BNC	1980–1993	100 M words	"I regret"	134
CLMETEV	1710–1920 [1. 1710–1780] [2. 1780–1850] [3. 1850–1920]	15 M words	"regr*" in the context of *I* up to 10 words to the left.	105
OBO	1674–1913 [1. 1710–1780] [2. 1780–1850] [3. 1850–1913]	127 M words	"regr*"	205

7.4 A synchronic analysis: Discourse contexts for *I regret (to say)*

Where *I regret* co-occurs with reported utterances rather than with factive complements, it can occur in structurally detached positions and comes to express illocution-related and discourse-grounded rather than lexical, i.e. emotive, meanings.[83] In this section I will describe the different discourse contexts in which this parenthetical use appears. I will first focus on bare parenthetical instances of *I regret* and instances of *I regret* that are complemented by a *to*-infinitival verb of saying as these always occur with reported utterances. The different uses in discourse will then briefly be compared to uses of *that*- and zero-complement clauses following the verb, which can occur either with fact clauses or with reported clauses. I will refer to finite declarative complement clauses without an overt complementizer that as "zero-clauses" in this chapter. This is not intended to imply that finite complement clauses without an explicit complementizer *that* are in line with McGregor's (2013) theory of optional markers which add interpersonal meanings (discussed in Chapter 5), but the term "non-introduced clause" had already been reserved for other purposes in Chapter 6 (to refer to a *that*-clause which is not introduced by the noun *fact*).

83 A distinctive characteristic of the reporting use of *regret (to say)* in Present-day English (though not attested in this data set) is that the addressee of the reported utterance can be made explicit, as in "Gaston often regretted to me that his weakness was that he did not know the Portuguese language" (Google, http://www.sundaytimes.lk!110130/Plus/plus_04.html).

Table 17 shows the number of instances of first-person *regret* in the BNC as a bare parenthetical (PAR), and instances followed by a *to*-infinitival verb of saying, a *that*-complement clause with or without overt complementizer *that*, or a gerund.[84] The abbreviations n, % and N stand for absolute numbers, relative (percentage) and normalized (per million words) frequencies respectively.

Tab. 17: *I regret* in the context of clausal constructions in the BNC

BNC	bare PAR	*to*-inf	*that*-clause	zero-clause	gerund	Total
n	10	44	57	9	14	134
%	7.5%	32.8%	42.5%	6.7%	10.4%	100%
N	0.10	0.45	0.59	0.09	0.14	1.38

To identify the various discourse contexts of parenthetical *I regret* and *I regret to say*, I firstly examined the communicative intent of the utterance and the way its communication affects and involves speaker and hearer. Secondly, I distinguished different functions of *regret* by determining the pragmatic or semantic contribution the verb's semantics make to the utterance as a whole. This led to a distinction between five broad discourse contexts.

First, *regret* can be used to soften the announcement of general bad news (294). In such uses, the reported situation can be considered worrisome to anyone, including both speaker and hearer. Neither speaker nor hearer are represented as (partly) responsible for the described negative situation, so the communication mainly consists of the giving and receiving of information without further involvement on the part of the participants. The report on a fatal explosion (294), for instance, conveys such general bad news.

(294) ***I regret to have to tell the House*** *that a bomb planted by the Provisional IRA exploded in Musgrave Park hospital at 3.53 pm last Saturday, killing two soldiers and injuring 11 other people* (BNC)

84 In the Present-day English data, all *to*-infinitives following *regret* are infinitives of verbs of speaking, optionally accompanied by a semi-modal auxiliary (as in *I regret to have to say*). Out of all 44 *to*-infinitives, 21 were structurally detached, that is, inserted within or appended to the host utterance that serves as the notional complement to the complex predicate. With *that*- and zero-clauses (and gerunds), *regret* always occurs in a main clause and thus in a structurally integrated position, so this brings the total of structurally detached instances in the BNC to 31 (10 bare parentheticals and 21 *to*-infinitives).

Second, the predicate can soften the announcement of more specific bad news (295)–(297). This use is similar to the previous one, except that the news is now reported to a specific hearer and the speaker is partly responsible for the reported situation; both speaker and hearer are thus more involved in the situation at hand. In (295), for example, the speaker admits to a close friend that, despite his best efforts to preserve the specimens of a botanical-zoological collection, a part of that collection could not be saved. In (296), a woman has invited two visitors to stay in her house, but she has to warn them: she and her family invoke – occasionally noisy – ghosts there.

(295) *"My Thanks are due,"... "for your instructions respecting the specimens in spirits, which I have since carefully examined, separated and supplied with fresh spirit; many of them* ***I regret to add*** *are much decomposed and I fear some may at last prove useless."* (BNC)

(296) *Drago has renovated sections of the loft area," she said. "It is where he formulates his experiments and conceives designs for new instruments. Fole and the others help him complete his designs, and subsequently assist in invoking the spirits. Sometimes,* ***I regret****, there is a frightful racket, but occasionally the discordant melds into harmony and a new resonance is reached.* (BNC)

Besides examples that depend strongly on a large amount of contextualization, a subtype of this use occurs in a very specific context, namely that of a polite refusal of a request, as in (297).

(297) *Your appeal against the above offer of permanent accommodation made available to you on 12/9/91 has been considered carefully but* ***I regret to inform you*** *that the appeal has not been allowed* (BNC)

Third, *I regret (to say)* can be used to soften the utterance of a negative opinion (298)–(301). In such cases, the speaker expresses a complaint about a situation while ascribing this negative situation to a specific group or person. The complaint typically appeals to a broader audience as a call for action or to prevent such negative situations from happening in the future. *Regret* expresses both the indignation on the part of the speaker and the mitigation of the possible offence that might be taken by the hearer.

(298) *We are dealing with the issue of investment and the necessity for it – which, **I regret to say**, the Chancellor of the Exchequer did not seem to understand.* (BNC)

(299) *If you produce a proposal, the first thing a lot of British engineers will do is tell you what's wrong with it. That, **I regret**, is a British characteristic.* (BNC)

Again, a particular subtype can be distinguished where such negative opinions are expressed in a direct reply to someone, namely when they introduce an expression of polite disagreement (300)–(301).

(300) *Let me be your guide, Myles," ... – "I'm not lost!" – "**I regret to say** I think you are.* (BNC)

(301) *I am, **I regret**, unable to agree that the judgment of the court beyond this or that, ..., can be supported or that it binds this court.* (BNC)

Fourth, *regret* can express an apology, in which case the speaker assumes full responsibility for the (non-)realization of a particular action that s/he is or was expected to carry out (302)–(303). Such hearer-directed expressions are equivalent in function to the interjection *sorry!*.

(302) *Joan and Sheila very kindly volunteered to wash all the curtains in here and they've been done. I've volunteered to take the stage curtains to the cleaners and I haven't done it yet **I regret to say** (laugh), so my apologies, it will get done eventually, er I hope.* (BNC)

(303) *A:"**I regret**, I cannot offer any refreshment, Madame," he said*
B: "I was not expecting a visitor!" "Please, don't apologise," she murmured (BNC)

Fifth and last, *regret* can be used as a text-structuring device signalling an afterthought or a specification on the part of the speaker (304). Such uses do not entail a strong involvement on the part of either speaker or hearer: the message that is conveyed is not specifically hearer-directed, nor need the situation described by the speaker be considered "regrettable" by the hearer. The emotive semantics of *regret* in such uses is weakened to the point that it merely expresses that something is "unfortunate" because stating it may counter hopes or expectations raised earlier in the context. In example (304), for instance, the speaker is making

predictions about horse racing. He begins by saying that two particular horses are too competitively bred and thus in his eyes unlikely to win. Then, however, he admits that "strictly on form, they are still sensible selections" and continues this counterbalancing of his initial reproval by saying that Brown Windsor has an additional advantage in that he "is well handicapped", i.e. he has relatively little extra weight to carry. The positive assessment of the horse's race chances is not a negative situation in itself, nor need it affect the hearer in a negative way – it is, however, opposed to the speaker's original negative judgement based on the horse's breeding conditions. In other words, *I regret to add* marks the continuation of a contrast; it serves as a cohesion marker in the broader discourse context.

(304) *Brown Windsor and Auntie Dot are the only two runners bred by their owners. That puts them firmly into my "wishful thinking" group but strictly on form, they are still sensible selections. Brown Windsor,* ***I regret to add****, is extremely well handicapped with Ghofar. Willsford would be my other suggestion.* (BNC)

In sum, parenthetical *I regret (to say)* has three primary functions: it can be used to soften an utterance (i–iii), to apologize (iv) or to indicate cohesive relations within the broader textual context (v). Whereas the announcement of general bad news (i) and the text-structuring device (v) are not directed towards a specific hearer and require little involvement between speaker and hearer, the other uses that were distinguished (ii–iv) are strongly interactional. Bare parentheticals (see examples (296), (299), (301), (303)) allow for an optional addition of *to say* and always occur in interactional contexts. As shown in Table 17, they remain infrequent as they are only a recent innovation, occurring from PDE onwards.

Up until now, I have illustrated the different discourse contexts for structurally detached instances of *I regret* and instances of *I regret to say* as these always co-occur with reported utterances. To turn to *that*- and zero-clauses following *regret*, these have traditionally been associated with factive complements only, as in (305).

(305) *Schrödinger said "If we are going to stick to this damn quantum-jumping, then* ***I regret*** *that I ever had anything to do with quantum theory".* (BNC)

However, *that*- and zero-clauses following *I regret* can also introduce reported utterances, as pointed out in Heyvaert & Cuyckens (2010). In fact, the same discourse contexts that were distinguished above can also be found for *that*- and zero-clauses following *I regret*. *I regret* can for instance introduce bad news,

mainly in the context of a polite refusal (306), or a complaint (307)–(308) that can take the form of an explicit disagreement (308). Somewhat more exceptionally, *I regret* with a finite complement clause can also function similarly to an apology (309) or to a text-structuring device indicating for instance a discoursal shift from a particular anecdote to a more general comment, as in (310).[85][86]

(306) ***I regret*** *that the committee decided it would not approve funding as detailed in your application.* (BNC)

(307) *I do not know what the hon. Gentleman means, but* ***I regret*** *that, as ever – and typically of Labour Members – the hon. Gentleman seems to glory in gloom and despondency in identifying the more negative aspects of things* (BNC)

(308) ***I regret*** *I cannot agree with some of the reasoning in the judgments.* (BNC)

(309) *My reports went to all British newspapers ... I was to some extent leading the British public astray. It has been on my conscience ever since.* ***I regret*** *I can shed little new light on the mystery of who blew the whistle on the celebrated dressing-room scene after Woodfull was hit.* (BNC)

(310) *RECENTLY I have been dragged, most unwillingly, into a ludicrous debate about whether hi-fi systems sound better if the room, records and electronics have been treated with coloured inks to convert the adverse effects of the gravitational field of the Earth into beneficial effects.* ***I regret*** *that this is not a joke. Some people do seriously believe that their records sound better if the labels are smeared with "neutralising cream" and stored with the sleeve notes pointing in a particular direction to align the printing inks.* (BNC)

The fact that an emotive verb such as *regret* can in PDE be used with reported utterances highlights the fact that the semantic construction types defined in Chapter 3 are realized by the entire construction, rather than on the basis of the

85 Concerning text type, the parenthetical function of *regret* occurs most frequently in fiction and in political reports or newspaper reports. The instances found in reports typically echo statements made to the press or to interlocutors in meetings, whereas those in fictional or biographical texts refer to conversations or letters.

86 Gerundial complements are strongly associated with the factive construction, though they can also be used to introduce reported utterances when modalized by an auxiliary indicating necessity (cf. (327d)) or ability ((cf. (328b) below). I will discuss this in 7.5.2.

complement-taking predicate only. In other words, we should not classify verbs, e.g. *regret* or *say*, as always and inherently factive or non-factive. As Heyvaert & Cuyckens (2010) pointed out, the different uses for *regret* also suggest that the reporting use is the result of a diachronic development in which the pre-existent complement of the emotive verb was reconceptualized to having the status of a reported utterance in specific constructional environments. This is what we will turn to in the next section.

7.5 A diachronic analysis: the development of *to*-infinitives and reported speech patterns

The first parenthetical uses of *regret (to say)* in Late Modern English are found in the period 1780–1850, and already occur in structurally detached positions and in various pragmatic uses. This sudden attestation and variety in parenthetical uses, probably due to the relative scarcity of data for the preceding periods, makes it difficult to give a detailed historical account of the pragmatic development of *regret (to say)*-parentheticals. This section will therefore take a broader perspective and consider the various clausal constructions *regret* can occur with over time. More specifically, I will describe the development of (various types of) *to*-infinitival complements following *regret* and the effect this development had on other complement patterns following the verb. Particular attention will be given to the Late Modern English development of one particular subtype of infinitival complement that became increasingly frequent and conventionalized, i.e. that of "*regret* + *to*-infinitival verb of saying".

Tables 18 and 19 below represent the distribution of clausal complement patterns following first-person instances of the verb *regret* in Late Modern English. The data show a strong increase in *to*-infinitival complements throughout the period. At first sight, the use of *regret* to introduce infinitival complements appears to be very sudden – the first instance in the OBO (311), containing an infinitival verb of saying, occurs in a structurally detached position and the *to*-infinitival pattern is immediately relatively frequent, as there are already 10 instances in the corpus in the first six years of attestation (see Table 18).

(311) *the fact is, the note, **I regret to say**, came into my possession at a gambling-house, and I gave 134l. in exchange for it* (OBO2, 1834)

However, if we consider data from Early Modern English, the emergence of *to*-infinitival complements after the verb seems to have taken place earlier, with first-person instances already in the course of the 17th century (see (314) and (317)

below). Such instances of *regret* with a *to*-infinitive, or indeed of the verb *regret* in general, remain rare in Early Modern English. Where occurrences of the verb *regret* are found, it is most typically construed with noun phrase complements (312) or somewhat less frequently with *that*-complement clauses (313a) or even zero-clauses (313b). I will focus on the non-finite complement patterns (which can themselves introduce another *that*-clause) and not discuss the *that*-clauses in detail.

(312) *the kyng demetrius* ***regrettit*** *hauyly the slauchtir of his fadir antigonus* (EEBO, 1550)

(313) a. *Augustin, whyle some tolerable estate of a Church still remayned, yet heavilie,* ***regraiteth****, that even in his time the Church of God (which her Lord will have to bee free) was so burdened with multitude of superfluous and superstitious ceremonies, as the state of the Iewes, vnder their Pedagogie was more tolerable.* (EEBO, 1614)

b. *I tell you again and again, I have no quarrel with such of them as are calm and modest, only* ***I regrate*** *they are too few.* (EEBO, 1669)

The diachronic analysis will be subdivided in two sections. Sections 7.5.1 and 7.5.2 will deal with complement patterns following *regret* in Early Modern and Late Modern English respectively. Section 7.5.3 places the analysis for *regret* (*to say*) in a broader perspective, by proposing that it is a part of a wider phenomenon in which emotive predicates come to function as an illocution modifier.

Tab. 18: First-person singular instances of *regret* in the OBO

OBO	*To*-inf	*That*-clause	Zero-clause	Gerund	Total
1710–1780				1	1
				100%	100%
1780–1850	10	17	4	7	38
	26.3%	44.7%	10.5%	18.4%	100%
1850–1913	55	38	20	19	132
	41.7%	28.8%	15.2%	14.4%	100%

Tab. 19: First-person singular instances of *regret* in the CLMETEV

CLMETEV	*To*-inf	*That*-clause	Zero-clause	Gerund	Total
1710–1780		1		1	2
		50%		50%	100%
		0.33		0.33	0.66
1780–1850	8	36	1	12	57
	14.0%	63.2%	1.8%	21.1%	100%
	1.40	6.29	0.17	2.10	9.96
1850–1920	24	18	2	2	46
	52.2%	39.1%	4.3%	4.3%	100%
	3.84	2.88	0.32	0.32	7.36

7.5.1 Early Modern English

Early *to*-infinitives following the verb *regret* fall into four distinct semantic categories (see Table 20 below for a summary). A general semantic distinction will be made between those infinitival complements that pertain to knowledge of a state of affairs, which I will refer to in this chapter as epistemic non-finite complements, and those that involve the potential actualization of an event, which I will refer to here as "non-epistemic" or "root" non-finite complements. The non-finite complements cannot in themselves contain speaker-related modal grounding (see Chapter 4), but as we will see, they can be subdivided into different types on the basis of their relation to a broader distinction between epistemic and deontic-dynamic modal notions.

As a first subtype of infinitive, *regret* can take epistemic knowledge complements, as in (314a–b).

(314) a. *I should not have offered to oppose you, had I known what Interest inspir'd and enflam'd your courage, and I do much regret* ***to have resisted*** *one that was so bravely busied in his quarrel, who is my Soveraign Lord, no less then [sic] he is yours.* (EEBO, 1664)

b. *Fourthly, I regreat* ***not to be [the] Anvile****, for any ingenious Hammer to make pleasant musick on* (EEBO, 1659)

Such complements, which specify the cause for regret, take the form of a perfect infinitive (314a) or, less commonly, of the infinitive *to be* followed by a subject complement (314b). The epistemic knowledge complements presuppose

knowledge of a situation that has (at least partially, in the case of an unbounded state as in (314b)) actualized temporally prior to the act of regretting and to the moment of speaking. In example (314), for example, the speaker expresses his emotion with respect to a situation ("his resistance") of which he has stable knowledge that it has occurred. This epistemic type of infinitive comes closest to the traditional definition of factive complements as "presupposed true by the speaker", which can be considered to entail that the speaker has a commitment of full epistemic certainty to the proposition contained in them (cf. also Chapter 4).

Besides epistemic knowledge complements, I found factive "non-epistemic" (i.e. root modal, or non-speaker-related deontic and dynamic) complements with *regret* in which not the knowledge of the complement proposition is presupposed, but rather the necessity for an action to be realized. As illustrated in (315), the infinitive clause in this second subtype expresses a pre-existent necessity ("regret to have to die" in (315)), and the state of affairs expressed by the infinitival complement is temporally posterior to the act of regretting.

(315) *if Christ had not given us assurance of a Blessed Immortality, there is not even a good Man who would not regret* ***to dye****.* (EEBO, 1700)

Note that the semi-modal need not be stated explicitly (as it is not in (315)). The idea that factive complements can involve both epistemic complements, involving knowable propositions, and non-epistemic complements, expressing potential actions, is not generally accepted, even though it has always been a part of the Hallidayan approach to factivity (see Halliday 1985: 246–247; see also Chapter 4).

A third, minor subtype of complements, illustrated in (316), similarly refers to a state of affairs that is located posterior to the regretting, but it can be seen to express reported absence of volition[87] (similar to "not want to") rather than necessity.

(316) *Earls, Bishops, Knights, Aldermen, Deans, Archdeacons, Heads and Governors of Colledges and Halls; and who wou'd regret* ***to be joyn'd*** *in so good a Company?* (EEBO, 1699)

87 Following Declerck (1991), I will use the term "absence of volition" to refer to external negation in the context of volition, that is to say that the negation applies to the modality of volition.

This subtype, however, is ambiguous between a true non-volitional non-epistemic reading and a conditional epistemic factive reading: in example (316), for instance, the infinitive can be interpreted to specify an object of absence of volition as in "who wouldn't want to be joined in so good a company?" but it can also express a potential recurrent cause for regret as in "who would regret it if/whenever they were joined in so good a company?". This semantic type of *to*-infinitive seems to be limited to the specific constructional environment in which *regret* is (at least implied to be) preceded by hypothetical "*would*/*should*", a context which has been found to specialize for the "polite expression of unfulfilled volition" for the verbs *like* and *love* in the context of a *to*-infinitive (De Smet & Cuyckens 2005: 23).

A final subtype, then, is construed with an infinitival verb of perception such as *hear*, *find*, or –most frequently– *see* that takes a complement (317).

(317) a. *I have often regrated **to see** the Iesuits so miserably baffle men, maintaining this odd and uncouth notion* (EEBO, 1678)
b. *Yet I could not but regret **to hear** another Lady whom I esteemed much more say, Oh, that my Debts were paid; to the end I might have the great pleasure of doing works of Charity* (EEBO, 1691)

In line with the semantic cline (emotion > knowledge state > knowledge acquisition) I proposed in Chapter 3, the perception infinitive can be seen to make the phase of knowledge acquisition presupposed in the emotive verb explicit. This has an "immediacy effect", whereby the emotion is interpreted as temporary and immediately triggered by the act of perception. As a result, *regret* can be seen to stand in a relation of simultaneity to the perception expressed in the infinitive. Contrary to the other subtypes, *regret* in this subtype seems to modify rather than govern the act of perceiving: *regret to see/hear* in example (317a–b) is equivalent to *see/hear with regret/sadness*. In fact, the noun *regret* is at the end of the Early Modern English period regularly used in an adverbial construction *with regret* modifying verbs of perceiving or saying[88] as in (318).

(318) a. *Oh! How like do they shew themselves (I mention it **with Regret**) to the Scribes and Pharisees of Old, who of all men most cried up and exalted Moses and the Prophets* (EEBO, 1692)

88 The modifier *with regret* is also common in extraposition constructions, as in *My Lord, 'tis with Regret I see you go* (EEBO, 1700).

b. *The Protestants saw **with Regret**, that they themselves were within an immediate Prospect of losing the most considerable Support of their Religion* (EEBO, 1700)

As soon as the verb developed a *to*-infinitive, this infinitival complement appears to come to function as an alternative construction to the adverbial one whereby *see with regret* can be replaced as *regret to see*. This modification use, already well-established with infinitival perception verbs in Early Modern English, was in Late Modern English extended to *to*-infinitival complements with verbs of saying that can introduce reported utterances, as we will see in the next section. Table 20 summarizes the types of infinitival complements that were found with the verb *regret* at the end of the Early Modern English period.

Tab. 20: Types of infinitives following *regret* by the end of the Early Modern English period

Temporal orientation of the infinitive	Semantic type of inf. construction	Realization patterns	Repeated and shortened example
ANTERIOR starting point	A. Epistemic knowledge	regret to have (past participle)	(314a) *I do much regret to have resisted him*
		regret to be (subject complement)	(314b) *I regreat not to be Anvile, for any ingenious Hammer to make pleasant musick on*
simultaneous	B. (modifier to) Epistemic perception	regret to PERCEPTION VERB (complement)	(317a) *I have often regrated to see the Iesuits so miserably baffle men*
POSTERIOR	C. Non-epistemic	regret to (infinitive)	(315) *there is not even a good Man who would not regret to dye*
	D. Reported volition / conditional epistemic	regret to (infinitive)	(316) *who wou'd regret to be joyn'd in so good a Company?*

No instances of *regret to say* with reported utterances were found in Early Modern English. There is, however, one instance of *find regret* with an infinitival verb of saying, given in (319).

(319) *Yet I find much regret* ***to relate*** *what I am going to inform you of; for I must renew all my sorrows* (EEBO, 1678)

This example is an instance of the factive non-epistemic construction ("I find regret to have to relate what I am going to inform you of") and does not yet have an illocutionary layer for the complement. The *to*-infinitival complement it contains is in itself a manipulative (rather than reporting) construction (see Chapter 3): it involves the combination of a verb of saying with a nominalized complement, and has the semantics of conveying a pre-existent proposition rather than creating an utterance. For *regret* to come to function as a reporting predicate, two semantic shifts are involved: (i) the pre-existent proposition in the complement to the secondary verb of saying is reconceptualized to having the status of a created utterance, which then allows (ii) the emotive meaning of *regret* to function as a modifier to the illocution of this reported utterance. It is only when this reconceptualization has taken place that the *regret*-clause can occur as a parenthetical clause attached to the reported utterance.

Early instances of gerund complements following the verb *regret* (320a–b), are used to introduce epistemic knowledge complements describing a situation anterior to the act of regretting as in (320a).

(320) a. *For therein he seems even to regret* ***his being bred*** *a Protestant* (EEBO, 1686)

b. *the Priest having taken the names of all the Virgins of Quality … put them into a large Urne, … at length the twentieth Ticket being drawn and open'd, Clelia's name was found in it. … As for Clelia, she did not certainly know what sentiments she ought to have: by reason of her natural modesty she could not but regret* ***at her going*** *to Porsenna's Camp* (EEBO, 1678)

One instance of a factive non-epistemic gerund was also found (320b), introduced by the preposition *at*. As the gerund is more restricted in use than the slightly earlier established infinitival construction following *regret*, the non-finite complement patterns that the verb *regret* developed in the second half of the 17th century are only partly interchangeable and thus allow for the possibility of functional differentiation between the two patterns. Indeed, in Late Modern English the gerund will take over the function of introducing epistemic knowledge complements entirely (see (324) below).

7.5.2 Late Modern English

In the Late Modern English data, the first instances of *regret (to say)* with reported utterances are found – first with infinitival complements ((321), (311) above), and shortly thereafter with *that*- or zero-complement clauses that are semantically equivalent to instances with an explicit infinitival verb of saying (322a–b).[89]

(321) *Q. You had been drinking more wine than you ought to have done?*
A. ***I regret to say*** *that was the case* (OBO2, 1843)

(322) a. *Sir, –* ***I regret*** *extremely that my engagements are so numerous I cannot possibly call on you to-day or Monday* (OBO2, 1845)
b. *Dear Sir We have received your letter of yesterday, whereby we observe that the sun we have remitted you will not be sufficient to cover all expenses to clear the ship.* ***We much regret*** *you have omitted mentioning the sum you require which prevents our remitting you the same by this very post* (OBO2, 1843)

There is a growing tendency in Late Modern English for *regret* to occur only with infinitival complements introduced by *to say* or other infinitival verbs of saying (with or without a preceding non-epistemic semi-modal, see below) – which is in fact the case in the PDE data.

As mentioned in 7.5.1, this new construction is closest in function to the *regret to see*-type distinguished for Early Modern English (B in Table 20): the predicate *regret (to say)* expresses a modification of the following locution and is

89 The development in which *regret* first takes a *to*-infinitival verb of saying followed by a propositional complement and then comes to express the same function in the absence of a *to*-infinitival verb of saying is similar to Van linden & Davidse's (2009) findings. Van linden & Davidse (2009) describe the diachronic development of "mandative" complements (Huddleston & Pullum 2002: 996) "expressing desired action" and propositional complements "describing arguable claims" (2009: 171) following deontic-evaluative adjectives such as *important* in extraposition constructions. They show how adjectives of importance originally take mandative complements. The first instances with propositional complement clauses in their data first appear as secondary complements to a mandative complement containing "a verb of cognition or verbalization such as *observe*, *notice*, *remember*, …" (2009: 196). To illustrate such a mandative-propositional construction, they (2009: 174) cite an example such as "It is important to realise that in these times of fast change it can be dangerous to let things drift" (WB). In later instances with propositional complements, it seems that "the mandative cognition or verbalization predicate was dropped from the combined pattern, while still being implied in some sense" (2009: 199).

equivalent to an adverbial construction *say with regret* (see also (318) above). It has in fact previously been pointed out that *regret* can take reported rather than fact clauses when it is functionally equivalent to *say with regret* (Davidse 1999a: 367; Heyvaert & Cuyckens 2010).

In the perception verb-construction, the *regret*-clause modifies the state of affairs expressed in the infinitival clause and thus remains on the descriptive, i.e. representational, level. Factive complements have no illocutionary layer (de Cuba & Ürögdi 2010); by contrast, complements of constructions of the *regret to say*-type can contain such an illocutionary layer (cf. (287b) above), in which the speech event is simultaneous with the represented speech situation and – in the case of first-person, simple present tense examples such as (293b) and (321) – at the same time coincides with the time of utterance. With the extension to the *regret to say*-construction, the modification comes to apply to the illocution itself, on the higher interpersonal level.

Besides the new function of the *regret*-clause as illocution modifier to a reported utterance, this use in which *regret* comes to introduce reported utterances also differs from the factive constructions in terms of syntactic alternations. As pointed out by Davidse (1999a: 367), reporting uses for *regret* allow for clausal substitution with *so* in the context of an affirmative reply – the reply in (321) can readily be replaced by *I regret so* in PDE. Heyvaert and Cuyckens (2010: 153) indicated another syntactic difference between reporting and factive uses of the verb regret: reported utterances "[do] not seem to have an equivalent in *-ing*". The clauses in (321) and (322), for instance, indeed resist alternation with a gerundial complement. It was also shown that *I regret* and *I regret to say* can occur as a structurally detached parenthetical – a property that is similarly associated with non-factivity. As such, the development in which *regret* comes to function similarly to a verb of speaking goes hand in hand with the acquisition of non-factive grammatical patterns associated with the reported speech paradigm.

In Early Modern English, the first infinitival constructions following *regret* were of three major types: epistemic knowledge complements, modification of epistemic perception infinitives, and non-epistemic complements. A minor category of indirectly reported volition complements resembles the factive epistemic and non-epistemic categories either in its hypothetical truth presupposition or in its future temporal orientation. In Late Modern English, the perfect infinitives have become rare, although an occasional instance can still be found (323). Note that the "anterior" function of the perfect infinitive is now expressed by gerundial complements, with or without a perfect auxiliary *have*, as in (324a) and (324b) respectively.

(323) *I regret deeply **to have caused** your Royal Highness the slightest inconvenience, and from my heart I deeply deplore it* (OBO3, 1874)

(324) a. *How much do I regret **not having had** more opportunities of showing you my esteem and love, before this new attention* (CLMETEV1, 1742)
b. *I instantly accosted him, and had no reason to regret **doing** so; I found him affable and communicative*. (CLMETEV2, 1842)

Instances of *regret* modifying epistemic perception infinitives (325) are still common. Note, however, that perception verbs can function rather as verbs of saying when they introduce finite complements (325c), in which case they too may have an illocutionary layer. The reported volition/conditional epistemic factive category (326) is still, though infrequently, attested.

(325) a. *perhaps I said I regretted **to hear** of his difficulties* (OBO2, 1843)
b. *I regret to find that through an oversight the 1911 edition was also published under that name* (OBO3, 1911)
c. *I regret **to observe**, that the removal of the moral restraint imposed by the presence of the Mahometan inhabitants has led to a certain degree of boisterous, though innocent, levity in the bearing of the Christians* (CLMETEV2, 1844)

(326) *I do like to hear from you – more than like. Next to seeing you, I have no greater satisfaction. But you have other duties, and greater pleasures, and I should regret **to take** a moment from either*. (CLMETEV2, 1811)

The factive non-epistemic category, then, has undergone some changes in the course of the Late Modern English period: non-finite non-epistemic complements following *regret* are now almost exclusively used in two specific uses that were not yet attested in the Early Modern English data. Firstly, a new infinitival construction developed that combines root necessity with a complement-taking verb of saying. In this construction, *regret* introduces an infinitival verb of saying followed by a propositional complement, with the verb of saying being preceded by an explicit root modal expression indicating necessity as in *I regret to have to add* (327a). The complex expression can as a whole be used as a modifier to an anchor clause or even phrase, as in (327a). In this respect, the *to*-infinitival type is similar to the illocution-modifying *regret to say*-construction.

(327) a. *the question received its final settlement; at a great sacrifice, not only of the time and peace of mind of that eminent philosopher, but,* ***I regret to have to add****, of his health. But the sacrifice has not been in vain.* (CLMETEV3, 1894)
b. ***I regret to be obliged to put it so plainly****, but I was displeased by Winterbotham's tone about your brother* (CLMETEV3, 1901)
c. ***I regret that I have to conclude*** *that the omens for retaining national control of vital areas do not look good. (BNC)*
d. ***I regret having to say*** *that I disagreed with almost everything he (Mr Hurd) said* (BNC)

However, this type of infinitival construction can in PDE be alternated with *that*-clauses (327c) and even with gerunds (327d), which the reporting *regret to say*-construction cannot (compare **I regret that I say that I disagree*; (in the intended sense) **I regret saying that I disagree)*. The grammatical alternates suggest that this particular combination of root necessity with a complement-taking verb of saying is still considered a factive non-epistemic construction, in which the necessity to declare a particular proposition is conceptualized as pre-existent.

Note that this is not entirely unexpected as, historically, the *regret to say*-construction may well have developed from such non-epistemic constructions (see (319) above), before the complement received an illocutionary layer and the *regret*-clause came to be able to function as a modifier to this illocutionary layer. Secondly, a similar non-epistemic construction indicating absence of ability, as in (328a), also came to be used in Late Modern English and is again also found in gerundial (328b) and *that*-complement constructions (328c).

(328) a. *on 6th I received his post-card saying, "Referring to our conversation* ***I regret to be unable*** *to do as requested* (OBO3, 1898)
= "regret (to say) I am unable to do as requested"
b. *on 2nd June I received the letter: "****I regret not being able*** *to get the money till the middle of next week. C. HANCORN"* (OBO3, 1887)
c. *My dear Sir,—I beg to say that I have received your message, and* ***regret that I am not able*** *to call upon you owing to the state of my health.* (OBO3, 1856)

Similar to the necessity construction with verbs of saying, it may be precisely the inability to perform a particular action that is conceived of as being pre-existent. Table 21 sums up the types of infinitival constructions found with *regret* in Late Modern English.

Tab. 21: Types of infinitival constructions following *regret* in Late Modern English

Temporal orientation of the infinitive	Semantic type of inf. construction	Realization patterns	Repeated and shortened example
ANTERIOR	A. Epistemic knowledge (rare)	regret to have (past participle)	(323) *I regret deeply to have caused your Royal Highness the slightest inconvenience*
simultaneous	B. (modifier to) Epistemic perception	regret to PERCEPTION VERB (complement)	(325a) *I regretted to hear of his difficulties*
	B'. Modifier to illocution of complement of verb of saying	regret to VERB OF SAYING (complement)	(321) *I regret to say that was the case*
POSTERIOR	C. Non-epistemic	regret to have to VERB OF SAYING (complement)	(327a) *at a great sacrifice, not only of the time and peace of mind of that eminent philosopher, but, I regret to have to add, of his health*
		regret to be obliged to (infinitive)	(327b) *I regret to be obliged to put it so plainly*
		regret to be unable to (infinitive)	(328a) *I regret to be unable to do as requested*
	D. Reported volition / conditional epistemic factive (rare)	regret to (infinitive)	(326) *I should regret to take a moment from either*

7.5.3 Productivity of the diachronic development

The development in which *regret* comes to be used as an illocution modifier is part of a more widespread phenomenon: a wide range of emotive predicates can readily be used as illocution modifiers in Late Modern English to express either reluctance (329a) or, by contrast, willingness (329b–c) to make a particular statement.

(329) a. *"But you don't think it will blow harder, Ready?" "I am **sorry to say**, sir, that I do.* (CLMETEV2, 1841)
b. *I **rejoice to say** that we have just had another letter from our dear Frank.* (CLMETEV2, 1800)

c. *whatever advantage has arisen, subsequently, from the sale of this volume of the "Lyrical Ballads," I am* ***happy to say****, has pertained exclusively to Mr. W.* (CLMETEV2, 1847)

Besides the illocution modifier use, the various predicates seem to occur with roughly the same different infinitival constructions as *regret* does. The predicate *be happy*, for instance, occurs with all 5 types of *to*-infinitives (A, B, B', C and D in Table 21) established for *regret*. The only notable difference is that, probably due to the positive orientation of the emotive predicate, the non-epistemic construction seems to be limited to the subtype indicating ability (thus excluding the necessity subtype), and the non-epistemic construction combined with verbs of saying is also construed with modal expressions of ability rather than necessity (i.e. as *be happy to be able to say p*), as illustrated in (330).

(330) *In presenting to my readers the account of the meeting of men of science at Berlin, in the autumn of 1828, I am* ***happy to be able to state****, that its influence has been most beneficial, and that the annual meeting to be held in 1831, will take place at Vienna* (CLMETEV2, 1830)

Nevertheless, the *to say*-pattern, and, by extension, the introduction of reported utterances in *that*-complement clauses is not equally entrenched for all emotive predicates in PDE. Some emotive predicates, such as *hate*, *like* and *love* (see (331)) continue to resist occurring with reported utterances with or without *to say* in PDE. In (331a), the reported utterance is relegated to a coordinated clause and in (331b), *like/love to say* do not modify a particular illocutionary act but express a mix of enjoyment of a hypothetical action ("enjoys it when they can say yes/no"; conditional epistemic factive) and habituality (see De Smet & Cuyckens 2005).

(331) a. *Could he have had a fall or tripped or something?" "That's not likely is it? I* ***hate to say*** *this but I do rather think from the bruising that someone did it to him."* (BNC)

b. *He mocked the Trade and Industry Department as "the department of abandoned responsibilities – not the business that likes to say yes, but the department that* ***loves to say*** *no."* (BNC)

Already in Late Modern English, the infinitival construction types occurring with *hate*, *like* and *love* seem to be restricted to the epistemic factive (332a) and reported volition (332b) constructions, or are ambiguous between the two. Moreover, they co-occur with hypothetical or at least potentially recurring situations,

whereas *regret* is typically used to refer to singular occurrences. The fact that these predicates are not used as modifiers to verbs of saying or perceiving may be due precisely to this "non-specific" complement type. In (332a), for instance, *he liked to see her reading poetry* is not equivalent to *he saw her reading poetry with great fondness* – the potential reoccurrence of the complement rather makes it equivalent to the conditional epistemic factive construction *he liked it if/whenever he saw her reading poetry*. Similarly, like in (332b) expresses the potential volition to make a particular comment rather than the making of a particular statement with enjoyment.

(332) a. *His affection for his present wife grew steadily. Her cleverness gave him no trouble, and, indeed, he* ***liked*** *to see her reading poetry or something about social questions; it distinguished her from the wives of other men.* (CLMETEV3, 1910)

b. *"If," remarked Rhoda, "it were first provided that no marriage should take place until after a ten years' engagement." "Yes," Barfoot assented, in his smoothest and most graceful tone. "That completes the system. Unless you* ***like*** *to add that no engagement is permitted except between people who have passed a certain examination; equivalent, let us say, to that which confers a university degree."* (CLMETEV3, 1893)

7.6 Conclusion

This case study had the aim of showing how an emotive predicate, traditionally associated with the paradigm of factive constructions, may acquire uses that realize the semantics of a reporting construction. I focused on a specific construction, *I regret (to say) p*, for which I provided both a synchronic analysis of the range of functions it can fulfill as an illocution modifier, and a diachronic analysis of how these functions developed.

In the synchronic section, I set out to demonstrate in which contexts the reporting use of *I regret (to say)* is found in present-day usage. I proposed five specific discourse contexts in which *I regret (to say)* comes to modify the illocution of a reported utterance: *I regret (to say)* can be used to soften announcements of (i–ii) general or more hearer-specific bad news or of (iii) complaints or disagreement; it can be used (iv) to express an apology or it can function (v) as a text-structuring device. In these uses, *I regret (to say)* can occur in structurally detached positions and encodes a range of meanings, varying from the anticipation of a negative reaction on the part of the hearer to the mere textual marking of contrast or specification.

In the diachronic section, then, I traced the emergence of (mainly) *to*-infinitival complements following *regret* in the Early Modern English and Late Modern English periods. It is argued that a specific type of *to*-infinitive, introducing a verb of saying, provided the constructional environment in which the parenthetical use of *I regret* developed. Although *to*-infinitives were not included as a potential factive construction by Kiparsky & Kiparsky (1970), the Early Modern English data show that, at least historically, a *to*-infinitive following *regret* could express epistemic factive and non-epistemic factive complements, as in *I much regret to have resisted him* (see (314a) above) or *who would not regret to (have to) die?* (see (315) above) respectively. Besides governing a factive complement, the *regret*-clause could also be equivalent to an adverbial modifier *with regret* and thus function as a descriptive modifier to an act of perceiving, as in *I have often regrated to see the Iesuits so miserably baffle men* (see (317a) above).

In Late Modern English, the first instances of *regret to say* with reported utterances are found, and this construction gradually ousts all other infinitival construction types with *regret*. The *regret to say*-construction probably developed via the non-epistemic factive construction (see (319) above) before the complement to the verb of saying was reconceptualized as a reported utterance with an illocutionary layer, with respect to which the emotive predicate came to function as an interpersonal modifier. The only infinitival constructions in PDE that are not directly introduced by a verb of saying are in fact non-epistemic constructions, as in *I regret to have to say that I disagree* or *I regret to be unable to come*. These constructions allow for factive alternations by means of gerunds or *that*-clauses (see (327)–(328) above), which suggests that also synchronically, factive complements may involve commitment to a pre-existent necessity or ability besides to pre-existent epistemic complements (see also Chapter 4).

The main point was to demonstrate the flexible contextual realization of the semantic construction types outlined in Chapter 3: even predicates whose core semantic function seems to be strongly associated with one construction type can be construed in formal and semantic alignment with another construction type. In the case of *regret*, this involved a reconceptualization of (i) the semantic status of the complement clause into a reported utterance, and of (ii) the function of the predicate into that of a modifier.

8 Conclusions

8.1 Summing up

This study has dealt with the contrast between factive constructions and constructions of reported speech or thought. I identified a third category, which I refer to as manipulative constructions, that is semantically and grammatically in between the latter two. I have focused on the notion of factive presupposition, which is traditionally defined as the presupposition by the speaker that the proposition in the complement clause is true (Kiparsky & Kiparsky 1970). I proposed to reconceptualise this notion into two concepts operating at different semantic levels, i.e. those of representational and interpersonal semantics.

The main theoretical contribution of this study is that it provides a new conceptual characterization of factive, manipulative, and reporting complementation constructions, which covers both levels of representational and interpersonal semantics. In terms of representational semantics, it was proposed in Chapter 3 that factive, manipulated, and reported complement clauses can be respectively characterized as being unaffected, affected, and effected by the situation described in their main clauses. Factive main clauses (e.g. *He resents p*) refer to a situation involving cognitive contact with or emotional reaction to a proposition. The proposition is conceptualized as being "pre-existent to" (Davidse 2003: 126) to the situation described in the factive main clause. Manipulative main clauses (e.g. *He denied p*; *He printed p*) describe an act of modification or re-creation, which implies that their complements are also pre-existent to this act. Reporting clauses, then, (e.g. *He claimed p*; *He thought p*) have the abstract semantics of creating an utterance in a speech or thought act. The utterance represented by the complement clause only exists as a result of the occurrence of the matrix act of speaking or thinking. The two central semantic features of creation versus pre-existence, and affectedness versus unaffectedness are summed up once more in Table 22.

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Tab. 22: The semantic relation between predicate meanings and semantic types of complement clauses: the two relevant semantic features

	created *p* e.g. *he said p*, *he thought p*	**manipulated *p*** e.g. *he denied p*, *he restated p*	**unaffected *p*** e.g. *he regretted p*, *he discovered p*
predicate describes a *change* affecting *p* (creating, modifying or re-creating *p*)	+	+	-
situation described by predicate implies *pre-existence* of *p*	-	+	+

From a semantic-aspectual viewpoint, the relation between the main clause and the complement clause in object position can be characterized as follows. In factive constructions, the main clause does not effect a change on the complement. I characterized this as a stative status for the complement with respect to the matrix situation. In manipulative constructions, the main clause does effect a change on the complement, e.g. a change in polarity (with *deny*), a change of state (e.g. with *print*), or a re-creation (e.g. with *restate*). The relation can be characterized as stative for the input entity, but also defines a subevent that represents the change towards the outcome of the process. In reporting constructions, the relation between main and complement clause is inherently dynamic and directional: the complement clause defines a separate subevent in a complex event structure.

These semantico-aspectual characterizations were correlated with the distinct grammatical behaviour of the three types of complement clauses, e.g. the effect of main clause negation, the nominal status of factive and manipulated complements as opposed to the clausal status of reported complements, etc.

I further pointed out the relation between specific subclasses of complement-taking predicates. Especially for factive constructions, I proposed that three semantic classes of predicates can be placed on a cline of semantic complexity, reproduced in (333).

(333) REALIZE p < KNOW p < LOVE p

It was proposed that knowledge acquisition predicates (e.g. *realize*) are semantically least complex: they only convey the transition towards a potential state of knowledge of a pre-existent proposition. Importantly, knowledge is not defined

in terms of a truth commitment to the pre-existent proposition, but instead as knowledge of the existence of the particular proposition (see Chapter 3 and 4). A knowledge state, then, (e.g. *know*) presupposes a prior moment of acquiring knowledge, and has the potential to trigger an emotive reaction. Finally, emotive predicates (e.g. *love*) inherently presuppose a prior knowledge state, and inception of that knowledge state, with respect to the complement proposition that is reacted to.

In Chapter 4, I turned to the interpersonal semantics of the three complementation constructions. It was proposed that the three complement types can all incorporate both epistemic and certain types of deontic speaker-related modal positioning. Unlike what has been proposed in the literature (see Chapter 4 and 2.1.3), the potential for explicit modal positioning is therefore argued to be a feature that is shared across the three construction types (cf. Halliday 1985; Davidse 1991).

The different complementation constructions do show differences with respect to the possible sources of the modal stance in the complement. In reporting constructions, the modal stance in the complement stems from the represented speaker or cognizer identified in the main clause. This links up with the representational semantics of the construction: reported complements represent unique entities created in a speech or thought act; they therefore depend on the specific circumstances of this speech or thought act for their interpretation. In manipulative and factive complementation constructions, the source of the modal stance was found to be more variable. The complement-internal position can relate to the actual speaker, to a represented speaker or cognizer, or to a third party, i.e. an "echoed" speaker. This variable modal source can be predicted from the representational semantics of factive and manipulative complementation constructions: both construction types have a complement that is pre-existent to the main clause situation. This independent existence allows for the content of the complement to relate to various sources.

Chapters 5 to 7 give a new descriptive account of three constructional alternates, which have often been claimed to be diagnostic tests of (non-)factivity: object extraposition, *the fact that*-clauses, and complement preposing (i.e. parentheticals). I have nuanced their status as recognition tests, showing that the two alternates claimed to positively identify factive constructions – object extraposition and *the fact that*-clauses – are in fact also possible with other types of complementation constructions. I described how the shift can also work in parentheticals (with or without a *to*-infinitival verb of saying), which are traditionally considered a diagnostic test for reporting constructions. These were associated

with the historical derivation of a reporting sense from a factive predicate meaning for *regret*.

I have identified distinctive semantic and formal characteristics defining these constructional alternates, thus explaining their contexts of occurrence and their relation to the three complementation types that were distinguished in Chapter 3. Central to all three chapters is the point that using these constructional alternates can induce a shift from a complementation construction of one type to that of an another type (e.g. from a reporting construction to a manipulative construction). This adds a dynamic component, which allows for synchronic and diachronic shifts, to the conceptual characterizations proposed in Chapters 3 and 4.

8.2 Brief outlook

Naturally, I would like to expand on the model proposed here in the future, to form a more complete picture of how the representational and interpersonal semantics of complementation constructions and the harmonic or coercive combinations with certain constructional patterns work across a wider range of complement types, in Present-day English but also in diachrony and cross-linguistically. In the following paragraphs, I will only touch upon a few possible expansions.

Firstly, the scope of the study could be extended to systematically cover non-finite complements (e.g. gerunds, accusative and infinitive constructions, etc., see Chapter 1, 2, and 7). These do not explicitly incorporate speaker-related modal positioning (see Chapter 4), which is the main reason why they were not dealt with in detail in this project. Nonetheless, it would be interesting to assess which core semantic and formal features account for their proposed relation (Kiparsky & Kiparsky 1970) to the factive or the reporting paradigm respectively, and to see in what respect their grounding mechanisms are in line with, or influenced by, the construction types they occur with. The extension to non-finite complements further begs the question of the status of a related semantic complementation construction type, i.e. that of reported volition (e.g. *want* + *to*-infinitive). Reported volition has been considered to be closely related to reported speech and thought. One typological fact that supports this affinity is the tendency for complement-taking predicates to be polysemous between reported speech, reported thought, and reported volition (e.g. Spronck 2015, 2016). Besides reported volition, the case studies also highlighted the relation to causative constructions which are exceptionally construed with a propositional rather than a states of affairs object

(see e.g. Chapter 5, with examples such as *engineer it that*…, and Chapter 6, with examples such as *reverse the fact that*…).

In relation to the characterization of non-finite complement types, prior studies have already highlighted the intentful, volitional, or goal-oriented (see e.g. Bolinger 1977: 151; Rudanko 1989: 35) nature of the *to*-infinitive as a construction, which is of course harmonic with the inherently directional, and main clause situation-dependent interpretation of reporting constructions. The more flexible nature of the gerund with respect to temporal and modal grounding (see e.g. De Smet 2010) in turn lends itself well to the more variable referential interpretations of pre-existent entities. By charting the possibilities for harmonic and coercive combinations across factive, reporting, and manipulative construction types, and comparing it to studies of the systematic grammatical and semantic differences that characterize factive and reporting constructions across different finite subordinate clause types (declarative, interrogative, exclamative) in both object and subject positions, we can hopefully get a fuller picture of the Present-day English system of complementation.

Moreover, two final theoretical points merit further research in my opinion. The first point involves the semantic cline proposed in (333). While the proposal here was made specifically with regard to English, it would be interesting to determine the typological validity of this cline, e.g. by constructing a semantic map to give a broader view on the relations between the different semantic predicate classes. From the point of view of interpersonal semantics, it would be interesting to compare factive, manipulative, and reporting constructions cross-linguistically to see how the possible epistemic and deontic modal markers and the variable modal source of pre-existent clauses can be expressed morphologically or constructionally across languages, and which combinations of markers are possible or excluded in which contexts.

A final open question is whether the synchronic distinction between factive and reported complements might further be explained by a broader different historical origin for the two types. With respect to the origin of complex sentences, it has been proposed that reported speech and thought constructions may originate from the integration of one (paratactically adjoined) clausal structure into the other (Hopper & Traugott 2003: 190–196; Heine & Kuteva 2007: 241–242; Deutscher 2007: Ch. 5). As regards factive complementation constructions, one open question is how the long diachrony of these clauses broadly speaking relate to the loss of case marking on obligatory obliques (e.g. *forget* + genitive in Old English), to adverbial clauses expressing some cause or locative source meaning (e.g. *because*, *from*), which could be reinterpreted as complements (cf. Deutscher 2007: Ch. 4 for a similar developmental path), or to subjects of object-experiencer

verbs which turned subject-experiencer (van Gelderen 2014). If a case could be made for (multiple) distinct source constructions for factive and reporting complementation constructions, it would further corroborate the linguistic importance of the contrast within complementation systems between pre-existent and created entities.

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