On the Semantics and Pragmatics of Explicit Performatives: A Parenthetical Experiment

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Preface

John L. Austin's (1961,1962) famous contribution to the philosophy of language is his observation that whenever a speaker makes an utterance to an addressee, he performs a speech act, such as stating something, making a request to the addressee to do something, asking a question and thereby seeking for information, making a promise and committing himself to do something, etc.

One distinction Austin makes in relation to performatives is that between implicit performatives and explicit performatives. The intended illocutionary force of the utterance of the imperative *Don't go there!*, for example, is implicit, as what the speaker has in mind by saying it is not specifically provided. Due to the implicit nature of the sentence, the imperative *Don't go there!* can be, depending on the information about the previous discourse, on kinesic cues given by the speaker, and on the power or status of the relationship between speaker and hearer, a warning, a command, a request or an advice. In order to make the illocutionary force explicit, the speaker has to indicate the speech act involved by adding in what is called the performative verb, or the performative prefix before the clause. If the clause is not declarative, this will involve its grammatical conversion into a declarative clause: *I warn you not to go there*, *I order you not to go there*, *I advise you not to go there* etc. Since performatives are seldom uttered using such a construction, it does seem to be the case that most of the performatives are implicit.

As, I will show in more detail later, explicit performatives are uttered whenever the contextual information does not suffice for the determination of the illocutionary force of the corresponding implicit speech act. Thus, for instance, if the contextual information is not sufficient to determine that the intended illocutionary force of the utterance of *I will be there for you* is a promise, the speaker uses the explicit performative sentence *I promise you that I will be there for you* in order to provide the missing information.

If we want to develop a semantic analysis for explicit performatives, we are faced with the following puzzle:

In order to account for the speech act expressed by the performative verb, one can assume that the so-called performative clause is purely performative and provides the illocutionary force of the speech act whose content is given by the semantic object denoted by the complement clause. Yet under this perspective, the performative clause that is, next to the performative verb, the indexicals *I* and *you* that refer to the speaker and to the addressee of the utterance context is semantically invisible and does not contribute compositionally its meaning to the meaning of the entire explicit performative sentence. Conversely, if we account for the truth conditional contribution of the performative clause and deny that the meaning of the performative verb is purely performative, then we have to find a way to account for the speech act expressed by the performative verb.

Of course, there is already the widely accepted and very appealing indirectness account for explicit performative utterances developed by Bach & Harnish (1979). Roughly, Bach and Harnish solve this puzzle in deriving the performativity, more precisely the illocutionary force, by means of a pragmatic inference process (their speech act schema). According to them, the important speech act performed by means of the utterance of the explicit performative sentence is a kind of the conventionalized indirect speech act.

However, the boundary between semantics and pragmatics can be drawn in many various ways. Therefore, I think there could be other perspectives regarding the interface between the truth-functional treatment of the declarative explicit performative sentences and the speech acts performed with their utterances, which are expressed by the performative verbs. Hence, this thesis consists in the experiment to develop a further analysis and to check out its consequences with respect to the semantics and pragmatics of explicit performative utterances and the new interface emerged.

Briefly, the experiment runs as follows:

First, I develop an analysis for explicit performative sentences framed by parenthetical structures such as in (1)(a). In a second step, this parenthetical analysis is applied to the proper Austinian explicit performative sentences in (1)(b).

(1) a. Tomorrow, I promise you this, I will teach them Tyrolean songs.
b. I promise you that I will teach them Tyrolean songs.

To analyze at first explicit performatives framed by parenthetical structures bears the convenience that we are faced with two utterances of two main clauses. Thus consider again (1)(a). Here there is the utterance of the host sentence *Tomorrow I will teach them Tyrolean songs*, and the utterance of the explicit parenthetical *I promise you this*, where the demonstrative *this* refers to the utterance of *Tomorrow I will teach them Tyrolean songs*. Since speakers perform speech acts with utterances of main clauses, I assume that the meaning of the explicit parenthetical *I promise you this* specifies that the actual illocutionary force of the utterance of *Tomorrow I will teach them Tyrolean songs* is the illocutionary force of a promise. Hence, instead of deriving an indirect illocutionary force by means of a pragmatic inference schema, we can deal with an ordinary direct speech act that is performed with the utterance of the host sentence. In contrast to the indirectness account, this kind of analysis stresses the particular discourse function of explicit performative utterances. Performative verbs are used whenever the contextual information is not sufficient to determine the illocutionary force of the corresponding implicit speech act.

The resulting consequences of the parenthetical analysis are interesting since they cast a different light on performative verbs. Surprisingly, the performative verbs are not performative at all. They do not constitute the execution of a speech act, but are *execution supporting*. Instead of constituting the particular illocutionary force,

they merely specify the illocutionary force of the utterance of the host sentence. For instance, the speaker utters the explicit parenthetical *I promise you this* for specifying what he is simultaneously doing. Hence the speaker does not succeed in performing the promise simply because he is uttering *I promise you this*. Rather, by means of the information conveyed by the utterance of *I promise you this*, the potential illocutionary forces of the utterance of the host sentence are *disambiguated*. Thus, it is not the case that explicit parentheticals are trivially true when uttered. Their function is more complex. Their *self-verifying* property ('*saying so makes it so*') is explained by means of disambiguation. Furthermore, according to the parenthetical analysis, instead of being purely performative, the performative verbs contribute compositionally their meanings to the truth conditions of the entire explicit performative sentence. The same holds for speech act adverbs such as *frankly*, and *by the way*.
Together with its consequences, this analysis is applied to the proper Austinian performatives, which display subordination. Even though the syntactic structure of the explicit performative sentence displays subordination of the complement clause, I assume that regardless of their structure, explicit performatives always semantically and pragmatically behave as the parenthetical analysis predicts.

The organization of the thesis is as follows: The thesis consists of three parts. In part I, I introduce some preliminaries and establish the framework where the parenthetical analysis will be implemented. In part II, I illustrate the parenthetical analysis and its application to the proper Austinian explicit performatives. Part III illustrates the behaviour of explicit performatives embedded under speech act adverbs, modals, negation, and the imperfective.

Part I starts with recapitulating the components of utterance meaning namely, the Austinian locutionary and the illocutionary act (chapter 1).

In chapter 2, I argue for a semantic intermediation of sentence mood. That is, the relation between matrix clauses that belong to a certain sentence type and their prototypical illocutionary forces is partly determined by the semantic object assigned to the respective sentence types by means of a semantic denotation function. Moreover, the semantic object denoted by the sentence corresponds to the semantic content of the speech act performed with the utterance of the respective sentence.

Chapter 3 introduces the semantic objects assigned to the particular sentence types. For the purpose of a semantic analysis of explicit performatives, I consider declaratives as denoting propositions, interrogatives as denoting propositional concepts (Groenendjik & Stokhof, 1984), and imperatives as denoting intensional properties (Hausser, 1980, and Portner, 2005).

In chapter 4, I develop a dynamic framework for utterances, illocutionary forces, and illocutionary acts. Here, I illustrate the process of the contextual determination of the illocutionary force of an utterance, and the function of the speech acts as updating contexts.

Part II starts with the illustration of pretheoretical formal characteristics of explicit performative utterances (chapter 1).

In chapter 2, I argue that in compliance with the semantic mood declarative explicit performative sentences denote propositions and are uttered in order to perform prototypical speech acts of the assertive kind. Moreover, the content of the assertive speech act corresponds to the proposition denoted by the explicit performative sentence. Hence, explicit performative sentences are not exceptional with respect to the relation between their sentence type and the prototypical speech acts performed with their utterances.

Chapter 3 poses the puzzle for a semantic analysis of explicit performative sentences mentioned above.

Chapter 4 introduces the parenthetical analysis. Roughly, next to the cases where the meaning of the performative verb is redundant, the main function of the performative verbs is to disambiguate the illocutionary force potential of the utterance of the host sentence and to support the execution of the speech act performed with the utterance of the host sentence. The support of the execution is necessary whenever the contextual information is not sufficient to determine the illocutionary force of the corresponding implicit speech act. This is shown in 4.1.1 through 4.1.3.
Since performative verbs have an execution-supporting meaning, but are used also in order to report speech acts such as in *Verena claimed that she felt like Hannibal Lector*, they show a systematic kind of polysemy. In general, expressions that relate to the type of speech act or to properties of its execution are the same as expressions that describe such acts. Hence, the two meanings of the performative verbs are related in a similar manner as Krifka (1999) relates with each other the Boolean meaning and the speech act conjunction denoted by *and*. Since the two meanings are related, one can regard in line with Pustejovsky (1995) the lexical ambiguity as structural. This is shown in 4.1.5.
In 4.2, the parenthetical analysis is applied to the Austinian explicit performative utterances that display subordination. If embedded under a performative verb used with the execution-supporting meaning, the complement clause that belongs to a certain sentence type is used to perform a speech act whose content corresponds to the semantic object denoted by the respective complement clause. Since performative verbs specify the illocutionary force of the utterance performed with the com-

plement clause, the mood relation for matrix sentences is transferred to complement clauses. In 4.3.2, I illustrate the context change of explicit performative utterances, and elaborate in more detail the disambiguation of the possible illocutionary forces of the utterance of the complement sentence in terms of partition resolution (cf. 4.3.2.1). A more detailed elaboration of the cases where the use of the performative verb is redundant follows in 4.3.2.2.
In section 4.3.3.3, I illustrate the problem of a uniform semantic mood of complement clauses embedded under directive and commissive verbs. Directive and commissive verbs embed both, proposition denoting *that*-complements and property denoting infinitival (PRO) complements: *I order you to kill Bill / I order you that you kill Bill, I promise you to kill Bill / I promise you that I kill Bill*. For this reason, I apply the techniques of Heim (2001), and Stechow (2002), and reduce the proposition denoted by the *that*-complement to an intensional property. Hence, I attain a uniform semantics of complements embedded under directive and commissive verbs. Roughly, this reduction takes place whenever the person feature of the performative verb or its indirect object agrees with the person feature of the embedded pronoun *I* and *you*.

In chapter 5, I argue for an exceptional treatment of conventional performatives such as *I award you the key to the city*. Whereas non-conventional explicit performatives are used whenever the contextual information does not suffice for the determination of the illocutionary force of the implicit speech act performed with the utterance of the complement clause, the discourse function of conventional explicit performatives is different. Conventional performatives are not used in order to provide missing information. Rather, because of the requirement of specific contexts, specific locutions, or specific meanings, their utterances already provide the full information required for their successful performance. This is in line with Bach & Harnish (1979). Since there is no intention that has to be recognized for the successful performance of the conventional illocutionary act, their speech act schema is inoperative.

Part III illustrates the behaviour of explicit performatives embedded under speech act adverbs, modals, negation, and the progressive aspect.

I. Speech Acts: A Framework

1 Utterance Meaning

Whenever a speaker makes an utterance to an addressee, where the utterance consists of a sentence from a language *L* spoken with a certain prosody in a context, he performs a speech act, such as asking, denying, stating, and promising. Austin (1961, 1962) called these acts *illocutionary acts*, and the utterances used to perform them have an *illocutionary force* or *illocutionary point*. Sometimes the illocutionary force of an utterance is spelled out in a *performative clause*. For example in (1)(a) the illocutionary force of a promise is made explicit, in contrast to (1)(b) where the illocutionary force has to be inferred from the context of utterance.

(1) a. I promise you to come to the party.
b. I will come to the party.

The aim of a semantic theory is to study the meanings of sentences according to Frege's *principle of compositionality*. The *principle of compositionality* requires that the meaning of a sentence should be a function of the meanings of its parts and their syntactic combinations. The semantic interpretation involves the assignment of denotations relative to a context, and their combination. The meaning of indexicals that is, words as *I*, *now*, and *this* whose denotations vary from context to context, are determined relative to their context of use. The extra-linguistic context enters during the determination of meaning only when called upon by a linguistic rule governing an element (the Kaplanian character). The result of semantic interpretation is some kind of entity, such as a proposition or a property, which is then the input to the pragmatics.

The principle aim of a pragmatic theory of utterance meaning is to account for the determination of the particular speech acts. A speech act is of the form $F(P)$. That means, a speech act consists of an illocutionary force F and a semantic content P denoted by the sentence that the speaker is using in order to perform a particular speech act type. As I will illustrate in chapter 2, the content of a speech act is provided by the semantic theory, namely by a semantic valuation function that maps a sentence of a language into its meaning.

In order to achieve a particular speech act meaning we have to model the steps necessary for the addressee to determine what can be taken to be the speakers' meaning of the utterance of a sentence. As I will recapitulate below, these steps consist of the recognition of (i) *the utterance act* or *phonetic act*, respectively (ii) *the phatic act,* (iii) *the rhetic act*, and (iv) *the illocutionary act*. Step (i) consists in the hearer's recognition that the speaker performs an utterance. At step (ii) structural ambiguities are resolved. At (iii) the hearer recognizes that the speaker utters with a particular prosody a sentence with a certain meaning provided by the semantic valuation function in the language *L*. At step (iii), indexicals and demonstratives get their values relative to the context of their utterance. Hence, if the sentence denotes a proposition, the addressee identifies the expressed proposition.

At step (iv), the addressee determines the illocutionary force of the utterance. Step (iv) is based on the knowledge of the language *L*, the conditions on the performance of the particular speech acts, and the speaker's presumed reason for the utterance of a sentence with a certain meaning with respect to the cooperative principle.

1.1 The Locutionary Act

Recognizing the *locutionary act* is recognizing that the speaker utters a sentence with a particular meaning. The first step in establishing the meaning of a speech act is to establish that the utterance act has taken place. The second step is to identify the meaning of what the speaker has said – that is, the meaning of the sentence uttered.

Austin (1975) distinguishes three aspects of the *locutionary act*:

(i) *The phonetic act* namely, the act of uttering a string of sounds (the pure *utterance act*). (ii) *The phatic act* namely, the act of uttering a string of sounds as belonging to a certain vocabulary and to a certain syntactic structure. The phatic act is based on the hearer's knowledge of the lexicon, and his knowledge of the syntactic, and prosodic contributions to meaning. The last component is (iii) *the rhetic act*. The rhetic act is the act of uttering a sentence with a certain meaning. The rhetic act determines relative to the utterance context the values of the indexicals that change with its context of utterance and hence the expressed proposition. For instance, if Verena is the speaker in context *c*, and Magda is the speaker in context *c'*, then there is a semantic difference between *I am bald* relative to *c*, and *I am bald* relative to *c'*. The expressed proposition that is denoted by *I am bald* is recognized relative to an utterance context (by means of the Kaplanian character) and the world spoken of. The addressee recognizes that the speaker uses the constituents of the sentence in order to refer to objects provided by the utterance context and that the speaker uses other constituents to predicate the properties of them. Whereas in the scenario above two speakers utter the same sentence in order to perform different locutionary acts, two or more sentences can be uttered in order to perform identical locutionary acts. For example, relative to the context of utterance, the sentences *The German chancellor is female* and *Angela Merkel is female* can express the same proposition. Hence, in the rhetic act, first, the contextual-invariant aspects of meaning are determined and second, the expressed proposition. Thus, recognizing the *locutionary act* is recognizing the syntactic structure of the sentence uttered, the meaning of the constituents and hence the meaning of the sentence itself. As I will illustrate in chapter 3, not all sentence types denote propositions.

Furthermore, I assume following Kaplan (1989) and Perry (2001) that structural ambiguities are presemantically resolved and hence in the phatic act where the

language is recognized and that takes place previous to the rhetic act where the sentence obtains its meaning. Consider for instance the structural ambiguity of *I saw her duck under the table* (Perry, 2001:42). In this case, knowing a little about the non-linguistic context helps to decide whether the actual speaker had lost his pet or was seeking security in an earthquake. Hence, the structural ambiguity is resolved by means of the information in the context by excluding the implausible structure.

1.2. The Illocutionary Act

In order to define the last component of utterance meaning, one has to distinguish between the illocutionary act i.e, the entire speech act performed by means of the utterance, and the illocutionary force of that utterance. An illocutionary act has the form $F(P)$. That is, a speech act consists of an illocutionary force F and a semantic content P. The content P of the speech act is determined in the locutionary act. In contrast, the illocutionary force is what the speaker intends to do with the prosodically marked utterance of a sentence. The speaker may intend to state P, to promise P, or to request the addressee to do P. Hence, the illocutionary force is a property of an utterance. For the speaker's utterance to be a successfully performed speech act of the form $F(P)$, the hearer has to recognize the intended illocutionary force F of the utterance. The force of the utterance is intended by the rational speaker to be shared belief by himself and his addressee, and conversely the addressee assumes that the speaker always speaks with overt and identifiable communicative intentions. For instance, under normal circumstances, if someone utters (2), he wants his addressee to recognize that he is seeking for information. In other words, the speaker intends his addressee to recognize that his utterance is intended to have the illocutionary force of a question.

(2) Did you finish digging the ditch around the house?

This complex intention is known as the speakers' *reflexive intention*, or *R-intention* (Bach & Harnish (1979)). Thus, in the scenario above, in uttering (2) the speaker reflexively-intends the addressee to recognize his intention in uttering the sentence in (2), or in other words, the speaker R-intends the addressee to recognize the illocutionary force of a question.

The *communicative presumption (CP)* (Bach & Harnish, 1979:12) assures that there is always an R-intention. According to the communicative presumption, the participants of conversation assume that whenever a speaker says something to the addressee, he has to expect that the addressee believes that there is an identifiable illocutionary intention that has to be recognized. Furthermore, the communicative presumption helps to distinguish linguistic acts from other acts, such as the act of

drawing a picture. According to Grice (1957), when people do things like this, there is no presumption that they have a communicative intention, as in the case of linguistic utterances.

According to Bach & Harnish (1979:15), the content of the illocutionary intentions that have to be recognized by the addressee, that is, the illocutionary force, consists of the attitudes expressed by the speaker. To communicate is to express a belief, an intention, a desire, or even a feeling. For instance, in the case of statements the speaker expresses two attitudes: (i) his belief relative to a certain proposition, and (ii) the intention that the addressee also believes it. Hence, for the speaker's utterance of a sentence to be a statement that p, the speaker must *R-intend* the addressee to take the utterance as a reason to think (i) that the speaker believes that p, and (ii) that the speaker intends the addressee to believe that p. Conversely, for the addressee to recognize that with the utterance the speaker is stating that p, the addressee must take the speaker's utterance of the sentence as R-intended to be a reason to think (i) that the speaker believes that p, and (ii) that the speaker intends the addressee to believe that p.

Importantly, for a statement to have been made and to be successful as an act of communication, the addressee does not actually have to believe that p or does not actually have to think that the speaker believes that p. These are perlocutionary effects of the utterance and are not necessary for the success of the illocutionary act of stating. For succeeding in performing a statement, it is sufficient that the addressee recognizes the speaker's R-intention. Anything more is more than just communication. Similarly, for the speaker's utterance to count as a successful request to do A there are two attitudes to be recognized by the addressee, namely (i) that the speaker desires the addressee to do A, and (ii) that the speaker intends the addressee to do A because of the speaker's desire.

For the successful performance of an illocutionary act, the illocutionary force of an utterance is R-intended to be recognized by the addressee. However, the recognition itself is constituted by a complex pragmatic inference process. This inference process involves the recognition that there has been an utterance of a sentence (the pure *utterance act* and the *phatic act*), then the determination of the sentence meaning (the *rhetic act*), and the determination of the illocutionary force of the utterance (the *illocutionary act*):

(3) utterance act > phatic act > rhetic act > illocutionary act

By means of the pragmatic inferential schema sketched in (3), one is able to model each step in the addressee's reasoning that leads to his recognition of the illocutionary force of the speaker's utterance. How the inferential schema for the recognition of utterance meaning is exactly modelled depends on the particular speech act theory used and on its resulting classification of speech acts. However, the aim of this chapter was to illustrate some preliminaries for the development of a quite general framework of speech acts (cf. chapter 4 below) that I will employ for the

analysis of explicit performative utterances in the second part of this thesis. Hence, there is no need to refer to a particular speech act theory (e.g. the speech act theory of Bach & Harnish, 1979, and the speech act theory of Allan, 1986), and to a particular inference schema that depends on the particular speech act classifications and on a particular perspective concerning the relation between sentence types and speech acts. To get an impression of slightly different inference schemata, the interested reader is referred to Bach & Harnish (1979:37), and to Allan (1986:211).

1.3 The Perlocutionary Act

The purpose of communication is to cause an effect in the addressee: speakers want their statements accepted, their questions answered etc. However, the perlocutionary acts are reactions to speech acts, and do not belong to their meaning. The perlocutionary effect of an illocutionary act is constituted by the addressee's interpretation of the utterance by virtue of recognizing the meaning of the sentence uttered, and its illocutionary force. For example, consider the utterance of (4). Here, the illocutionary force is inferred by means of the hearer's recognition that the speaker R-intends him to recognize that the speaker has offered a bet. Whether or not the addressee takes up the bet is the perlocutionary effect of (4).

(4) I bet you 1000 euro that Jedi Knights really exist.

Furthermore, the illocutionary force of the utterance of the sentence in (5) below is inferred by means of the hearer's recognition that the speaker R-intends him to recognize that the speaker is expressing his desire that the addressee tells the speaker whether or not *p* (i.e. that the speaker has performed a question). In contrast, the *perlocutionary effect of the question act* performed with the utterance of (5) consists in an appropriate answer to (5). Similarly, the illocutionary force of the utterance of the sentence in (6) consists in the hearer's recognition that the speaker R-intends him to recognize that the speaker believes *p* and that the addressee believes *p* himself (i.e. that the speaker has performed an assertion). Thus, the *perlocutionary effect of the assertion* consists in the fact that the addressee takes to be true that Tony Hawks was the winner of the contest.

(5) Did you know?

(6) Tony Hawks was the winner of the contest.

However, since speakers use explicit performatives in order to raise the chance that the addressee recognizes the utterance meaning that is, the illocutionary force

named by the verb, I see no need to agonize over the systematic relation between utterance meaning and the respective perlocutionary effects.

Therefore, having recapitulated the components of illocutionary acts, I illustrate in the next chapter the relation between matrix sentences that belong to a certain sentence type and the prototypical illocutionary acts performed with their utterances. In doing so, I will argue against a pure pragmatic characterization of sentence mood and for the semantic intermediation of sentence mood. That is, the relation between matrix clauses that belong to a certain sentence type and the prototypical illocutionary force of their utterances is partly determined by the semantic object assigned to the respective sentence types by means of a semantic valuation function. Moreover, with utterances of sentences that are members of a certain type, speakers perform speech acts whose contents corresponds to the semantic object denoted by the respective sentences. The particular semantic objects assigned to sentences of a certain type are introduced in chapter 3. Roughly, in order to analyze explicit performative utterances I regard declaratives as denoting propositions, interrogatives as denoting propositional concepts (Groenendjik & Stokhof, 1984), and imperatives as denoting intensional properties (Hausser, 1980, and Portner, 2005).

2 The Relation between Sentence Types and Illocutionary Forces

Universally, three sentence types are traditionally distinguished: declarative, interrogative, and imperative sentences (cf. König & Siemund (2005) for a typological overview of sentence type distinctions in grammar). The sentence types, namely the formal properties characterizing those types should ideally form a system of choices that are mutually exclusive, such that each sentence token can be assigned to one type and no sentence token can be a member of more than one type (cf. Sadock & Zwicky, 1985). Ideally, this criterion is formally fulfilled where the formal markers such as inflectional affixes, word order, particles etc. identifying the basic sentence types in a language form a system of alternatives. However, this is merely an idealization. Whereas, the sentence in (7) belongs to the class of interrogatives, the particle *please* is a marker for imperative sentences:

(7) Could you please give me a ride?

Declarative sentences are primarily used for speech acts of the assertive type, such as asserting, stating, claiming but also for criticizing, and promising. Interestingly, explicit performative sentences such as *I ask you to go* are also of the declarative type. Interrogative sentences are prototypically used for performing question acts, i.e. eliciting information, asking questions, introducing deliberations etc. Imperatives are prototypically used in all attempts to get or advise the addressee to do something, i.e. they are uttered in order to perform prototypical directive speech acts such as orders, requests, suggestions, advices etc.
Thus, we have the following (mood-) relation between form types and their prototypical illocutionary function as in (8):

(8)

Sentence Types	Prototypical Illocutionary Acts
declarative	assertive speech act
imperative	directive speech act
interrogative	question act

A particularity of European languages is that sometimes a clear opposition between basic sentence types can be found also with respect to embedded sentences. Here, the relevant opposition is expressed by different complementizers or the lack thereof:

(9) a. Simona knows that Andrea lives in Padova.
b. Simona wants to know whether/if Andrea lives in Padova.
c. Simona asks Andrea to help her.

If such complementizers occur in dependent, embedded sentences, they have no influence on the speech acts performed by means of the utterance of the sentences containing them. Even though the complement clause in (9)(b) is of the interrogative type, the utterance of the entire sentence is nevertheless an assertive speech act. In contrast, the complement clauses in (10) and (11) can be used independent and non-embedded, and speakers perform with their utterances exclamations (cf. (10)), and question acts (cf. (11)), respectively.

(10) That I should live to see this! (König & Siemund, 2005)[1]

(11) Ob Christian wohl noch raucht? [German]
If Christian PART.INTERR. still smokes?

Furthermore, there is no imperative complementizer and hence, it is commonly assumed that imperatives cannot be embedded. However, in Slovenian there are examples of embedded imperatives in *that*-clauses (cf. Rus, 2005, Dvořák, 2005):

(12) Ukazal je, da delaj.
Ordered is that work-2.SG.IMP.
'He ordered you to work/that you work' (Rus, 2005)

(13) Rečem Ti, da ga ubógaj.
Say you that him obey-2.Sg.IMP.
'I tell you to obey him' (Dvořák, 2005)

A discussion of complement sentences with respect of their hypotactic or paratactic behaviour exists in the case of the verb second complements in German (cf. Reis, 1997, Gärtner 2001, 2002, Meinunger 2005a, 2005b)). In contrast to complementizer containing verb-final clauses that correspond to the 'true' subordinated clauses in German, these dependent verb-second clauses can be used to express an assertoric commitment of the actual speaker. Thus, for instance in (15) the proposition *Lara ist schwanger* is evaluated relative to the belief worlds of Dirk, but can also function as the content of an assertion of the actual speaker.

(14) Ich glaube, er hat recht. [German]
I believe he is right. (Reis, 1997)

(15) Dirk meint, Lara ist schwanger. [German]
Dirk believes Lara is pregnant. (Meinunger, 2005)

In the same way, embedded imperatives are attested in German (cf. Schwager, 2006):

(16) Ich habe dir doch gestern schon gesagt, geh hin.
I have you PART yesterday already told go-2.SG.IMP.there

[1] Cf. for exclamations as basic speech acts Roguska (2005)

In the following two sections, I will illustrate two distinct characterizations of the relation between sentence types and their prototypical speech acts performed in uttering them. Whereas, as I will illustrate in the next section, a pure pragmatic characterization of mood is misleading, I assume in 2.2 that the relation between sentences that belong to a certain type and the prototypical illocutionary forces of their utterances is intermediated by the particular semantic objects denoted by the distinct sentence types.

2.1 Pragmatic Characterizations of Mood

A speech act consits of an illocutionary force *F* and a semantic content *P*. First, recall that one has to distinguish the force of a speech act from the speech act itself: Even though (17)-(19) share the same illocutionary force of requesting, they count as different speech acts. The utterance of (17) is a request to give the speaker the chocolate, (18) is a request to shut the door, and so on.

(17) Give me the chocolate!

(18) Shut the door!

(19) Don't cry – work!

Furthermore, requesting, questioning, asserting, promising etc. are different illocutionary forces. What about the content of speech acts? According to the pragmatic view, the relation between sentence types and the prototypical speech acts can be fruitfully studied only at the level of the speech acts that are typically performed in uttering such sentences. At the level of semantic content, no distinction between declaratives, interrogatives, and imperatives needs to be made, and hence the difference in meaning must be accounted for at the level of speech acts. Of course, as I will illustrate in the next section 2.2, this view is not tenable.
One of the most prominent implementations of the pragmatic characterization of mood consists in the distinction between the *mood* of a sentence, and its *radical* (Stenius (1967)). According to Stenius, the radical corresponds to the propositional content of the sentence, and the mood is the way in which the content is presented. Thus, the declarative in (20), the imperative in (21), and the interrogative in (21) share a radical namely, the proposition *that Jiro is on time* and differ only in mood.

(20) Jiro is on time.

(21) Be on time, Jiro!

(22) Jiro, are you on time?

Of course, this approach is limited. Only sentences that express propositions can be analyzed in this way. This analysis is not applicable to constituent questions such as *Who is on time?* that do not denote propositions. Hence, the problem is to find one kind of entity that will serve as a semantic object for both sentential and constituent interrogatives.

Another proposal in order to fix the meaning of non-declarative sentences is given by Lewis (1970). Lewis adopts the syntactic *performative analysis* of Ross (1970) in order to explain the semantics of non-declarative sentences. Lewis claims that the meaning of the non-declarative sentences is given by their corresponding explicit performative sentences. Hence, for example the interrogative in (24) has the same meaning as (23):

(23) I ask you whether you feel well.

(24) Do you feel well?

Lewis treats (24) as a paraphrase of (23) and proposes to derive the former from the latter by means of meaning-preserving transformations. According to Lewis, non-declarative sentences should be treated as paraphrases of the corresponding performatives. They have the same deep structure, and the same content. This gives rise to the view that non-declarative sentences also denote propositions.
Yet, it does not seem that non-declarative sentences have truth-values. Consider for example the dialogue in (25) below. In (25) B's response does not make sense. After *Free Willy* one cannot respond with saying *That's true*. What is true? It does not make sense for B to say *That's true* because A has not said anything that is true or false. This provides strong evidence that imperatives simply do not have truth conditions (of course, the same holds for interrogatives). If *Free Willy* would in fact mean *I command that you free Willy* then *That's true* should be an intelligible respond.[2]

(25) A: Free Willy!
B: That's true.

Furthermore, as Hausser (1980:75) argues, the performative analysis fails because its pragmatic characterization of mood mixes up the rather distinct notions of sentence mood and speech acts. Thus, if the interrogative sentence in (26) below is merely a paraphrase of the explicit performative sentence in (27), then also the interrogative sentence in (28) should be paraphrased as in (29):

(26) Did you ever read 'The Hitchhiker's Guide to the Galaxy'?

[2] Of course, at this point one can argue that the explicit performative sentence has no truth-value as well. To this objection I will reply in part II, section 2.2.

(27) I ask you whether you ever read 'The Hitchhiker's Guide to the Galaxy'.

(28) Could you pass me the salt?

(29) I ask you whether you could pass me the salt.

It is easy to see that even though (28) is interrogative it is not used to perform a question act, which can be made explicit by the use of the explicit formula *I ask you*.

A further counterargument that concerns the ambiguity of non-declarative sentences is given by Grewendorf (1979) and Zaefferer (1979). Consider for instance the sentences in (30) through (34) below. Since a speaker can perform more than one illocutionary act with the utterance of the imperative sentence in (30) (of course, not simultaneously), the sentence in (30) can be derived from more than one explicit performative paraphrase, namely from (31)-(34). Thus, the utterance of (30) is ambiguous in many ways:

(30) Be funny!

(31) I order you to be funny.

(32) I request you to be funny.

(33) I beg you to be funny.

(34) I permit you to be funny.

Furthermore, the performative analysis breaks down because it can only be applied to non-declarative sentence types. In the case of declarative sentences, the analysis assigns the wrong truth conditions: the declarative sentence in (35) below would be true if and only if the speaker states that it is raining. Hence, the only thing that would count for the meaning of a declarative sentence such as (35) is that the speaker in fact states the proposition that it is raining. For this reason, Lewis decided to give declaratives a special status and considered them as underived primitives.

(35) It is raining.

(36) I state that it is raining.

2.2 The Semantic Characterization of Mood

As shown above, according to the pragmatic approach of Stenius (1967) the utterances of (37)-(39) share the same propositional content, namely that the addressee is on time, and differ only in their illocutionary forces.

(37) You are on time.

(38) Be on time!

(39) Are you on time?

Thus, according to the pragmatic characterization of mood, the different speech acts performed with the utterance of the different sentences that belong to certain types are only distinguished by virtue of their illocutionary forces.
However, according to the paradigm in (8) above this assumption predicts that the utterances of (40) and (41) below have different speech act meanings – what is obviously wrong. Albeit of the different sentence types, they share the same illocutionary force, and both sentences are used to perform a request to go. Hence, there is obviously not always a one to one correspondence between the sentence types and the speech acts, which are performed with their utterances, and the fact that with the utterance of the declarative in (40) and the imperative in (41) speakers perform the same speech act is exceptional with respect to the paradigm in (8) above.

(40) You should go home now.

(41) Go home now!

Even though declarative sentences are used to perform prototypical assertive speech acts, the examples in (40) and (41) clearly demonstrate that the pragmatic characterization of sentence mood is not able to determine the entire domain of the possible speech acts that could be performed by means of the utterance of a sentence of a certain type. Because there is no one to one relation between sentence types and speech acts, it is mistaken to characterize mood in terms of speech act properties. Thus, importantly, mood does not determine speech acts but rather delimits the set of possible speech acts, which could be performed with the utterance of a sentence (Hausser, 1980).

Furthermore, as Gazdar (1981) has pointed out, if all speech acts have a propositional content, then the utterance of the interrogative in (42) below and the declarative in (44) below share the same propositional content, and merely differ with respect of their illocutionary forces. Moreover, the interrogative in (43) also denotes the proposition in (44) and its utterance has the same force as (42). Thus, the utterances of the interrogatives in (42) and (43) share not only the illocutionary

force, but also have the same propositional content. That is, they lack a difference in meaning, and are instances of the same speech act, what is obviously not the case.

(42) Who will eat the cookies?

(43) Will someone eat the cookies?

(44) Someone will eat the cookies.

Since (45)-(47) below have the same propositional content in (48), and are regarded as having the same illocutionary subtype that corresponds to constituent interrogatives, any attempt to distinguish between two types of illocutionary forces corresponding to sentential and constituent interrogatives fails as well.

(45) Who ate something?

(46) What did someone eat?

(47) Who ate what?

(48) Someone ate something.

Yet, there is a way out. Instead of regarding speech acts as pairs consisting of an illocutionary force and a 'propositional' content, one can consider them as pairs consisting of an illocutionary force and a semantic content that is not always propositional but identical with the particular meaning of the sentence. Thus, (45)-(47) have the same illocutionary force, but differ in content. Hence, the determination of the prototypical speech act which is performed with the utterance of a sentence of a certain sentence type is intermediated by the semantic object which is denoted by the sentence uttered and which corresponds to the content of the respective speech act.

Thus, following Gazdar (1981), let D be the set of sentences d of the natural language L. The members of D are syntactically and semantically disambiguated. In addition, sentences have properties by virtue of their syntax (the word order, the presence of *wh*-words, the absence of the subject): that is, they are declarative, interrogative, or imperative sentences. Furthermore, let J be the set of sentence meanings, which are the result of a semantic valuation function $V : D \rightarrow J$ for L that takes as arguments members of D and yields their meanings. For the purpose of what follows, I assume that declarative sentences denote propositions, interrogative sentences denote propositional concepts (Groenendjik & Stokhof, 1984), and imperatives denote intensional properties (Hausser, 1980, Portner, 2005)). (cf. chapter 3 for the illustration of the semantic objects denoted by the particular sentence types)

In the spirit of Gazdar (1981:68), let F be the set of illocutionary forces f. Then, the relation M (for *Mood*) between sentences d of a certain sentence type and their

prototypical illocutionary forces *f*, which is intermediated by the semantic object denoted by the sentence *d* is illustrated as follows:

(49) Mood:
$M \subseteq F \times D$, then for each $m_i \in M$, there is a $f_i \in F$, and a $d_i \in D$, such that $m_i = \langle f_i, d_i \rangle$, where $V(d_i) = j_i$

Furthermore, let A^* be the set of the speech acts performed in uttering $d \in D$. Then a speech act $a \in A^*$ is a subset of the Cartesian product $F \times J$ (cf. Gazdar 1981:68):

(50) Speech Acts:
$A^* \subset F \times J$, then for each $a_i \in A^*$, $a_i = \langle f_i, j_i \rangle$, where $j_i \in J$

To put it into words, (49) and (50) together state that the semantic content of a prototypical speech act *a* performed with the utterance of a certain sentence *d* corresponds to the semantic object *j* that is, to the meaning of the sentence *d* uttered.

The definition of mood in (49) seems to be similar to *the literal meaning hypothesis*, which Gazdar (1981:74) ascribes to Searle. According to the literal meaning hypothesis the assignment of illocutionary forces is uniquely determined by the particular sentence types plus their semantic objects (instead by means of information of the utterance context). This would lead to the result, that illocutionary forces, and hence the speech acts are always prototypical. Yet, with the utterance of sentences of a certain type, speakers can also perform non-prototypical speech acts. Mood does not determine the speech act but rather delimits the set of the possible speech acts, which could be performed with the utterance of a sentence.
Again, let *F* be the set of illocutionary forces *f* and *D* the set of the sentences *d* that are syntactically structured. Furthermore, let *U* correspond to the set of utterances *u* of a particular linguistic object $d \in D$. A^* is the set of all speech acts *a* performed with the utterance *u* of $d \in D$. Suppose, there exists a function $\Im : U \rightarrow F$, such that for all $u \in U, \Im(u) \in \{f : f \in A^*\}$. Under the *literal meaning hypothesis*, the function $\Im$ would be defined as follows:

(51) $\Im(u) =$ *QUEST*, when *u* corresponds to an utterance of an interrogative sentence.
$\Im(u) =$ *REQUEST*, when *u* corresponds to an utterance of an imperative sentence.
$\Im(u) =$ *ASSERT*, when *u* corresponds to an utterance of a declarative sentence.

Certainly, the *literal meaning hypothesis* predicts that the illocutionary force is uniquely determined by the sentence uttered. Therefore, the literal meaning hypothesis excludes that in a certain context the utterance of the declarative sentence in (52) below corresponds to a non-prototypical offer (instead of an prototypical speech act of the assertive type), and similar, that in a certain utterance context the

declarative sentence in (53) below corresponds to a non-prototypical threat that the actual speaker will return. Under the literal meaning hypothesis, the inference to indirect speech acts would also be excluded (cf. (54)): the utterance of the interrogative sentence is a non-prototypical request to give the actual speaker a ride, rather than a prototypical question act.

(52) You need my help.

(53) I will return.

(54) Could you give me a ride?

However, this is merely the other side of the same coin: The semantic intermediation of mood helps to speak about prototypical speech acts in terms of their prototypical force and their particular content. In contrast, the non-prototypical speech acts are determined by means of the interplay of the semantic object plus information of the context of utterance.

Of course, the interesting point for the semantics of sentence types is to address the issue why the utterance of a particular sentence with a particular meaning constitutes a suitable means to perform the non-prototypical speech act type in question. In other words, what kind of meanings should be modelled for the distinct sentence types in order to guarantee together with the information of the utterance context the performance of a particular non-prototypical speech act type? Maybe the challenge is to create somehow underspecified meanings for each sentence type, such that its interplay with the contextual information gives the right content for each speech act type that can be performed with the utterance of the respective sentence. Yet this should be discussed elsewhere.

Furthermore, as it will be shown in chapter 4, there is a further definition of speech acts that represents speech acts as in terms of their power to change contexts. In contrast, the present definition presents speech acts as pairs of forces and contents: $a = <f, j,>$.

Yet, before I will address this issue, I will illustrate in the following chapter the semantics of interrogatives (Groenendjik & Stokhof, 1984), and the semantics for imperatives (Hausser, 1980, and Portner, 2005).

3 The Meanings of Non-Declarative Sentences

The meaning of declarative sentences and of their embedded counterparts, (*that*-complements) consists in their truth conditions, and corresponds to a proposition. In contrast, the meaning of interrogatives and their embedded counterparts (*wh*-complements) is not propositional. The same holds for the meaning of imperatives. In the following section, I will illustrate the meaning of interrogatives (Groenendjik & Stokhof, 1984)). Afterwards, I will illustrate the meaning of imperatives (Portner, 2005 based on Hausser, 1980).

3.1 Interrogatives

Due to the semantic characterization of mood, interrogative sentences are entitled to have a meaning of their own. Groenendjik & Stokhof (1984) call this *the independent meaning requirement*. Since interrogatives are not true and false, and their meanings cannot be identified with truth conditions, it is commonly assumed that the meaning of an interrogative corresponds to the set of its possible answers (Hamblin, 1973, Karttunen, 1977, Groenendjik & Stokhof, 1984).
The *independent meaning requirement* is opposed to the mood-radical distinction of Stenius (1967), illustrated in chapter 2 above, who assumes that at the level of the semantic content no distinction between declaratives, interrogatives, and imperatives needs to be made and that the difference in meaning must be accounted for at the level of pragmatics. Furthermore, *the independent meaning requirement* is opposed to the *performative analysis* of Lewis (1972) who analyzes non-declaratives in terms of their declarative paraphrases namely, as proposition denoting explicit performatives.
Groenendjik & Stokhof (henceforth G&S) establish a further requirement on the semantics of interrogatives: since interrogatives and embedded interrogatives come in pairs, they should be treated as being semantically related in the same way as declarative sentences and their embedded forms (i.e. *that*-complements) are treated as being related to each other. Thus, G&S treat interrogatives and their embedded forms as being identical in meaning (their so-called *equivalence requirement*). Since embedded interrogatives can be moved, and can occur as antecedents of anaphoric expressions, one can consider embedded interrogatives as syntactic and semantic independent parts:

(55) a.[Whether John was coming to the party, too]$_I$ was what$_i$ he asked me

b.Mary still wondered [whether John was coming to the party, too]$_i$
but Bill knew it$_i$.

According to the *equivalence requirement*, matrix- and embedded interrogatives are identical in meaning and therefore can be regarded as identical in mood. As will become obvious in the second part of this thesis, this is an important matter for the parenthetical analysis of explicit performative utterances. Roughly, the application of the parenthetical analysis predicts that in the case of explicit performatives speakers do not merely perform speech acts with the utterance of matrix sentences, but also with the utterance of embedded sentences. In the latter case, the independent meaning of the complement clause serves as the semantic content of the respective speech act performed.

In the following section, I will briefly illustrate and for the purpose of this work in a simplified manner, G&S's semantics of matrix interrogatives and their corresponding embedded forms.

3.1.1 The Semantics of Interrogatives (Groenendjik & Stokhof, 1984)

To account for the relation between embedded indicatives and embedded sentential interrogatives in (56) and (57) below, and in addition for the fact that embedded indicatives and interrogatives can be coordinated as in (58) below, G&S assume that *wh*-complements and *that*-complements denote the same kind of semantic objects, namely, propositions.

(56) John knows whether Mary walks in the garden.
Mary doesn't walk in the garden.
John knows that Mary doesn't walk in the garden.

(57) John knows whether Mary walks in the garden.
Mary walks in the garden.
John knows that Mary walks in the garden.

(58) John knows that Peter left for Paris, and whether Mary went with him.

Whereas the denotation of *that*-complements is index-independent (i.e. independent of actual facts such that it denotes at every index the same proposition), the proposition denoted by *wh*-complements depends on actual facts:
In (56) John knows whether Mary walks in the garden and the negative Mary doesn't walk in the garden together entail John knows that Mary doesn't walk in the garden. In (57) John knows whether Mary walks in the garden and the positive Mary walks in the garden entail John knows that Mary walks in the garden.
Consequently, *whether* ϕ denotes the proposition that ϕ, if ϕ is true in the actual world, and the proposition that not ϕ, if ϕ is false in the actual world.

Because of the requirement that matrix interrogatives and their embedded counterparts are similar in meaning, the same holds for non-embedded matrix interrogatives: $?\phi$ denotes the proposition that ϕ, if ϕ is true in the actual world, and the proposition that not ϕ, if ϕ is false in the actual world.
This conforms to G&S's answerhood requirement and says that the proposition DENOTED by an interrogative at a certain index *i* is its true answer at *i* (where *i* is a variable of type *s*)[3]. Hence, G&S define the denotation of an interrogative $?\phi$, and of its embedded counterpart *whether* ϕ in set-theoretical terms (cf. (59) below). The translation in two-sorted type theory is given in (60):

(59) $[\![?\phi]\!] = \{ j \mid [\![\phi]\!]_i = [\![\phi]\!]_j \}$

(60) $\lambda j [\phi(i) = \phi(j)]$

In contrast, the INTENSION of matrix interrogatives and their embedded counterparts corresponds to the *propositional concept* illustrated in (61) below. A propositional concept is a function from possible worlds to propositions, or equivalently, a relation between indices, which holds between two indices *i* and *j* iff the denotation of ϕ is the same at *i* and at *j* (cf. (62) below). Such relations are transitive, symmetric, and reflexive and hence *equivalence relations* on the set of indices *I* that induce partitions on *I*.

(61) $\lambda i \lambda j [\phi(i) = \phi(j)]$

(62) $[\![?\phi]\!] = \{ \langle i, j \rangle \mid [\![\phi]\!]_i = [\![\phi]\!]_j \}$

Thus, the intension of interrogatives are partitions on the set of indices *I*. Note that Groenendjik & Stokhof call the semantic object that corresponds to the intension of an interrogative a *question*. This is not to be confused with questions as speech acts, called question acts.
The members of a question are non-empty subsets of *I* and therefore the propositions that are the possible answers to that question. A yes/no-question has two possible answers and therefore induces a bi-partition on *I* (cf. figure 1 below, where *I/Q* denotes the partition on *I* induced by the question *Q*). Note that the view that a question *Q* induces a partition on *I* embodies that the semantic interpretation of an interrogative determines what its answers are.

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[3] G&S use a two-sorted type theory that has next to the two basic types *e* and *t* a third type *s*. The domain of *s* is the set of possible worlds. Furthermore, there are variables (*i* and *j*) and constants of type *s* such that it allows for λ-abstraction and quantification over possible worlds.

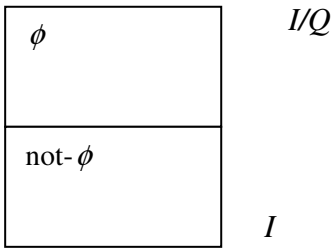

Figure 1

Like embedded sentential interrogatives, embedded constituent interrogatives are intimately related to embedded *that*-clauses:

(63) John knows who walks in the garden.
Mary walks in the garden.
John knows that Mary walks in the garden.

(64) John knows who walks in the garden.
Mary doesn't walk in the garden.
John knows that Mary doesn't walk in the garden.

Again, the last sentence follows from the first two premises. As before, G&S account for this entailment and let constituent interrogatives denote propositions. As in (56) and (57) above, the entailments in (63) and (64) reflect the index dependency of the denotation of interrogatives. The proposition denoted by *who walks in the garden* entails the proposition *that Mary walks in the garden* in case Mary actually walks in the garden, and the proposition *that Mary doesn't walk in the garden* in case she does not.

Hence, given G&S's *equivalence requirement*, the *wh*-complement *who walks in the garden* and the matrix interrogative *Who walks in the garden* DENOTE the proposition that gives the exhaustive specification of the actual extension of the property of walking in the garden. In (65) below the denotation is represented in set-theoretical terms, namely as the set of possible worlds (or indices) where *walk in the garden* has the same extension as in the actual world. Again, in (66) below the denotation is represented in two-sorted type theory.

(65) $[\![Who\_walks\_in\_the\_garden?]\!]_i =$
$\left\{ j \middle| [\![walk\_in\_the\_garden]\!]_i = [\![walk\_in\_the\_garden]\!]_j \right\}$

(66) $\lambda j.[\lambda x.walk\_in\_the\_garden(i)(x) = \lambda x.walk\_in\_the\_garden(j)(x)]$

As before, the INTENSION of a constituent interrogative is given as an equivalence relation between indices:

(67) $\lambda i \lambda j.[\lambda x.walk\_in\_the\_garden(i)(x) = \lambda x.walk\_in\_the\_garden(j)(x)]$

Whereas a yes/no-question induces a bi-partition on the logical space *I*, a constituent question such as *Who walks?* has as many distinct semantic answers as there are possible denotations of the relation on which it is based:

Nobody walks
a_1 is the one that walks
a_2 is the one that walks
a_1 and a_2 are the ones that walk
…
Everybody walks

An immediate consequence of the semantic characterization of mood illustrated in 2.2 above, is that speakers use sentences that belong to the interrogative type in order to perform prototypical question acts whose contents correspond to the propositional concept assigned to the respective sentence (cf. the definitions (49) and (50) in 2.2 above). As I will elaborate in detail in the second part of the thesis, the application of the parenthetical analysis predicts that in the case of explicit performatives speakers do not merely perform speech acts with the utterance of matrix interrogatives, but also with the utterance of their embedded *wh*-counterparts. In the latter case, the propositional concept assigned to the complement clause serves as the semantic content of the question act performed.
Since speakers use explicit performatives such as *I ask you whether you are sick* in order to raise the chance that the addressee recognizes the illocutionary force named by the verb, there is no need to illustrate the particular perlocutionary effects. Since the information provided by an answer corresponds to the perlocutionary effect of question acts, I skip G&S's notions of semantic and pragmatic answerhood. Roughly, the information provided by an answer resolves the partition on *I*.

Having illustrated the meaning of interrogatives, I will now set forth some arguments of G&S to consider question acts as basic speech acts (next to assertive, directive, commissive and conventional speech acts).

3.1.2 Question Acts as Basic Speech Acts

As shown in the paradigm in (8) at the beginning of chapter 2, with the utterances of sentences that belong to the declaratives, imperatives, and interrogatives, speakers perform prototypical speech acts, namely assertive acts, directive acts, and question acts. Moreover, there is the widespread assumption that the prototypical speech acts performed by uttering sentences of the declarative and imperative type are distinct, non-overlapping types of speech acts. For instance, Bach & Harnish (1979) subsume the prototypical speech acts performed with the utterance of declaratives under the constative category, and the prototypical speech acts performed with the utterance of imperatives under the directive category. In contrast, even though there are sentences that are members of the interrogative type that are used to perform prototypical question acts, Bach & Harnish, and Vanderveken (1990-91), regard asking a question not as a basic speech act. For them asking a question belongs to another basic speech act type: namely, to the directive type.

Thus, for instance, Vanderveken (1990-91) reduces the illocutionary force of an utterance of an interrogative to the special force of a request. In general, the content of the request corresponds to the specific change of the world required by the illocutionary point. Since the illocutionary point of a request is the world-to-words direction of fit that makes the world fit the words, the illocutionary point of the 'interrogative'-request is to ask the addressee for the future action to give the speaker a correct answer to the question.

Groenendjik & Stokhof (1994) convincingly argue against the mere subclassification of question acts and maintain that with the utterances of sentences of the interrogative type speakers perform basic speech acts for its own. According to G&S, the illocutionary point of a question act seems to be of another kind than the illocutionary point of a simple request. A request calls for an action that transforms the world as such. Since 'real' requests are directed to an action of the addressee to change the world, their contents can be identified with the change in the world required. However, as G&S argue, asking a question is not directed to an action to transform the world as such. What the question demands is merely a change in the information state of the speaker, and hence a change in the information about the world and not in the world itself. Thus, information and what information is about have to be distinguished and the effect of a question act is more similar to the effect of an assertion. According to G&S there is no reason to classify a question act as a subtype of directives.

3.2 Imperatives

Portner's (2005) account of the meaning of imperatives starts with a theory of sentence mood. Portner assumes that the mood relation between the three universal sentence types, namely declaratives, interrogatives, and imperatives and their sentential force (opposed to the illocutionary force) is intermediated by a semantic object. Furthermore, Portner assumes that there is a universal update function *F*, which determines the pragmatic effect of the semantic object denoted by the particular sentence types. (68) below shows that the generalized update function *F* adds the semantic object on the set of the corresponding type. Thus, the propositions denoted by declaratives, the set of propositions denoted by interrogatives (Hamblin, 1973), and the properties denoted by imperatives (as first proposed by Hausser, 1980) are added on the corresponding *common ground*, the *question set* (a set of propositions, cf. Ginzburg, 1995), and the *To-Do-List-Function* that associates each participant with a set of properties.

(68) The generalized update function (Portner, 2005):
The generalized update function *F* = "take a set of *x*'s and another *x*, and add the new *x* to the set" is universal. (More precisely, *F*= {<*c*,<*a*,*r*>>: For some set *X*, $c \in \wp(X)$ & $a \in X$ & $r = c \cup \{a\}$})

(69) No other update function is universal, and *F* is the preferred update function in the sense that if *F* can be used to establish the force of a sentence (note, not the illocutionary force of an utterance V.M.), it must be. (Portner, 2005)

Thus, according to (68) *F* applied to a context *c* and a semantic object of type *a* gives rise to the addition of the semantic object on the set that corresponds to its type. The semantic object denoted by declaratives is added on the common ground, the semantic object denoted by interrogatives on the question set, and the semantic object denoted by imperatives on the To-Do-List. (70) below displays the Portnerian property denoted by imperatives. Since in the case of promissives the speaker adds the property onto his own To-Do-List, the restriction to be identical with the addressee in *c* assures that it is the correct To-Do-List whereon the property *P* denoted by the imperative ϕ ! is added:

(70) $\lambda P \lambda w \lambda x . x = addressee(c) \wedge P(x)(w)$

Hence, the imperative ϕ ! yields for each world where the addressee has the property *P* denoted by ϕ the singleton set of the addressee of *c*, and yields for each world where the addressee of *c* does not have the property *P* the empty set.

Furthermore, the To-Do-List provides for each participant a measure of rationality. A cooperative and rational addressee strives to have all the properties on his To-Do-List. Portner models this by means of a partial ordering relation on the set of

possible words that constitute the *common ground* (*CG*). The ordering relation is induced by the properties on the addressee's To-Do-List (note that *CG* is modelled as a set of possible worlds, and *TDL*(*i*) is the To-Do-List function applied to the discourse participant *i*):

(71) The partial ordering of worlds $\prec_i$ (Portner , 2005):
For any w_1, $w_2 \in$ *CG*, $w_1 \prec_i w_2$ iff for some $P \in TDL(i)$,
$P(w_2)(i) = 1$ and $P(w_1)(i) = 0$, and for all $Q \in TDL(i)$, *if* $Q(w_1)(i)=1$, then $Q(w_2)(i)=1$, where $Q \neq P$.

Thus, according to (71) w_2 is the better world since in w_2 *i* has more properties on his To-Do-List as in w_1. Furthermore, the To-Do-List constrains what counts as the rational, cooperative behaviour of the discourse participants:

(72) Agent's commitment (Portner, 2005):
For any agent *i* the participants in the conversation agree to deem *i*'s actions as rational and cooperative to the extent that those actions in any worlds $w_1 \in$ *CG* tend to make it more likely that there is not a world $w_2 \in$ *CG*, such that , $w_1 \prec_i w_2$.

In order to account for the speech acts that are performed with the utterances of sentences, I must disagree with the view that there is a universal update function *F* that assures that the semantic object is added on a particular discourse set corresponding to its type. If I understood it proper, *F* corresponds to the sentential force that does not relate sentence types via the intermediation of meaning to their prototypical illocutionary forces. Rather, *F* directly relates the semantic object denoted by the sentence types to its appropriate discourse set. The latter looks similar to the perlocutionary effect of speech acts (cf. 1.3 above). Remember that the perlocutionary effect does not belong to the speech act meaning, and is not linguistic in nature, but is a consequence of the speech act successfully and non-defectively performed. Therefore, in order to subsume the meaning of utterances of sentences that belong to the imperatives to my point of view, I assume the following: The utterance of a sentence of the imperative type and therefore the information in the context of the utterance determines the successful and non-defective performance of the directive act, and with it the perlocutionary effect.
In compliance with the semantic characterization of mood illustrated in 2.2 above, I assume that the semantic object denoted by sentences of the imperative type corresponds to the content of the prototypical directive speech act performed with the utterance of the respective sentence. Further, not the sentential force but rather the entire successful and non-defective performance of the directive speech act determines the perlocutionary effect of accepting the resulting obligation, and therefore that the property denoted by the imperative is added onto the To-Do-List of the addressee.
Consequently, since the kind of speech act performed (that is, the directive speech act) determines that the speaker R-intends the addressee to recognize that the

speaker wants him to accept the obligation and to add the property onto his To-Do-List, I see no need for an additional restriction of the property such as in (70). According to a speech act theoretical point of view, there is no need for the restriction to be identical with the addressee of *c* in order to assure that the property *P* denoted by the imperative is added on the correct To-Do-List. Onto whose To-Do-List the property is added, is determined by the speech act type that is successfully and non-defectively performed. Note, if the speaker performs a commissive speech act, then the speaker R-intends the addressee to recognize that the speaker itself is committed. Hence, the performance of the commissive speech act, and hence the speech act type itself, determines that the speaker adds the property onto his own To-Do-List.

Thus, I assume for the meaning of matrix imperatives the unrestricted intensional property *P* in (73):[4]

(73) $\lambda P \lambda x \lambda w.P(w)(x)$

Remember the outcomes of the last section. Next to the uniform semantics of matrix declaratives and *that*-complements, there is a uniform semantics of matrix interrogatives and *wh*-complements. Furthermore, I take matrix imperatives as denoting properties that correspond to the semantic content of the prototypical directive speech acts that are performed with their utterance. Unfortunately, to my knowledge apart from Slovenian (cf. chapter 2, (12) and (13)), and occurrences of embedded imperatives in German (cf. ibd. (16)) there are no property denoting embedded imperative clauses that speakers use to perform directive speech acts.

As illustrated in 2.2 above, the semantic intermediation of mood helps to speak about prototypical speech acts in terms of their prototypical force and their particular content. Since there is no one to one correspondence between sentence types and speech acts, and since there are non-prototypical speech acts performed, semantic mood does not suffice for the determination of each illocutionary force of an utterance. As Hausser (1980) has pointed out, sentence mood does not determine the illocutionary force of an utterance, but merely delimits the set of forces, which could be associated with the utterance of the sentence. What is also important for the determination of the illocutionary force is the information in the context where the sentence is uttered. This is the plot of the next chapter. In order to illustrate the interplay of the information about sentence mood and further information in the utterance context in the determination of the prototypical and non-prototypical illocutionary forces, I will develop a framework of utterances, illocu-

[4] Since in the account of Portner the order of the arguments makes no difference with respect to the compositionality, I see no problem to switch the order of the arguments and to regard the intensional property as an egocentric proposition of the type <*e*, <*s,t*>> (instead of <*s*,<*e,t*>).

tionary forces, and illocutionary acts. The perlocutionary effects of speech acts are illustrated by means of context change. The particular context updates of assertive acts, question acts, and directive speech acts are illustrated in 4.3.1 through 4.3.3.

4 Utterance Meaning over again

As illustrated in chapter 1, for the successful performance of an illocutionary act the illocutionary force of an utterance is R-intended to be recognized by the hearer. The recognition itself is constituted by a complex inference process. This inference process involves the recognition of the utterance act and the phatic act, namely that there has been an utterance of a sentence of a certain type. A further step is the determination of the sentence meaning (e.g. the expressed proposition) in the rhetic act. The determination of the illocutionary force of the utterance takes place in the illocutionary act:

(74) utterance act > phatic act > rhetic act > illocutionary act

Furthermore, the prototypical illocutionary force of an utterance is determined by the recognition of the type of the sentence uttered and its particular meaning. For example, a declarative sentence denotes a proposition *p* that corresponds to the content of the prototypical assertive speech act. Declaratives are used by speakers to express their belief that *p* and to express their intention that the addressee also believes *p*. Yet, as illustrated in 2.2, this perspective would be similar to the *literal meaning hypothesis*. Remember that the *literal meaning hypothesis* overgeneralizes since it merely accounts for the prototypical speech acts that are performed with the utterance of sentences of certain types and excludes the wide variety of non-prototypical speech acts that could also be performed in uttering them. For instance, with the utterance of the declarative sentence *I will be there for you* the speaker can perform a non-prototypical promise. Thus, the illocutionary force of the actual speech act is determined by the interplay of the information about sentence mood and further information in the utterance context.

Following Bach & Harnish (1979), I call the conditions that are singly necessary and sufficient for the performance of an illocutionary act *success conditions*. Success conditions are the requirements on the context of utterance in order to secure the uptake of the R-intention (cf. 1.2 above). For instance, a success condition for the performance of a commissive speech act consists in the *propositional content condition* that the content must represent a future action of the speaker. For a promise, a subtype of commissive speech acts, there is a further success condition that the context has to meet. Namely, the *preparatory condition* that the speaker believes that the addressee favours doing *A* over doing not *A*. Notice, in case the preparatory condition is that the speaker believes that the addressee favours doing not *A* over doing *A*, the success conditions for a threat are fulfilled.

Those conditions on a context that are not success conditions but are required for the nondefectiveness of a speech act are called *felicity conditions*. Importantly, a speech act can be successfully performed even if the felicity conditions are not fulfilled. Among the felicity conditions are the *sincerity conditions*. Thus for in-

stance, a sincerity condition for commissive speech acts is that the speaker really intends to do *A*. If in the context of utterance this condition is not fulfilled, the speech act is successful but defective. Thus, a promise, which is not sincere is empty but nevertheless a promise.
A sincerity condition for assertive speech acts is that the speaker believes that *p*. A further felicity condition for assertive acts is the *preparatory condition* that the speaker has evidence for the truth of *p*. If the sincerity conditions are not fulfilled, the assertion is false but nevertheless a successful assertion.
The felicity conditions for requests are that the speaker has the authority over the addressee, the *preparatory condition* that the speaker believes that the addressee is able to do *A*, and finally the *sincerity condition* that the speaker wants *A* done. In case the felicity conditions are not fulfilled, the request is nevertheless successfully performed.
The felicity conditions for questions include the *preparatory condition* that the speaker has an information gap and does not know the answer. Furthermore, there is the *sincerity condition* that the speaker believes that the addressee is able to give the asked information. Similarly, if the felicity conditions for questions are not fulfilled, the question is nevertheless successful. Owing to the reasons listed in 3.1.2, I assume in the following course of the thesis that questions are basic speech acts.
Depending on the particular speech act, preparatory conditions can be both, success conditions and felicity conditions. Furthermore, felicity conditions are not involved in the determination of the illocutionary force. What they determine is the nondefectiveness of the successfully performed speech act. Therefore, they secure the perlocutionary effect: if a speech act is defective, the achievement of the perlocutionary effect becomes implausible. Thus, for instance, if the addresse believes that the speaker is insincere, the content of a false statement will not be believed by the addressee, and if the addressee believes that the speaker lacks the required authority, the request will not be obeyed etc.
Furthermore, with respect to the information in the context, the fulfillment of the preparatory conditions is presupposed, and the fulfillment of the sincerity conditions have to be possible, they are not known to be false and their intersection with the information in the context may not be empty.

Speech acts are performed by using a sentence in a context. Therefore, before I will address the question of what kind illocutionary forces and speech acts are it is necessary to define first, the notion of context, and second, the notion of an utterance (in a context).

4.1 Context and Common Ground

According to Stalnaker (1998), the relation between context and content is dual: In case of occurrence of context dependent expressions such as pronouns and demonstratives, the expressed proposition is determined by means of aspects of the context of utterance. Furthermore, speech acts, and therefore the illocutionary force and the semantic content affect the contexts in which they are performed.
In order to model this interaction, I follow Stalnaker (1998). In addition, I adopt Schwager's (2006) integration of the Kaplanian concept of indexicality that allows to account for the evaluation of indexicals in contexts and the evaluation of propositions relative to the common ground, that is, relative to a set of possible worlds.
Following Schwager (chapter 2.1), I assume that a context c can be represented as a quadruple containing the speaker c_S of the context, the addressee c_A of the context, the context time c_T, and the world of the context c_w. c is uniquely determined by these components. Thus, for instance, the location l of c is determined such that c_S is at l in c_w.

(75) The set of contexts C is the set of quadruples $< c_S , c_A , c_T , c_w > \in (E \times E \times T \times W)$, such that c_S is communicating with c_A at c_T in c_w.

Of course the notion of context in (75) is too narrow since it does not allow the explication of meaning in form of the Kaplanian character. This is warranted by means of (76). According to Schwager, each context $c \in C$ determines a set of contexts, her *discourse set* (*DS*). *DS* corresponds to the actual discourse situation, such that for each context $c \in DS$, c_S and c_A cannot distinguish c from their actual context c_0 (i.e. c_S and c_A take c as the actual context). Thus, the discourse set *DS* of the actual context c_0 is defined as follows:

(76) $DS(c_0) = \{ c \in C \mid$ the mutual joint beliefs of c_{0S} and c_{0A} at c_{0T} in c_{0w} cannot distinguish c from $c_0 \}$

To put it into words, if the speaker and the addressee are presented in any of the contexts in *DS*, they cannot exclude that c_0 is the context where they are actually in.
Given the function *DS*, Schwager defines the common ground *CG*. *CG* is a function that is applied to the context that is regarded as the actual context, and yields a set of possible worlds. The set $CG(c)$ is defined such that for all worlds $w \in CG(c)$ at c_{0T}, c_{0S} and c_{0A} cannot distinguish w from their actual world c_{0w}:

(77) The common ground *CG* of a context c:
$CG(c) = \{ w \in W \mid$ the mutual beliefs of c_S and c_A do not allow them to distinguish w from $c_w \}$

Furthermore, if there is no uncertainty with respect to the identity of the speaker of c, the addressee of c, and the time of c_0 then a context $c \in DS$ will agree on these first three parameters. Hence, whereas the indexicals get their values in $DS(c_0)$ the expressed proposition is evaluated relative to the worlds in $CG(c)$.
For Stalnaker (1978) the *common ground* is not a set of possible worlds but rather a set of sets of possible worlds, called *presuppositions*. Presuppositions are propositions whose truth is taken for granted as part of the background of the conversation. Presuppositions are what is taken by the speaker to be common ground of the participants in the conversation, what is treated as their *common belief* or *mutual belief* for the purpose of conversation. A proposition is presupposed if the speaker acts as if he believes that the proposition is true in the actual world and as if he believes that his audience also believes that it is true. That is, the participants do not have to believe them really, but for the purpose of the conversation, they act as if they would do. Furthermore, these presuppositions can also be characterized in terms of the *context set* (Schwager's $CG(c)$); namely as a single proposition that is, as the set of possible worlds compatible with what is presupposed. Thus, the *context set* is the set of possible worlds recognized by the speaker to be life options relevant to the conversation. It is obtained by taking the intersection of the set of propositions of the common ground. A proposition is presupposed (that is, a member of the common ground) iff it is true in all the possible worlds of the context set. In the further course of this work, I will refer to the common ground as the set of possible worlds $CG(c)$.

Having defined the notion of context, I will now define the notion of utterance.

4.2 Sentence Types, Sentence Meanings, and Utterances

Let D be a set of sentences of the natural language L, which are syntactically and semantically disambiguated, and which have properties by virtue of their syntax namely, they are of the declarative, interrogative, or imperative type:

(78) $D = \{d_1, d_2, ...\}$

Thus, D is a superset of the set of sententes that are members of the declarative type (D_{decl}), the set of sentences that are members of the imperative type (D_{imp}), and the set of sentences that are members of the interrogative type (D_{int}):

(79) $D_{decl} = \{d_1, d_2 ...\}$
$D_{int} = \{d_1, d_2 ...\}$

$D_{imp} = \{d_1, d_2 ...\}$
where $D_{decl} \cup D_{imp} \cup D_{int} \subseteq D$, and $D_{decl} \cap D_{imp} \cap D_{int} = \varnothing$

By means of the set of sentences D and the set of contexts C, it is possible to define the set of utterances U of sentences $d \in D$ in a context $c \in C$. Following the usual practice, I regard the set of utterances U as the Cartesian product of D and C: $U = D \times C$. Hence, an utterance $u_i \in U$ is an ordered pair consisting of a sentence d_i and the context c where the sentence is uttered (the utterance context):

(80) $u_i = \langle d_i, c \rangle$, where $u_i \in U$

As introduced in 2.2 above, J is the set of sentence meanings that are the values of the semantic function $V: D \rightarrow J$ for L that takes as arguments members of D and yields their meanings.
Thus, an utterance u of a sentence d in a context c may express the semantic content that is obtained by means of the semantic function V that applies to sentences $d \in D$ that is, to sentences that belong to the types D_{decl}, D_{int}, or D_{imp} and yields their meanings $j \in J$: $V(d) = j$.[5]
As illustrated in chapter 3 above, there are different meanings for different sentence types. Declaratives denote propositions, interrogatives denote propositional concepts (Groenendijk & Stokhof, 1984), and imperatives denote intensional properties (Hausser, 1980). Hence, the set of sentence meanings J is a superset of the set of meanings J_{decl} denoted by declaratives, the set of meanings J_{int} denoted by interrogatives, and the set J_{imp} denoted by imperatives:

(81) $J_{decl} = \{j_1, j_2, ...\}$
$J_{int} = \{j_1, j_2, ...\}$
$J_{imp} = \{j_1, j_2, ...\}$
where $J_{decl} \cup J_{imp} \cup J_{int} \subseteq J$, and $J_{decl} \cap J_{imp} \cap J_{int} = \varnothing$

Thus, V applied to a sentence $d_i \in D_{decl}$ yields its meaning $j_i \in J_{decl}$, which is a proposition. V applied to a sentence $d_i \in D_{int}$ yields its meaning $j_i \in J_{int}$, which is a propositional concept. V applied to $d_i \in D_{imp}$ yields $j_i \in J_{imp}$, namely an intensional property.

Consider for example the sentence *It is raining* $\in D_{decl}$. Hence, $[\![it\_is\_raining]\!]^{c,g} = V(it\_is\_raining) = \lambda w.\ rain'(w)$. Similarly, the sentence *Did I sleep?* is a member of the interrogatives, *Did I sleep?* $\in D_{int}$, and its meaning is a propositional concept: $[\![Did\_I\_sleep]\!]^{c,g} = V(did\_I\_sleep) = \lambda w \lambda w'.sleep'(c_S)(w) = sleep'(c_S)(w')$.

[5] Of course the definition in (79) does not exclude sentences that do not belong to the set of declaratives, interrogatives, and imperatives. This allows the placement of minor sentence types such as exclamatives.

The sentence *Free Willy!* is a member of the imperatives, *Free Willy!*$\in D_{imp}$, such that its meaning is an intensional property: $[\![free\_Willy]\!]^{c,g} = V(free\_Willy) = \lambda x \lambda w.free'(willy)(w)(x)$.

Utterances are acts and therefore have effects. Yet, there is not merely the perlocutionary effect of speech acts that are performed with utterances but the information that the utterance of a certain sentence has taken place changes the utterance context to a context whose common ground includes the information that the speaker has uttered a certain sentence. In general, addition of non-redundant and non-contradictory information to the common ground of a context *c* results in a new context *c'* whose common ground is more informative. As illustrated in 4.1 above, the common ground of a context *c* is defined as a set of possible worlds. Hence, the common ground of the non-defective updated context *c'* is the result of the intersection of new information ϕ with the set of possible worlds that constitute the set *CG*(*c*):

(82) $CG(c) \cap \phi = CG(c')$, such that $\{ w \in W \mid \phi(w) \}$

Hence, if the actual speaker utters a sentence then this information about the discourse itself is added on the common ground of the utterance context *c*. By means of the information that the speaker utters a sentence, the utterance context *c* is changed to the context *c'* where the utterance has taken place. That is, the worlds $w \in CG(c')$ make true that c_S utters a sentence. Moreover, *CG*(*c*) comprises among others *the success* and *felicity conditions* for the speech act that is performed by means of the utterance of a sentence $d \in D$. Namely, the kind of given information in the context of utterance that makes it possible, and does not prevent to carry out the speech act.

4.3 The Determination of Utterance Meaning and the Function of Speech Acts to Change Contexts

The sets *DS*(*c*) and *CG*(*c*) do not only involve information that is given by the promoted propositions but also information about the current discourse itself.
Suppose, the actual speaker c_S utters the sentence *I am bald*. Suppose furthermore, both participants are aware that c_S is the producer of the utterance, are not in doubt about their identities, and have knowledge of the time c_T. Hence, all worlds *w* in *CG*(*c*) make true that c_S has uttered an English sentence at c_T. In addition, there is information about the prototypical speech act performed with the utterance of sentences of a certain sentence type. That is, in *CG*(*c*) is true that with the utterance of a certain sentence, speakers perform prototypical speech acts, and that the particular meaning of the sentence corresponds to the content of the respective speech act.

Thus, with the utterance of sentences of the declarative type speakers perform prototypical speech acts of the assertive kind whose contents correspond to the proposition denoted by the respective sentences. With the utterance of sentences of the imperative type, speakers perform prototypical directive speech acts whose contents correspond to the property denoted by the respective sentences. Similarly, speakers use sentences of the interrogative type in order to perform prototypical question acts whose contents correspond to the propositional concept denoted by the respective sentences.
I am bald belongs to the proposition denoting declaratives. Roughly, if $CG(c)$ does not contain information that indicates the contrary, then all worlds in $CG(c)$ make true that with the utterance of the sentence *I am bald* c_S successfully performs a prototypical assertive speech act whose semantic content is the proposition denoted by *I am bald*. Hence, by means of the information in $CG(c)$ c_A infers the prototypical assertive illocutionary force of the utterance of the sentence *I am bald*, and therefore the prototypical assertive speech act. Thus, the assertive speech act is successfully performed and c_A recognizes that c_S intends that c_A believes that c_S is bald. Next, according to the perlocutionary act of assertions (cf. 1.3 above), if c_A in fact believes that c_S was right with respect to the expressed proposition that c_S is bald, then all worlds in $CG(c)$ make true that c_S is bald.

This complex process of the determination of the illocutionary force of an utterance by means of information in $CG(c)$, and the perlocutionary effect of the resulting speech act will be illustrated in terms of context change. Therefore, I introduce illocutionary forces as partial functions from sentence meanings into speech acts, and speech acts as partial functions from contexts into contexts.

First, illocutionary forces are inferred by means of information of the utterance context. That is, by means of the information about the sentence mood, and about the fulfilled success conditions of the particular speech acts. Second, speech acts are formed by combining an illocutionary force $f \in F$ with a sentence meaning $j \in J$. Thus, following Gazdar (1981), I assume that the illocutionary force of an utterance f is a function that is applied to a sentence meaning that is determined by the semantics by means of $V(d_i) \in J$ and yields a speech act $a_i \in A$ (cf. (83) below) which is itself a function from contexts into contexts (cf.(84) below):

(83) $f(j_i) = a_i$, where $a_i \in A$

(84) $f : J \rightarrow (C \rightarrow C)$

Speech acts denote functions from contexts into contexts. The primary function of speech acts is to achieve a perlocutionary effect. That is, after their determination by means of the information in the utterance context, successful and non-defective speech acts change the context where their determination takes place into a context where the perlocutionary effect is achieved.

We cannot order something felicitously (successfully and non-defectively) what is already carried out, cannot permit something felicitously what is already permitted, cannot assert something felicitously what is already known, and we cannot ask something felicitously what is already answered. Furthermore, there are empty promises, false assertions, insincere requests etc. where the felicity conditions are not fulfilled. Since normally, successful but defective speech acts do not achieve the intended perlocutionary effect, I follow Gazdar (1981) and assume that speech acts are partial functions that will not be defined for every context. In (85) below the speech act $a \in A$ is defined as a set of partial functions from the set of (illocutionary) contexts C into the set of (perlocutionary) contexts C. Note that whereas (83) above displays speech acts as structured objects that is, as consisting of an illocutionary force and a semantic contents, the illustration of speech acts in (85) below is not so fine grained.

(85) $a : C \rightarrow C$,
if a is successfully and felicitously performed in the illocutionary context $c \in C$ and undefined otherwise.

The meaning of a sentence $d \in D_{decl}$ is a proposition, namely a function from possible worlds to truth-values. In contrast, as illustrated in chapter 3, I assume that sentences $d \in D_{int}$ denote propositional concepts and sentences $d \in D_{imp}$ denote properties.

For instance, consider the sentence *It is raining* that is a member of D_{decl}. Hence, its meaning is propositional, $[\![it\_is\_raining]\!]^{c,g} = \lambda w.\ rain'(w)$. Suppose f is the prototypical assertive force inferred by the addressee from the utterance context c by means of the information about the semantic mood that assigns the prototypical illocutionary force f_{Assert} to the proposition denoting sentence $d \in D_{decl}$,. Then f_{Assert} is applied to $[\![it\_is\_raining]\!]^{c,g}$ and yields a prototypical assertive speech act $a_{Assert} \in A$: $f_{Assert}([\![it\_is\_raining]\!]^{c,g}) = f_{Assert}(\lambda w.\ rain'(w)) = a_{Assert}$.

Similarly, the sentence *Did I sleep?* is a member of D_{int}. Hence, its meaning is a propositional concept, $[\![Did\_I\_sleep]\!]^{c,g} = \lambda w \lambda w'.sleep'(c_S)(w) = sleep'(c_S)(w')$. Suppose f is the prototypical illocutionary force of questions inferred by the addressee from the utterance context c by means of the information about the semantic mood that assigns the prototypical f_{Quest} to the propositional concept denoting sentence $d \in D_{int}$. Then $f_{Quest}([\![Did\_I\_sleep]\!]^{c,g}) = f_{Quest}(\lambda w \lambda w'.sleep'(c_S)(w) = sleep'(c_S)(w')) = a_{Quest}$.

The sentence *Free Willy!* is a member of D_{imp}. Hence, its meaning is an intensional property, $[\![free\_Willy]\!]^{c,g} = \lambda x \lambda w.free'(willy)(w)(x)$. If the addressee infers the directive force from the utterance context c by means of the information about the semantic mood that assigns the prototypical f_{Dir} to the property denoting sentence $d \in D_{imp}$, then $f_{Direct}([\![free\_Willy]\!]^{c,g}) = f_{Direct}(\lambda x \lambda w.free'(willy)(w)(x)) = a_{Direct}$.

Since at least some illocutionary forces are not defined for some sentence meanings, at least some members of F will be partial functions. For instance, one cannot

perform assertions with sentences that denote semantic objects that are not propositions. Thus, $f([\![Where\_is\_Marina?]\!]^{c,g})$ is not defined if f corresponds to the assertive illocutionary force f_{Assert}. Hence, the definition of illocutionary forces in (83) is completed below:

(86) $f(j_i) = a_i$ if j is of the appropriate semantic type, undefined otherwise.

Remember that in 2.2, the set of speech acts A^* is defined as a subset of $F \times J$ (cf. (87) below):

(87) Speech Acts:
$A^* \subset F \times J$, then for each $a_i \in A^*$, $a_i = \langle f_i, j_i \rangle$, where $j_i \in J$

By means of (87), we are able to account for speech acts as the result of the utterance of a sentence (the utterance act), the determination of the semantic content in the locutionary act, and the inference of its illocutionary force by means of information in the utterance context in the illocutionary act. That is by means of (87) we can regard a speech act as consisting of a semantic content and the illocutionary force that is inferred by means of the information in the utterance context.
Importantly, the definition in (87) does not merely define prototypical speech acts whose prototypical illocutionary forces are determined by means of contextual information about sentence mood, but also non-prototypical speech acts whose illocutionary forces are determined by means of other contextual information namely, by means of the fulfilled success conditions of other speech act types. However, this definition of speech acts as ordered pairs has no independent ontological status and is merely an auxiliary means to illustrate the result of the determination of the illocutionary force by means of the information of the utterance context. The primary function of speech acts is to achieve a perlocutionary effect. That is, successful and non-defective speech acts change the context where their determination takes place into a context where the perlocutionary effect is achieved.
According to Gazdar (1981), due to the previous introduced illocutionary force (cf. (83) and (84) above) as a function from the set of sentence meanings J to the set of speech acts A, the set of speech acts A can be defined in terms of the auxiliary definition of the more fine grained speech acts A^* in (87) above. Hence, in (88) below the set of speech acts A is defined in terms of the set A^* whose members are more fine grained speech acts. Remember that A^* is a set of ordered pairs $a = \langle f, j \rangle$.

(88) $A = \{ f(j) \mid \langle f, j \rangle \in A^* \}$

The speech acts $a \in A$ do not allow us to discriminate the illocutionary force from the semantic content of the speech act, whereas the members of A^* do.

Furthermore, utterances, and the speech acts performed by them classify sequences of contexts. There are three contexts that I call the *utterance context c*, the *illocutionary context c'*, and the *perlocutionary context c''*. In order to keep the context change as concise as possible, the *utterance context c* corresponds to the Austinian presemantic phonetic act (the pure utterance act), and the presemantic phatic act. The *illocutionary context* is a combination of the Austinian semantic rhetic act and the illocutionary act (cf. chapter 1 for the introduction of the locutionary, the illocutionary, and the perlocutionary act). In the further course of this thesis, this simplification will be retained.
Utterances connect *c* and *c''* which are as close as possible given that *c* makes the success and the felicity conditions for the particular speech act type true in order to determine in *c'* the utterance as a particular successful and felicitous speech act that induces the particular perlocutionary effect that leads to *c''*.
In detail, the utterance context *c* is the context where an utterance of a certain sentence takes place. *CG*(*c*) includes information about the previous discourse that requires that the speaker's contribution is of an illocutionary type appropriate to that stage of talk exchange. Note, this is a conversational presumption of Bach & Harnish (1979:63) called *sequencing* (*SE*). According to *SE*, questions have to be answered, requests and commitments acknowledged, and assertions concur with, are dissent from, or elaborate on previous information. Furthermore, in *c* is mutual assumed that the speaker is competent, cooperative, and complies with the *communicative presumption (CP)* (cf. 1.3). Roughly, *CP* says that *CG*(*c*) includes the information that whenever one of the participants says something to the other member of the conversation, he is doing so with some recognizable illocutionary intent. Thus, *CP* assures that whenever a context change is put forth by an utterance, the participant who utters a sentence of a certain sentence type does so with the illocutionary intention to act.
Further properties of the utterance context *c* are the conditions for the performance of a speech act. That is, the *success conditions*, the *felicity conditions*, and the *preparatory conditions* for the particular speech act types that have to be fulfilled in *CG*(*c*). Note that depending on the particular speech acts, the preparatory conditions can act as success or felicity conditions. For instance, the preparatory condition for a promise is the success condition that the speaker believes that the addressee favours doing A in contrast over doing non-A.
Furthermore, I assume that *CG*(*c*) contains the information that with the utterance of a sentence of a certain type, speakers perform prototypical speech acts, whose semantic contents correspond to the semantic object denoted by the respective sentence.
In general, addition of information to a context *c* results in a new context *c'*. As illustrated in 4.1 above, the common ground of a context *c* is defined as a set of

possible worlds. Therefore, the new context *c'* is the result of the intersection of the new information with the set of possible worlds that constitute the set *CG*(*c*) in order to make the resulting set *CG*(*c'*) of *c'* more informative:

(89) $CG(c) \cap \phi = CG(c')$, such that $CG(c') \subseteq \{w \in W \mid \phi(w)\}$

Hence, by means of the information that the speaker utters a sentence, the *utterance context c* is changed to the *illocutionary context c'*. That is, the worlds $w \in CG(c')$ make true that c_S utters a sentence. Furthermore, in *c'* the sentence obtains its meaning by means of the semantic valuation function $V : D \rightarrow J$. Which meaning is assigned depends on the particular sentence type. Furthermore, in *DS*(*c'*) the indexical expressions get their values. Moreover, by means of the information in *CG*(*c'*) the illocutionary force of the utterance is inferred and hence the information about which type of speech act $a \in A$ is performed.
Remember that speech acts $a \in A$ are functions from contexts into contexts. Given that the successfully performed speech act is also felicitously and non-defectively performed, then *a* is applied to the illocutionary context *c'* and yields the *perlocutionary context c''*. The perlocutionary context *c''* is the context where the intended perlocutionary effect is achieved. In the case of assertive speech acts the perlocutionary effect is that the addressee believes the propositional content, in the case of questions, that the addressee provides the missing information and in the case of directive or commissive speech acts that the speaker or the addressee accepts the obligation emerged.
Thus, whereas speech acts in general update the illocutionary context *c'* to the perlocutionary context *c''*, the particular speech acts with its particular perlocutionary effects operate on the common ground of the illocutionary context *c'*. Hence, assertive speech acts, and question acts operate on the common ground of the illocutionary context *c'* and add new information. Directive and commissive speech acts operate on the common ground of the illocutionary context *c'* and order the set of possible words in *CG*(*c'*) according to the ideal of the rational and cooperative participant of the conversation who makes true as many as possible properties on the To-Do-List (Portner, 2005). This will be illustrated in more detail in the following sections 4.3.1 through 4.3.3.

In the following, I will illustrate the determination of the three prototypical speech act types namely, assertive speech acts, question acts, and directive speech acts. That is, I will illustrate in detail the determination of the meaning of the sentence uttered and the determination of the illocutionary force of the utterance. Moreover, I will show the perlocutionary effect of the particular speech act induced by its function to change contexts: the change from the illocutionary context *c'* where the speech act is recognized and hence successfully performed, to the perlocutionary context *c''*, where the intended perlocutionary effect has taken place.

4.3.1 The Context Change of Assertive Speech Acts

Suppose, in the context *c* the speaker c_S utters the sentence *I am bald*. Then, first, in accordance with (89) above, the information that c_S utters the sentence *I am bald*, changes the utterance context *c* to the illocutionary context *c'* whose possible worlds in *CG*(*c'*) make true that c_S utters the sentence *I am bald*:

(90) $CG(c) \cap \{ w \in W \mid c_S \text{ utters } I\ am\ bald \text{ in } w \} = CG(c')$

Remember that, in order to keep the context change as concise as possible, the utterance context *c* is a combination of the presemantic utterance act, and the presemantic phatic act. The illocutionary context is the result of the combination of the semantic rhetic act and the illocutionary act.
Furthermore, in the common ground of the context *c'*, *CG*(*c'*), the sentence meaning is obtained via the semantic evaluation function $V: D \rightarrow J$ (cf. (91) where the indexical pronoun *I* obtains its value in *DS*(*c*), such that *I* refers to the actual speaker c_S). The assigned semantic object depends on the sentence type. The sentence *I am bald* belongs to the declaratives and therefore denotes a proposition:

(91) $[\![I\_am\_bald]\!]^{c,g} = V(I\_am\_bald) = \lambda w.bald'(c_S)(w)$

By means of the information in *CG*(*c'*), namely the information about the previous discourse, the communicative presumption, the particular semantic mood, and the fulfillment of the particular success conditions that help to recognize the R-intention of the speaker, the prototypical illocutionary force *f* of the utterance can be pragmatically inferred. Thus, c_A infers from *CG*(*c'*) that the prototypical illocutionary force *f* of the utterance is assertive and thus determines the prototypical speech act: the information that c_S performs an assertive speech act with the content that c_S is bald is true in all worlds $w \in CG(c')$:

(92) $CG(c') \subseteq \{ w \in W \mid c_S \text{ performs } a_{Assert} = \langle f_{Assert}, \lambda w.bald'(c_S)(w) \rangle \text{ in } w \}$

Importantly, the inference of the illocutionary force in order to determinate the speech act, results in the definition of speech acts as a pair of force and content illustrated in 2.2 and repeated in (87) above. This definition makes it possible to speak about speech acts in terms of their semantic contents and their illocutionary forces inferred from the context *c'* that is, $a_{Assert} = \langle f_{Assert}, \lambda w.bald'(c_S)(w) \rangle$. Next, in accordance with (83), the assertive illocutionary force f_{Assert} is applied to

the sentence meaning and yields the assertive speech act $a_{Assert} \in A$, which is itself a function from contexts into contexts[6]:

(93) $f_{Assert}(\lambda w.bald'(c_S)(w)) = a_{Assert}$

If a_{Assert} is felicitously and non-defectively performed, a_{Assert} is applied to the illocutionary context $c' \in C$ and yields the perlocutionary context $c'' \in C$, where the intended perlocutionary effect has taken place. Of course, the particular perlocutionary effect depends on the type of speech act performed. In order to achieve the assertive perlocutionary effect, in $CG(c')$ the felicity conditions for assertions have to be fulfilled. That is, it is commonly assumed in c that c_S himself believes that c_S is bald, and that c_S has evidence for the truth of the proposition. If c_A is willing to believe in the truth of the proposition, then the illocutionary context c' is changed to the perlocutionary context c'' whose possible worlds, $CG(c'')$, make true the new information provided by the semantic content of the assertive speech act. Thus, whereas the function of speech acts generally consists in updating the illocutionary context c' to the perlocutionary context c'', the particular perlocutionary effect of the assertive speech act operates on the common ground of the illocutionary context c' by adding new information.
According to Stalnaker (1978), there are additionally two constraints on the perlocutionary effect of assertive speech acts: An assertion of a sentence is felicitous, that is, non-defective with respect to $CG(c)$ only if (i) the proposition denoted by the sentence is non-redundant, and (ii) the proposition denoted by the sentence is non-contradictory:

(94) $f_{Assert}(\phi)$ is felicitous w.r.t $CG(c)$ only if
(i) the resulting $CG(c')$ is non-contradictory:
$CG(c) \cap \phi \neq \emptyset$, i.e. $\exists w(w \in CG(c) \,\&\, \phi(w))$
(ii) the resulting $CG(c')$ is non-redundant:
$CG(c) \setminus \phi \neq \emptyset$, i.e. $\exists w(w \in CG(c) \,\&\, \neg\phi(w))$

These constraints have the following motivation: To assert something incompatible with what is already presupposed is self-defeating, since one wants to reduce the $CG(c)$ but does not want to eliminate all the worlds together. To assert something that is already presupposed is the attempt to do something what is actually already done.

Hence, if the felicity conditions for assertive speech acts are fulfilled in $CG(c')$, and if the proposition denoted by the sentence uttered is not redundant or contradictory, then the assertive speech act changes the illocutionary context c' to the perlocutionary context c'', where all $w \in CG(c'')$ make true that c_S is bald:

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[6] The notation a_{Assert} is used for both definitions of speech acts that is, the fine grained notion and the definition of speech acts in terms of context change.

(95) $CG(c') \cap [\![I\_am\_bald]\!]^{c,g} = CG(c'')$,
where $CG(c'') = \{ w \in W \mid c_S \text{ is bald in } w \}$

Hence, an assertion $a_{assert} \in A$, and as I will show in the next section as well question acts $a_{quest} \in A$ are incremental in their effects on the illocutionary contexts *c'* they apply to.

Note that there is a class of negative speech acts that are described by verbs such as *refuse*, and *deny* whose effects on the context is not incremental (cf. for an analysis part III, chapter 3 below). These acts require that there is already some information in the context where the act takes place, which is removed by means of the perlocutionary effect. Take the case of a denial. If someone denies ϕ then it must be the case that ϕ is already asserted in the context that obtains before the denial takes place (namely, in the utterance context of the denial). As a result, ϕ is no longer asserted and is removed from *CG*(*c*). Consequently, ϕ is no longer mutually believed.

4.3.2 The Context Change of Question Acts:

Suppose, in the context *c*, c_S utters the interrogative *Do you like pizza?* Then, the utterance act changes the utterance context *c* to the illocutionary context *c'* where the worlds in *CG*(*c'*) make true that c_S utters the sentence *Do you like pizza?*.

(96) $CG(c) \cap \{ w \in W \mid c_S \text{ utters } \textit{Do you like pizza?} \text{ in } w \} = CG(c')$

In *CG*(*c'*) the sentence meaning is obtained via the semantic valuation function $V: D \rightarrow J$ that assigns the sentence $d \in D_{Interr}$ its corresponding meaning $j \in J_{Interr}$, namely a propositional concept of the type <*s*,<*s*,*t*>> (cf. for the meaning of interrogatives 3.1 above):

(97) $[\![Do\_you\_like\_pizza?]\!]^{c,g} =$
$\lambda w \lambda w'.like'(pizza)(c_A)(w) = like'(pizza)(c_A)(w')$

Again, the indexical pronoun *you* obtains its value in *DS*(*c*), such that *you* refers to the actual addressee c_A. The propositional concept induces a bipartition on the members of the logical space *W*. Since *CG*(*c*) is a subset of the set of worlds *W*, the propositional concept also induces a bipartition on the worlds $w \in CG(c')$.
Furthermore, in the illocutionary context *c'* c_A infers the prototypical illocutionary force f_{Quest} of the utterance by means of the information about the semantic mood of interrogatives in *CG*(*c'*), and thus determines the prototypical speech act successfully performed with the utterance *"Do you like pizza?"*: $a_{Quest} = \langle f_{Quest}, \lambda w \lambda w'.like'(c_A)(w) = like'(c_A)(w') \rangle$.

(98) $CG(c') \subseteq \{ w \in W \mid$ c_S performs
$< f_{Quest}, \lambda w \lambda w'.like'(c_A)(w) = like'(c_A)(w') >$ in w $\}$

Again, the illocutionary force f_{Quest} is applied to the sentence meaning and yields the speech act a_{Quest}, which is itself a function that takes a (illocutionary) context *c'* and yields a (perlocutionary) context *c''*:
$f_{Quest}\,(\,\lambda w \lambda w'.like'(pizza)(c_A)(w) = like'(pizza)(c_A)(w')\,) = a_{Quest}$.
Hence, suppose that in *CG*(*c'*) the felicity conditions for questions are fulfilled. That is, it is mutually assumed that c_S has the information gap induced by the meaning of the interrogative, and believes that c_A is able to fill it by means of the resolution of the induced partition.

Since explicit performative utterances such as *I ask you whether Verena likes pizza* are used in order to raise the chance that the utterance is recognized as the successful performance of a question, the perlocutionary effect of question acts is not relevant for an analysis of explicit performatives. Therefore, I skip the perlocutionary effect of question acts. Roughly, the perlocutionary effect of questions is to receive an answer. Thus, if c_A gives a true exhaustive answer in form of an assertive speech act in order to fill the information gap then the question act changes the illocutionary context *c'* to the perlocutionary context of the assertive speech act which operates on the common ground of *c'*.If the answer is relevant[7] then by means of the answer the partition on *CG*(*c'*) is resolved in order to make the common ground of *c''* more informative. For example, if c_A utters the declarative *Yes, I like pizza* and performs an assertive speech act, then, all $w \in CG(c'')$ make true that c_A likes pizza:

(99) $CG(c') \cap [\![I\_like\_pizza]\!]^{c,g} = CG(c'')$,
where $CG(c'') = \{ w \in W \mid$ c_A likes pizza in w $\}$

4.3.3 The Context Change of Directive Speech Acts

Suppose, in the context *c* c_S utters the sentence *Free Willy!* Then, the utterance act changes the utterance context *c* to the illocutionary *c'* whose worlds in *CG*(*c'*) have the property that c_S utters the sentence *Free Willy!*.

(100) $CG(c) \cap \{ w \in W \mid c_S$ utters *Free Willy* in w $\} = CG(c')$

[7] In order to capture the intermediate contexts the content of the answer has to be relevant for the question act.

Again, in *CG*(*c'*) the sentence meaning is obtained via the semantic function *V* that assigns the sentence $d \in D_{imp}$ its appropriate meaning, that is, an intensional property of type <*e*,<*s,t*>>:

(101) $[\![Free\_Willy!]\!]^{c,g} =$
$\lambda x \lambda w.free'(willy)(w)(x)$

Again, in the illocutionary context *c'* c_A infers the prototypical illocutionary force f_{Dir} of the utterance by means of the information in *CG*(*c'*), that is the information about the semantic mood of imperatives, the fulfilled success conditions for directive speech acts, the sequencing condition etc., and thus determines the prototypical directive speech act: $a_{Dir} = \langle f_{Dir}, \lambda x \lambda w.free'(willy)(w)(x) \rangle$.

(102) $CG(c') \subseteq \{ w \in W \mid c_S$ performs $a_{Dir} = \langle f_{Dir}, \lambda x \lambda w.free'(willy)(w)(x) \rangle$ in $w \}$

Again, according to (83) and (84) above, the illocutionary force f_{Dir} is applied to the sentence meaning and yields the speech act a_{Dir}, which is itself a function from contexts into contexts: $f_{Dir}(\lambda x \lambda w.free'(willy)(w)(x)) = a_{Dir}$.
Given that in *CG*(*c'*) the felicity conditions for directive speech acts are fulfilled. That is, it is mutually assumed that c_S wants c_A to free Willy, and that c_A is able to realize the future action. If c_A accepts the obligation then c_A adds the property denoted by the imperative onto his To-Do-List (Portner, 2005).
As illustrated in 3.2 above, the To-Do-List provides for each participant a measure of rationality: That is, the cooperative and rational addressee strives to have all the properties on his To-Do-List. This is modelled by means of a partial ordering relation on the set of possible words in *CG*(*c'*). The ordering relation is induced by the properties *P* on the addressee's To-Do-List (note, that *TDL*(c_A) is the To-Do-List function applied to the discourse participant c_A):

(103) The partial ordering of worlds $\prec_{c_A}$ (Portner , 2005):
For any *w', w''* ∈ *CG*(*c*), *w'* $\prec_{c_A}$ *w''* iff $\exists P \in TDL(c_A)$, $P(w'')(c_A) = 1$ and $P(w')(c_A) = 0$, and $\forall Q \in TDL(c_A)$, *if* $Q(w')(c_A) = 1$, then $Q(w'')(c_A) = 1$, where $Q \neq P$.

Thus, according to (103) *w''* is the better world since in *w''* c_A has more properties on his To-Do-List as in *w'*.
Hence, if $P = \lambda x \lambda w.free'(willy)(w)(x)$, and $\lambda x \lambda w.free'(willy)(w)(x) \in TDL(c_A)$ then the better worlds $w'' \in CG(c)$ are the worlds that make true, among other properties *Q*, that c_A frees Willy ($\lambda w.free'(willy)(w)(c_A)(w'')$). Hence, the best worlds in *CG*(*c*) are the worlds where c_A frees Willy. Furthermore, the To-Do-List constraints what counts as the rational, cooperative behaviour of the discourse participants:

The participants in the conversation agree to deem c_A's actions as rational and co-operative to the extent that c_A's actions in any worlds $w' \in CG(c)$ tend to make it more likely that it is not the case that there is a world $w'' \in CG(c)$, such that, $w' \prec_{c_A} w''$.

Hence, if c_A is willing to accept the obligation that is, to add the property $\lambda x \lambda w.free'(willy)(w)(x)$ onto his To-Do-List, $[\![free\_Willy]\!]^{c,g} \in TDL(c_A)$, the directive speech act a_{Dir} changes c' to the perlocutionary context c''. Furthermore, according to the particular perlocutionary effect of directive speech acts, the possible worlds $w \in CG(c'')$ are ordered with respect to the ideal to make as many as possible properties on the To-Do-List true, including the property of c_A to free Willy.
Thus, the perlocutionary effect of directive speech acts consists in adding the content of the directive speech act on the To-Do-List of c_A. Furthermore, the To-Do-List orders the possible worlds in $CG(c'')$ such that the best worlds in $CG(c'')$ make true, among other duties on the To-Do-List, that c_A frees Willy.
Explicit performative utterances such as *I order you to free Willy* are used in order to raise the chance that the utterance is recognized as the successful performance of the order. For that reason, I see no need for a proper reconstruction of the final perlocutionary context change of directive speech acts, and skip the precise reconstruction of the rather drafted proposal of Portner (2005).

Having now established the framework where the parenthetical analysis for explicit performatives will be implemented, I will introduce in the second part of the thesis the parenthetical analysis and their application to the proper Austinian explicit performatives. Yet, foremost, I list some pretheoretical formal characteristics of explicit performative utterances. Further, I will argue for the view that in compliance with the semantic mood, declarative explicit performative sentences are used in order to perform prototypical assertive speech acts whose contents correspond to the proposition denoted by the explicit performative sentence. Hence, even though with the utterances of explicit performative sentences speakers perform the speech act expressed by the performative verb, explicit performative sentences are not exceptionally with respect to the relation between their sentence type and the prototypical speech act performed with their utterance.

II. The Semantics and Pragmatics of Explicit Performatives

1 Pretheoretical Characteristics of Explicit Performatives

Whereas in (1) the illocutionary force of promising has to be inferred from the context of utterance, in (2) the illocutionary force of the utterance is expressed by the so-called *performative formula*.

(1) I will give you the job.

(2) I promise to give you the job.

Utterances of explicit performative sentences have a certain interesting property made familiar to philosophers and linguists by J.L. Austin. Namely, given the right context, to utter (2) with appropriate intention IS to promise the addressee to give him the job. In virtue of having this property, a sentence is *performative* and the main verb may be called a *performative verb.* In the following, I list the formal conditions on the performative use of the explicit performative sentence. Note that these conditions are mere pretheoretical observations and do not depend on a particular analysis of explicit performative utterances.

1.1. Performative Verbs

The most crucial component of explicit performative sentences is the performative verb. As I will show in 4.1.5 below, the lexical entry of the performative verb expresses the R-intention of the speaker.
In (3) I present a non-exhaustive list of performative verbs that can be used for expressing the R-intention and hence the illocutionary force of the speech act performed with the utterance of the explicit performative sentence.

(3) assert, state, claim, deny, correct, state, declare, tell, predict, warn, advise, swear, promise, refuse, offer, bet, request, ask, invite, beg, order, command, forbid, interdict, propose, permit, resign, dedicate, define, forgive, baptize, congratulate, thank

According to Searle's (1969) *principle of expressibility*, usually any illocutionary force should be expressible by means of an explicit performative verb. However, there are some exceptions. Illocutionary forces such as threating cannot be expressed that way:

(4) #I hereby threaten you.

1.2. The Subject

A further condition on performative verbs concerns their subjects. Only the actual speaker can perform the speech act and can take the responsibility for the speech act expressed by the performative verb. Since the actual speaker is denoted by a first person singular subject such as in (5)(a), the form of the subject-phrase seems to be constraint to a first singular person pronoun *I*. However, (5)(b) shows that the first person plural pronoun *we* is also a good candidate for the subject of the performative verb.

(5) a. I order you to pay your outstanding dept.
b. We, the members of the cabinet, promise to reflate the market.

According to Allan (1986), it is not necessary to regard *we* as referring to joint speakers, because a performative sentence can be uttered by an authorized speaker provided by the utterance context. The same holds for (6) where the subject of the performative verb corresponds to definite description and where an authorized speaker is speaking for the court.

(6) The court permits you to sit down.

Note furthermore that in passive constructions, the actual speaker provided by the utterance context performs the speech act – and not the individual denoted by the second person pronoun *you*:

(7) You are hereby authorized to undersign the contract.

1.3. Tense and Aspect

Since a speech act is performed at the time of utterance, the performative verb is used in present tense.

(8) I order you to leave.

(9) I ordered you to leave.

(10) Higgins has ordered Magnum to take care of the Ferrari.

With the utterance of (8), the speaker expresses that he performs an order. In contrast, (9) and (10) are speech act reports. They do not express that the actual speaker performs an order at the time of utterance but the sentence reports that an order was made at a time before the utterance event. Thus, the speech act performed with (8) corresponds to an order and the speech acts performed with (9) and (10) correspond to an assertion performed by the actual speaker in order to

inform the addressee that he ordered him to leave, or that Higgins has ordered Magnum to take care of the Ferrari.
Furthermore, since in the right circumstances the speech act is successfully performed at the time of utterance, the performative sentence is perfective. Nevertheless, it seems to be possible that some performatives are imperfective (cf. Allan 1986: 169):

(11) I am hereby promising you not to scatter chips on the carpet.

(12) That horse has won its third race in a row, and I'm betting you $10 it'll win on Saturday.

According to Allan (1986:169), for some people the utterance of (11) has the illocutionary force of a promise because if the speaker subsequently scatters chips on the carpet, he can be accused of breaking the promise. The same holds for (12). The utterance of (12) has the illocutionary force of a bet because it is not odd when the addressee replies *You're on!,* thereby taking up the bet, and expecting the speaker to pay up in case he looses.

1.4. Embedding

An utterance is explicit performative only if the explicit performative sentence is of the declarative type. In case the explicit performative sentence is a member of the interrogatives, such as in (13) below, the performativity vanishes. The same holds if the explicit performative is embedded in the antecedent of a hypothetical conditional as in (14).

(13) Did I order you to clean the table?

(14) If I ask you whether you want to marry me, my husband will be very angry.

Corresponding to the sentence type, the utterance of (13) is a prototypical question act. Similarly, with the utterance of the sentence in (14) that is of the declarative type, the speaker asserts the possibility that the she asks the addressee whether the addressee wants to marry her. The hypothetical clause *I ask you whether you want to marry me* is a condition for the truth of the consequent clause and therefore its utterance is not performative.

1.5. The Adverb *hereby*

According to Austin (1975) the adverb *hereby* marks the verb as performative, presumed that the adverb means 'in uttering this performative formula'.
Thus, the insertion of *hereby* is a test for the performative use. That is, the adverb can be inserted in sentences only if in uttering them the speaker performs the speech act whose illocutionary force is expressed by the verb:

(15) I hereby order you to leave.

Whereas for Austin the adverb means 'in uttering this performative formula', Bach & Harnish (1979) claim that *hereby* means 'in uttering this sentence'. Hence, according to them *hereby* expresses the self-reference of the utterance namely that the speaker spells out not only the illocutionary force of the utterance but also "the vehicle of that force": namely the utterance of the sentence itself.

According to Allan (1986), the remarks 1.1 through 1.4 are necessary conditions on the performative use of the explicit performative sentences. These conditions have to be necessarily fulfilled if we want to account for the use of these sentences as explicit performatives. In contrast, 1.5 is a sufficient condition for the performative use. The following characteristics in 1.6 through 1.7 are listed for the sake of completeness.

1.6. Hedged Performatives

As Fraser (1975) has observed, explicit performatives can be embedded under modals.

(16) I must hereby ask you when you will finish your thesis.

(17) I shall hereby warn you that my brother will find you.

(18) I can (hereby) order you to come to your baptism.

The utterance of (16) is a question, (17) is a warning, and the utterance of (18) is an order if the modal has the reading that the speaker is now in the position to order the addressee to come to his own baptism. In contrast, (18) is merely a statement about the speakers' ability if (18) has the reading that the speaker is able to perform the order. A further example of explicit performative sentences that loose their performativity embedded under modals is (19).

(19) I could/should request you to leave the city.

1.7. Negation

There are two ways to negate explicit performative sentences:

(20) a. I (#hereby) do not promise you to come to the party, but I will try.
I (#hereby) do not order you to answer the door - I beg you to do it.
b. I hereby deny that I took the charitable donation in order to buy the Ferrari.
I hereby refuse your proposal.

The oddity of *hereby* indicates that the utterances in (20)(a) are not performative. The actual speaker does not perform an act of non-promising, or an act of non-ordering. It seems that the overt negation deprives the utterance of its performativity and the utterances in (20)(a) are mere assertive speech acts with the content that the speaker does not promise or order anything. In contrast, the inherent negative predicates in (20)(b) do not prevent the performance of the speech act whose illocutionary force is expressed by the performative verb. For instance, with the utterance of the sentence *I refuse your proposal,* the speaker in fact refuses the proposal of the addressee.

Having listed the pretheoretical characteristics of explicit performative sentences, I will argue in the following chapter, first, for the view that performative sentences have truth conditions, and second, that with the utterance of explicit performative sentences that are of the declarative type, speakers perform prototypical assertive speech acts. This view has the advantage that explicit performative sentences also comply with the semantic characterization of mood illustrated in part I, 2.2, and do not constitute an exception. Corresponding to their sentence type the explicit performative sentences are used in order to perform prototypical assertive speech acts, whose semantic contents correspond to the propositional meaning of the explicit performative sentence.

2 The Semantic Mood of Explicit Performatives

2.1 The Propositional Meaning

The semantic intermediation of sentence mood illustrated in part I, 2.2 is opposed to Austin (1959), and Lewis (1970). Both assume that for instance the explicit performative sentence in (21) and the interrogative sentence in (22) are not only equivalent on the illocutionary level, but are also semantically equivalent.

(21) I ask you whether you feel well.

(22) Do you feel well?

According to Lewis, (21) is a declarative sentence and therefore denotes a proposition. Furthermore, in order to account for a truth conditional treatment of all sentence types, he proposes to treat (21) and (22) as semantically equivalent. This leads to the misguiding consequence that non-declaratives also denote propositions, and that sentence mood has not to be characterized in semantic terms but in terms of the illocutionary force.
In contrast to Lewis, Austin appreciates that the matrix interrogative in (22) does not denote a proposition. Yet, because of the semantic equivalence of (21) and (22), he mistakenly concludes that albeit of its declarative type the sentence in (21) does not denote a proposition, too. Unfortunately, this predicts that not all declarative sentences denote propositions. Furthermore, whereas the explicit performative sentence in (21) does not denote a proposition, the speech act report in (23) – which is similar in structure – does.

(23) Marina asked Magda whether she feels well.

Summarized, Austin and Lewis agree that the explicit performative sentence in (21) and the interrogative sentence in (22) are semantically equivalent, but disagree in respect of the issue whether the explicit performative sentence in (21) should denote a proposition or not.

In the following, I take the position that the declarative explicit performative sentences denote propositions. As I will show in chapter 4 below, with the utterance of explicit performative sentences speakers give information about utterances simultaneously performed. That is, the propositions denoted by the explicit performative sentences are evaluated relative to the context of utterance whose information does not suffice for the determination of the illocutionary force of the corresponding implicit speech act. Therefore, with the utterance of the explicit performative sen-

tences speakers provide the missing information which illocutionary force is the intended one.
Whereas the content of the corresponding implicit assertive speech act is propositional, the contents of the corresponding implicit directive and question acts do not correspond to propositions. Their semantic contents correspond to the kind of semantic objects that are appropriate for the type of the sentence uttered (namely, a propositional concept, or an intensional property introduced in part I, chapter 3). Consequently, the interrogative in (22) and the declarative explicit performative sentence in (21) that describes the illocutionary force of the corresponding implicit speech act performed with the utterance of the interrogative in (22) are not semantically equivalent.

In the next section, I recapitulate the ongoing discussion with respect to the issue whether explicit performative sentences that belong to the declaratives are used in order to perform prototypical speech acts of the assertive kind. Treating the utterances of declarative explicit performative sentences as assertive has the advantage that explicit performative sentences comply with the semantic characterization of mood illustrated in part I, 2.2. That is, corresponding to their sentence type the explicit performative sentences are used in order to perform prototypical assertive speech acts, whose semantic contents correspond to the propositions denoted by the explicit performative sentence.

2.2 The Prototypical Assertive Speech Act

Austin (1962, 1963) insisted on a distinction between assertive speech acts (in his terminology *constatives*) whose contents have truth conditions and performative sentences, which have felicity conditions. Thus, according to Austin, the sentence in (24) has no truth-value, but its utterance is felicitous if the actual speaker intends to stay here.

(24) I promise to stay here.

In contrast, the sentence in (25) below is true iff the speaker stayed at the place referred by *there* the day before the utterance time and false otherwise.

(25) Yesterday, I stayed there.

Since Austin maintained that the content of performative utterances cannot be evaluated in terms of truth conditions, he consequently claimed that performative utterances do not describe, report or constate anything at all. That is, despite of their declarative type, speakers do not perform assertive speech acts in using them. Rather, the performative formulas are involved in the performance of the speech

act: The performative formula makes explicit which speech act type is being performed. To use the performative formula is to perform the illocutionary act named by the performative verb. Austin (1962) lists several examples of performative sentences and says that to utter one of these sentences in the appropriate circumstances is not to describe or to report the action, but it is to perform the action. Note that this is the *self-guaranteeing* property of explicit performative utterances.

In the following, I will refer to Austin's point of view by means of the following three arguments provided by Bach & Harnish (1979:205) to summarize Austin's thinking on the matter:

(26) The content of performative utterances is neither true nor false. Therefore, performative utterances are not assertions.

(27) Someone who utters to the addressee *I order you to leave* would not be said to have asserted that he was ordering the addressee to leave.

(28) Someone who utters *I order you to leave* does not convey the information (i.e. a proposition) that he is ordering the addressee to leave.

The claim that performative sentences are neither true nor false and therefore are no assertive speech acts was challenged from the beginning.
Among others, David Lewis (1970) has pointed out that explicit performative sentences are true iff the speaker actually does what he says he is doing. For instance, if a speaker utters (24) and thereby performs the promise to stay here, then he has spoken the truth. Lewis (1970:210) remarks, "Austin says [the sentence *I bet you sixpence it will rain tomorrow*] is neither true nor false, apparently because to utter the sentence (in normal circumstances) is to bet. Granted; but why is that a reason to deny that the utterance is true? (…) the performative is truly uttered when and because it is uttered." Note that according to Lewis this *self-verifying* property of the explicit performative utterance (also referred to by *saying so makes it so*) is a result of the fact that what the speaker says about himself is made true by means of the speakers' saying it.

In addition, the representatives of the indirectness account of explicit performatives, (IA) namely Bach & Harnish (1979), and Allan (1986) argue in detail against (26)-(28) in order to support IA and therefore that speakers perform with the performative utterances not merely the speech act named by the performative verb, but also statements. According to them performatives are utterances of declarative sentences, which have to denote propositions and in uttering them speakers are also stating what they are doing. Furthermore, even though a speaker is doing both, namely stating and performing the speech act whose illocutionary force is expressed by the verb, the latter seems to be more communicatively relevant than the 'secondary ' speech act of stating. Hence, the speech act whose illocutionary force is named by the verb is the only point of the utterance.

In contrast, Schiffer (1972) and Grewendorf (1979) argue in line with Austin in order to show that performative sentences are not used for the performance of statements.
In his analysis of explicit performatives, Schiffer (1972) agrees with Austin in that the performative formula always makes explicit the full illocutionary force of an utterance. Roughly, Schiffer's argument goes as follows:
If the full illocutionary force would include being assertive then the following infinite regress would result:

(29) a. I order you to calm down.
b. I state that I order you to calm down.
c. I state that I state that I order you to calm down.
d. I state that I state that I state…..

Therefore, Schiffer concludes that if the full illocutionary force of a performative includes being assertive then its full illocutionary force cannot be made explicit. Thus, one is forced to assume that the full illocutionary force does not include an assertive component, and that speakers do not perform assertive speech acts.

Bach (1975:233), who maintains that with the utterance of explicit performatives speakers perform both statements and the speech act whose illocutionary force is named by the verb, claims that the problem of Schiffer's argumentation is grounded in the acceptance of Austin's view that speakers always make explicit the full illocutionary force of their utterance. Bach maintains that even though speakers doing both, performing the speech act whose force is named by the verb, and performing a statement, they do not make explicit the full illocutionary force. The only thing what speakers make explicit is the primary goal of their utterance, namely the force named by the verb. Hence, without Austin's principle that always the full illocutionary force is being made explicit, which is not argued for nor otherwise defended, the regress is stopped at the first step, that is, at (29)(a).
Furthermore, the fact that there are illocutionary forces that have no analogue performative expression supports Bach's claim that Austin's principle is not a suitable premise:

(30) # I hereby threaten you that I will go to the police.

A further counterargument with respect to the view that performative utterances are assertive speech acts is provided by Grewendorf (1979, 2002). The argument is related to the fact that addressees cannot react to performatives in the way they react to assertive speech acts. According to Searle (1969) a sincerity condition and a preparatory condition on assertive speech acts is that the speaker believes in the truth of what he asserts and has evidence for the truth of what he asserts. Whereas *How do you know*, and *That's not true* are natural responds to (31), they are not possible reactions to performative utterances (cf. (32)).

(31) A: Christian quitted smoking.
B: How do you know? / That's not true, I saw him smoking just now.

(32) A: I order you to leave.
B: # How do you know? / # That's not true.

According to Harnish (2004), this argument is overgeneralizing. It is not always true that under normal conditions any assertion can be naturally responded by *How do you know?*, or *That's not true*. *How do you know?*, and *That's not true* seem to be also weird responses in the case of the utterances of (33) which are undisputable assertive speech acts:

(33) a. I have headache.
b. I love pizza.
c. Hi. Let me introduce myself. My name is Tom. (Harnish 2004: 46)

Furthermore, explicit performatives can sometimes be followed by remarks suitable for assertions. Thus, for example Ginet (1979:261) designs a scenario where a judge is murdered one night and an imposer takes his place on the bench the next day. In the courtroom is B who knows about the murder and the imposture:

(34) Imposture: I hereby sentence the defendant to 30 days in jail.
B: No, you are wrong. You don't have the authority to sentence anyone to anything.

A further bit of dialogue that does not seem to be odd is given by Harnish (2004):

(35) A: I promise to be there.
B: Is that true? Do you promise to be there?

Another argument against the additional performance of assertive speech acts consists in the fact that at first glance it seems to be impossible to report the action of performing the speech act whose force is expressed by the performative verb in the present continuous. If a performative is an assertive speech act about what the speaker is doing now, it should have the same form as (36) below.

(36) I am reading 'The Lord of the Rings'.

Of course, in the most cases this form is odd (cf. for instance (37) below). However, the odd sounding form can nevertheless do the job of ordering the addressee to close the door. According to Harnish (p.c.), a possible explanation for the oddity is that there is a contrast between the semantics of the sentence, which is imperfective, and the perfective nature of the illocutionary force named by the verb. Maybe for this reason, the use of the imperfect aspect appears to be odd. However, as already mentioned in the first chapter of part II, there are at least some imperfective performatives (cf. (38)) that constitute an emphatic performative utterance.

(37) # I am ordering you to close the door.

(38) a. I am warning you, young man!
b. I am requesting you to tell me your decision.

Moreover, the sentence in (39) below suggests that it is not the case that if something resists the present continuous it does not report a present activity (Harnish, 2004: 50):

(39) #I am concluding from P & Q that P.

A first argument supporting the view that explicit performatives are assertive speech acts, is provided by Bach (1975) and Ginet (1979), and consists in the counterintuitive asymmetry that results if one treats explicit performative sentences as being of different mood that speakers use singly in order to perform the speech act named by the performative verb.
The sentence in (40) can be used to assert of another person's act that in performing it the person referred by *she* begs the addressee to calm down. Similarly, (41) can be used to assert of one's own past act that in performing it one begged the addressee to calm down. Thus, why cannot *I hereby beg you to calm down* be used to assert one's own current act that by performing it one begs the addressee to calm down? In addition, why should a mere shift in person, and tense, and from *thereby* to *hereby* deprive such a sentence of its power to assert that a certain act is of a certain sort?

(40) She thereby begs him to calm down.

(41) I thereby begged him to calm down.

If we regard utterances of explicit performatives as assertive, there is no need to define a class of exceptions where the performative verbs invoke special conventions. It is more economical to assume that a declarative is prototypically used to assert that something is the case. Ginet (1979:247) argues, "There is a theoretically economical straightforward generalization about declaratives differing only in person, tense that should not be rejected for compelling reason. Complications should not be multiplied beyond necessity".

Even though the discussion whether explicit performative utterances are assertions or not is ongoing and even though the arguments pro and contra are both not satisfying and convincing, I will assume that with the utterances of explicit performative sentences speakers perform prototypical assertive speech acts. For the application of the parenthetical experiment it is mandatory to assume that explicit performative sentences that belong to the declarative type are not exceptional and comply with the semantic characterization of mood illustrated in part I, 2.2. In sake of the parenthetical experiment I assume in the following that corresponding to their sentence type explicit performative sentences are used in order to perform prototypical

assertive speech acts, whose contents correspond to the propositional meaning of the explicit performative sentence.

Next, I will point out two pretheoretical facts with respect to explicit performatives that has to be taken into account for the development of a semantic and pragmatic analysis of explicit performative utterances.

3 Posing the Problem of a Semantic Analysis of Explicit Performatives

3.1 Two Pretheoretical Facts about Explicit Performatives

If we want to analyze explicit performatives such as in (42) below, we come across two well-known pretheoretical facts.

(42) a. I ask you whether you have read 'The Hitchhikers Guide to the Galaxy'.
b. I promise you to be quiet.
c. I state that it is raining outside.

The first fact concerns the *self-guaranteeing* property of explicit performative utterances. Whenever someone says for example (42)(b) that utterance could be insincere if the speaker does not intend to do the act represented by the propositional content. Furthermore, it can fail to be a promise if one of the presuppositions fails to obtain (for example, if the person the speaker takes himself to be addressing is not a person but a dummy). However, the speaker cannot lie or be mistaken about it's having the force of a promise, because, in some sense, the utterance of the sentence gives it the force of a promise. This fact is summarized in (43):

(43) Self-guaranteeing:
Under normal circumstances, with the utterance of an explicit performative sentence the speaker succeeds in performing the speech act expressed by the performative verb. The content of this particular speech act is given by the embedded sentence.

For example with the utterance of (42)(c), the speaker performs a statement with the content *that it is raining outside*. Thus, it seems that the performative verbs that name the force of the speech act that is performed in uttering them, merely have a performative meaning, and do not compositionally contribute their meanings to the truth conditions of the entire sentence. Viewed that way, the performative formulas are *semantically invisible*. Yet, the indexical pronouns *I* and *you* refer to the actual speaker and the actual addressee of the utterance context. Hence, instead of being semantically invisible, the performative formula should contribute its meaning to the truth-conditions of the entire sentence. Consequently, the entire explicit performative sentence denotes a proposition. This fact is summarized in (44) below:

(44) The truth conditional contribution:
The meaning of the performative formula contributes to the truth

conditions of the explicit performative sentence and does not have a pure performative meaning.

If we want to account for both facts above, then we are faced with the following puzzle:

3.2 The Puzzle

Used in the third person past tense the performative formula makes a truth conditional contribution to the meaning of the entire sentence. In contrast, used in the first person present tense it seems to lack the truth conditional contribution and names the force of the speech act that is simultaneously performed with its utterance. Thus, in (45) below, with the utterance of the sentence *I promise you that I will quit smoking* the actual speaker performs the speech act whose illocutionary force is expressed by the performative verb *promise*. The content of this commissive speech act is given by the embedded clause (cf. (45)(b)).

(45) a. I promise you that I will quit smoking.
b. $f_{Comm}(\llbracket that\_I\_will\_quit\_smoking \rrbracket^{c,g})$

Therefore, Austin (1962) seems to be right in assuming that the meaning of the performative formula *I promise you* merely consists in indicating the force of the commissive speech act and does not contribute its meaning to the meaning of the entire explicit performative sentence. Yet, consider the speech act report in (46) and the obvious validity of the inference in (47).

(46) a. Christian promised that he would quit smoking.
b. $f_{Assert}(\llbracket Christian\_promised\_that\_he\_would\_quit\_smoking \rrbracket^{c,g})$

(47) If I claim that it is going to rain, then someone does.
I claim that it is going to rain.
Ergo, someone claims that it is going to rain. (M. Green, 2005: 1)

In (46), the meaning of the performative formula and therefore of the performative verb contributes to the truth conditions of the entire sentence. This is displayed in (46)(b), where the entire sentence denotes a proposition and the actual speaker (as opposed to the subject of the sentence) performs an assertive speech act with the content that Christian promised that he would quit smoking. Moreover, the obvious validity of (47) indicates that embedded in the antecedent of the conditional the performative formula is also semantically visible. The same holds if the explicit performative sentence is of the non-declarative type such as in (48) below:

(48) Did I order you to clean the table?

Thus, the performative formula contributes its meaning to the meaning of the entire explicit performative sentence in speech act reports, in the antecedents of conditionals, and embedded in non-declaratives.
Yet, if the performative verb is used non-embedded and in the first person present tense, the performative formula seems to be semantically invisible and does not contribute its meaning to the truth conditions of the entire sentence. Hence, we are forced to assume that the performative formula has a pure performative, pragmatic meaning and therefore guarantees that the speech act is successfully performed. However, it is hard to see why the performative formula should not make a truth conditional contribution. How could a change in tense and person turn a semantically invisible prefix that is merely used to perform the speech act named by it, into one that is semantically visible?
Importantly, the problem in respect of the truth-conditional contribution of the performative formula is extended to speech act adverbs such as *confidentially* in (49) below:

(49) a. Confidentially, I don't like him.
b. $f_{Assert\text{-}condfidentially}([\![not : I\_like\_him]\!]^{c,g})$

(50) a. Knut confidentially said that he doesn't like him.
b. $f_{Assert}([\![confidentially : K\_said\_that\_he\_doesn't\_like\_him]\!]^{c,g})$

In (49), the actual speaker performs an assertion, which is modified by the adverb *confidentially*. Again, whereas in (49) the speech act adverb is semantically invisible and merely comment on the speech act performed, it contributes its meaning when used in a speech act report such as in (50) above.
Further evidence for the view that the performative formula is semantically visible is given to me by Ede Zimmermann (p.c.). Consider the German sentence in (51) below where the pronoun *er* ('he') is bound by its sentence internal antecedent *der Hersteller* ('the producer'). If the performative formula *der Hersteller weist darauf hin* were semantically invisible, the pronoun would lack reference.

(51) Der Hersteller$_i$ weist darauf hin, dass er$_i$ keine Gewährleistung gibt.
The producer$_i$ indicates that he$_i$ gives no warranty.

If we assume that performative verbs are visible and always contribute their meanings to the meaning of the entire sentence, then an explicit performative sentence such as *I state that it is raining* has the following propositional meaning in (52) and hence the truth conditions in (53):

(52) $[\![I\_state\_that\_it\_is\_raining]\!]^{c,g} =$
$\lambda w.state'(w)(c_S)([\![that\_it\_is\_raining]\!]^{c,g})$

(53) *I state that it is raining* is true in *w* relative to a context *c* iff c_S states that it is raining in *w* (i.e. iff c_S performs a statement in *w*).

Yet, it seems that the truth conditions are read out from the complement *that it is raining*. In a context, where is no rain it would sound strangely if the speaker would defend himself in saying that he has merely stated that it is raining and that this was true. Hence, the speaker is assertorically committed to the truth of the embedded proposition $[\![that\_it\_is\_raining]\!]^{c,g}$. In uttering *I state that it is raining,* the speaker performs an assertive speech act with the propositional content that it is raining: $f_{Assert}([\![that\_it\_is\_raining]\!]^{c,g})$. Hence, in order to account for the statement performed with the utterance of the explicit performative, we are forced to say that the performative formula *I state* is semantically invisible such as in (54)(b) below and we are going in circles:

(54) a. I state that it is raining.
b. $f_{Assert}([\![that\_it\_is\_raining]\!]^{c,g})$

Thus, in order to develop a semantic analysis of explicit performatives we would be forced to say that the performative verbs (and the speech act adverbs) have two distinct meanings. If the performative verb is not embedded and if it is used in the first person present tense, its meaning is purely performative (or in the case of adverbs purely speech act commenting). In contrast, if the explicit performative sentence is embedded and/or the performative verb is not used in first person present tense it exhibits an ordinary linguistic meaning that makes a truth conditional contribution.
Note, this puzzle is known as *Cohen's Problem* that is drawn on Cohen (1964), and reformulated by Lycan (1999). Green (2005) elaborated the puzzle with respect of assertive performative verbs. According to him, assertive verbs are semantically translucent instead of semantically invisible or visible.

In the following chapter, I will offer an analysis for explicit performative utterances that is able to cope with the just mentioned puzzle without postulating a pure pragmatic performative meaning of the performative formula, and a pure pragmatic performative meaning of the speech act adverbs. That is, even though the performativity is warranted such that with the utterance of the explicit performative sentence the speaker performs the speech act named by the performative verb, the performative verbs, the pronouns, and the speech act adverbs contribute their meanings to the truth conditions of the entire sentence.

4 A Parenthetical Analysis of Explicit Performatives

Explicit performative sentences are not only framed by syntactic subordination structures but also by adjoined structures such as in (55) below. In order to distinguish the explicit performative sentences, which display subordination from their parenthetical counterparts, such as *I ask you this*, I call the latter *explicit parentheticals*.

(55) a. Is it necessary, I ask you this, that they should learn Tyrolean songs?
b. Who, I ask you this, has the undisputed greatest singing voice?
c. Remember, I beg you this, the word that you commanded your servant Moses
d. The next level, I assert this, would be a transformation language
e. Go now, I request this, and cry at home!

In the following, I will assume that explicit performatives that display subordination behave with respect to the semantics and the pargmatics as explicit parentheticals in parenthetical structures – regardless of their syntactic structure. Therefore, I will introduce an analysis for explicit parentheticals such as in (55) that will serve as a model for the analysis of the proper Austinian explicit performative utterances that display subordination. To analyze explicit parentheticals first has the advantage that we can deal with two utterances of two main clauses. Since speakers perform speech acts with the utterance of main clauses, I assume that the meaning of the explicit parenthetical, for instance the parenthetical *I beg you this* in (55)(c) specifies that the utterance of the host sentence *Remember the word that you commanded your servant Moses* has the illocutionary force of begging. Hence, instead of deriving the illocutionary force by means of a pragmatic inference schema, we can deal with ordinary direct speech acts that are performed with the utterance of the host sentence. As it will become apparent in 4.1.2.and in 4.3.2.1 below, this kind of analysis stresses that performative verbs are used whenever the contextual information is not sufficient to determine the illocutionary force of the corresponding implicit speech act.

4.1 An Analysis of Explicit Parentheticals

4.1.1 The Semantics of Explicit Parentheticals

If we compare the Austinian explicit performative sentence in (56)(a) with the parenthetical adjoined structure in (56)(b) then the embedded complement clause *that I will stay next time* corresponds to the host sentences *Next time I will stay* of the explicit parenthetical *I promise you this*. (Consider the simplified syntactic structure in (57) below, where the parenthetical expression is adjoined to its host clause).

(56) a. I promise you that I will stay next time.
b. Next time – I promise you this – I will stay.

(57) $[[\text{I promise you this}]_S\ [\text{Next time I will stay}]_S]_S$

Hence, whereas the utterance of the Austinian explicit performative sentence in (56)(a) is normally regarded as a single utterance of one sentence, in the case of adjoined structures we can deal with two utterances of two main clauses. For instance, consider again (56)(b). Here are two utterances with complete determinable semantic contents. The utterance of the host sentence *Next time I will stay* and the utterance of the explicit parenthetical expression *I promise you this*.
Since speakers perform speech acts with the utterances of main clauses, the speaker of (56)(b) simultaneously performs two different speech acts. Next to the implicit speech act performed with the utterance of the host sentence *Next time I will stay*, the speaker performs a prototypical assertive speech act with the utterance of the declarative parenthetical expression *I promise you this*.
This is a demonstrative. Importantly, instead of referring to the proposition denoted by the host sentence, I stipulate that the demonstrative *this* refers to the UTTERANCE of the host sentence that is, to the utterance of *Next time I will stay*. That is, to the utterance *"Next time I will stay"*= < *Next time I will stay*, *c*>, where *c* is the context of utterance. (cf. for the definition of utterances part I, 4.2).
The stipulation is reasonable because since the demonstrative *this* refers to the utterance of the host sentence, it can be considered as relating the two distinct speech acts: Since the demonstrative *this* refers to the utterance of the host sentence, it relates the two distinct speech acts. The speaker uses the semantic content of the prototypical assertive act namely the proposition denoted by *I promise you this* in order to describe what speech act type he simultaneously performs with the utterance of the host sentence *Next time I will stay*. With the proposition denoted by *I promise you this,* the speaker describes the utterance context *c* where he simultaneously performs a promise with the utterance of the host sentence.

(59) below shows the meaning of the explicit parenthetical *I promise you this*.

As illustrated in part I, 4.1 above, $c \in C$ is a context that corresponds to the quadruple $<c_S , c_A , c_T , c_w> \in (E \times E \times T \times W)$, such that c_S is communicating with c_A at the context time c_T in c_w. Furthermore, the actual context $c_0 \in C$ has a discourse set $DS(c_0)$, where the indexicals get their values. $DS(c_0)$ is the set of contexts $c \in C$ which c_S and c_A cannot distinguish from their actual context c_0. Furthermore, each context $c \in C$ has a common ground $GC(c)$. w is a variable for the worlds $w \in GC(c)$, and $u \in U$ are structured variables for utterances. Remember that, as shown in part I, 4.2, an utterance u is defined as a pair of a sentence $d \in D$ in a context $c \in C$: $u=<d,c>$. Again, D is the set of sentences and the sets of declaratives D_{decl}, interrogatives D_{int}, and imperatives D_{imp} are subsets of D. v corresponds to the logical type of the members of the set U.
The indexical pronouns *I,* and *you*, and the demonstrative *this* are directly referential. Hence, the values of the pronouns are determined in the context of their utterance $c \in DS(c_0)$, such that c_S is the speaker of c, and c_A is the addressee of c. The value of the demonstrative *this* is also determined by means of the actual discourse context $c \in DS(c_0)$. Hence, as shown in (58), *this* refers to the actual simultaneously performed utterance u_0 of the declarative host sentence d in the context $c \in DS(c_0)$: that is, to an utterance with the structure $<d,c>$, where $d \in D_{decl}$, and $c \in DS(c_0)$. For the sake of clarity I omit the time variable provided by the verb.

(58) $[\![this]\!]^{c,g} = u_0$

(59) a. $[\![promise]\!]^{c,g} = \lambda u \lambda y \lambda x \lambda w.\ promise'(w)(x)(y)(u)$
type $<v,<e,<e,<s,t>>>>$

b. $[\![promise\_this]\!]^{c,g} =$
$\lambda y \lambda x \lambda w.\ promise'(w)(x)(y)(\ \text{“Next time I will stay”})$
type $<e,<e,<s,t>>$

c. $[\![I\_promise\_you\_this]\!]^{c,g} =$
$\lambda w.\ promise'(w)(c_S)(c_A)(\ \text{“Next time I will stay”})$
type $<s,t>$

(59)(a) shows that the meaning of the verb *promise* is applied among others to utterances u of type v. As shown in (58), the value of the demonstrative *this* is determined by means of the actual discourse context $c \in DS(c_0)$, and therefore refers to the utterance of the declarative host sentence *Next time I will stay*. Hence, the demonstrative *this* answers the question in virtue of WHICH utterance u the promise is performed: the promise is performed in virtue of the utterance *“Next time I will stay”* = < *Next time I will stay*, *c*>.
(59)(c) shows that the meaning of *I promise you this*, namely the result of $[\![promise]\!]^{c,g}([\![this]\!]^{c,g})([\![you]\!]^{c,g})([\![I]\!]^{c,g})$, is a proposition of type $<s,t>$. A set of possible worlds where c_S performs a successful promise (to c_A) with the utterance of the host sentence that is, with the utterance *“Next time I will stay”*.

Furthermore, as I will illustrate in more detail below, the proposition denoted by the explicit parenthetical *I promise you this* is evaluated relative to the worlds $w \in CG(c)$, that make true the success conditions for a promise and therefore that with the utterance *"Next time I will stay"* c_S performs a commissive speech act.

As mentioned in 1.5 above, according to Bach & Harnish (1979) the adverb *hereby* means 'in virtue of the utterance' and expresses the utterance-referential property of the explicit performative sentence. Since the adverb is redundant, can be omitted, and scopes over the relation expressed by the matrix verb I propose that the meaning of *hereby* corresponds to an identity-function over the entire relation expressed by the matrix verb and therefore is of the type $\langle\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle,\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle\rangle$ ((cf. (60) below, where f stands for the function denoted by the performative verb of the type $\langle\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle$).

(60) $[\![hereby]\!]^{c,g} = \lambda f_{\langle\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle} \cdot f_{\langle\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle}$

Thus, *hereby* makes no contribution to the meaning of the explicit performative sentence and is used to emphazise the execution-supporting meaning of the matrix verb in (59)(a) above and therefore the description of the action. Hence, according to this analysis *hereby* means 'in virtue of the execution-supporting meaning of the verb'. And especially in virtue of the utterance to which the execution-supporting meaning of the type $\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle$ is applied. This is feasible, since, as I will show in the next section the execution-supporting meaning of the 'performative' verbs serves to specify the illocutionary force of the utterance of the host sentence. Thus, the speech act is performed with the support of the meaning of the 'performative' verb.

Having introduced the meaning of the explicit parentheticals, I will now illustrate the interaction of the proposition denoted by the explicit parentheticals with the utterance of the host sentence. Roughly, next to the cases where the meaning of the explicit parenthetical is redundant, the main function of the explicit parenthetical is to disambiguate the illocutionary force potential of the utterance of the host sentence[8]. Hence, the meaning of the explicit parenthetical supports the execution of the speech act performed with the utterance of the host sentence. The support of the execution is necessary whenever the contextual information does not suffice for the determination of the illocutionary force of the corresponding implicit speech act.

[8] Since we only know a little about real processes of disambigation the following idea constitutes a bare idealization of pragmatic disambiguation.

4.1.2 The Disambiguation of the Illocutionary Force Potential

Generally, explicit parentheticals are used in contexts *c* where the information provided by the utterance of the host sentence is not sufficient for the determination of the intended illocutionary force of the corresponding implicit speech act and therefore for its success. For instance, in contexts where the information provided by the utterance of *I will be there for you* does not suffice for the determination that the utterance is an act of promising, the speaker uses the explicit parenthetical *I promise you this*, and provides the missing information that he promises with the utterance of *I will be there for you*. Hence, the actual speaker secures the uptake of the intended illocutionary force and therefore the further course of conversation.
To account for this, I assume that in contexts where the information provided by the utterance of the host sentence does not suffice for the determination of the intended illocutionary force, the utterance of the host sentence induces an ambiguity with respect to various possible illocutionary forces (the so-called *illocutionary force potential*). In order to secure the uptake and the further course of conversation, the speaker utters the explicit parenthetical, whose meaning disambiguates the illocutionary force potential of the utterance of the host sentence. Thus, it is not the case that explicit parentheticals are trivially true when uttered. Their function is more complex. Their *self-verifying* property ('*saying so makes it so*') is explained by means of *disambiguation*.
The utterance of the host sentence features an illocutionary force potential whenever the information provided by this utterance, namely the information about the sentence mood and hence about its prototypical illocutionary force does not suffices for the success of the intended speech act. The lack of information induces that in *CG*(*c*) the success conditions for several speech acts are fulfilled. In order to be cooperative and informative and to secure the further course of conversation, the speaker resolves this ambiguity in *CG*(*c*) by means of the utterance of the 'performative' verb. As I will show in more detail in 4.1.5 below, the lexical entry of the 'performative' verb expresses the R-intention of the actual speaker that is normally recognized by the addressee by means of the fulfillment of the particular success conditions of the respective speech act performed with the utterance of the host sentence. Hence, with the utterance of the 'performative' verb the speaker provides the missing information and resolves the ambiguity in *CG*(*c*).

Take for instance the utterance of *Next time – I promise you this – I will stay* that takes place in the context *c*, where the meaning of *I promise you this* refers to the utterance of the declarative host sentence. As illustrated in part I, 2.2, with the utterance of the proposition denoting declaratives, speakers perform prototypical speech acts of the assertive kind, whose contents correspond to the semantic object denoted by the declaratives. This information about the sentence mood given in the common ground of the utterance context, *CG*(*c*), does not suffice for the success of the intended speech act performed with the utterance of the host sentence. Next to the success conditions for the prototypical assertive force that are fulfilled by

means of the information about the sentence mood provided by the utterance of the sentence that belongs to the declaratives, further success conditions are fulfilled in *CG*(*c*). The set of possible worlds denoted by the host sentence *Next time I will stay* describes a future course of action. Thus, in *CG*(*c*) the success conditions for predictions (an instance of the prototypical assertive force type f_{assert}) and promises (an instance of the non-prototypical commissive force type f_{comm}) are fulfilled since they require that the semantic content describes a future course of action. Furthermore, suppose that in *CG*(*c*) is no further information with respect to the issue which speech act is performed with *"Next time I will stay"*. As a result, c_A is not able to determine the illocutionary force of the utterance *"Next time I will stay"*. The utterance of the host sentence is ambiguous with respect to the information about its possible illocutionary forces. The information in *CG*(*c*) determines either an instance of the prototypical assertive type f_{assert} or an instance of the non-prototypical commissive type f_{comm}.
In order to be cooperative and informative the speaker resolves the contextual ambiguity in *CG*(*c*) by means of the utterance of the explicit parenthetical *I promise you this*. The meaning of *promise* provides the missing information that the illocutionary force of the utterance of the host sentence is an instance of f_{comm}, namely the illocutionary force of a promise.
Hence, instead of simply being *self-verifying* (*"saying so makes it so"*), the function of the explicit parenthetical is more complex. The meaning of the explicit parenthetical *disambiguates* the several fulfilled success conditions in *CG*(*c*) and hence the illocutionary force potential of the utterance of the host sentence. Note, since the meaning of the explicit parenthetical conveys new information about the illocutionary force of the utterance of the host sentence, the meaning of the explicit parenthetical creates new facts in *CG*(*c*). For a more detailed elaboration of the disambiguation of the illocutionary forces, see 4.3.2.1 below.

The same holds for all explicit parentheticals that describe particular illocutionary forces whose inferences are difficult to master because the information provided by means of the utterance of the host sentence is too weak and induces an ambiguity with respect to its possible illocutionary forces. That is, the information about sentence mood, and hence about the prototypical illocutionary force of the utterance of the host sentence does not suffice for the determination of the intended illocutionary force and therefore for the success of the speech act performed with the utterance of the host sentence. The success conditions for several speech acts are fulfilled in *CG*(*c*). For instance, the differences between the distinct instances of the directive force type cannot be filtered out only by means of the information about sentence mood and by means of information about the prototypical illocutionary force f_{dir}. The different success conditions of begging, requesting, asking, ordering, demanding etc. cannot be determined only by virtue of the information about the prototypical illocutionary force provided by the mere implicit prototypical speech act performed with the utterance of the imperative host sentence. The same holds

with respect to the individuation of instances of other force types. For example, the differences between agreeing and conceding, between guessing, supposing, and stipulating, between questioning and inquiring cannot be determined only by virtue of the information about the sentence mood and the prototypical force f_{assert} provided by the utterance of the host sentence in $CG(c)$.[9] In order to secure the uptake of the intended instance and the further course of conversation, the cooperative speaker uses the explicit parenthetical whose meaning disambiguates the possible illocutionary forces of the utterance of the host sentence.

Note that there are two types of ambiguities with respect to the information about the possible illocutionary forces of an utterance. First, the ambiguity among the information about various prototypical and non-prototypical illocutionary force types and their instances (e.g. the ambiguity between the instances of the prototypical f_{Assert} and the instances of the non-prototypical f_{Comm} above). Second, the ambiguity among the information about various instances of one certain illocutionary type (e.g. $f_{begging}$, f_{demand}, f_{permit}, and f_{order}).

4.1.3 Contradiction and Redundancy

Of course, there are contexts where the determination of the prototypical implicit speech act performed with the utterance of the host sentence is sufficient for the further course of conversation. In these contexts, the utterance of the host sentence induces no ambiguity with respect to its possible illocutionary forces. Hence, there is no illocutionary force potential of the utterance of the host sentence, and no need for disambiguation.

In the first case, the information provided by the proposition denoted by the explicit parenthetical is false and *contradicts* the contextual information about sentence mood and the prototypical illocutionary force that is provided by the mere utterance of the host sentence and that is already sufficient for the further course of conversation.
In the second case, the information provided by the proposition denoted by the explicit parenthetical is *redundant*. The 'performative' verb does not provide additional information with respect to the speech act performed with the host sentence. The contextual information about sentence mood and the prototypical illocutionary force provided by the mere utterance of the host sentence and hence the prototypical speech act performed with the utterance of the host sentence already suffices for the further course of conversation.

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[9] Considered that way, explicit parentheticals disambiguate the illocutionary force potential of an utterance in the same manner as the preverbal *please* disambiguates between the question act and the indirect request: *Could you please give me a ride?*

Remember, in 2.2 I have plead for an assertive treatment of the utterances of the declarative explicit performative sentences. This bears the advantage that also the declarative explicit performative sentences comply with the semantic characterization of mood, illustrated in part I, 2.2. In accordance with their declarative sentence type, explicit performative sentences are uttered in order to perform prototypical assertive speech acts, whose contents correspond to the propositional meaning of the explicit performative sentence.
As illustrated in part I, 4.3.1 according to Stalnaker (1978) there are two additional constraints on the felicitous and non-defective performance of assertive speech acts. An assertive speech act is felicitously performed in the (illocutionary) context *c* only if the resulting (perlocutionary) context *c'* is not contradictory and not redundant:

(61) $f_{Assert}(\phi)$ is felicitous w.r.t $CG(c)$ only if
(i) the resulting $CG(c')$ is not contradictory:
$CG(c) \cap \phi \neq \emptyset$, i.e. $\exists w(w \in CG(c) \,\&\, \phi(w))$
(ii) the resulting $CG(c')$ is not redundant:
$CG(c) \setminus \phi \neq \emptyset$, i.e. $\exists w(w \in CG(c) \,\&\, \neg\phi(w))$

In order to begin with the former condition (i) and hence with the case where the information provided by the explicit parenthetical is *contradictory*, it is necessary to illustrate how the proposition denoted by the explicit parenthetical interacts with the success conditions of the speech act performed with the utterance of the host sentence in *c*:

(62) a. $[\![I\_order\_you\_this]\!]^{c,g} = 1$ iff
$CG(c) \subseteq [\![I\_order\_you\_this]\!]^{c,g}$
(That is, iff in *c* the success- and felicity conditions for an order are fulfilled and c_S performs an order with the utterance of the host sentence)
b. $[\![I\_order\_you\_this]\!]^{c,g} = 0$ (and hence contradictory) iff
$CG(c) \subseteq [\![\neg I\_order\_you\_this]\!]^{c,g}$
(iff it is not the case that in *c* the success- and felicity conditions for an order are fulfilled, that is iff c_S lacks the necessary social authority to order.)

Remember that in order to disambiguate the illocutionary force potential of the utterance of the host sentence, the meaning of the explicit parenthetical creates new facts in $CG(c)$, since it conveys the new information about the illocutionary force of the utterance of the host sentence (cf. 4.1.2 above). In contrast, here, the already established information about the performance of the prototypical question act in $CG(c)$ determines whether the explicit parenthetical is true or false. In other words,

the facts in $CG(c)$ decide whether the content of the assertive speech act performed with the utterance of the explicit parenthetical is true or false.
Thus, in terms of the condition on a felicitous assertion in (61), the truth conditions in (62)(a) lead to a non-contradictory and hence felicitous update of the common ground of the illocutionary context c (cf. (63)(a) below). In contrast, the truth conditions in (62)(b) lead to a contradictory and defective update of the common ground of the illocutionary context c (cf. (63)(b)):

(63) a. non contradictory:

$$CG(c) \cap [\![I\_order\_you\_this]\!]^{c,g} \neq \varnothing \text{ ,i.e.}$$

$$\exists w(w \in CG(c) \,\&\, [\![I\_order\_you\_this]\!]^{c,g}(w))$$

b. contradictory:

$$CG(c) \cap [\![I\_order\_you\_this]\!]^{c,g} = \varnothing \text{ ,i.e.}$$

$$\neg\exists w(w \in CG(c) \,\&\, [\![I\_order\_you\_this]\!]^{c,g}(w))$$

Remember that in contexts where the speaker disambiguates the illocutionary force potential of the utterance of the host sentence, the information provided by the mere utterance of the host sentence does not suffice for the determination of the intended illocutionary force. In $CG(c)$ the success conditions for several speech acts are fulfilled. In order to be cooperative and informative and to secure the further course of conversation, the actual speaker resolves this ambiguity in $CG(c)$ by means of the meaning of the 'performative' verb. The lexical entry of the 'performative' verb expresses the R-intention of the actual speaker (cf. 4.1.5 below) normally recognized by the addressee by means of the fulfillment of the success conditions of the implicit speech act performed with the utterance of the host sentence.

In contrast, there are contexts where the determination of the prototypical speech act is already sufficient for the course of conversation. Here, the utterance of the host sentence does not induce an ambiguity with respect to the success conditions for several speech acts. After processing the utterance of the host sentence, the worlds in $CG(c)$ merely make true the conditions on the speech act performed with the utterance of the host sentence. Here, the information provided by the utterance of the host sentence, that is, the prototypical speech act suffices for the further course of the conversation.
In the first case where disambiguation is not possible, the proposition denoted by the explicit parenthetical turns out to be false, and effects that the common ground of the context updated by means of the assertive speech act is empty and defective. In the second, more interesting case, the meaning of the explicit parenthetical provides no additional information and therefore is *redundant*.

Consider for instance (64), where the host sentence is interrogative.

(64) Who, I ask you this, has the undisputed greatest singing voice?

According to the semantic mood illustrated in part I, 2.2, interrogatives are used to perform prototypical question acts whose contents correspond to the meaning of the interrogative sentence. Thus, c_A infers from the information in $CG(c)$ that with the utterance *"Who has the undisputed greatest singing voice?"* c_S successfully performs a prototypical question act:

(65) $CG(c) \subseteq \{ w \in W \mid c_S \text{ performs } a_{Quest} \text{ in } w \}$

Let c be a context where the prototypical question act suffices for the course of conversation, and where the utterance of the interrogative host sentence does not induce an ambiguity with respect to several instances of its illocutionary force type (for instance an ambiguity between the forces *asking*, *interrogating,* and *questioning*). That means, in c it is excluded that the speaker formally asks the addressee on the suspicion that something important has been kept hidden (*interrogating*) or that the speaker asks for an answer that is expected to include an element of explanation or even justification (*questioning*). Hence, in order to secure the further course of conversation it suffices to convey that the actual speaker wants his addressee to give him the missing information. However, this is already guaranteed by the performance of the prototypical implicit question act. With the performance of implicit questions, speakers already express that they want their addressees to give them the missing information. Hence, for the purpose to perform a question act in c there is no need for additional information to secure the further course of conversation.

Moreover, in contexts where the implicit question act performed with the utterance of the host sentence suffices to secure the further course of conversation, the meaning of the 'performative' verb *ask* does not provide additional information with respect to the implicit question act performed with the utterance of the host sentence.

The meaning of *ask* merely expresses the illocutionary force of a question, namely, the R-intention of the speaker that he wants the addressee to give him the missing information (Vanderveken, 1990-91). Thus, in contexts where the information that the speaker wants the addressee to give him the missing information suffices, the verb *ask* conveys no additional information with respect to the implicit question act performed. Since the worlds in $CG(c)$ already make true that the prototypical question act is successfully performed, the meaning of the explicit parenthetical *I ask you this* is redundant and merely emphasizes the question act performed with the utterance of the host sentence:

(66) Redundancy (cf. (61)(ii) above):

$CG(c) \setminus [\![I\_ask\_you\_this]\!]^c = \varnothing$, i.e.

$\neg\exists w(w \in CG(c) \,\&\, \neg [\![I\_ask\_you\_this]\!]^c (w))$

Next, consider the sentences in (67) below. In compliance with the semantic mood, declaratives are used to perform prototypical assertive speech acts whose contents correspond to the meaning of the declarative sentence. Thus, c_A infers from the information in *CG*(*c*) that with the utterance *"The next level corresponds to a transformation language"* c_S successfully performs a prototypical assertive speech act.

(67) The next level, I state/claim/assert this, corresponds to a transformation language.

Again, let *c* be a context where the prototypical assertive act suffices for the course of conversation, and where the utterance of the declarative host sentence does not induce an ambiguity with respect to several instances of its assertive force type (for instance an ambiguity between the forces *stating*, and *guessing*). That means, in *c* is excluded that the speaker expresses a rather weak commitment to the truth and that he presupposes its probability (Vanderveken, 1990-91). Hence, in order to secure the further course of conversation it suffices in *c* to express a strong assertoric commitment with respect to the truth of the propositional content. Again, this is already guaranteed with the performance of the prototypical implicit assertion. With the performance of implicit assertions, speakers always express a strong assertoric commitment to the truth of the propositional content. Hence, in contexts where the expression of a strong assertoric commitment suffices to secure the further course of conversation, there is no need of additional information.

Again, in contexts where the implicit assertive act performed with the utterance of the host sentence suffices to secure the further course of conversation, the meanings of the 'performative' verbs *state, claim*, and *assert* do not provide additional information with respect to the implicit assertive act performed with the utterance of the host sentence.

In contrast to the assertive but not 'performative' verbs *guess*, *assume*, *suggest*, and *suppose* that speakers use to describe that they have a rather weak commitment to the truth of the proposition denoted by the host sentence[10], the meanings of the assertive verbs *state*, *claim*, and *assert* express a strong commitment to the truth of the propositional content of the implicit assertive speech act. Therefore, they convey no additional information with respect to the commitment to the truth of the propositional content of the implicit assertive act. There are no differences in

[10] Since in parenthetical structures the non-'performative' verbs *guess, assume, suggest*, and *suppose* do not allow for the adverb *hereby* and according to my judgement also for the demonstrative *this* that refers to the utterance of the host sentence, a parenthetical analysis is not applicable: *The next level, I (#hereby) guess (?this), corresponds to a transformation language.* The odditiy of *this* explains why the verbs *guess, assume, suggest*, and *suppose* are not 'performative' verbs and do not have the execution-supporting meaning of the type $\langle v,\langle e,\langle s,t\rangle\rangle\rangle$ but merely the reporting meaning of the type $\langle\langle s,t\rangle,\langle e,\langle s,t\rangle\rangle\rangle$. *Hereby* is odd since the adverb is used to emphasize the utterance reference expressed by the execution-supporting meaning of the 'performative' verb.

strength between the prototypical assertive speech act performed with the utterance of the host sentence and the assertoric commitment expressed by the meanings of *state, claim*, and *assert.* If there were any difference at all, the difference would be too marginal for being important. Hence, the meanings of *state, claim*, and *assert* provide no additional information about the assertoric commitment of the speaker and therefore are redundant:

(68) Redundancy:

$$CG(c) \setminus [\![I\_state / claim / assert\_this]\!]^{c,g} = \varnothing \text{, i.e.}$$

$$\neg\exists w(w \in CG(c) \,\&\, \neg [\![I\_state / claim / assert\_this]\!]^{c,g}(w))$$

Again, the information provided by the explicit parenthetical merely emphasizes the prototypical implicit assertive act performed with the utterance of the host sentence[11].

Of course the meaning of the 'performative' verbs *state*, *assert*, and *claim* is not always redundant. *Claim* tends to connect the assertion of the speaker by way of right of ownership. *State* has a nuance of entering into a larger or more formal discourse (Vanderveken, 1990-91). However, these are mere tendencies and in contexts where this information is not needed to secure the further course of conversation, the determination of the prototypical speech act is sufficient and this information is not relevant. In contrast, in contexts where the additional meaning aspects of *state* and *claim* are relevant for the further course of conversation, the information provided by the utterance of the host sentence does not suffice to secure the further course of information, and the utterance of the host sentence is ambiguous with respect to this possible illocutionary forces. Therefore, the cooperative speaker uses *state* and *claim* in order to provide the missing information and disambiguates the illocutionary force potential[12].

Next, consider the discourse in (69) below. Here, the information provided by the utterance of the host sentence does not suffice and induces an illocutionary force

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[11] (i) *Who on earth has, I ask you this, ever read Thomas Manns ‚Der Zauberberg'?* (ii) *Could you please, I beg you this, close the window?*
Under the assumption that rhetoric questions are indirect speech acts (i) and (ii) constitute interesting cases. Wheres the explicit parenthetical in (ii) describes the indirect speech act of begging, (i) describes the direct speech act of asking a question. Here the explicit parentheticals do not disambigate the illocutionary force potential of the utterance of the host sentences. Indirect speech acts are not underspecified but *overspecified* with respect of two illocutionary forces and thus *not ambig* with respect to various illocutionary forcres. Hence the utterance context of the explicit parenthetical already makes true the information about two illocutionary forces. The parenthetical does not give any new information, is redundant and is used to emphazise one of the illocutions.

[12] The additional aspects of meaning can be modelled as conventional implicatures in the spirit of Potts (2003) that do not consitute a part of the descriptive meaning. Viewed this way in the most contexts the additional meaning aspect is not relevant for the success of the respective speech act.

potential. Here, *state*, *assert*, and *claim* are used by the actual speaker to provide the information that she is not merely assuming or guessing, but intends to express a strong assertoric commitment to the truth of the propositional content.

(69) Verena: Performative verbs are not performative.
H-C to Magda: Verena guesses that performative verbs are not performative.
Verena: No! Performative verbs are, I CLAIM/ASSERT/STATE this, not performative.

The same holds for *ask* that can be used in contexts where an ambiguity exists with respect to the issue whether the speaker is interrogating, questioning or merely asking. In contexts where this information is relevant, the information provided by the utterance of the host sentence does not suffice to secure the further course of information. The utterance of the host sentence is ambiguous with respect to the possible instances of the question type, and the cooperative speaker uses *question,* or *interrogate* in order to provide the missing information and thus disambiguates the illocutionary force potential.

Summarized, contradiction arises if the information given by the utterance of the explicit parenthetical is false and contradicts the contextual information about the sentence mood and the prototypical force that is provided by the utterance of the host sentence and that is already sufficient for the success of its implicit speech.
Redundancy arises if the information in $CG(c)$ provided by the utterance of the host sentence, namely, the information about the sentence mood and the prototypical force, is already sufficient for the further course of the conversation. In these contexts, the meaning of the 'performative' verb does not provide additional information with respect to the implicit speech act performed with the host sentence[13].

For a more detailed elaboration of the redundancy, see 4.3.2.2 below.

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[13] Of course, similar to #*John said – I ask you this – that he will come* or #*Yesterday – I predict this – I felt like Hannibal Lector* which constitute a special case of contradictory since they are contradictory in every context, the discussed redundant performatives constitute special cases because they are almost in every context redundant. Whereas pure contextual contradictory arises if the felicity conditions of the respective speech act are not fulfilled, pure contextual redundancy occurs if the perlocutionary effect of the alleged speech act is already performed. For instance, if the utterance of a statement is disambiguated as a statement even though its content already follows from the common ground. Thus explicit parentheticals such as #*I insult you* and # *I threaten you* are pure contextual redundant since the main utterance is already disambiguated by means of its semantic content that constitutes a future course of action wich penalizes the addressee. Thus there are no contexts where these two parentheticals are informative. The two verbs have no performative use.

4.1.4 Interim Conclusion

According to the parenthetical analysis, the 'performative' verbs, the indexical pronouns and in addition, the speech act adverbs (cf. for the analysis part III, chapter 1) contribute their meanings to the truth conditions of the entire sentence, and therefore are semantically visible. Since the meaning of the 'performative' verb is applied to an utterance of type *v*, the meaning of the 'performative' verbs is not purely performative but *execution supporting*. For instance, the speaker utters the explicit parenthetical *I promise you this* for describing what he is simultaneously doing, and the speaker does not succeed in performing the commissive speech act simply because he utters the explicit parenthetical. Rather, due to the meaning of the 'performative' verb the potential illocutionary forces of the utterance of the host sentence are disambiguated. Thus, explicit parentheticals have a more complex function and are not simply *"saying so makes it so"*, or *self-verifying*.
Furthermore, the performativity, and hence the *self-guaranteeing* property of the explicit parenthetical is a result of the utterance of the host sentence. The meaning of the 'performative' verb merely disambiguates the illocutionary force potential of the utterance of the host sentence. Therefore, there are ordinary implicit, and in opposition to Bach & Harnish (1979), direct speech acts and there is no need for a special mechanism to handle the performativity. Hence, even though the 'performative' verb is semantically visible and does not have a pure performative meaning, the parenthetical analysis is able to account for the performance of the speech act whose force is expressed by the meaning of the 'performative' verb.
Since 'performative' verbs denote the execution-supporting meaning, but are also used in order to report speech acts such as in *Verena claimed that she felt like Hannibal Lector*, they show a systematic kind of polysemy. The two meanings of the 'performative' verbs are related in a similar manner as Krifka (1999) relates the Boolean conjunction and the speech act conjunction both denoted by *and*. In general, expressions that are related to the type of speech act or to the properties of its execution are the same expressions that describe such acts. Moreover, since there is a relation between the two meanings, we can regard this type of ambiguity as structural rather than lexical. This is shown in the next section.

4.1.5 The Structural Ambiguity of 'Performative' Verbs

Even though the parenthetical analysis has the advantage that the meaning of the 'performative' verbs is not purely performative, but contributes to the truth conditions of the entire sentence, the parenthetical experiment requires to model the 'performative' verbs as ambiguous.
Consider for instance the speech act report in (70)(b). Here, the commissive verb *promise* is used in third person past tense. Its meaning is applied to the proposition denoted by the host sentence and yields the proposition that Verena promised that

she will be courteous tomorrow. In contrast, consider (70)(a) where the commissive verb *promise* is in first person present tense. Here, according to the parenthetical analysis, instead of being applied to the proposition denoted by the host sentence, its meaning is applied to the utterance of the host sentence and yields the proposition that the actual speaker claims with the utterance *"Tomorrow I will be courteous"*.

(70) a. Tomorrow, I (hereby) promise you this, I will be courteous.
b. speech act report:
Tomorrow, Verena (#hereby) promised this, she will be courteous.

Thus, *promise* is lexical ambiguous between the two meanings illustrated in (i) and (ii) in (71) below, where $t \in T$ is a variable for tense of type *i*.

(71) $[\![promise]\!]^{c,g}$ =
(i) execution-supporting meaning:
$\lambda u \lambda y \lambda x \lambda t \lambda w.promise_1'(w)(t)(x)(y)(u)$, type <*v*,<*e*,<*e*,<*i*,<*s*,*t*>>>>>
(ii) reporting meaning[14]:
$\lambda P \lambda y \lambda x \lambda t \lambda w.promise_2'(w)(t)(x)(y)(P)$,
type <<s,<*e*,*t*>>,<*e*,<*e*,<*i*, <*s*,*t*>>>>>

The meaning in (i) is a clue for the actual addressee that the illocutionary force of the utterance *u* is the illocutionary force of a promise. In contrast, the meaning in (ii) is used to describe that the property *P* is the semantic content of a promise previously performed. To express it differently, whereas (ii) is used to describe an already performed speech act in terms of its force and content, (i) is used to support the execution of the speech act performed with the utterance *u*. Thus, the meaning in (ii) is *execution supporting*, and the meaning in (i) is speech act *reporting*.

As illustrated in 4.1.1 above, I propose that the adverb *hereby* expresses that the speech act whose force is expressed by the matrix verb is performed by virtue of the utterance to which the execution-supporting meaning is applied.
Its semantics, which is repeated in (72) below, expresses that use of the adverb is redundant since the utterance reference of the explicit parenthetical is already a component of the execution-supporting meaning in (71)(i).

(72) $[\![hereby]\!]^{c,g} = \lambda f_{<<v,<e,<e,<s,t>>>>>} . f_{<<v,<e,<e,<e,<s,t>>>>}$

[14] Of course, not all complements denote propositions. Thus, the *wh*-complements of interrogative verbs denote propositional concepts and the infinitival complements denote intensional properties. Moreover, in 4.3.3 I will show that *that*-complements embedded under directive and commissive verbs also denote intensional properties *P* of type <*s*,<*e*,*t*>>.

However, consider again the speech act report in (70)(b) above, where in contrast to (70)(a) the insertion of *hereby* is odd. Hence, even though the meaning of *hereby* is redundant, it is uttered to emphasize the use of the matrix verb with the execution-supporting meaning and therefore the utterance-reference of the 'performative' verb.

Polysemy requires that meanings are somehow related to each other. The execution-supporting meaning and the reporting meaning are related in a similar manner as Krifka (1999) relates the two meanings of *and* with each other.
According to Krifka, the Boolean $\wedge$ denoted by *and* is used in (73)(a) to describe the conjoined execution of the speech acts in (73)(b). (Where the speech act conjunction & is incrementally updating the context c where the two question acts A and A' are performed: $[A\&A'](c) = A'(A(c))$)

(73) a. speech act report:
A asked B which dish did Al made, and A asked B which dish did Bill made.
b. A to B: Which dish did Al made? And, which dish did Bill made?

(74) shows that the truth-functional meaning of the quantifier *every* can be also used to describe the conjoined execution of speech acts:

(74) a. A: Which dish did every chef make?
b. speech act report: For every chef x, A asked which dish x made.

Thus, the natural language provides shared resources for the execution and the description of speech acts. We can use *and* and *every* to conjoin the execution of speech acts because we can use *and* and *every* to describe the conjoined execution of speech acts. In general, expressions that are related to the type of speech act or to properties of its execution are the same expressions that describe such acts. According to Bierwisch (1980), to whom Krifka is referring, the class of performative verbs is also a subclass of these resource-sharing expressions. The reporting meaning of *promise* is used in the speech act report in (70)(b) to describe the execution-supporting meaning of *promise* used in the explicit parenthetical in (70)(a).
As I will elaborate in part III, chapter 1, speech act adverbials constitute a further case of shared resources and are ambiguous between a meaning that comments on the speech acts performed with the utterance of the main clause, and a second meaning that describes their speech act commenting function:

(75) a. A to B: Frankly, you are boring.
speech act report: A told B frankly that B is boring.
b. A to B: In case you are interested, the party is tomorrow.
speech act report: In case that B is interested A told B that the party is tomorrow.

Since many expressions come with these two related meanings, this kind of polysemy can be regarded as systematic. Yet, mysteriously, there are specialized expressions that do not share their resources (cf. Krifka, 2004):

(76) a. A to B: Alas, you lost all the money.
speech act report: A expresses the regret to B that B lost all the money.
b. speech act report: A insulted B by saying that he never did anything right.
*A to B: I (hereby) insult you that you never did anything right.

I think that *insult* is not a 'performative' verb having an execution-supporting meaning because *insult* describes the perlocutionary effect of feeling insulted and not the R-intention of the speaker. Similarly, *alas* is not a speech act adverbial since it does not comment on success conditions or felicity conditions or on any other properties of utterances but describes the speaker's attitude with respect to the event denoted by *you lost all the money*.

Since there is a relation between the two meanings, I follow a suggestion of Ede Zimmermann (p.c) and consider this type of ambiguity as structural rather than lexical. That is, in line with Pustejovsky (1995), in the lexical entry the argument structure maps an underlying meaning, and the derived one is obtained by means of a syntactically realized coercion operator *Q* whose value is obtained by means of the information in the lexical entry. Hence, lexical polysemy is reduced to a kind of structural ambiguity whose resolution takes place in the presemantic phatic act.
Because I merely want to sketch the basic idea, I will not introduce the complex generative lexicon and solely give a simplified illustration of the lexical entry and the resolution of the structural ambiguity.
Structural ambiguity arises whenever a phrase or sentence has more than one underlying structure, such as the phrases *Tibetan history teacher*, and *short men and women*. These ambiguities are said to be structural because each phrase can be represented in two structural different ways, e.g., [*Tibetan history*] *teacher* and *Tibetan* [*history teacher*].
In the case of structural polysemy, the different structures attached are invisible because the derived meanings are generated by means of the application of a function that is syntactically symbolized as the coercion operator *Q* (Pustejovsky, 1995). Thus, instead of a lexical ambiguity of the 'performative' verb, we can deal with an ambiguity between two structures. For this purpose, one has to determine a basic meaning, which is shifted or coerced into the derived meaning. Since the execution-supporting meaning of type $\langle v,\langle e,\langle e,\langle i,\langle s,t\rangle\rangle\rangle\rangle\rangle$ is applied to utterances of type *v* that have semantic contents (properties, propositions, and propositional concepts) that are in turn the arguments of the reporting meaning, I assume that the execution-supporting meaning is the basic one.

Next, consider the examples in (77) and (78) below.

(77) a.Tomorrow, Verena promised this, she will be courteous.
b. Tomorrow, I promised this, she will be courteous.
c. Tomorrow, Verena promises this, she will be courteous.

In (77), the execution-supporting meaning is ruled out since the arguments of the 'performative' verb *promise* do not refer to the actual speaker, and the utterance time. Therefore, the lexical entry should guarantee that the basic execution-supporting meaning is ruled out if the arguments of the verb do not correspond to the actual speaker, the actual addressee, and the utterance time, and that in this case the reporting meaning is the plausible one. Moreover, the information in the lexical entry should explain why the sentences in (78) below are execution supporting even though the verb (cf. (78)(a)) or the subject NP *you* (cf. (78)(b)) have the 3rd person feature.

(78) a. The court permits you to sit down.
b. You are permitted to sit down.

In (78)(a) the performative sentence is uttered by an authorized speaker c_S provided by the utterance context, even though the 'performative' verb does not have the 1st person feature. In (78)(b), the passive structure absorbs the agent role of the 'performative' verb and generates an implicit argument for the actual speaker. Hence, even though the subject NP *you* has the 2nd person feature, the lexical entry should guarantee the execution-supporting meaning of the 'performative' verb.

With respect to the reporting meaning there should be no restrictions listed in the lexicon. This is supported by the following sentences in (79) where the 'performative' verbs are used with the reporting meaning even though the 'performative' verb has the features 1st person present tense:

(79) a. Whenever you are upset with me, I promise you a car.
b. (While signing the contract): I bequeath you my car.

In order to cope with the requirements above, I assume that the lexical entry restricts the arguments of the predicate to the actual speaker, the actual addressee, and the utterance time in order to be execution supporting with respect to the speech act performed with the utterance *u*.

Furthermore, there are examples of pronominal elements that are interpreted in a sense that is different from its antecedent. For instance, (80) shows that the expression *newspaper* serves to the distinct roles 'physical object' and 'institution':

(80) The newspaper$_i$ has decided to change its$_i$ format.
(Nunberg, 1979)

A similar example can be constructed with 'performative' verbs. Here, in the first part of the coordination the 'performative' verb *claim* is used with the reporting

meaning. Yet, in the second part of the coordination *so* refers to its underlying execution-supporting meaning:

(81) Each time I see her, Marina claims$_i$ that the movie with Robert Redford is boring – and I do so$_i$ hereby as well.

Therefore, I assume that the lexical entry gives information about the theta-roles of the argument of the verb. There is the information that the *object* or *vehicle* by means of which the speech act is supported is an utterance. Importantly, the *agent* that supports the execution of the speech act is the actual speaker provided by the utterance context *c*, and the *patient* concerned by the execution of the speech act is the addressee of the utterance context *c*.
Inspired by Stechow (2002), who interprets the tempus, person, and mood features of the verb as indices of variables and restricts their interpretation, I model this restriction by means of the indices *Ag*(ent), and *Pa*(tient) of the variables *x*, and *y* of type *e* provided by the verb and restrict their assignments *g* at the level of semantics. This is shown in (82)(a) and (b) below. Similarly, the tense of the verb must correspond to the time of utterance at which the execution of the speech act is supported. Again, this is modelled by means of the index *t* (utterance time) of the time variable *t* of type *i*. Again, this index restricts the assignment function *g* (cf. (82)(c) below):

(82) a. $[\![\lambda x^{Ag}.\phi(a)]\!]^{c,g} \equiv [\![\phi]\!]^{c,g[a/x^{Ag}]}$
if $a = c_S$ provided by *c*, and undefined otherwise.
b. $[\![\lambda y^{Pa}.\phi(a)]\!]^{c,g} \equiv [\![\phi]\!]^{c,g[a/x^{Pa}]}$
if $a = c_A$ provided by *c*, and undefined otherwise.
c. $[\![\lambda t^{t}.\phi(a)]\!]^{c,g} \equiv [\![\phi]\!]^{c,g[a/t^{t}]}$
if $a = c_t$ provided by *c*, and undefined otherwise.

Thus, if the conditions on the execution-supporting meaning are violated, the β-Conversion is not defined, and the execution-supporting meaning is ruled out.

Consequently, the basic execution-supporting meaning of *promise* should be presented in the lexical entry as $\lambda u \lambda y^{Pa} \lambda x^{Ag} \lambda t^{t} \lambda w.promise'(w)(t^{t})(x^{Ag})(y^{Pa})(u)$, of the type <*v*,< *e*,< *e*,< *i*,<*s*,*t*>>>>. Yet, if we assume that the basic execution-supporting meaning is restricted to the actual speaker of *c*, the actual addressee of *c*, and the utterance time of *c*, (that is, the function is restricted), we are faced with a loss of information since we do not know the general, unrestricted meaning of the 'performative' verb.
Thus, I propose that basic execution-supporting meaning is the neutral, unrestricted one: $\lambda u \lambda y \lambda x \lambda t \lambda w.promise'(w)(t)(x)(y)(u)$.
As I will show below, the restricted execution-supporting meaning $\lambda u \lambda y^{Pa} \lambda x^{Ag} \lambda t^{t} \lambda w.promise_1'(w)(t^{t})(x^{Ag})(y^{Pa})(u)$ and the reporting meaning $\lambda P \lambda y \lambda x \lambda t \lambda w.promise_2'(w)(t)(x)(y)(P)$ are derived by means of two functions that

are components of the lexical entry and that are syntactically realized as two different coercion operators of different types. Similar to nouns that are only syntactically realized in singular or plural, this neutral form is also not syntactically realized. A further example constitutes the tense in the case of verbs. Verbs are only realized with a certain tense feature. Here, the neutral form is also not syntactically realized.

According to Pustejovsky (1995), the lexical semantics needs to refer to several levels of lexical information.[15] The first level of information is the argument structure that encodes the conventional mapping from the verb to a function, that is, in my case to $\lambda u \lambda y \lambda x \lambda t \lambda w.promise'(w)(t)(x)(y)(u)$. The argument structure relates the syntactic realization of the verb to the number and type of arguments that are identified at the level of the syntactic structure, and at the level of the utterance structure (cf. 4.2.2 below), and makes use of at the level of semantics. That is, the argument structure specifies the number and type of the arguments that a lexical item carries.
If the λ-expression is applied to the objects that are referred to by the arguments, that is to the actual speaker c_S, the actual addressee c_A, and the utterance time c_t, the arguments of the verb coerce the basic neutral execution-supporting meaning $\lambda u \lambda y \lambda x \lambda t \lambda w.promise'(w)(t)(x)(y)(u)$ to the restricted less informative meaning $\lambda u \lambda y^{Pa} \lambda x^{Ag} \lambda t^{t} \lambda w.promise_1'(w)(t^{t})(x^{Ag})(y^{Pa})(u)$. Of course, the reporting meaning has no restrictions, and can also be applied to the actual addressee, the actual speaker and the utterance time (cf. (79) above). Hence, if there is any semantic or contextual information that points to the reporting meaning then the coercion to the reporting meaning is also plausible.
If the λ-expression is applied to arguments where at least one does not refer to the actual speaker c_S, the actual addressee c_A, and the utterance time c_t, the restricted execution-supporting meaning is ruled out and the arguments coerce the basic execution-supporting meaning $\lambda u \lambda y \lambda x \lambda t \lambda w.promise'(w)(t)(x)(y)(u)$ to the reporting meaning $\lambda P \lambda y \lambda x \lambda t \lambda w.promise_2'(w)(t)(x)(y)(P)$.
The information into which meaning the neutral basic meaning is coerced, is given by means of Pustejovsky's so-called *qualia structure* of the lexical entry of *promise*. In the case of 'performative' verbs the qualia structure provides the two partial functions or roles, namely *REP*(orting) and *EX*(ecution supporting) that are applied to the neutral basic meaning and yield the reporting meaning or the restricted execution-supporting one:

(83) $REP(\lambda u \lambda y \lambda x \lambda t \lambda w.promise'(w)(t)(x)(y)(u)) =$
$\lambda P \lambda y \lambda x \lambda t \lambda w.promise_2'(w)(t)(x)(y)(P)$
type $<<s,<e,t>>,<e,<e,<i,<s,t>>>>>$

[15] Because I do not make use of events, and because I do not work with the entire organized lexical knowledge base, I omit the event structure and the lexical inheritance structure.

$EX(\lambda u \lambda y \lambda x \lambda t \lambda w.promise'(w)(t)(x)(y)(u)) =$
$\lambda u \lambda y^{Pa} \lambda x^{Ag} \lambda t^{t} \lambda w.promise_1'(w)(t^{t})(x^{Ag})(y^{Pa})(u)$
type <*v*,< *e*,< *e*,< *i*,<*s*,*t*>>>>.

As mentioned above, the value of the function *REP* is defined since we can achieve from utterances u = <*d*,*c*> their semantic contents $[\![d]\!]^{c,g}$, in the case of *promise* a property *P* of type <*s*,<*e*,*t*>>. Since an expression that supports the execution of the speech act can also be used to report the execution of a speech act, the type of the execution-supporting meaning can be coerced to the type of the reporting meaning. In the syntactic structure, this function is displayed as the coercion operator Q_{REP}. When applied Q_{REP} returns the value of its role *REP*, namely, $\lambda P \lambda y \lambda x \lambda t \lambda w.promise_2'(w)(t)(x)(y)(P)$ of the type <<*s*,<*e*,*t*>>,<*e*,<*e*,<*i*,<*s*,*t*>>>>>.
Whereas *REP* coerces in line with Pustejovsky the underlying semantic type <*v*,< *e*,< *e*,< *i*,<*s*,*t*>>>> to the derived type <<*s*,<*e*,*t*>>,<*e*,<*e*,<*i*,<*s*,*t*>>>>>, *EX* restricts the meaning but do not shift the semantic type.[16] In the syntactic structure *EX* is symbolized as the coercion operator Q_{EX}. When applied it returns the value of its role *EX*, namely $\lambda u \lambda y^{Pa} \lambda x^{Ag} \lambda t^{t} \lambda w.promise_1'(w)(t^{t})(x^{Ag})(y^{Pa})(u)$ of the type <*v*,< *e*,< *e*,< *i*,<*s*,*t*>>>>.[17]

---

[16] In order to avoid that, in opposition to Pustejovsky's idea, *EX* does not shift the type, one could speculate that the underlying meaning is the restricted one but is modeled as a character meaning where the restrictions are presuppositions:
$\lambda c \lambda u \lambda y \lambda x \lambda t \lambda w.t = time(c).y = addressee(c).x = speaker(c).promise'(w)(t)(x)(y)(u)$
Hence, there is only one function *REP* which is applied to the character meaning and yields the diagonal proposition, that is, it effects that the presuppositions become parts of the content, and, as required, changes the type.

[17] The two operators are defined as follows: Σ is the set of operators σ that coerce the underlying meaning to the restricted execution supported meaning. Φ is the set of operators ϕ that coerce the underlying meaning to the reporting meaning.
Def.
If α is the expression $\lambda Q \lambda u \lambda y \lambda x \lambda t \lambda w.Q(w)(t)(x)(y)(u)$ and $\alpha([\![\beta]\!]^{c,g})([\![\delta]\!]^{c,g})([\![\gamma]\!]^{c,g})$
where $[\![\beta]\!]^{c,g} = a$, $[\![\delta]\!]^{c,g} = b$, and $[\![\gamma]\!]^{c,g} = d$
then
(i) if $a = c_T$ & $b = c_S$ & $d = c_A$ and
if there is an operator $\sigma \in \Sigma$ such that $\sigma(\alpha)$ results in an expression whose functional application is only defined if the theta- roles provided by α correspond to c_S and c_A and the time provided by α to c_T then $\sigma(\alpha)$ corresponds to the expression
$\lambda Q \lambda u \lambda y^{Pa} \lambda x^{Ag} \lambda t^{t} \lambda w.Q(w)(t)(x)(y)(u)$
(ii) If there is no restriction for *a, b*, and *d*, and if there is an operator $\phi \in \Phi$ such that $\phi(\alpha)$ results in an expression which is applied to the content *P*of the utterance $u \in U$ then $\phi(\alpha)$ corresponds to the expression $\lambda Q \lambda P \lambda y \lambda x \lambda t \lambda w.Q(w)(t)(x)(y)(P)$.
(iii) undefined otherwise.

Hence, the simplified lexical entry of the 'performative' verb is as in (84) below, where the component *promise* corresponds to the word form, and the subscripts $promise_1$ and $promise_2$ indicate the two different predicates that are the values of the functions *EX* and *REP*. The corresponding structural ambiguity is as in (85) below:

(84) The lexical entry of *promise*:

$$
\begin{aligned}
&< promise,\\
&\lambda u \lambda y \lambda x \lambda t \lambda w.promise'(w)(t)(x)(y)(u),\\
&EX(\lambda u \lambda y \lambda x \lambda t \lambda w.promise'(w)(t)(x)(y)(u)) =\\
&\lambda u \lambda y^{Pa} \lambda x^{Ag} \lambda t^{t} \lambda w.promise_1'(w)(t^{t})(x^{Ag})(y^{Pa})(u),\\
&REP(\lambda u \lambda y \lambda x \lambda t \lambda w.promise'(w)(t)(x)(y)(u)) =\\
&\lambda P \lambda y \lambda x \lambda t \lambda w.promise_2'(w)(t)(x)(y)(P) >
\end{aligned}
$$

(85) The structural ambiguity among:
$[Q_{EX}[\ \mathrm{V}\ldots]_{\mathrm{VP}}]_{\mathrm{VP}'}$
$[Q_{REP}[\ \mathrm{V}\ldots]_{\mathrm{VP}}]_{\mathrm{VP}'}$.

Note that the basic execution supporting meaning of *promise* and therefore also the values of *EX* and *REP* express the R-intention of the speaker with respect to his utterance *u* that is normally recognized by means of the information in the utterance context. Namely that the addressee recognizes (i.e. believes) that the speaker wants to do *P* (cf. (86) below where the R-intention is modelled as meaning postulates of *promise*):

(86)

a. $(\forall u, y, x, t, w)(promise_1(w)(t)(x)(y)(u)$
$\rightarrow (\exists P)(content\_of'(P,u) \wedge (\forall w')(Bel_{y,w,t}(w') \rightarrow (\forall w'')(Bul_{y,w',t}(w'') \rightarrow P(x)(w'')(t)))$
$\wedge(\forall w')(Bul_{x,w,t}(w') \rightarrow P(x)(w')(t)))))$

b. $(\forall u, y, x, t, w)(\forall P)(promise_2(w)(t)(x)(y)(P)$
$\rightarrow (\forall w')(Bel_{y,w,t}(w') \rightarrow (\forall w'')(Bul_{x,w',t}(w'') \rightarrow P(x)(w'')(t)))$
$\wedge(\forall w')(Bul_{x,w,t}(w') \rightarrow P(x)(w')(t)))$

Bel, and *Bul* map an individual *x*, a world *w*, and a time *t* to the set of worlds that constitutes *x*'s belief or desire set at *t*. The relation $content\_of'(P,u)$ expresses that the property *P* is the semantic content of the utterance *u*.

For illustration, consider for instance the explicit parentheticals in (87)(a) and (b) that are ambiguous between the two structures displayed in (88) below:

(87) a. Tomorrow, Verena promised this, she will be courteous.
b. Tomorrow, I promise this, I will be courteous.

(88) a. [Verena [Q_{EX} [promised this]$_{VP}$]$_{VP'}$]$_S$
b. [Verena [Q_{REP} [promised this]$_{VP}$]$_{VP'}$]$_S$

The restricted execution-supporting meaning and the reporting meaning are derived due to the qualia information in the lexical entry, namely by means of the functions *EX* and *REP* that yield the expected value. The functions are syntactically translated into the operators Q_{EX} and Q_{REP} that are applied to the word form *promise*. Hence, there is no lexical ambiguity. Instead, the ambiguity is structural. The argument structure in the lexical entry encodes the neutral basic execution-supporting meaning. The restricted execution-supporting meaning and the reporting meaning are derived by means of the information in the lexical entry of *promise*. Since in (87)(a) the arguments of the verb do not refer to the utterance time c_t and to the actual speaker c_S but to me and a time previous to the utterance time, the arguments force that the function *REP* is applied to the neutral basic meaning and yields the reporting meaning $\lambda P \lambda y \lambda x \lambda t \lambda w.promise_2'(w)(t)(x)(y)(P)$. Thus, the ambiguity among the two structures of the explicit parenthetical *Verena promised this* in (88) above is resolved in favour of the structure in (88)(b) that individuates the expression *promise* with the reporting meaning. In (87)(b) the arguments of the verb refer to the utterance time c_t and to the actual speaker c_S. Consequently, the arguments effect that *EX* is applied to the neutral basic meaning and yields the restricted $\lambda u \lambda y^{Pa} \lambda x^{Ag} \lambda t^t \lambda w.promise_1'(w)(t^t)(x^{Ag})(y^{Pa})(u)$. Thus, the ambiguity among the two structures is resolved in favour of the structure in (88)(a) that individuates the expression *promise* with the execution-supporting meaning.

As mentioned in part I, chapter 1, I assume in line with Kaplan (1989), and Perry (2001) that structural ambiguities are presemantically resolved in a context *c* previous to the context where the sentence uttered obtains its meaning. Hence, the structural ambiguity of the 'performative' verbs (and of the speech act adverbs) is resolved in the context that corresponds to the presemantic Austinian *phatic act*. As illustrated in part I, 1.1, the phatic act is the act of uttering a string of sounds that belong to a certain vocabulary, and to a certain syntactic structure. The phatic act is based on the hearer's knowledge of the lexicon, and the knowledge of the syntactic, and prosodic contributions to meaning. That means, in my terms, structural ambiguities are resolved in the context that I called the *utterance context* that is a combination of the pure utterance act (the phonetic act) and the phatic act (cf. part I, 4.3).

Next to the knowledge of the lexical entry and therefore the knowledge that the indexed variables restrict their assignments at the level of semantics, there are of course further clues for the resolution of the structural ambiguity.
In the following, I will list some information given by the utterance context *c* that helps the addressee to determine the plausible structure.

If in the common ground of the utterance context the relevant facts for the performance of a speech act are given, the addressee presumes that the speaker uses the 'performative' verb with the structure that individuates the expression as bearing the restricted execution-supporting meaning. Consider for instance the utterance of the sentence *This time, I promise you this, I will come to the party*. Supposed in the common ground of the utterance context of the respective sentence is true that the addressee does not know whether the speaker will go to the party, and wants that the speaker will go with him. Hence, in the utterance context the *preparatory condition* for a promise is fulfilled, namely that the addressee prefers the realization of the promise.

Equally important for the determination of the plausible structure is the information about the previous discourse in $CG(c)$. Thus, supposed that in addition all worlds $w \in CG(c)$ make true the relevant information that the speaker is invited to the party and is asked whether he would come. Then these facts relevant for the performance of the promise help the addressee to determine that the plausible structure is the one, which individuates the expression as execution supporting. Note, that the latter information about the previous discourse namely that the speaker is asked whether he would come, corresponds to the *sequencing condition* (SE) of Bach & Harnish (1979:63) that requires that the contribution of a competent and cooperative speaker is of an illocutionary type appropriate to that stage of talk exchange.

In contexts where is still uncertainty with respect to the intended structure, the insertion of the adverb *hereby* helps the addressee to determine that the plausible structure is the one that individuates the expression as execution supporting. Hence, even though the optional adverb *hereby* is redundant since the utterance-reference is already expressed by the execution-supporting meaning of the 'performative' verbs, its acceptable insertion signalizes that the plausible structure is the structure where Q_{EX} scopes over the 'performative' verb. Consequently, *hereby* disambiguates between the two structures.

Moreover, all sorts of contextual facts may be helpful for the addressee to determine which structure is the plausible one. For instance, if the speaker is raising his hand in order to take an oath or if the speaker talks about explicit performatives and utters *This time, I promise you this, I will come to your party* merely to show his addressee a typical instance of an explicit parenthetical.

Next, consider the examples below:

(89) a. Whenever you are upset with me, I promise you that I will come to the party next time.
b. (While signing a contract): I bequeath you my car.

For the reporting meaning there are no restrictions listed in the lexical entry. Thus, even though the performative verbs have the features 1st person present tense and the pronoun *you* refers to the actual addressee provided by the utterance context,

the utterances of these sentences are not execution supporting but merely report the speech acts whose illocutionary force (R-intention) is expressed by the 'performative' verbs.
For (89)(a), imagine a context c whose $CG(c)$ makes true that the participants of the conversation talk about their abilities to calm down each other after fighting about the issue of going to boring parties, and that the speaker was asked what strategy he usual prefers. Here, this information helps the addressee to determine that the plausible structure is the structure where Q_{REP} scopes over the expression *promise*. Furthermore, at LF the present tense feature provided by the verb *promise* does not directly refer to the utterance time. The present tense is not deictic but the time variable t_1 provided by *promise* is bound by the temporal adverbial clause *whenever you are upset with me* (cf. as an approximation (90)(b) below). Therefore, the present tense is not indexical and does not refer to the utterance time c_t.

(90) a. Whenever you are upset with me, I promise you that I will come to the party.
b. $\forall t_1[t_1 \subseteq t_0] \wedge$ you are upset with me at $t_1 \rightarrow t_1$I promise you that I come to the party at t_2 $[t_1 \prec t_2]$.

Consequently, according to the lexical entry, the plausible structure is the structure where Q_{REP} scopes over the 'performative' verb.

Finally consider (89)(b) which is ambiguous between that the speaker bequeaths the addressee his car by virtue of his signature, and that the speaker bequeaths the addressee his car by virtue of his utterance. Yet, neither the lexical entry, nor the context do provide clues for the addressee for the determination of the plausible structure that individuates the expression as speech act reporting or as execution supporting. Moreover, whereas in (89)(a) at LF the present tense is bound by the quantifier in order to exclude its direct reference to the utterance time, in (89)(b) this clue is not in stock. Hence, if the speaker gives no further information such as for instance with the additional utterance *"By virtue of my signature",* (89)(b) constitutes a case where the structural disambiguation totally fails. Both structures and hence both meanings are plausible. Note, in this case even the insertion of the adverb *hereby* does not give a clue since it can be interpreted as referring to the linguistic action or as referring to the action of signing the contract.

Importantly, since the structural disambiguation merely plays a minor role for the analysis of the explicit performatives, in the further course of the thesis I will omit the indices of the variables that restrict their assignments. The reader is asked to keep in mind that in the utterance context where the disambiguation takes place, the resulted execution-supporting meaning of the 'performative' verb is of course restricted to the actual speaker, the actual addressee and the utterance time.

In the next section, the parenthetical analysis will be applied to the Austinian explicit performative utterances that display subordination. If embedded under a 'performative' verb that denotes the execution-supporting meaning, the complement clause is used by speakers to perform a speech act whose content corresponds to the semantic object denoted by the particular complement clause.

4.2 The Application of the Parenthetical Analysis to Explicit Performatives

Having introduced the parenthetical analysis, in this section the parenthetical analysis will be applied to the genuine Austinian explicit performative utterances such as *I promise you that I will be courteous*. Even though the syntactic structure of the explicit performative sentence displays subordination of the complement clause, I assume that regardless of their syntax, explicit performatives semantically and pragmatically behave as the parenthetical analysis predicts. Therefore, 'performative' verbs and speech act adverbs contribute their meanings to the truth conditions of the entire sentence (cf. for the analysis of speech act adverbs part III, chapter 1 below). They are not purely performative but execution supporting and contribute their meanings to the truth conditions of the entire sentence. Hence, neither the pronouns, and the 'performative' verbs nor the speech act adverbs have to be regarded as semantically invisible.
The meaning of the 'performative' verb *disambiguates* the illocutionary force potential of the simultaneously performed utterance of the complement clause. The function of the Austinian explicit performative sentences is more complex and not simply *self-verifying* (no *'saying so makes it so'*).
Importantly, the application of the parenthetical analysis to the Austinian explicit performative utterances implies that speakers do not only perform speech acts with the utterance of independent main clauses, but also with the utterance of dependent complement clauses. This assumption can be supported by the fact that according to Kiparsky (1995), hypotactic structures such as in (91)(a) below are diachronically derived from paratactic structures, where the previous embedded complement clause corresponds to a main clause (cf. (91)(b) below):

(91) a. I assert that it is raining outside.
b. I assert that: It is raining outside.

Briefly, Kiparsky (1995) assumes that Indo-European languages lacked a system of complementizer and therefore complementizer phrases (CP's). Hence, dependent sentences were not subordinated but rather adjoined to the matrix clauses. In the course of time, the dependent sentences had developed to arguments that were embedded, rather than adjoined.

Since there are explicit 'performative' uses in all syntactic environments that is, in parataxis, adjunctions, and subordinations, I propose that even though there are different forms, we are not forced to assume that we need a different analysis for every form. Therefore, I apply the parenthetical analysis to the Austinian explicit performatives, and propose that explicit performative sentences that display subordination denote the same proposition as explicit parentheticals. Since complement clauses are diachronically derived from main clauses, I assume that in certain linguistic environments, namely, as complements of an explicit 'performative' verb that denotes the execution-supporting meaning of type $<v,<e,<s,t>>>$, the complement clauses retain the main clause property that with their utterances speakers perform speech acts.

Further support for the assumption that speakers utter complement clauses in order to perform speech acts, is unknowingly provided by Bach & Harnish (1979). Bach & Harnish (1979:229) claim that an utterance does not have to be grammatical to have been produced with identifiable illocutionary intent. Instead of uttering a grammatical sentence, a speaker can produce a word, a phrase, or even a dependent clause, and thereby successfully perform an illocutionary act. Bach & Harnish (ibid.) give some examples of ungrammatical expressions whose utterances are readily identifiable illocutionary acts:

(92) a. No smoking.
b. Slippery when wet
c. Two nonstudents, please.

None of these expressions constitutes a grammatical English sentence. (92)(a) is close to the sentence *Smoking is not permitted here*, (92)(b) to *This road is slippery when wet*, and (92)(c) to *I would like two tickets for nonstudents, please*. The communicative presumption is not merely waived by the utterance of an ungrammatical locution. The only problem is that if the locution uttered is not a grammatical sentence, it has either no meaning or not enough meaning to make an utterance of it an illocutionary act with a complete semantic content. However, since complement clauses have complete meanings of their own, this problem does not occur. *That*-complements denote propositions, *wh*-complements denote propositional concepts (cf. part I, 3.1), and as I will illustrate in 4.3.3 below, infinitival complements denote properties.

In the following, I assume that the utterance of an Austinian explicit performative sentence is also composed of two utterances. By means of the propositional meaning of the explicit performative sentence, the speaker describes what kind of speech act he is performing with the utterance of the complement clause.

4.2.1 The Semantics of Explicit Performative Sentences

Subordination involving explicit performative sentences have the same meaning as the explicit parentheticals (cf. (59) in 4.1.1 above). They denote propositions that are evaluated relative to the common ground $CG(c)$ where with the utterance of the complement sentence c_S simultaneously performs an implicit speech act of a particular type:

(93) a. $[\![promise]\!]^{c,g} =$
$\lambda u \lambda y \lambda x \lambda w.\ promise'(w)(x)(y)(u)$
type $\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle$

b. $[\![promise\_that\_I\_will\_be\_courteous]\!]^{c,g} =$
$\lambda y \lambda x \lambda w.\ promise'(w)(x)(y)(\text{“ that I will be courteous”})$
type $\langle e,\langle e,\langle s,t\rangle\rangle\rangle$

c. $[\![I\_promise\_you\_that\_I\_will\_be\_courteous]\!]^{c,g} =$
$\lambda w.\ promise'(w)(c_S)(c_A)(\text{“that I will be courteous”})$
type $\langle s,t\rangle$

In the further course of this thesis I will omit the temporal argument t of the ‘performative’ verbs and give them the simpler type $\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle$. Equal to the ‘performative’ verb *promise* in (59)(a), the meaning of *promise* in (93)(a) is of the type $\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle$ and is not applied to the proposition denoted by the complement clause *that I will be courteous*, but to the utterance of the complement clause of type v.[18]

(93)(c) shows that the meaning of *I promise you that I will be courteous*, which is the result of $[\![promise]\!]^{c,g}(\text{“that I will be courteous”})([\![you]\!]^{c,g})([\![I]\!]^{c,g})$, is a proposition of type $\langle s,t\rangle$. Thus, *I promise you that I will be courteous* is semantically equivalent with *I promise you this*. Both sentences denote a set of possible worlds where c_S performs a successful promise with the utterance *“that I will be courteous”*.

Again, this proposition is evaluated relative to the worlds $w \in CG(c)$. The proposition describes the illocutionary force of the speech act performed with the utterance of the complement sentence, whose success conditions have to be fulfilled that is, have to be true in $CG(c)$. Furthermore, suppose that the relation of mood also holds for complement clauses (cf. for the semantic mood of complement clauses 4.3 below) and determines the prototypical speech acts that are performed with their utterances. Consequently, with the utterance of *that*-complements speakers perform prototypical assertive acts. Then, as in the parenthetical case, the mood of the embedded *that*-clause *that I will be courteous* does not suffice for the determination of the illocutionary force of its utterance. Therefore, the utterance of the explicit per-

[18] Of course, the fact that the meaning is applied to an utterance of the complement clause instead to the proposition denoted by it does not conform to the principle of compositionality.

formative sentence disambiguates the illocutionary force potential of the utterance of the complement clause *that I will be courteous* since its propositional content $\lambda w.$ *promise'*$(w)(c_S)(c_A)$(*"that I will be courteous"*) describes that the speaker performs a promise with the utterance *"that I will be courteous"*.

Thus, similar to the explicit parentheticals the genuine Austinian explicit performative sentences denote a proposition that is evaluated relative to the utterance context, where the speaker performs a speech act with the utterance of the complement sentence.

Before going into detail, I briefly recapitulate the consequences of the application of the parenthetical analysis to the Austinian explicit performative utterances:

The performative formulas, that is the 'performative' verbs, the pronouns and in addition, the speech act adverbs (cf. part III, chapter 1 below) contribute their meanings to the truth conditions of the entire sentence. Therefore, they are semantically visible, and the meaning of the 'performative' verbs is not purely performative. Speakers utter explicit performative sentences such as *I promise you that I will be courteous* merely for describing what they are simultaneously doing. In the case of *I promise you that I will be courteous* the speaker does not succeed in performing the commissive speech act simply because he is uttering the sentence. Rather, due to the meaning of the 'performative' verb, the possible illocutionary forces of the utterance of the complement sentence are *disambiguated*. Thus, the utterances of explicit performative sentences are not simply *self-verifying*. Their discourse function is more complex. The performativity of the explicit performative sentence is a result of the utterance of the complement clause. Since, there are ordinary implicit speech acts we are able to account for the performance of the speech act whose force is expressed by their meaning – even though 'performative' verbs are not semantically invisible and not purely performative,

Note that although this analysis exhibits a close similarity to Donald Davidson's (1979) paratactic analysis, there are differences: In Davidson analysis the complementizer *that* corresponds to a demonstrative that refers to the following utterance of a sentence (similar to *this* in the parenthetical structures above). However, in contrast to Davidson, I do not propose that structures that display subordination are surprisingly paratactic structures – subordinations remain subordinations and *that* a pure complementizer. Furthermore, in Davidon's analysis, the performative verb is a mood setter for the utterance of the sentence to whom *that* refers. The referred sentences are reduced to declarative sentences with truth conditions. For instance, according to Davidson, the utterance of the sentence *I order you to close the door* is paraphrased into *My next utterance has imperative sentential force: You will close the door*. In contrast, as will become obvious in 4.3 below, I do not reduce all complement types to proposition denoting declaratives. Rather, I assume that complement sentences are also sentences of a certain type and therefore denote particular semantic objects that correspond to the semantic contents of the particular speech acts performed with their utterances.

4.2.2 The Structure of Explicit Performative Utterances

As shown in the analysis of explicit parentheticals in 4.1 above, the meaning of the 'performative' verb *promise* in (93)(a) already expresses the utterance-referential property of the parenthetical expression. Therefore, the meaning of the optional adverb *hereby* is redundant and merely serves to emphasize the execution-supporting meaning of the 'performative' verb. As illustrated in 4.1.5 above, *hereby* is a clue for the addressee to disambiguate the structure in favour of the structure that individuates the 'performative' verb as (restricted) execution supporting.

(94) $[\![hereby]\!]^{c,g} = \lambda f_{<<v,<e,<e,<s,t>>>>>} . f_{<<v,<e,<e,<s,t>>>>>}$, where $c \in DS(c_0)$

Furthermore, in the case of explicit parentheticals the demonstrative *this* directly refers to the utterance of the particular host sentence (cf.(58)) and assures that the utterance of the host sentence is the argument of the explicit 'performative' verb. Of course, since the Austinian performatives lack the demonstrative *this*, things are different.

In order to secure that the utterance of the complement clause corresponds to the argument of the performative verb, I follow Kupffer (2003) and assume that the utterance of an explicit performative sentence is structured.[19]
For every utterance *u* of an explicit performative sentence, there is a tree, such that *u* corresponds to the root of that tree. There is also a mereological side of this structure. If *M* is the set of *u*'s daughters that is, those utterances that *u* immediately dominates, then *u* is ΣM, the mereological sum of *M*. If *u* has no daughters, *u* is atomic, and has no utterances as parts. Utterances are sums of other utterances, called their subutterances. For instance, if *u* is an utterance of the explicit performative sentence *I state that it is raining* then *u* is the mereological sum of the utterance *"I"*, and the utterance *"state that it is raining"*. The latter are the subutterances of *"I state that it is raining"* and are immediately dominated by *"I state that it is raining"*. Note, whereas *"I"* is atomic, the utterance *"state that it is raining"* consists of the further subutterances *"state",* and *"that it is raining"*. Figure 3 below shows how the utterance of the explicit performative sentence *I state that it is raining* is composed:

[19] Kupffer (2003) structures utterances in order to account for the occurrence dependency of the indexicals. See for instance (i) below, where the two occurrences of the pronoun *you* refer to different addressees: (i) *YOU take the vine and YOU take the cheese*.

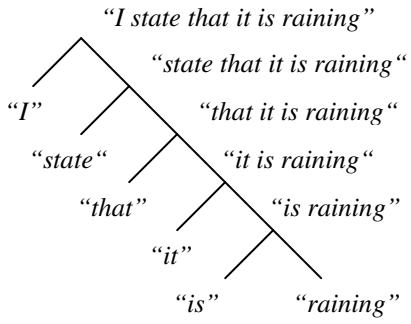

Figure 3: The structure of the utterance *"I state that it is raining"*

Importantly, the utterance of the sentence *I state that it is raining* consists among others of the subutterance *"that it is raining"*. Furthermore, the utterance structure in figure 3 is based on the corresponding syntactic structure in (95). Here, the direct object of the verb *state* is the CP *that it is raining*:

(95) $[I_{DP}[\text{state}_V\ [\text{that it is raining}]_{CP}]_{VP}]_S$

(96) lists the meanings that are associated with (95):

(96) a. DP:
$[\![I]\!]^{c,g} = c_S$, type e
b. V:
$[\![state]\!]^{c,g} = \lambda u \lambda x \lambda w.state'(w)(x)(u)$, type <v,<e,<s,t>>>
c. CP:
$[\![that\_it\_is\_raining]\!]^{c,g} = \lambda w.rain'(w)$, type <s,t>
d. S:
$[\![I\_state\_that\_it\_is\_raining]\!]^{c,g} =$
$\lambda w.state'(w)(c_S)$ (*"that it is raining"*) , type <s,t>

In (96)(b), the meaning of the verb *state* is of the type <v,<e,<s,t>>>. Instead of being applied to the propositional meaning of the complement clause in (96)(c), it is applied to an argument $u \in U$ of type v. That is, the predicate is applied to the the utterance *"that it is raining"* (and not to the utterances *"it is raining"*, or *"it is raining"*). Utterances are utterances of expressions of a certain syntactic category. Therefore, the syntactic structure in (95) where the direct object and hence the argument of the verb is the CP *that it is raining*, and whereon the utterance structure is based, assures that the argument of $[\![state]\!]^{c,g}$ is the utterance *"that it is raining"*. (96)(d) shows that the result of the application of $[\![state]\!]^{c,g}$ to an utter-

ance of type *v* and to an individual of type *e* is a proposition of type <*s,t*>, that is, a set of possible worlds where c_S states with the utterance *"that it is raining"*.[20] Thus, despite of the syntactic subordination structure, the Austinian explicit performative utterances semantically and pragmatically behave as the parenthetical analysis predicts. Instead of one utterance of the sentence *I state that it is raining* there are two related utterances. With the propositional content of the utterance of the explicit performative sentence, the speaker asserts that he states with the utterance of the complement sentence *that it is raining*, that is, with *"that it is raining"*.

Whereas in the case of the syntactic structure in (95) above the direct object of the 'performative' verb is the CP *that it is raining* whose utterance is the argument of the 'performative' verb, in the case of double object constructions things are different. For instance, the verb *promise* in the explicit performative sentence *I promise you that I will be courteous* has two arguments. Next to the direct object *that I will be courteous*, there is the indirect object *you*. The structure of the utterance is as in figure 4 below:

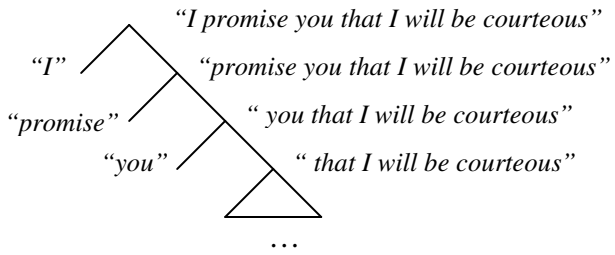

Figure 4: The structure of utterances in the case of double objects

In order to assure that the meaning of the verb *promise* applies to the utterance *"that I will be courteous"*, I adopt Larson's (1988) syntactic D-structure for double object constructions in (97)(a). Roughly, in the D-structure the verb *promise* is base generated in V,VP2 in order to secure its proper semantic interpretation: namely that the predicate is applied to its direct object, that is, to the CP *that I will be courteous*. Then, in the S-structure the verb *promise* is moved to V,VP1 (cf. (97)(b)).

(97) a. D-structure:
$[I_{DP}[e_V\ [you_{SPEC,VP1}\ promise_{V,VP2}[that\ I\ will\ be\ courteous]_{CP}]_{VP1}]_{VP2}]_S$
b. S-Structure:
$[I_{DP}[promise_V\ [you_{SPEC,VP1}\ t_{V,VP2}[that\ I\ will\ be\ courteous]_{CP}]_{VP1}]_{VP2}]_S$

[20] Thus, the meaning of the utterance *I state that it is raining* is composed of the meaning of its parts and of its parts itself:
$[\![\langle I\_state\_that\_it\_is\_raining, c\rangle]\!] = [\![\langle state, c\rangle]\!]\big(\langle it\_is\_raining, c\rangle\big)\big([\![\langle I, c\rangle]\!]\big)$

In the D-structure the grammatical functions and the thematic roles are assigned. The roles correspond to the arguments of the function expressed by the verb (cf. Stechow, 2004). Hence, the D-structure is responsible for the proper functor argument structure. Because I want to ensure that the semantics of *promise* is applied to the utterance of the CP *that I will be courteous,* I assume that even though the utterance structure in figure 4 above is based on the S-Structure, the D-structure secures that the utterance *"that I will be courteous"* is the argument of $[\![promise]\!]^{c,g}$. More precisely, in the D-structure, the direct object of the verb *promise* is the CP *that I will be courteous.* Furthermore, *promise* is of the logical type $\langle v,\langle e,\langle e,\langle s,t\rangle\rangle\rangle\rangle$. That means, it cannot be applied to the proposition of type $\langle s,t\rangle$ that is denoted by the CP *that I will be courteous*, but to the utterance of the CP *that I will be courteous* of type *v*, namely, to *"that I will be courteous"* in figure 4 above.
Again, the result of the application is a proposition that corresponds to the meaning of the explicit performative sentence *I promise you that I will be courteous*: a set of possible worlds where c_S promises c_A with *"that I will be courteous"*.

So far, I have illustrated the meaning of the explicit performative sentences and the therefore required interaction of the utterance structure of explicit performative utterance, the meaning of the 'performative' verb, and the syntactic structure of the explicit performative sentence. However, I have not yet discussed the speech act, which is performed in the utterance context *c* by means of the utterance of the complement sentence, and which is described by the proposition denoted by the explicit performative sentence.
In the following, I will show how the utterance of the complement clause interacts with the proposition denoted by the explicit performative. Since 'performative' verbs specify the illocutionary force of the utterance performed with the complement clause, the mood relation for matrix sentences is transferred to complement clauses. Therefore, I propose that complement clauses belong to a certain sentence type, that is, proposition-denoting *that*-complements are of the declarative complement sentence type, propositional concept denoting *wh*-complements are of the interrogative complement sentence type, and, as I will show in 4.3.3, property denoting infinitival complements are of the infinitival complement sentence type. Since the semantic mood is transferred to complement sentences of a certain type, with the utterance of *that*-complements speakers perform prototypical assertive speech acts, whose contents correspond to the proposition denoted by the complement clause. Similarly, with the utterance of *wh*-complements and infinitival complements, speakers perform prototypical question acts and directive speech acts, whose contents correspond to the semantic object denoted by the respective complement sentence.

4.3 Complement Clauses and Context Change

As mentioned in part I chapter 2, a particularity of European languages is that there is the clear opposition between basic sentence types also with respect to embedded sentences. Here, the relevant opposition is expressed by the different complementizers *that*, and *whether/if* or the lack thereof in the case of infinitival PRO complement in (98)(c):

(98) a. Simona knows that Andrea lives in Padova.
b. Simona wants to know whether/if Andrea lives in Padova.
c. Simona asks Andrea PRO to help her.

Normally, if these complementizers occur in dependent, embedded sentences, they have no influence on the speech acts that are performed with the utterance of the sentences containing them. Thus, even though the complement clause in (98)(b) is of the interrogative type, the utterance of the entire sentence is nevertheless an assertive speech act. In contrast, the complement clauses in (99) and (100) can be used independently and non-embedded, to perform an exclamation and a question act with their utterance:

(99) That I should live to see this! (König & Siemund, 2005)

(100) Ob Christian wohl noch raucht? [German]
If Christian PART.INTERR. still smokes?

Furthermore, as displayed in (98)(c) there is no imperative complementizer and hence, it is commonly assumed that imperatives cannot be embedded. However, in Slovenian there are examples of embedded imperatives in *that*-clauses (cf. Rus, 2005, Dvořák, 2005):

(101) Ukazal je, da delaj.
Ordered is that work-2.SG.IMP.
'He ordered you to work/that you work' (Rus, 2005)

(102) Rečem Ti, da ga ubógaj.
Say you that him obey-2.Sg.IMP.
'I tell you to obey him' (Dvořák, 2005)

Furthermore, embedded imperatives are also attested in German (cf. Schwager, 2006):

(103) Ich habe dir doch gestern schon gesagt, geh hin.
I have you PART yesterday already told go-2.SG.IMP.there

In the following, I will assume the following: if embedded under a 'performative' verb that denotes the execution-supporting meaning, the complement clauses are

used by speakers to perform speech acts whose contents correspond to the semantic object denoted by the particular complement clause. Therefore, I assume that complement clauses also belong to a certain sentence type and that the semantic mood relation holds for complement clauses as well. For instance, the proposition-denoting *that*-clauses are of the declarative complement type. Whenever they are embedded under an execution-supporting assertive verb, they are uttered in order to perform prototypical assertive speech acts. Similarly, propositional concept denoting *wh*-clauses are of the interrogative complement type. Whenever they are embedded under an execution-supporting question verb, they are used to perform question acts. Furthermore, as I will illustrate in more detail in 4.3.3 below, I assume that PRO-clauses belong to the infinitival complement type, and in case they are embedded under an execution-supporting directive or commissive verb, they are used to perform prototypical directive speech acts or non-prototypical commissive speech acts.

4.3.1 The Semantic Mood of Complements

As illustrated in 4.2 above, the propositional content of explicit performative utterances is evaluated relative to the worlds $w \in CG(w)$ where the speaker utters a complement clause in order to perform a speech act. Thus, whenever complement sentences are embedded under 'performative' verbs that have the execution-supporting meaning, they are used by speakers to perform speech acts.
As illustrated in part I, section 2.2., mood is a relation between matrix sentences $d \in D$ that belong to a certain sentence type and their prototypical illocutionary forces $f \in F$. This relation is intermediated by the semantic object denoted by *d*. Furthermore, the meaning of the uttered sentence *d* corresponds to the semantic content of the speech act $a \in A$, which is performed by means of the utterance of *d*. In the case of explicit performative utterances, this characterization of the semantic mood and the prototypical speech acts is transferred to complement sentences. Not solely matrix sentences but also complement sentences have properties by virtue of their syntax. They are formally marked by means of the presence or absence of the complementizer *that, whether, if*, the absence (PRO) or presence of an overt subject or object. That is, they belong to the declarative, interrogative, or infinitival complement type.

Thus, let *S* be the superset of the complement sentences that belong to a certain type. That is, *S* is the set of the sentence types S_{decl}, S_{int}, and S_{inf}.

(104) $S_{decl} = \{s_1, s_2, ...\}$
$S_{int} = \{s_1, s_2, ...\}$
$S_{inf} = \{s_1, s_2, ...\}$
with $S_{decl} \cup S_{inf} \cup S_{int} \subseteq S$, and $S_{decl} \cap S_{inf} \cap S_{int} = \varnothing$

Let *I* be the set of the complement meanings. The members of *I* are the result of the semantic valuation function $V: S \rightarrow I$ for *L* that takes as arguments members of *S* and yields their meanings *I*. The members of the set *I* are the meanings of declarative complements, interrogative complements, and infinitival complements (cf. (105) below). Thus, if *V* is applied to *that*-complements $s \in S_{decl}$, it yields propositions. If *V* is applied to *wh*-complements $s \in S_{int}$, it yields propositional concepts, and if *V* is applied to infinitival PRO-complements $s \in S_{inf}$, it yields properties (cf. 4.3.3 below for a more detailed illustration of the semantic object denoted by PRO-complements).

(105) $I_{decl} = \{i_1, i_2, ...\}$
$I_{int} = \{i_1, i_2, ...\}$
$I_{inf} = \{i_1, i_2, ...\}$
with $I_{decl} \cup I_{inf} \cup I_{int} \subseteq I$, and $I_{decl} \cap I_{inf} \cap I_{int} = \varnothing$

Note that the matrix types and the corresponding types of complement clauses denote the same semantic objects. Matrix declaratives and declarative *that*-complements denote propositions, matrix interrogatives and interrogative *wh*-complements denote propositional concepts, and matrix imperatives and infinitival complements denote properties (cf. 4.3.3 below for the semantic mood of infinitival complements).
Again, let *F* be the set of illocutionary forces *f*, and *S* the set of complements that are members of a certain type. Then, the relation of mood between the sentence types and their prototypical illocutionary forces, also holds for complement sentences $s \in S$:

(106) Sentence Mood:
$M \subseteq F \times S$, then for each $m_i \in M$, there is a $f_i \in F$, and a $s_i \in S$,
such that $m_i = \langle f_i, s_i \rangle$, where $V(s_i)$ determines f_i.

(107) Speech Acts:
$A^* \subset F \times I$, then for each $a_i \in A^*$, $a_i = < f_i, i_i, >$, where $i_i \in I$

Again, the semantic content of prototypical and non-prototypical speech acts performed with the utterance of complement sentences of a certain type corresponds to the meaning of the respective complement sentences.

Remember, due to (107), we are able to account for speech acts as the result of an utterance of a complement sentence (the utterance act), the determination of the semantic content in the locutionary act, and the inference of its illocutionary force by means of the contextual information in the illocutionary act. That is, by means of (107) we can speak about speech acts in terms of their semantic contents and their illocutionary forces that are inferred by means of information in the utterance context. Importantly, the definition in (107) does not solely define prototypical

speech acts whose prototypical illocutionary forces are determined by means of contextual information about the sentence mood, but also non-prototypical speech acts whose illocutionary forces are determined by means of other contextual information, namely, by means of the fulfilled success conditions of the non-prototypical speech act types.

Having applied the mood relation to complements embedded under 'performative' verbs, I will illustrate the context change of explicit performative utterances, and elaborate in more detail the disambiguation of the illocutionary force potential of the utterance of the complement sentence in terms of partition resolution (cf. 4.3.2.1 below). A more detailed elaboration of the cases where the use of the 'performative' verb is redundant follows in 4.3.2.2 below.

4.3.2 The Context Change of Explicit Performatives

(107) defines the set of prototypical and non-prototypical speech acts A^* as a subset of $F \times I$ and therefore the members of A^* as ordered pairs, $a_i = \langle f_i, i_i \rangle$, and is used to describe the speech act in terms of the inferred illocutionary force and the semantic content. Yet, the primary function of speech acts is to change contexts.[21] Again, as illustrated in part I, section 4.3, the less fine grained notion of speech acts defines a speech act $a \in A$ as a partial function from the set of (illocutionary) contexts C into the set of (perlocutionary) contexts C:

(108) $a : C \rightarrow C$, if a is successfully and felicitously performed in the illocutionary context c and undefined otherwise.

(109) $f(i_i) = a_i$, if i_i is of the appropriate semantic type, undefined otherwise.

(109) shows that the illocutionary force $f \in F$ of an utterance of a complement sentence is a function that takes the sentence meaning that is determined by means of $V(s_i) \in I$ and yields a speech act $a \in A$ which is itself a partial function from (illocutionary) contexts into (perlocutionary) contexts.

The meaning of *that*-complements $s \in S_{decl}$ is a proposition. In contrast, interrogative complements $s \in S_{int}$ denote propositional concepts (cf. part I, chapter 3) and infinitival PRO-complements $s \in S_{inf}$ denote properties (for a detailed elaboration of the meaning of PRO complements, see 4.3.3.2.)
Take for instance the explicit performative sentence *I state that it is raining*. The complement clause *that it is raining* is declarative ($s \in S_{decl}$). Hence, the semantic

[21] cf. part I, 4.3 for the difference between the two notions and the fact that the set A is definable in terms of the illocutionary force as a function that is a member of the ordered pair.

valuation function *V* assigns to the declarative *that it is raining* a propositional meaning: $[\![that\_it\_is\_raining]\!]^{c,g} = V(that\ it\ is\ raining) = \lambda w.\ rain'(w)$. Then, by means of the information about the semantic mood in the utterance context, namely that the prototypical force of the proposition denoting sentence $s \in S_{decl}$ is assertive, the addressee is able to determine the illocutionary force f_{Assert}, which is a function from sentence meanings to assertive speech acts which are itself functions from contexts to contexts.
Hence, $f_{Assert}([\![that\_it\_is\_raining]\!]^{c,g}) = f_{Assert}(\lambda w.\ rain'(w)) = a_{Assert}$, where $a_{Assert} \in A$.

In the case of *I ask you whether it is raining* the *wh*-complement is an interrogative clause ($s \in S_{int}$). Hence, its meaning is a propositional concept of type <*s*,<*s*,*t*>>: $[\![whether\_it\_is\_raining]\!]^{c,g} = \lambda w \lambda w'.rain'(w) = rain'(w')$. Then, by means of the information about the semantic mood in the utterance context, namely that the prototypical force of the propositional concept denoting sentence $s \in S_{int}$ is the illocutionary force of a question, the addressee is able to determine the illocutionary force f_{Quest}, which is a function from sentence meanings to question acts which are itself functions from contexts to contexts. Hence, $f_{Quest}([\![whether\_it\_is\_raining]\!]^{c,g}) = f_{Quest}(\lambda w \lambda w'.rain'(w) = rain'(w')) = a_{Quest}$, where $a_{Quest} \in A$.

The infinitival complement $s \in S_{inf}$ of *I order you to free Willy* denotes an intensional property: $[\![to\_free\_Willy]\!]^{c,g} = \lambda x \lambda w.free'(willy)(w)(x)$. By means of the information about the semantic mood in the utterance context, namely that the prototypical force of the property denoting sentence $s \in S_{inf}$ is directive, the addressee determines the illocutionary force f_{Dir}, which is a function from sentence meanings to directive acts which are itself functions from contexts to contexts. Hence, $f_{Direct}([\![to\_free\_Willy]\!]^{c,g}) =$
$f_{Direct}(\lambda x \lambda w.free'(willy)(w)(x)) = a_{Direct}$, where $a_{Directt} \in A$.

As illustrated in part I, 4.3, utterances, and the speech acts performed by using them classify sequences of contexts. There are three contexts that I called the *utterance context c*, the *illocutionary context c'*, and the *perlocutionary context c''*. In order to keep the context change as concise as possible, the *utterance context c* corresponds to the Austinian presemantic phonetic act (the pure utterance act), and the presemantic phatic act. The *illocutionary context* is a combination of the Austinian semantic rhetic act and the illocutionary act (cf. part I, chapter 1 for the introduction of the locutionary, the illocutionary, and the perlocutionary act).
Utterances connect *c* and *c''* which are as close as possible given that *c* makes the success and the felicity conditions for the particular speech act type true in order to determine in the illocutionary context *c'* the utterance as a particular successful and felicitous speech act that induces the particular perlocutionary effect that leads to *c''*.

As illustrated in part I, section 4.1, the set $CG(c)$ is the common ground of a context $c \in C$, where $c = < c_S , c_A , c_T , c_w > \in (E \times E \times T \times W)$, such that c_S is communicating to c_A at c_T in c_w. Furthermore, $DS(c_0)$ is the set of contexts where the Kaplanian indexicals get their values.
Furthermore, the utterance context c is the context where an utterance of a certain sentence takes place. $CG(c)$ includes information about the previous discourse that requires that the speaker's contribution is of an illocutionary type appropriate to that stage of talk exchange (Bach&Harnish's *sequencing condition* cf. part I, 4.3). Furthermore, in $CG(c)$ it is mutually assumed that the speaker is competent, cooperative, and complies with the *communicative presumption (CP)* (cf. part I, 1.2). Remember, *CP* assures that whenever a context change is put forth by an utterance, the participant who utters a sentence of a certain sentence type does so with the illocutionary intention to act.
Furthermore, as illustrated in part II, 4.1.5, I assume that structural ambiguities are resolved presemantically. That is, the ambiguity between the structure where Q_{EX} scopes over the 'performative' verb V and the structure where Q_{REP} scopes over the 'performative' verb V is resolved in the utterance context c, in particular, in the Austinian phatic act, before the meaning of the explicit performative sentence is assigned by the semantic valuation function $V(d) \in J$. If the plausible structure is the structure Q_{EX} V, the 'performative' verb is individuated with the restricted execution-supporting meaning of the type $<v,<e,<e,<s,t>>>>$.[22] The execution-supporting meaning of the 'performative' verb is applied to utterances of type v. Therefore, I assume that the possible worlds in $CG(c)$ include the information that the utterance of the explicit performative sentence is composed of several subutterances and that the speaker utters the complement clause in order to perform a speech act.
Further properties of the utterance context c are the conditions on the performance of a speech act. The *success conditions*, the *felicity conditions*, and the *preparatory conditions* for a particular speech act type that are fulfilled and hence true in all worlds $w \in CG(c)$. Furthermore, according to the semantic characterization of mood, I assume that in $CG(c)$ it is true that with both, utterances of main clauses as well as utterances of complement clauses embedded under execution supporting 'performative' verbs, speakers perform speech acts whose contents correspond to the semantic objects denoted by the respective complement sentences.

Remember that addition of information to a context results in a new context:

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[22] Since the structural disambiguation plays merely a minor role for the analysis of the explicit performatives, I omit the indices of the variables that restrict their assignments. The reader is asked to keep in mind that in the utterance context where the disambiguation takes place the resulting execution-supporting meaning of the 'performative' verb is of course restricted to the actual speaker, the actual addressee, and the utterance time.

(110) $CG(c) \cap \phi = CG(c')$, where $CG(c') = \{w \in W \mid \phi(w)\}$

Hence, by means of the information that the speaker utters a sentence $d \in D$, or $s \in S$, the utterance context *c* is changed to the illocutionary context *c'*. That is, the worlds $w \in CG(c')$ make true that c_S utters a sentence. Furthermore, in the illocutionary context *c'* the sentence obtains its meaning by means of the semantic valuation function $V : D \rightarrow J$, or V: $S \rightarrow I$. Which meaning is assigned depends on the particular sentence type. Furthermore, in *DS*(*c'*) the indexical expressions are evaluated. By means of the information in *CG*(*c'*) the illocutionary force of the utterance is inferred and hence, the information about which type of speech act $a \in A$ is performed. Remember that speech acts $a \in A$ are functions from contexts into contexts. Given that the successfully performed speech act is also felicitously and hence non-defectively performed, the speech act is applied to the illocutionary context *c'* and yields the perlocutionary context *c''*. The perlocutionary context *c''* is the context where the intended perlocutionary effect is fulfilled. For instance, the perlocutionary effect of assertive speech acts is that the addressee believes the propositional content. The perlocutionary effect of questions is that the addressee provides the required information, and the perlocutionary effect of directive or commissive speech acts is that the speaker or the addressee accepts the emerged obligation. Notice, the perlocutionary act is not a component of the speech act meaning.
Thus, whereas speech acts in general update the illocutionary context *c'* to the perlocutionary context *c''*, the particular speech acts with its particular perlocutionary effects operate on the common ground of the illocutionary context *c'*. Hence, assertive speech acts, and question acts operate on the common ground of the illocutionary context *c'* and add new information[23]. Directive and commissive speech acts operate on the common ground of the illocutionary context *c'* and order the set of possible words in *CG*(*c'*) according to the ideal of the rational and cooperative participant of conversation who makes true as many as possible properties on his To-Do-List. The latter perlocutionary effect will be illustrated in more detail in 4.3.3.4 below.

As illustrated in 4.1.2 above, instead of simply being *self-verifying*, the meaning of the explicit parenthetical disambiguates the illocutionary force potential of the utterance of the host sentence. In the following section, I will show and elaborate in more detail that the same holds for the meaning of the explicit performative sentence.

[23] Of course, the perlocutionary effect of questions coincides with the perlocutionary effect of its answer.

4.3.2.1 Disambiguation Reloaded

Generally, explicit performative sentences are used in contexts *c* where the information provided by the utterance of the complement sentence does not suffice for the determination of the intended illocutionary force of the corresponding implicit speech act, and therefore for its success. For instance, in contexts where the information provided by the utterance of *I will be there for you* does not suffice for the determination that the utterance is an act of promising, the speaker uses the explicit performative sentence *I promise you that I will be there for you*. Thus, the speaker provides the missing information that he promises with the utterance of *I will be there for you*, secures the uptake of the intended illocutionary force and therefore the further course of conversation.

As illustrated in 4.1.2 above, I assume that in contexts where the information provided by the utterance of the complement sentence does not suffice for the determination of the intended illocutionary force, the utterance of the complement induces an ambiguity with respect to various possible illocutionary forces (the so-called *illocutionary force potential*).

In order to secure the uptake and the further course of conversation, the speaker utters the explicit performative sentence, whose meaning disambiguates the illocutionary force potential of the utterance of the complement sentence. Thus, it is not the case that explicit performative sentences are trivially true when uttered. Their function is more complex. Their *self-verifying* property ('*saying so makes it so*') is explained by means of *disambiguation*.

The utterance of the complement sentence features an illocutionary force potential whenever the information provided by this utterance, namely, the information about the sentence mood and hence about its prototypical illocutionary force does not suffice for the determination of the success of the intended speech act. The lack of information induces that in $CG(c)$ the success conditions for several speech acts are fulfilled. In order to be cooperative and informative and to secure the further course of conversation, the speaker resolves this ambiguity in $CG(c)$ by means of the utterance of the 'performative' verb.

As illustrated in 4.1.5 above, the lexical entries of the 'performative' verbs expresses the particular R-intention of the actual speaker that normally has to be recognized by the addressee by means of the fulfillment of the particular success conditions of the respective implicit speech act performed with the utterance of the complement sentence.[24] Hence, with the utterance of the 'performative' verb the speaker provides the missing information, and resolves the ambiguity in $CG(c)$.

For instance, suppose that in the utterance context c c_S utters the declarative *I promise that I will be courteous*. As illustrated in 4.1.5 above, the utterance context *c* is a combination of the pure utterance act (the phonetic act) and the phatic act

[24] See Vanderveken (1990-91) for a semantic decomposition of speech act verbs.

where the structural ambiguity of the 'performative' verb is resolved. Thus, suppose that the plausible structure is the structure where Q_{EX} scopes over the expression *promise* such that *promise* is used with the execution-supporting meaning of the type <*v*,<*e*,<*e*,<*s*,*t*>>>> that requires an utterance of type *v*.
As illustrated in 4.2.2 , the D-structure secures that the argument of the 'performative' verb is the CP *that I will be courteous,* and that the execution-supporting meaning of the 'performative' verb is applied to the utterance of the CP, that is, to the utterance *"that I will be courteous"*. Thus, *CG*(*c*) contains the information that the utterance of the sentence *I promise that I will be courteous* is composed of, among others, the utterance of the CP *"that I will be courteous"*. Furthermore, according to the extension of the semantic mood to complement clauses, in *CG*(*c*) is true that with the utterance of complements of a certain complement type, speakers perform prototypical speech acts, and that the particular meanings of the complements correspond to the content of the respective speech acts.

Thus, first of all the utterance context *c* is updated by means of the information that c_S utters the complement clause *that I will be courteous*. That is, the utterance act changes the utterance context *c* to the illocutionary context *c'* whose worlds in *CG*(*c'*) have the property that c_S utters the complement *that I will be courteous*:

(111) $CG(c) \cap \{ w \in W \mid c_S \text{ utters } \textit{that I will be courteous} \text{ in } w \} = CG(c')$

In the illocutionary context *c'* the meaning of the declarative complement sentence *that I will be courteous* is obtained by means of the semantic valuation function *V* that takes complements of certain types and yields their meanings: $[\![that\_I\_will\_be\_courteous]\!]^{c,g} = V(that\_I\_will\_be\_courteous) = \lambda w.courteous'(w)(c_S)(t')$, where *t'* is a time after the time of the utterance c_t. Since time is a deictic category the utterance time c_t is given by $DS(c_0)$.
Next, by means of the information in *CG*(*c'*) namely the information about the previous discourse, the communicative presumption, the particular semantic mood of *that*-complements, and the fulfillment of the particular success conditions that help to recognize the R-intention of the speaker, the prototypical illocutionary force f_{Assert} of the utterance of the complement sentence is inferred.
Yet, since the proposition describes a future action of c_S, both the propositional content condition for predictions as well as the conditions for a promise which is an instance of the commissive force f_{Comm} are fulfilled and hence true in *CG*(*c'*).
Thus, the information provided with the utterance of the complement sentence does not suffice for the success of the intended speech act, and hence for the determination of the intended illocutionary force. In *CG*(*c*) the success conditions for several speech acts are fulfilled.The utterance *"that I will be courteous"* is ambiguous with respect to the information about its possible illocutionary forces.
Notice, as shown in 4.1.2 above, there are two types of ambiguity that arise if the information provided by the utterance of the complement sentence (that is, the

information about sentence mood and the prototypical illocutionary force) does not suffice for the determination of the intended illocutionary force and hence for the success of the implicit speech act. (i) The ambiguity with respect to the information about various instances of prototypical and non-prototypical illocutionary force types (e.g. the ambiguity between the instances of the prototypical f_{Assert} and the instances of the non-prototypical f_{Comm}), and (ii) the ambiguity with respect to the information about various instances of one certain illocutionary type (e.g. $f_{begging}$, f_{demand}, $f_{permitt}$, and f_{order}).

The information provided by the utterance *"that I will be courteous"* is not sufficient for the determination of the intended speech act. Because the actual illocutionary force of the utterance *"that I will be courteous"* cannot be recognized by the addressee, in *CG*(*c*) further information about various possible illocutionary forces is true. Hence, the information about the various possible illocutionary forces of the utterance *"that I will be courteous"* i.e., the particular success conditions for a particular illocutionary force constitutes the reflexive, symmetric, and transitive *equivalence relation* 'has the same success conditions' on the logical space *W*:

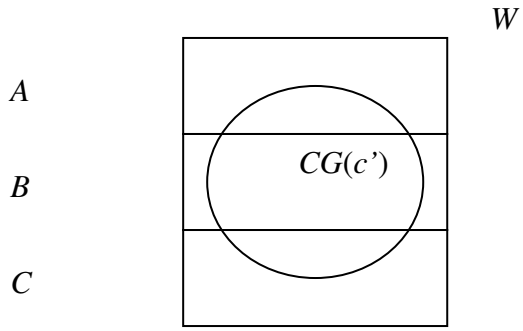

Figure 5

Hence, the set *W* (and with it the set *CG*(*c'*)) is structured into mutually exclusive and exhaustive nonempty subsets whose members are regarded as equivalent with respect to the information about the particular illocutionary force. That is, the set of possible worlds *CG*(*c'*) is divided into *equivalence classes*, namely, subsets of possible worlds, which are equivalent with respect to the information (i.e. the success conditions) about the possible illocutionary forces of *"that I will be courteous"*. Dividing the set *W* and with it the set *CG*(*c'*) into mutually exclusive and exhaustive nonempty subsets effects a *partitioning* on that set. Suppose for the sake of clarity that the utterance *"that I will be courteous"* is ambiguous only with respect to two instances of the prototypical assertive force type f_{Assert}, namely, a warning $f_{warning}$, and a prediction $f_{predict}$, and an instance of the commissive force type, $f_{promise}$. Thus, as illustrated in figure 5 above, the set of possible worlds *W* and

hence the set $CG(c')$ is partitioned into three equivalence classes, or cells. The set of possible worlds *A* that makes true the success conditions for a warning, the set of possible worlds *B* that makes true the success conditions for a promise, and the set *C* that makes true the success conditions for a prediction.

In the next step, the context *c'* is incrementally updated according to the structure of the utterance *"I promise you that I will be courteous"* (cf. figure 4 in 4.2.2 above). That is, it is first updated by means of the information that c_S utters *you*, and second, by means of the information that c_S utters *promise*, and third, by means of the information that c_S utters *I*. Thus, we arrive at the entire utterance *"I promise you that I will be courteous"* and at the new context *c''*, where all worlds $w \in CG(c'')$ make true that c_S utters *I promise you that I will be courteous*:

(112) $CG(c') \cap \{ w \in W \mid c_S \text{ utters } \textit{I promise you that I will be courteous} \text{ in } w \} = CG(c'')$

c'' is the context where the meaning of the entire explicit performative sentence *I promise you that I will be courteous* is obtained by means of $V(d) \in J$: $[\![I\_promise\_you\_that\_I\_will\_be\_courteous]\!]^{c,g} = \lambda w.promise'(w)(c_A)(c_S)$ (*" that I will be courteous"*). By means of the information in $CG(c'')$, the communicative presumption, the particular mood of declarative sentences, and the success conditions, the prototypical assertive force f_{Assert} of the utterance *"I promise you that I will be courteous"* is inferred.
Suppose that in $CG(c'')$ the felicity conditions for assertive speech acts are fulfilled (because it is mutually believed that c_S himself believes that c_S promises with the utterance *"that I will be courteous"*), and that c_A is willing to belief in the truth of the proposition. Then *c''* is changed to the perlocutionary context *c'''* where all $w \in CG(c''')$ make true that c_S promises with the utterance *"that I will be courteous"*:

(113) $CG(c'') \cap [\![I\_promise\_you\_that\_I\_will\_be\_courteous]\!]^{c,g} = CG(c''')$
where $CG(c''') = \{ w \in W \mid c_S \text{ promises with } \textit{"that I will be courteous"} \text{ in } w \}$

As illustrated in 4.1.5 above, the lexical entry of the 'performative' verb *promise* expresses the R-intention of the speaker that is normally recognized by the hearer by means of the fulfillment of the success conditions. For this reason, the proposition denoted by the explicit performative sentence is true in the equivalence class consisting of a set of worlds *B* where the success conditions of the promise are true. Consequently, by updating $CG(c'')$ by means of $[\![I\_promise\_you\_that\_I\_will\_be\_courteous]\!]^{c,g}$ the partition on the set of worlds $CG(c'')$ is resolved, and the resulting common ground $CG(c''')$ is constituted by the set of worlds *B* that make true the success conditions for a promise:

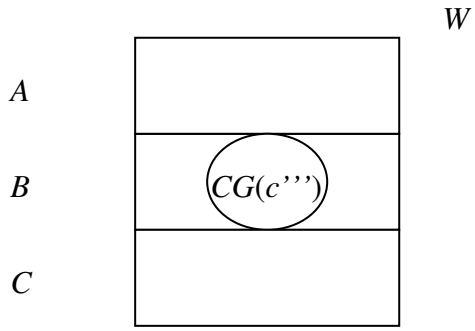

Figure 6

Thus, the illocutionary force potential of the utterance *"that I will be courteous"* is disambiguated in favour of $f_{Promise}$: By means of the information about the success conditions for a promise in $CG(c''')$ c_A infers that the illocutionary force of *"that I will be courteous"* is the illocutionary force of a promise ($f_{promise}$). Note that since the common ground is in *B*, and the partition on *W* is still present, the illocutionary force potential of the utterance *"that I will be courteous"* remains unaffected – Even though in $GC(c''')$ the ambiguity is resolved.
In a further step, $f_{promise}$ is applied to $[\![that\_I\_will\_be\_courteous]\!]^{c,g}$ and yields the speech act $a_{promise} \in A_{dyn}$, which is itself a function from contexts into contexts. Hence, with the utterance of the explicit performative sentence *I promise you that I will be courteous*, c_S gives additional information and ensures that the utterance *"that I will be courteous"* will be recognized as a successfully performed promise.

The view that the meaning of the 'performative' verbs leads to the resolution of the partition and thus fully specifies what in fact the speaker is doing does not imply that "illocutionary force is exhausted by meaning", as Strawson (1964:456) claims. Rather, the addressee infers the illocutionary force by means of the information about the success conditions in $CG(c''')$. The meaning of the 'performative' verb is a device for the addressee to decide which success conditions in $CG(c''')$ are relevant for the determination of the illocutionary force of the utterance of the complement clause. In this case the meaning does not conventionally determine ('count as') the illocutionary force. Rather, the meaning of the performative verb delimits the illocutionary force potential of the utterance of the complement clause. The meaning of the 'performative' verbs may fully specify what the speaker is in fact doing, but does not conventionally determine the illocutionary force solely by virtue of its meaning. As always, the illocutionary force is given by means of the utterance of a sentence. As I will illustrate in the next section, this is apparent in the cases where the meaning of the 'performative' verb is redundant. Here, the

information about the illocutionary force of the utterance of the complement sentence, and hence the inferred illocutionary force itself, effects that the meaning of the explicit performative sentence provides redundant information that has already been established.

Summarized, instead of simply being *self-verifying*, the discourse function of the explicit performative sentence is more complex and its meaning *disambiguates* the illocutionary force potential of the utterance of the complement clause. Explicit performatives are used in contexts *c* where the information provided by the utterance of the complement sentence does not suffice for the determination the intended illocutionary force of the implicit speech act. In order to secure the uptake and the further course of conversation, the speaker utters the explicit performative sentence and disambiguates the illocutionary force potential of the utterance of the complement sentence. The same holds for all explicit performative sentences that resolve the ambiguity of particular illocutionary forces whose determination is difficult to master, because the information conveyed by the utterance of the complement clause does not suffice for the determination of the actual illocutionary force, and for the success of the intended implicit speech act. Thus, for example, the different success conditions of begging, requesting, asking, ordering, and demanding are not conveyed by the mere utterance of the complement clause and cannot be determined only by virtue of the information about the prototypical directive force in the utterance context. The performance of a mere implicit speech act does not suffice in order to provide this particular information. The same holds with respect to the individuation of instances of other force types. For example, the differences between agreeing and conceding, between questioning and inquiring are not conveyed by the mere utterance of the complement clause. Their uptake is not secured only by virtue of the contextual information about the sentence mood and the prototypical force.

Since the meaning of the explicit performative sentence conveys new information about the illocutionary force of the utterance of the complement sentence, it creates new facts in the common ground. This explains why with the utterance of explicit performatives speakers cannot mislead their addressees with respect to the illocutionary force. Thus, this is the reason why the second utterance in (114) below is odd:

(114) I promise you that I will come to the party. # But this doesn't mean that I promised you to come to the party.

The utterance of the explicit performative sentence disambiguates the illocutionary force potential of the utterance *"that I will come to the party"* and creates new facts in the common ground. That is, the possible worlds in the common ground make true that the actual speaker promises with the utterance *"that I will come to*

the party". If the propositional content of the second utterance is intersected with the possible worlds constituting the common ground then it contradicts the facts already established by the utterance of the explicit performative sentence. Hence, the new context that is updated by means of the second utterance is defective, that is, the second utterance brings about that the resulting common ground is empty.

4.3.2.2 Redundancy Reloaded

As illustrated in 4.1.3, explicit parentheticals do not always disambiguate the illocutionary force potential of the utterance of the host sentence. Again, the same holds for explicit performative sentences. In contexts where there is no illocutionary force potential and where the determination of the implicit prototypical speech act suffices for the course of conversation, there is no need for disambiguation by means of the meaning of the 'performative' verbs. Hence, if the speaker nevertheless uses the explicit performative sentence (instead of performing the sufficient implicit speech act), the meaning of the 'performative' verb is redundant. In these contexts, the meaning of the 'performative' verb does not provide additional information with respect to the implicit speech act performed with the utterance of the complement sentence. The use of the explicit performative sentences comes accros as merely emphazising the implicit speech act performed with the utterance of the complement sentence.

Suppose, in c, c_S utters the declarative *I state that it is raining*. As illustrated in 4.1.5 above, the structural ambiguity of the 'performative' verb is resolved in the phatic act that takes place in the utterance context c. Suppose that the structural ambiguity is resolved in favour of the structure where Q_{EX} scopes over the expression *state*. Remember that Q_{EX} yields the restricted execution-supporting meaning of the type $\langle v,\langle e,\langle s,t\rangle\rangle\rangle$ which has to be applied to utterances. As illustrated in 4.2.2, the fact that the utterance structure is based on the syntactic structure where the direct object of the 'performative' verb is the CP *that I will be rich* ensures that the meaning is applied to the utterance of the complement that is, to the utterance *"that I will be rich"*.
Thus, $CG(c)$ includes the information that the utterance of the sentence *I state that it is raining* is composed of, among others, the utterance of the CP namely, *"that it is raining"*. Furthermore, according to the extension of the semantic mood to complement clauses, in $CG(c)$ is true that with the utterance of complements of a certain type speakers perform prototypical speech acts, and that the meanings of the complements correspond to the content of the respective speech acts.
Thus, first of all the utterance context c is updated by means of the information that c_S utters the complement clause *that it is raining*. That is, the utterance act changes the utterance context c to the illocutionary context c' where the worlds in $CG(c')$ have the property that c_S utters the complement *that it is raining*:

(115) $CG(c) \cap \{ w \in W \mid$ c_S utters *that it is raining* in w $\} = CG(c')$

In *c'* the meaning of the declarative complement sentence *that it is raining* is obtained by means of the semantic valuation function that takes complements of a certain type and yields their meanings: $[\![that\_it\_is\_raining]\!]^{c,g} = \lambda w.rain'(w)$

Thus, by means of the information in *CG*(*c'*), namely the information about the previous discourse, the communicative presumption, the particular semantic mood of *that*-complements, and the fulfillment of the assertive success conditions that help to recognize the R-intention of the speaker, the prototypical assertive force *f* of the utterance of the complement sentence is inferred. c_A infers from *CG*(*c'*) that the illocutionary force *f* of the utterance is assertive and thus determines the prototypical speech act, which is performed with the complement clause. Thus, all worlds $w \in CG(c')$ make true that c_S performs a speech act of the assertive kind a_{Assert}:

(116) $CG(c') \subseteq \{ w \in W \mid$ c_S performs $a_{Assert} = \langle f_{Assert}, \lambda w.rain'(w) \rangle$ in w $\}$

According to (109) above, f_{Assert} is applied to $[\![that\_it\_is\_raining]\!]^{c,g}$ and yields the assertive speech act $a_{Assert} \in A_{dyn}$, which is a function from contexts into contexts (cf. (108) above): $f_{Assert}(\lambda w.rain'(w)) = a_{Assert}$.

Given that in *c* the information provided by the utterance of the complement sentence already suffices for the future course of conversation and there is no partition on *CG*(*c*). That is, in order to secure the further course of conversation it suffices to express a strong assertoric commitment to the truth of the propositional content. However, this is already guaranteed by the performance of the prototypical implicit assertion. Remember that with the performance of the prototypical implicit assertions as in (117) below, speakers always express a strong assertoric commitment to the truth of the propositional content:

(117) a. It is raining.
b. The next level corresponds to a transformation language.

Hence, since in *c* the information provided by the utterance of the complement clause suffices for the further course of conversation, there is no need of additional information.

Further, the context *c'* is incrementally updated according to the structure of the utterance *"I state that it is raining"* (cf figure 4 in 4.2.2 above). That is, it is updated first, by means of the information that c_S utters *state*, and second, by means of the information that c_S utters *I*. Thus, we arrive at the root utterance *"I state that it is raining"* and at a new illocutionary context *c''*, where all worlds $w \in CG(c'')$ make true that c_S utters the sentence *I state that it is raining*:

(118) $CG(c') \cap \{w \in W \mid c_S \text{ utters } I \text{ state that it is raining in } w\} = CG(c'')$

The illocutionary context *c''* is the context where the meaning of the entire explicit performative sentence *I state that it is raining* is obtained, that is, $[\![I\_state\_that\_it\_is\_raining]\!]^{c,g} = \lambda w.state'(w)(c_S)$ (*"that it is raining"*). Note, the indexical *I* obtains its value with respect to $c \in DS(c'')$ such that *I* refers to the actual speaker c_S. Furthermore, the prototypical assertive force f_{Assert} of the utterance *"I state that it is raining"* is inferred by means of the information in *CG*(*c''*), namely, the communicative presumption, the particular mood of declarative sentences, and the success conditions.

Suppose that in *CG*(*c''*) the felicity conditions for assertive speech acts are fulfilled (because it is mutually believed that c_S himself believes that c_S states with the utterance *"that it is raining"*), and that c_A is willing to belief in the truth of the proposition. Then the speech act changes the illocutionary context *c''* to the perlocutionary context *c'''* where according to the particular perlocutionary effect of assertive speech acts all $w \in CG(c''')$ make true that c_S states with the utterance *"that it is raining"*:

(119) $CG(c'') \cap [\![I\_state\_that\_it\_is\_raining]\!]^{c,g} = CG(c''')$,
where $CG(c''') = \{w \in W \mid c_S \text{ states with } \textit{"that it is raining"} \text{ in } w\}$

This holds, since in *CG*(*c'''*) is true that with the utterance of the complement clause *that it is raining* c_S performs a speech act of the assertive kind, because in the previous *CG*(*c'*) it is already inferred that with the utterance *"that it is raining"* (cf.(116) above) c_S performs an instance of the assertive type.

However, remember the outcomes of the redundancy in the case of explicit parentheticals in section 4.1.3 above.

In contexts where the performance of the implicit speech act already guarantees the further course of conversation, there is no need for additional information conveyed by means of the explicit performative sentence. Hence, the meaning of the 'performative' verb gives no additional relevant information and the information given by the explicit performative sentence is redundant. The use of the explicit performative sentence comes across as merely emphasizing the implicit speech act performed with the utterance of the complement sentence.

Since the assertive verb *state* expresses a strong commitment to the truth of the propositional content of the assertive speech act, there are no differences between the prototypical assertive speech act performed with the complement sentence and the expressed assertoric commitment by means of *state.* If there is any difference at all then the difference is too marginal for being important. Hence, in this context the meaning of *state* provides no additional information about the assertoric commitment of the speaker and therefore is redundant:

According to the Stalnakerian (1978) constraint on the non-defective performance of speech acts of the assertive kind, repeated in (120)(ii) below, the information

provided with the explicit performative sentence is redundant. The assertive speech act is successfully but non-felicitously performed, that is, the resulting perlocutionary context *c'''* is defective (cf. (121)).

(120) $f_{Assert}(\phi)$ is felicitous w.r.t $CG(c)$ only if
(i) the resulting $CG(c')$ is not contradictory:
$CG(c) \cap \phi \neq \varnothing$, i.e $\exists w(w \in CG(c) \,\&\, \phi(w))$
(ii) the resulting $CG(c')$ is not redundant:
$CG(c) \setminus \phi \neq \varnothing$, i.e. $\exists w(w \in CG(c) \,\&\, \neg\phi(w))$

(121) $CG(c'') \setminus [\![I\_state\_that\_it\_is\_raining]\!]^{c,g} = \varnothing$, i.e.
$\neg\exists w(w \in CG(c'') \,\&\, \neg [\![I\_state\_that\_it\_is\_raining]\!]^{c,g}(w))$

Note that whereas in the case of disambiguation, the explicit performative provides new information and creates new facts in $CG(c)$, here the already established facts in $CG(c)$ decide that the content of the assertive speech act performed with the utterance of the explicit performative sentence is redundant.[25]

Before I will continue with the problem of the semantic mood of infinitival complements, I will give a short remark with respect to the view that with the utterances of explicit performative sentences speakers additionally perform speech acts of the assertive kind.

4.3.2.3 An "Assertive Remark"

The disambiguation and the redundancy elaborated above rest on the assumption that with the utterance of explicit performative sentences speakers perform two speech acts. For instance, in the case of *I promise you that I will be courteous,* the

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[25] Note that *I promise you that I will damage your car* constitutes a case where the established facts in $CG(c)$ decide that the content of the global assertive speech act is contradictory and trigger the inference of the illocutionary force of a threat – even though the speaker disambiguates the illocutionary force potential of the utterance of the complement clause.
Suppose that in $CG(c)$ is true that the addressee loves his car and does not favour that the speaker causes damages. Thus, even though the speaker disambiguates the illocutionary force potential of the utterance of the complement, the information in $CG(c)$ does not fulfill the preparatory condition for a promise. On the contrary, in $CG(c)$ rather holds that the converse preparatory condition is fulfilled, namely that the addressee favours that the speaker will not cause damages on his car. Yet, this is a preparatory condition for the performance of a threat. Hence, the facts in $CG(c)$ would make false the proposition denoted by the explicit performative sentence. However, the addressee takes the speaker to be cooperative and assumes that he obeys the maxim of quality and the maxim of relevance. Thus, the addressee infers from the facts in $CG(c)$ that by means of the utterance of the complement sentence the speaker uses *promise* in order to emphasize his commitment to realize the future action but performs the relevant threat that he will damage his car.

first one is the speech act performed with the utterance of the complement clause *that I will be courteous*; the second one is the global speech act of the assertive type performed with the utterance of the entire explicit performative sentence. However, I do not see a problem with this outcome, because there is no evidence for Schiffer's view that also the assertive force has to be made explicit by means of the further use of a performative formula, as in (122) below (Schiffer, 1972):

(122) I state that I promise you that I will be courteous.

As illustrated in 2.2 above, the main counterargument concerning the assertive view rests on the acceptance of Austin's assumption that speakers make explicit always the full illocutionary force of their utterance. Concerning this matter, I agree with Bach (1975:233) who counters that there is no reason for assuming that speakers make always explicit the full illocutionary force of their utterance. The only thing that speakers make explicit is the primary goal of their utterance, namely, according to the parenthetical analysis, the illocutionary force of the implicit speech act performed with the utterance of the complement clause.
Since Austin's principle that the full illocutionary force always has to be made explicit comes without any further support whatsoever, this argument is anything but convincing. Furthermore, the fact that there are illocutionary forces that have no analogue performative expression supports Bach's claim that Austin's principle is not a suitable premise:

(123) # I hereby threaten you.

According to the parenthetical analysis, the discourse function of explicit performatives is to disambiguate the illocutionary force potential of the utterance of the complement clause. However, remember the outcomes of section 4.3.2.2 above. There are contexts where no disambiguation takes place since the information provided with the utterance of the complement clause namely, the information about sentence mood and the prototypical illocutionary force suffices for the further course of conversation. If the speaker uses nevertheless the explicit performative sentence (instead of performing the sufficient implicit speech act), the meaning of the 'performative' verb is redundant. In these contexts, the lexical meaning of the 'performative' verb does not provide additional information with respect to the implicit speech act performed with the utterance of the complement sentence. The use of the explicit performative sentence comes across as a mere emphasis of the implicit speech act performed with the utterance of the complement sentence.
This explanation also holds for (122) above. Here, the use of *state* is redundant, since in contexts where the explicit performatives are uttered, the information about sentence mood and the prototypical assertive force provided with the utterance of *I promise you that I will be courteous* suffices for the further course of conversation. The information about the prototypical assertive force suffices to achieve the needed perlocutionary effect of the assertive speech act and to intersect

and thereby disambiguate the illocutionary force potential of the utterance of the complement *that I will be courteous*. There is no additional need to specify what kind of assertive speech act is performed with the utterance of the entire explicit performative sentence. As in the redundancy cases discussed before, the use of *state* is redundant because it provides no further information about the strong assertoric commitment of the speech act performed with the utterance of the entire explicit performative sentence. The use of *state* is redundant simply because there is no contextual need to make explicit the secondary assertive illocutionary force of the implicit assertive speech act performed with utterance of the complement *that I promise you that I will be courteous*. Hence, the utterance of an explicit performative of the form *I state that I promise you that I will be courteous* is always a non-felicitous and hence defective assertive speech act.[26]

Further, regarding utterances of explicit performative sentences as assertive has the advantage that also explicit performative sentences that belong to the declarative type comply with the semantic characterization of mood illustrated in part I, 2.2. That is, we do not have to stipulate that explicit performative sentences are exceptions with respect to the mood relation. Rather, according to their declarative type, explicit performative sentences are used in order to perform prototypical assertive speech acts, whose contents correspond to the propositional meaning of the explicit performative sentence.

In the following chapter, I will illustrate the problem of a uniform semantics of complement clauses embedded under directive and commissive verbs. Directive and commissive verbs embed both, proposition denoting *that*-complements, and property denoting infinitival (PRO) complements. Therefore, I apply the techniques of Heim (2001), and Stechow (2002), in order to reduce the proposition denoted by the *that*-complement to an intensional property. Doing so, I attain a uniform semantics of complements embedded under directive and commissive verbs. Roughly, this reduction takes place whenever the person feature of the 'performative' verb, or of the indirect object of the performative verb agrees with the person feature of the embedded pronoun.

4.3.3 The Problem of a Uniform Semantics of the Complements Used to Perform Directive and Commissive Speech Acts

As described in part II, 4.3.1, the semantic mood of matrix interrogatives also holds for *wh*-complements. Similarly, the semantic mood of matrix declaratives

[26] Of course, apart from contexts where the speaker wants to express that he is merely stating with the use of the explicit performative sentences. Note that in these contexts the speaker makes also explicit the primary goal of his utterances, namely that he is stating as opposed to promising.

also holds for *that*-complements. According to my analysis, both matrix declaratives, as well as *that*-complements embedded under 'performative' verbs that come with the execution-supporting meaning of the type <*v*,<*e*,<*s,t*>>>, are uttered in order to perform prototypical assertive speech acts whose contents correspond to the proposition denoted by the complement clauses. Similarly, also matrix interrogatives, as well as *wh*-complements embedded under 'performative' verbs that come with the execution-supporting meaning, are uttered in order to perform prototypical question acts whose contents correspond to the propositional concept denoted by the *wh*-complements.
As illustrated in part I, 3.2, I regard matrix imperatives as denoting properties that correspond to the semantic content of the prototypical directive speech acts performed with their utterance. Unfortunately, apart from Slovenian (cf. (101) and (102), in 4.3 above), and occurrences of embedded imperatives in German (cf. (103), in 4.3) no further data for property denoting embedded imperative clauses that speakers use to perform directive speech acts have been reported. Hence, it seems that the semantic mood for matrix imperatives does not hold for complement clauses that are embedded under execution-supporting directive 'performative' verbs that are uttered in order to perform directive speech acts whose contents correspond to the semantic object denoted by the complement clause.

Next, consider (124) below, where the directive verbs *beg*, *request*, and *demand* embed infinitival PRO-complements:

(124) a. I beg you to PRO give me you car.
b. I demand to PRO leave the screen saver as it was.

As illustrated in part I, 3.2, imperative sentences denote intensional properties of the type <*e*,<*s,t*>> that correspond to the semantic content of the prototypical directive speech acts performed by means of their utterances. According to Chierchia (1989), PRO-complements also denote properties. Hence, I assume that both, matrix imperatives, as well as PRO-complements embedded under a directive 'performative' verb that comes with the execution-supporting meaning of the type <*v*,<*e*,<*s,t*>>>, are uttered in order to perform prototypical directive speech acts whose contents correspond to the property denoted by the respective complement clause. It is further assumed that infinitival complements are also used in order to perform non-prototypical speech acts, such as promising, betting, and offering, that are in the majority of classifications subsumed under the commissive speech act type, but do not exhaust it (cf. Bach & Harnish, 1978, and Allan, 1989):

(125) a. I promise you to leave.
b. I offer you to participate in my e-mail news list.
c. I bet to sleep with Mary before him.

Furthermore, directive and commissive verbs embed next to infinitival clauses *that*-clauses that denote propositions of type <*s,t*> :

(126) a. I beg you that you help me.
b. I request that you sponsor this event.
c. I demand that you break off with all your male friends.
d. I promise you that I will eat it.

Hence, if one assumes that the semantic content of directive and commissive speech acts corresponds to a property, then there is no uniform semantics for matrix imperatives, PRO complements, and *that*-complements. Consequently, one has to get rid of the directly referential *de re* reading of the overt pronoun that is a component of the proposition denoted by *that*-complements of type <*s,t*> in order to achieve a *de se* property of type <*e*,<*s,t*>>. This is the plot of the following three sections.

4.3.3.1 *That*-Complements, First Person, and De Se

For Kaplan (1979) the pronoun *I* is always directly referential in that it invariably denotes the actual speaker:

(127) a. Joseph thought that I am Catholic.
b. Joseph thought, "Verena is Catholic". (de re)

If we want to express a de se thought of the subject, we have to use a third person pronoun and achieve an ambiguity between de se and de re:

(128) a. Joseph thought he is Catholic. (de se/de re)
b. Joseph thought, "I am Catholic".
c. Joseph thought, "The man in the mirror is Catholic".

The de se scenario is that Joseph sees himself in the mirror praying the rosary and thinks "I am Catholic". The de re scenario is Joseph sees himself in the mirror without recognizing himself and thinks, "The man in the mirror is Catholic". The sentence in (128)(a) is in both readings true.
We achieve the same ambiguity with a first person matrix subject:

(129) a. I thought that I am Catholic. (de se/de re)
b. I thought, "I am Catholic".
c. I thought, "The woman in the mirror is Catholic."

Hence, the generalization is that the de se/de re ambiguity arises whenever the matrix subject and the subordinated pronoun agree in their person features. [27]
In order to account for a uniform semantics of the embedded PRO-clauses and the embedded *that*-clauses in (125) and (126) above, I will apply the approach of Ste-

[27] Stechow (2002) and Schlenker (1999) develop the de re and the de se scenarios in order to explain, among others, the contrasting behaviour of the embedded Amharic logophoric pronoun *I*. In *John says I am a hero* the Amharic *I* can can be interpreted de se.

chow (2002), who refers back to Schlenker (1999), and Heim (2001). Stechow argues that the de se reading follows from the binding principles for verbal quantifiers, more precisely, from feature deletion under variable binding by verbal quantifiers. The central primitives of the approach are the following ones: Person, Tense, and Mood are features of the verb that are checked by the features of the corresponding arguments of the verb, which are an individual, a world, and a time variable. At LF, the features of variables are interpreted. Variables that have them will be deictic, that is, directly referential. The features of the verb (called the 'checkees') are never interpreted. Importantly, features of semantically bound variables are deleted and therefore never interpreted at LF.

Verbs of attitudes, verba dicendi, and, as I propose further, all 'performative' verbs are LF-moved *verbal quantifiers* (Heim, 2001) and therefore are variable binders that delete features under agreement. In the following example, the deleted features of (130)(a) are indicated by parenthesis in (130)(b):

(130) Gerd_1 hopes he_1 wins. (Stechow, 2001)
Feature deletion under verbal quantifiers:
a. S-Structure:
$[hopes^{\text{ind.pres.3.}}[w^{\text{ind}}\, t^{\text{pres}}\, he^{3.}\, wins]_{\text{CP}}]_{\text{VP}}$
(morphological agreement between the features of the matrix verb and the embedded ones)
b. LF movement of the matrix verb, λ-binding, and feature deletion:
$[hopes^{(\text{ind.pres.3.})}\, \lambda x \lambda t \lambda w.[w^{(\text{ind})}\, t^{(\text{pres})}\, x^{(3)}\, wins\,]_{\text{VP}}]_{\text{VP}}$

The semantic binding of variables has the effect that their features are not interpreted. The LF is generated from the S-structure by raising the verbal quantifier. Since at LF only interpretable features survive, non-interpretable features are deleted. Hence, even though there is the overt pronoun *he* at the S-level, the pronoun is no longer directly referential at LF, but bound by the verbal quantifier *hope* that simultaneously quantifies over individuals, worlds, and times in order to produce the intensional de se property $\lambda x \lambda t \lambda w.win'(w)(t)(x)$ of type $<e,<i,<s,t>>>$. Note that if we omit the time variable, as I have done in the most part of this thesis, the embedded clause is of type $<e,<s,t>>$. Of course, there are cases where the matrix verb does not agree with the person of the subordinate verb as witnessed by a sentence such as *I hope that he will win*. Here, the pronoun *he* needs not to be bound by *hope*.

At the S-structure, all features are still present and feed the PF-level, where the morphological features determine the pronunciation of the expression. This guarantees that in (130) above the pronoun *he* is pronounced, even though at LF its non-interpretable feature 3rd person is deleted under variable binding.[28]

[28] Note that the existence of seperate de se readings in case of *that*-complements is controversial cf. Schlenker, Percus&Sauerland, Emar Maier.

Next, consider the explicit performative sentence in (131) below, where the *that*-complement denotes a property of the actual speaker. Again, the central idea is that if the person feature of the 'performative' matrix verb *promise* agrees with the person feature of the embedded pronoun *I*, the semantic object denoted by the *that*-complement is de se and of type <*e*,<*i*,<*s,t*>>>. That means even though at the S-level the pronoun *I* has the first person feature, and therefore is pronounced at PF, at LF the first person feature whch is λ-bound by the verb *promise*, is deleted, and hence is not interpretable. Consequently, the embedded pronoun *I* is not deictic and does not directly refer to the actual speaker (in contrast to the subject *I* of the matrix predicate *promise* that has the feature first person, and is interpreted deictic, that is, *I* directly refers to the actual speaker of the context *c*).

(131) I promise you that I will win.
Feature deletion under the verbal quantifier *promise*:
a. S-Structure:
$[promise^{\text{ind.pres.1}}\ [w^{\text{ind}}\ t^{\text{future}}\ I^{1}\ win]_{\text{CP}}]_{\text{VP}}$
(morphological agreement)
b. LF movement of the matrix verb, λ-binding, and feature deletion:
$[promise^{(\text{ind.pres.1.})}\ \lambda x \lambda t \lambda w.[w^{(\text{ind})}\ t^{\text{future}} x^{(1)}\ wins\ ]_{\text{VP}}]_{\text{VP}}$

Note in (131)(b) the future feature is not deleted since there is no agreement and it is not bound by the verb *promise*. Thus, since λt is the present time binder provided by the present time feature of the verb *promise*, the variable t^{future} is not λ-bound, and therefore directly refers to the utterance time provided by the utterance context *c*.
Next, consider the problematic case in (132), where the first person feature of the verb *order* and the second person feature of the embedded pronoun *you* do not agree. Here, the verb does not bind the embedded pronoun *you*. The embedded pronoun keeps its third person feature, and seems to be directly referential. Yet, the embedded *that*-clause should denote a 'de te' property of the addressee:

(132) I order you that you kill Bill.

Before I will address this problematic case, I will display how this approach accounts for PRO-complements.

4.3.3.2 PRO and Object Control Verbs

Since Chierchia (1989), it is commonly assumed that PRO must be interpreted as a de se pronoun. For instance, imagine the following scenario of Schlenker (1999). John is drunk such that he has forgotten that he is a candidate in the election. He watches someone on TV and finds that that person is a terrific candidate who should definitely be elected. Unbeknownst to John, the candidate he is watching is

John himself. Then the sentence in (133)(a) is true, whereas the sentence in (133)(b) is false.

(133) a. John hopes that he will be elected.
b. John hopes [PRO to be elected]

If the situation changes, John recognizes himself and John hopes for himself to be elected (John hopes: "I will be elected.") then the sentence in (133)(b) is true.

In contrast to overt embedded pronouns, PRO is not pronounced at PF, and is a variable without case but with person feature. Furthermore, PRO is always bound by the verbal quantifier. To account for this, Stechow gives the variable the feature *log*(ophoric): a variable with the feature *log* is bound by a verbal quantifier (and hence will be never interpreted). An immediate consequence is that PRO can never be deictic, and is always de se.
For the sake of illustration, consider (134) below, where the infinitive complement denotes a property of the actual speaker, the value of the directly referential *I*:[29]

(134) I promise you PRO to win
Feature deletion under the verbal quantifier *promise*:
a. S-Structure:
$[promise^{1,ind}\ [\text{PRO}^{1,log}\ w^{ind}\ to\ win]_{CP}]_{VP}$
(morphological agreement between the first person feature of the matrix verb and the first person features of PRO in CP)
b. LF movement of the matrix verb, λ-binding, and feature deletion:
$[promise^{(1.,ind)}\ \lambda x \lambda w.\ [\ x^{(1,log)}\ w^{(ind)}\ to\ win\ ]_{VP}]_{VP}$

Next, consider the sentence in (135) below, where PRO is not controlled by the features of the matrix verb but by the features of the indirect object of the verbal quantifier. Hence, the variable cannot be λ-bound by the matrix verb.

(135) I order you PRO to kill Bill.

Thus, object control does not fit the pattern since there is no agreement with the features of the verb but rather with the feature of the indirect argument of the verb. For that reason, Stechow assumes for object control verbs the following:

(136) Object control: Object control verbs are verbal quantifiers that delete the feature of the individual variable they bind if it agrees with their object.
(Stechow, 2002:27)

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[29] With respect to the discussion of coherent and incoherent infinitive complements in German I refer to Sabel (1996) who proposes that in German all infinitive complements have a controlled PRO. For that reason I will not discuss and test whether the German infinitives embedded under performatives verbs are coherent or incoherent.

Hence, consider (137) below, where the infinitive complement denotes a property of the actual addressee, the value of the directly referential *you*:

(137) I order you PRO to kill Bill.
Feature deletion under the verbal quantifier *promise*:
a. S-Structure:
$[order^{1,ind}\ you^{2}\ [\mathrm{PRO}^{2,log}\ w^{ind}\ to\ kill\ Bill]_{CP}]_{VP}$
(morphological agreement between the second person feature of the object of the matrix verb and the second person features of PRO in CP)
b. LF movement of the matrix verb, λ-binding, and feature deletion:
$[order^{(1.,ind)}\ you^{2}\ \lambda y \lambda w.[\ y^{(2,log)}\ w^{(ind)}\ to\ kill\ Bill]_{VP}]_{VP}$

Of course, in order to account for the stipulation in (136) above, one has to define a meaning rule for 'performative' verbs that control the embedded variable by means of the features of their indirect object:

(138) The meaning rule of the 'performative' verb *order* with object control:
$[\![order]\!] =$

$$(\forall u, y, x, t, w)(\forall P)\ (order(w)(t)(x)(y)(P) \rightarrow$$
$$(\forall w')(Bel_{y,w,t}(w') \rightarrow (\forall w'')(Bul_{x,w',t}(w'') \rightarrow P(y)(w'')(t))))$$

With this meaning rule at hand, one is able to account also for the problematic case in (132) repeated in (139) below. Namely, for the de se reading (or rather the 'de te' reading) of the *that*-clause which is embedded under directive 'performative' verbs and that denotes a property ascribed to the actual addressee that is given by the indirect object of the 'performative' verb.

Hence, consider (139) below, where *request* is a verbal quantifier that controls the embedded variable *you* by means of the person feature of its indirect object *you.*

(139) I request you that you will kill Bill.
Feature deletion under the verbal quantifier *promise*:
a. S-Structure:
$[request^{ind.pres.1}\ you^{2}\ [w^{ind}\ t^{future}\ you^{2}\ kill\ Bill]_{CP}]_{VP}$
b. LF movement of the matrix verb, λ-binding, and feature deletion:
$[request^{(ind.pres.1.)}\ you^{2}\ \lambda y \lambda t \lambda w.[w^{(ind)}\ t^{future}\ y^{(2)}\ kill\ Bill\ ]_{VP}]_{VP}$

Here, *request* is a verbal quantifier whose lexical entry is similar to (138) above which requires that *request* controls the embedded variable *y* by means of the second person feature of its indirect object *you.*

With these ingredients at hand, I am able to account for a uniform semantic treatment of complements embedded under directive and commissive matrix verbs. Each of the complement clauses denotes an intensional property of type

<*e*,<*i*,<*s,t*>>>. Consequently, *that*-complements and PRO-complements embedded under execution-supporting commissive and directive verbs are used to perform commissive or prototypical directive speech acts whose contents correspond to the properties denoted by the complement clauses.

4.3.3.3 The Semantic Mood of the PRO-Complements and *that*-Complements Embedded under Directive and Commissive Verbs

As illustrated in part I, 3.2, I assume following Hausser (1980) and Portner (2005) that matrix imperatives express actions directed to the addressee and denote properties. With the utterance of a sentence of the imperative type, speakers perform directive speech acts whose contents correspond to the properties denoted by the respective sentences. As illustrated in the last section, PRO-complements also express actions and invariably denote properties regardless of the features of the matrix verb. Moreover, in matrix imperatives, such as *Free Willy!*, there is no overt pronoun that directly refers to the addressee of the utterance context *c*. Since PRO is not pronounced at PF, the same holds for PRO-complements. Therefore, even though PRO-complements belong to the infinitival sentence type S_{inf}, I assume that PRO-complements are used in order to perform prototypical directive speech acts whose contents correspond to the properties denoted by the complement clauses.
This is supported by the fact that in many Indo-European languages, the infinitive is often used to perform directive speech acts:

(140) a. Mettre toujours la ceinture de sécurité. [French]
'Always wear (your) seatbelt.'
b. Ajouter les oignons à la sauce. [French]
'Add the onions to the sauce.'
c. No fumar. [Spanish]
'No smoking'
d. Nicht schiessen! [German]
'Do not fire'.

With the utterances of PRO-complements, speakers perform prototypical directive speech acts. There are contexts where the implicit directive speech act does not suffice for the further course of conversation. Here, the utterance of the PRO-complement is ambiguous among various instances of the directive force type. The meanings of the directive verbs serve to disambiguate the illocutionary force potential of the utterance of the PRO-complement.
For instance, the implicit directive speech act performed with the utterance of the sentence *Free Willy!* expresses the strong desire of the speaker with respect to the realization of the future action to free Willy. Thus, the prototypical implicit speech act performed with the utterance of the PRO-complement also expresses a strong desire of the speaker with respect to the realization of the future action described by the property denoted by the complement clause.

Furthermore, the meanings of the directive verbs *demand, order, request, beg*, and *ask* that also express this strong desire, are additionally individuated with respect to the fact that the hearer has or has not the option of a refusal. For instance, in the case of a command or an order, the speaker is peremptory and no such option is expected. In contrast, if the speaker asks or begs someone to do something, he gives the option of a refusal to the addressee. Note that this mode of achievement (Vanderveken, 1990-91) belongs to the success conditions of the directive speech acts. For instance, a demand is successfully performed only if the addressee recognizes that he lacks the option of a refusal.
Hence, in contexts where the information about the option of refusals is relevant, the information provided by the utterance of the PRO-complement, that is, the information about sentence mood and about the prototypical illocutionary force of its utterance does not secure the future course of conversation. In $CG(c)$ the success conditions for several speech acts are fulfilled. Hence, the utterance of the PRO-complement is ambiguous with respect to the information about its possible illocutionary forces. With the use of the directive verbs, the cooperative speaker provides additional information, and disambiguates the illocutionary force potential.

Consider for instance the utterance of the sentence *I order you to free Willy*. The PRO-complement is a member of the infinitival complement type S_{inf}, and denotes the intensional property $[\![to\_free\_Willy]\!]^{c,g} = \lambda y \lambda w.free'(willy)(w)(y)$ of the type <*e*,<*e*,<*s,t*>>>. In contexts where the information that the actual addressee lacks the option to refuse the resulting obligation is relevant, the implicit prototypical speech act performed with the utterance of the PRO-complement does not secure the further course of conversation. The utterance of the PRO-complement is ambiguous among the various instances of the prototypical directive force f_{Direct}. Because PRO-complements are also embedded under commissive verbs, such as in *I promise you PRO to go*, the utterance of the PRO-complement is additionally ambiguous with respect to an instance of the non-prototypical illocutionary force type f_{Comm}. This illocutionary force potential is disambiguated by means of the assertion of *I order you to free Willy*. Hence, by means of disambiguation the addressee infers f_{order}. Consequently, the illocutionary force f_{order} is applied to the meaning of the complement and yields a speech act, which is itself a function from contexts into contexts:
$f_{order}([\![to\_free\_Willy]\!]^{c,g}) = f_{order}(\lambda y \lambda w.free'(willy)(w)(y)) = a_{order}$.

As illustrated in section 4.3.1 above, *that*-complements are members of S_{decl} and are used by speakers in order to perform prototypical assertive speech acts. Furthermore, *that*-clauses are also embedded under directive or commissive verbs. Hence, utterances of *that*-clauses are ambiguous with respect to the various instances of the illocutionary force types f_{Assert} , f_{Comm}, and f_{Dir}. With the utterance of 'performative' verbs, the speaker disambiguates this illocutionary force potential.

Consider for instance *I order you that you free Willy*. Because of control and the corresponding feature deletion, the complement denotes the intensional property $[\![that\_you\_free\_Willy]\!]^{c,g} = \lambda y \lambda w.free'(willy)(w)(y)$. The assertion of *I order you that you free Willy* disambiguates the illocutionary force potential, and the addressee infers that the illocutionary force of the utterance *"that you free Willy"* is the illocutionary force f_{order}. Consequently, the function f_{order} is applied to the complement meaning and yields the directive speech act a_{order}, which is itself a function from contexts into contexts: $f_{order}([\![that\_you\_free\_Willy]\!]^{c,g}) = f_{order}(\lambda y \lambda w.free'(willy)(w)(y)) = a_{order}$.

Next, consider the explicit performative sentence *I promise you that I will free Willy*. Because of the feature deletion triggered by the binding by *promise*, the complement denotes the intensional property $[\![that\_I\_will\_free\_Willy]\!]^{c,g} = \lambda x \lambda w.free'(willy)(w)(t)(x)$. Again, the assertion of *I promise you that I will free Willy* disambiguates the illocutionary force potential, and the addressee infers that the illocutionary force of the utterance *"that I will free Willy"* is $f_{promise}$. Consequently, $f_{promise}([\![that\_I\_will\_free\_Willy]\!]^{c,g}) = f_{promise}(\lambda x \lambda w.free'(willy)(w)(t)(x)) = a_{promise}$.[30]

The lexical object control introduced in 4.3.3.2 above that regulates that the property denoted by the PRO-complement, or by the *that*-complement is ascribed to the indirect object of the 'performative' verb, mirrors the R-intention that the speaker has in performing with the utterance of the respective complement clause a directive speech act. The meaning of the directive verb disambiguates the possible illocutionary forces of the utterance of the complement clause in favour of an instance of a directive speech act. Next to its meaning, the R-intention of the speaker and hence the directive speech act type itself, expresses that the property denoted by the complement clause corresponds to the property of the addressee who has to add the property onto his To-Do-List. Thus, lexical control is mirrored by the particular speech act type performed, and has a pragmatic analogon.

As illustrated in 4.3.3.1 above, if the person feature of the 'performative' matrix predicate corresponds to the person feature of the overt pronoun in the *that*-complement, the feature of the pronoun is deleted and a de se property of the subject of the 'performative' verb is generated which directly refers to c_S. In this case, the ascription of the property to the actual speaker c_S is also mirrored by the lexical meaning of the commissive verb and hence by the R-intention of the speaker that helps to recognize the commissive speech act performed with the utterance of the *that*-complement. The meaning of the commissive performative verb disambiguates the illocutionary force potential of the utterance of the complement clause in favour of an instance of a commissive speech act. Again, the R-intention of the speaker and hence the speech act type itself expresses that the property denoted by

[30] Remember that since the time variable *t* is not lambda bound by the verbal quantifier, its tense feature is directly referential.

the complement clause corresponds to the property of the speaker who has to add the property onto his own To-Do-List. Thus, here the question to whom the property is ascribed is answered by the particular R-intention of the speaker, and hence by the type of speech act performed with the utterance of the complement clause[31].

In the following section, I will illustrate in more detail how the ambiguity with respect to the various instances of the prototypical directive force is resolved. Of course, this illustration is slightly redundant, exists only for the sake of completeness and can be skiped.

4.3.3.4 The Context Change of Directive and Commissive Speech Acts

Suppose in the utterance context c, c_S utters the declarative *I beg you to free Willy*. Furthermore suppose, in the utterance context c the structural ambiguity is resolved in favour of the structure where Q_{EX} scopes over the expression *beg* and individuates the expression with the execution-supporting meaning of type <*v*,<*e*,<*e*,<*s*,*t*>>>> which has to be applied to utterances. As illustrated in section 4.2.2 above, the fact that the utterance structure is based on the syntactic structure where the direct object of the 'performative' verb is the complementizer phrase *PRO to free Willy*, assures that the meaning is applied to the utterance of the complement, that is, to the utterance *"to free Willy"*.
Thus, $CG(c)$ contains the information that the utterance of the sentence *I beg you to free Willy* is composed of, among others, the utterance of the CP *"to free Willy"*.
Furthermore, according to the extension of the semantic mood to complement clauses, in $CG(c)$ is true that with the utterance of complements of a certain type, speakers perform prototypical speech acts, and that the meanings of the sentence types correspond to the content of the respective speech acts.
Thus, first of all the utterance context c is updated by means of the information that c_S utters the complement clause *to free Willy*. That is, the utterance act changes the utterance context c to the illocutionary context c' whose worlds in $CG(c')$ make true that c_S utters the complement *to free Willy*:

(141) $CG(c) \cap \{ w \in W \mid c_S \text{ utters } \textit{to free Willy} \text{ in } w \} = CG(c')$

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[31] The unattractive consequence that *that*-complements embedded under directive verbs are of the same type as matriximperatives ($\langle e, \langle s, t \rangle \rangle$) can be bypassed in considering imperatives as a relation between the addressee and the speaker: $[\![\phi !]\!]^{c,g} = \lambda y \lambda x \lambda w . \phi(w)(x)(y)$, type $\langle e, \langle e, \langle s, t \rangle \rangle \rangle$

In *c'* the meaning of the imperative complement *to free Willy* is obtained by means of the semantic valuation function $V: S \rightarrow I$ that takes complements of certain types and yields their meanings: $[\![to\_free\_Willy]\!]^{c,g} = \lambda x \lambda w.free'(w)(x)(willy)$
By means of the information in *CG*(*c'*) namely, the information about the previous discourse, the communicative presumption, the particular semantic mood of PRO-complements, and the fulfillment of the particular success conditions that help to recognize the R-intention of the speaker, c_A infers from *CG*(*c'*) that the prototypical illocutionary force of the utterance is directive. That is, c_A determines that with the utterance of the complement clause the speaker performs the prototypical directive speech act.
However, the prototypical illocutionary force f_{Dir} does not say anything about the mode of achievement. Suppose that in *c'* this information is relevant for the course of conversation. Then, even though the utterance of the complement has the prototypical force f_{Dir}, this information is not sufficient for the successful performance of the intended instance of the directive speech act. The further course of conversation is not secured. The utterance of the complement clause is ambiguous with respect to the information about the mode of achievement, that is, the utterance of the complement clause is ambiguous between the various instances of the directive force: f_{demand}, $f_{request}$, f_{beg} etc. Furthermore, since speakers also perform commissive speech acts such as a promise with the utterance of PRO-complements, there is the further possible illocutionary force $f_{promise}$.

To be more precise, as illustrated in section 4.3.2.1 above, the information provided by the utterance *"to free Willy"* does not suffice for the determination of the intended speech act. Since the actual intended illocutionary force of the utterance *"to free Willy"* cannot be recognized by the addressee, the worlds in *CG*(*c*) make true further information about various possible illocutionary forces, i.e. the particular success conditions for the particular instances f_{demand}, $f_{request}$, f_{beg}, and $f_{promise}$. Therefore, the utterance constitutes the *equivalence relation* 'has the same success conditions' on the set of possible worlds *W* and with it on the common ground of the illocutionary context *c'*.
Hence, the set *CG*(*c'*) is structured into mutually exclusive and exhaustive non-empty subsets whose members are regarded as equivalent with respect to the information about the particular instance of the directive illocutionary force type. That is, the set of possible worlds *CG*(*c'*) is divided into *equivalence classes*, i.e., subsets of the set of possible worlds, which are equivalent with respect to the information (i.e. success conditions) about the possible illocutionary forces of *"to free Wily"*. Suppose that among others, the utterance *"to free Willy"* is ambiguous with respect to the success conditions of f_{order}, $f_{promise}$, f_{beg}, and f_{forbid}. Then, the set of possible worlds *CG*(*c'*) is partitioned into at least four equivalence classes. The set of possible worlds *A* that makes true the success conditions for orders, the set of possible worlds *B* that makes true the success conditions for promises, the set of

possible worlds *C* that makes true the success conditions for the illocutionary force f_{beg}, and the set of possible worlds that makes true the success conditions for f_{forbid}.

Next, the context *c'* is incrementally updated according to the structure of the utterance *"I beg you to free Willy"* (cf. section 4.2.2 figure 4). That is, first, by means of the information that c_S utters *you*, and second, by means of the information that c_S utters *beg*, and third by means of the information that c_S utters *I*. Thus, we arrive at the root utterance *"I beg you to free Willy"* and at a new context *c''*, where all worlds $w \in CG(c'')$ make true that c_S utters *I beg you to free Willy*:

(142) $CG(c') \cap \{ w \in W \mid c_S \text{ utters } I \text{ beg you to free Willy in } w \} = CG(c'')$

c'' is the context where the meaning of the entire explicit performative sentence *I beg you to free Willy* is obtained, that is, $[\![I\_beg\_you\_to\_free\_Willy]\!]^{c,g} = \lambda w.beg'(w)(c_S)(c_A)$ (*"to free Willy"*). Note, the indexicals *I* and *you* get their values with respect to $c \in DS(c'')$ such that *I* refers to the actual speaker c_S, and *you* to the actual addressee c_A.
Furthermore, by means of the information in $CG(c'')$, the communicative presumption, the particular mood of declarative sentences, and the success conditions, the prototypical assertive force f_{Assert} of the utterance *"I beg you to free Willy"* is inferred.
Next, suppose that in $CG(c'')$ the felicity conditions for assertive speech acts are fulfilled (because it is mutually believed that c_S himself believes that c_S begs c_A with the utterance *"to free Willy"*), and that c_A is willing to belief in the truth of the proposition. Then the assertive speech act changes *c''* to the perlocutionary context *c'''* where all $w \in CG(c''')$ make true that c_S begs c_A with the utterance *"to free Willy"*:

(143) $CG(c'') \cap [\![I\_beg\_you\_to\_free\_Willy]\!]^{c,g} = CG(c''')$,
where $CG(c''') = \{ w \in W \mid c_S \text{ begs with } \textit{"to free Willy"} \}$.

Next to the R-intention of the speaker, the meaning of the 'performative' verb *beg* expresses the option of the addressee to refuse the obligation, here, the obligation to free Willy. For that reason, the proposition denoted by the explicit performative sentence is true in the equivalence class consisting of set of worlds *C* where the conditions for f_{beg} are true. Consequently, by updating $CG(c'')$ by means of $[\![I\_beg\_you\_to\_free\_Willy]\!]^{c,g}$ the partition on the set of worlds $CG(c'')$ is resolved, and the resulting common ground $CG(c''')$ is a subset of the set *C* whose worlds make true the conditions of f_{beg}. Hence, the illocutionary force potential of the utterance *"to free Willy"* is disambiguated in favour of f_{beg}: By means of the additional information about the success conditions for f_{beg} in $CG(c''')$ c_A infers that the illocutionary force of *"to free Willy"* is the illocutionary force f_{beg}. In a

further step, f_{beg} is applied to $[\![to\_free\_Willy]\!]^{c,g}$ and yields the speech act $a_{beg} \in A_{dyn}$, which is itself a function from contexts to contexts.

The same pattern holds for explicit performative sentences such as *I promise you to free Willy*, and*I promise you that I will free Willy*. Though, for reason of readability, I shall not run through the entire context change in order to illustrate the disambiguation.

Having checked the consequences of a straightword application of my experiment, namely a parenthetical analyses of explicit performative utterances I will widening the scope of the experiment on conventional speech acts, cases where explicit performatives are embedded under modals, negation, and the progressive aspect still wondering how long the experiment will be running.

In the next section, I argue for an exceptional treatment of conventional performatives such as *I award you the key to the city*. Roughly, whereas non-conventional explicit performatives are used whenever the contextual information is not sufficient to determine the illocutionary force of the implicit speech act, the discourse function of conventional explicit performatives is different. Conventional performatives are not uttered in order to provide missing information. Rather, for the reason of the requirement of specific contexts, specific locutions, or specific meanings, their utterances already provide the full information required for their successful performance. This is in line with Bach & Harnish (1979). Since there is no intention that has to be recognized for the successful performance of the conventional illocutionary act, their speech act schema is inoperative.

5 The Discourse Function of Conventional Illocutionary Acts

With respect to the experiment to apply the parenthetical analysis to explicit performatives, the conventional illocutionary acts listed in (144) below constitute the following problem: The execution-supporting meaning of the 'performative' verbs has the type $<v,<e,<s,t>>>$ and is applied to the utterance of the complement sentence of type v. In the case of complement sentences the semantic denotation function V: $S \rightarrow I$ assigns the complement clauses $s \in S$ that belong to a certain sentence type the appropriate meaning $i \in I$ of the appropriate semantic type. Moreover, sentence mood relates the utterances of complements of a certain type to their prototypical illocutionary speech acts whose contents correspond to the semantic object denoted by the respective complement sentence. Yet consider the utterances of the sentences in (144) below. Unfortunately, here is no complement clause

whose utterance could serve as the argument of the 'performative' verb. The arguments of the 'performative' verbs are DP's that lack a sentential meaning.

(144) a. I (hereby) resign my membership.
b. I (hereby) pronounce you man and wife.
c. I (hereby) name this ship Queen Mary.
d. I (hereby) donate you 15 points.
e. I (hereby) award you the key to the city.

Hence, if we apply the execution-supporting meaning of the 'performative' verb to the utterance of a DP, there is no determinate semantic content of the respective speech act performed with the utterance of the DP. Therefore, with the utterances of DP's speakers do not perform genuine linguistic speech acts.
The advocates of the so-called truth-conditional pragmatics argue for non-sentential speech acts (cf. for instance Stainton (1995)), and insist on filling the non-sentential and therefore incomplete content by means of information of the utterance context in order to arrive at a complete sentential semantic content. However, I have a rather traditional view of the semantics-pragmatics interface. Next to providing values for indexicals, I do not believe that contextual information about the speaker meaning influences the content of speech acts at the level of semantics (or at the level of the locutionary act) in such a manner. Contextual information about the speaker meaning is rather the study of those aspects of interpretation that take as input the completely determined content and yields other propositions implicated by that speech act.
Thus, I think that the non-sentential utterances of DP's are not genuine speech acts because they lack a complete semantic content. Arguments against the truth-conditional pragmatics and therefore against the view that non-sentential utterances are genuine speech acts are given by Stanley (2000). Stanely gives an example of an apparent non-sentential speech act that lacks a complete semantic content that cannot be filled by means of information of the utterance context. Suppose a context where a thirsty man staggers up to a street vendor and utters:

(145) water…

If the utterance of (145) is a genuine speech act, (145) must express a determinate semantic content. Suppose that the speech act is an assertion. Then the content has to be propositional. Yet, what proposition is expressed? Is the expressed proposition that the thirsty man wants water? Or, is it the proposition that the vendor should give him water? In this case, the available information of the context does not determine the propositional content. Therefore, as Stanley maintains, the utterance of (145) is not a genuine speech act.
Note that (145) is clearly not a case of syntactic ellipsis. Syntactic ellipses, such as the second sentence in (146) below, require a background context and cannot occur discourse initial. The discourse initial utterance of the second sentence in the dis-

course in (146) below which constitutes a standard example of syntactic ellipsis is completely inappropriate.

(146) A: Robby will bungee-jump. B: Verena won't.

In contrast, the discourse initial utterance of *water* in (145) above is appropriate.

Thus, if the contextual filling of the semantic content is no option, what else can be proposed?

In the case of conventional explicit performatives, there is no utterance of a complement clause and hence no implicit speech act whose possible illocutionary forces can be disambiguated by means of the utterance of the explicit 'performative' verb. In fact, there are no implicit conventional illocutionary acts. Conventional illocutionary acts can only be performed explicit. This is a matter of convention.

According to Bach & Harnish (1979:108), conventions are *counts-as* rules. Thus, roughly, an utterance conventionally counts as F-ing not just for happening to be, but because it is mutually regarded as F-ing in a community or group.

Whereas communicative illocutionary acts succeed by means of recognition of intention (R-intention), conventional ones succeed by satisfying a convention. What utterances count as F-ing depends on the conventions they fall under.

A condition for being a successful conventional illocutionary act is the specification of the context. In general, only in certain circumstances doing certain kinds of acts count as baptizing someone, saluting an officer, or calling a meeting. Furthermore, for an utterance to be a conventional illocutionary act, the utterance must be issued by the right person. Not just any utterance of *guilty* counts as finding a person guilty. It must be said by a judge at the appropriate stage of the judicial proceedings. Notice, since the utterance context provides the actual speaker, the right context provides the right speaker.

In some cases, the convention requires a specific form of words, in other cases not. For example, a marriage ceremony requires specific sentences to be pronounced by the participants. Bach & Harnish (ibd.) call conventional illocutionary acts of this kind *locution-specific*. Here, the convention requires the utterance of specified words. In other cases, what must be uttered is identified by the meaning of what is said (the expressed proposition). Here, the convention requires the utterance of words with a specified meaning (*meaning-specific*).

Hence, conventional illocutionary acts are locution specific or meaning specific and successful if and only if, both, the convention on the context as well as this convention is met. This is the reason why the performative formula is part of the semantic content of the conventional illocutionary acts, and why there are no implicit conventional speech acts. This is supported by the fact that there are no indirect, nonliteral ways of performing a conventional act. For instance, it seems that in order to fire someone the speaker must say something that means *You're fired*. If I say, *From now on you will have a lot of time that you can spend in the caribic* this

is no indirect way of firing, but an indirect way of TELLING the addressee that he is fired. All what matters for the conventional illocutionary act of firing is that the right words be uttered.

Next, consider the conventional explicit performative in (147) below.

(147) I hereby award you the key to the city.

For the success of the speech act it is sufficient that the utterance meets the conventions of the award ceremony, namely that the utterance is an utterance of a certain locution (the utterance of *I hereby award you*) made by a specific speaker provided by a specific context (the ceremony), who is determined by the city as the orator. In order to succeed there has to be no intention of the speaker recognized by the addressee by means of the utterance of a sentence of a certain type. Rather, the success is secured by the requirement of the utterance of specific words and a specific context.
Hence, in the case of conventional illocutionary acts the locution-specifity or the meaning-specifity requires that the performative formulae always belong to the semantic content of the conventional illocutionary act. For instance, with the utterance of *I award you the key to the city* the speaker performs a conventional illocutionary act with the content that the speaker awards the addressee the key to the city. This is not given in the case of non-conventional explicit performatives. For instance, with the utterance of *I promise you that I will be rich* the speaker performs an implicit speech act with the content that the speaker will be rich with the utterance of the complement sentence. Here, the performative formula *I promise you* does not belong to the semantic content of the implicit speech act but secures the uptake of the commissive speech act.
By means of convention, the utterance *"I hereby award you the key to the city"* counts as awarding the addressee the key to the city. That is, the possible worlds in $CG(c)$ make true that the utterance and the context meet the required specifications, and that the speaker knows this convention and intends his utterance to fall under it. Note that the intention of the speaker is inessential to the success of the conventional act.
Furthermore, since convention requires a specific context, a specific locution, or at least a specific semantic content, there never emerges an illocutionary force potential. For succeeding these requirements must be fulfilled. There is only the matter of the successful or not successful performance. There is no question as what else the utterance of the conventional performative could count. The utterance *"I hereby award you the key to the city"* is not ambiguous with respect to other possible illocutionary forces. Consequently, there is no need to support the execution of the conventional speech act by means of the utterance of a 'performative' verb in order to disambiguate the illocutionary force potential. Therefore, the verbs used in order to perform conventional illocutionary acts lack the execution-supporting

meaning and are used with the reporting meaning of the type <*e*,<*e*,<*s*,*t*>>>. There is no structural ambiguity.

Summarized, whereas non-conventional explicit performatives are used in contexts *c* where the information in *CG*(*c*) is not sufficient to determine the illocutionary force of the intended implicit speech act, the discourse function of conventional explicit performatives is different. Conventional performatives are not uttered in order to provide missing information. Rather, for the reason of the requirement of specific contexts, specific locutions, or specific contents, their utterances already provide the full information required for their successful performance.
Note that this argumentation for an exceptional treatment of conventional performatives is in line with Bach & Harnish (1979). Since there is no intention that has to be recognized for the successful performance of the conventional illocutionary act, their speech act schema is inoperative as well.

Finally, consider the well-known example given by Lee (1975) in (148) below:

(148) I (hereby) inform you that you are (hereby) dismissed.

In the right context uttered by the right speaker, *that you are hereby dismissed* conventionally counts as a dismissal. According to Bach & Harnish (1979: 117) the same utterance can count as both a conventional illocutionary act and a communicative illocutionary act. Hence, I assume that the 'performative' verb *inform* provides the additional information that next to the conventional dismissal with the utterance *"that you are hereby dismissed"* the speaker informs the addressee about the dismissal.

With the utterance *"that you are hereby dismissed"* the speaker performs the conventional dismissal. If the contextual requirements are fulfilled, the information that the speaker performs a successful dismissal with the utterance *"that you are hereby dismissed"* is part of the common ground. Moreover, by means of the utterance of the 'performative' verb *inform*, the speaker makes explicit an instance of the communicative prototypical assertive force of the utterance of the declarative complement *that you are hereby dismissed*. As usual, in the common ground of the utterance context holds the information about the semantic mood that is, the information that with sentences of a certain type the speaker performs prototypical speech acts. The *that*-complement is declarative such that its utterance makes true the information about its prototypical assertive illocutionary force.
The execution supporting meaning of inform is applied to the utterance *"that you are hereby dismissed"* and yields the proposition that the actual speaker informs the addressee about *"that you are hereby dismissed"*. If the utterance of the declarative sentence *I inform you that you are hereby dismissed* is assertive and if the addressee is willing to believe in truth of the proposition, the perlocutionary assertive effect creates new facts in the common ground.

Since in the common ground of the utterance context holds the information about the mood of the *that*-complement, the information that the speaker informs the addressee with *"that you are hereby dismissed"* is not contradictory with respect to the information in the common ground – even though in the common ground is already established that the speaker performs a conventional dismissal with the utterance *"that you are hereby dismissed"*.

Yet, if I say that you are hereby dismissed in order to perform a dismissal, I do not have to make explicit that I inform you about the dismissal. Hence, since the information that with the utterance of a *that*-complement the speaker performs an prototypical assertive speech act, is already part of the common ground and the speech act verb *inform* does not provide additional information, the meaning of inform is redundant (in the same way as *I ask you whether you will come* discussed in 4.3.2.2). Note that whereas an infelicitous assertion with a contradicory semantic content leads to an empty common ground, redundant and hence infelicitous assertions do not affect the common ground.

5.1 DP-Complements and ∅-Complements

Conventional performatives such as in (149)(a), explicit promises such as in (149)(b) subcategorize DP-complements and verbs such as *thank* even ∅-complements.

(149) a. I resign from the Mont Pelerin Society.
b. I promise you a car.
c. Thank you.

Since we cannot perform speech acts neither with utterances of nonsentential DP-complements nor with ∅-complements, it seems that the parenthetical experiment runs out. Yet, in case we dogmatically want to apply the parenthetical analysis we can assume that DP-complements such as in *I resign the contract* can be filled up by means of a lexical decomposition of the matrix verb *resign* ('x causes that z is finished') such that the utterance of the contract in (150)(a) has a sentential meaning and hence the propositional content as in (150)(b):

(150) a. $\langle$ *the contract*, c $\rangle$
b. the refilled semantic content of $\langle$ *the contract*, c $\rangle$:
$\lambda w.finish'(w)(c_S)([\![the\_contract]\!])$

(151) below shows the meaning of I resign the contract – the proposition that the actual speaker resigns with the utterance of the contract (with the sentential meaning)

(151) $[\![I\_resign\_the\_contract]\!]^{c,g} =$
$\lambda w.\ resign'\ (w)(c_S)(<the\_contract, c>)$

However, since conventional performatives are locutionspecific and cannot reduced to implicit utterances, I do not like the dogmatic application of the parenthetical experiment at this place.
Similar holds for $\varnothing$-complements. If we insist of an explanation along the parenthetical analysis, we are forced to assume that the semantic content of the CP-utterance is not realized. If the semantic content of the CP-utterance is already part of the common ground or is implied by the common ground, the utterance of the CP is redundant, therefore not realized but interpolated by the speaker and the addressee. That means the speaker and the addressee pretend that the utterance of the CP already has taken place. Thus, the semantic representation of *thank* below contains a free, unbound variable (corresponding to the demonstrative *this*) such that the $\varnothing$-complement is interpreted deictically und refers to the interplated utterance:

(152) $\lambda w \lambda y \lambda x.\ thank'\ (w)(x)(y)(u_0)$

Since redundancy does not explain why there are verbs that do not allow the omission of the CP-utterance, we have to assume that this information is lexical ([+ omission of the CP-utterance], Fillmore, 1986)

III. Embedding

Having elaborated the application of the parenthetical analysis to the genuine Austinian performatives, I will illustrate the behaviour of explicit performatives embedded under speech act adverbials, modals, negation, and the progressive aspect.
In the next chapter, the parenthetical analysis is applied to speech act adverbs such as *frankly,* and *to change the subject.* Treating the speech act adverbial in a similar way as the 'performative' verbs has the advantage that one can account for their speech act commenting function and for their contribution to the truth conditions of the entire sentence.

1 Speech Act Adverbials

In addition to explicit performatives, there are further expressions that can be used to comment upon a speech act performed with the utterance of the sentence in which they occur. Bach & Harnish (1979:219) give among others the following examples:

(1) a. Frankly, you bore me.
b. By the way, I couldn't find your underwear.
c. Truthfully, did you lie to me?

In each of these examples, the adverbial is not used to modify the meaning of the main clause of the sentence. Whereas in (2) below the adverb *truthfully* is used as a sentence adverb that describes the event denoted by *you answered me*, in (1)(c) the adverb is used to characterize the utterance of the main clause. Here, *truthfully* is used to indicate that c_A should provide a true answer to the question act performed with the utterance of the interrogative *Did you lie to me?*.

(2) You answered me truthfully.

The same holds for the other speech act adverbs in (1). In (1)(a), the manner adverb *frankly* expresses the sincerity condition of the assertive act performed with the main clause. The extrapositive adverb *by the way* in (b) indicates that the utterance of the following main clause is digressive.
Hence, the strategy is to take the adverbs as commenting on the utterances of main clauses. Roughly, the manner adverb *frankly* means 'the next utterance is frankly', and the extrapositive adverb *by the way* means 'the next utterance is performed by the way'.
Note that in contrast to the explicit performative utterances that display subordination, the utterance structure of the sentences in (1) is based on an adjunction structure where the adverbial or the adverbial clause is adjoined to its host clause. For example the adverbial expression *frankly* in (1)(a) is a sister of the main clause *you bore me*:

(3) [[frankly]$_{Adv}$ [you bore me]$_S$]$_S$

Consequently, I assume that each of the utterances in (1) is composed of two utterances: namely the utterance of the speech act adverb and the utterance of the main clause. Therefore, I propose that the speech act adverbs have a similar meaning and function as the 'performative' verbs in my analysis. The meaning of the speech act adverbial *frankly* is illustrated in (4).

(4) $[\![frankly]\!]^{c,g} = \lambda u \lambda w.frankly'(w)(u)$, type <*v*,<*s*,*t*>>

Here, similarly to the meaning of the 'performative' verbs, the meaning of the speech act adverbial *frankly* is applied to an utterance and yields a proposition. The resulting proposition denoted by the entire sentence is evaluated relative to the common ground of *c* whose worlds $w \in CG(c)$ make true the conditions for the prototypical speech act performed with the utterance of the main clause. Therefore, the speech act adverbs comment on the assertive illocutionary act performed with the utterance of the main clause by providing further information about it.
For further illustration consider again (1)(a). Here $\lambda u \lambda w.frankly'(w)(u)$ is applied to the utterance of its sister *"you bore me"*, and yields the proposition $\lambda w.frankly'(w)$ (*"you bore me"*) that is evaluated relative to a context *c* whose worlds in *CG*(*c*) make true that with the utterance of the sentence *you bore me* of the declarative type c_S successfully performs a prototypical speech act of the assertive kind. Thus, the proposition denoted by the sentence in (1)(a) provides the information that the sincerity condition of the assertive speech act is fulfilled. Since the assertive speech act is successfully performed, the information about the sincerity condition is already part of the common ground. Hence, the proposition denoted by *Frankly, you bore me* is redundant and used to emphasize that c_S believes in the truth of the propositional content of the utterance *"you bore me"*. (Maybe, in a further step the resulted proposition implicates that what is said does not conform to anything what is social expected that is, c_S has to speak the truth even if he would insult c_A)
Similarly, in (1)(b) the meaning of *by the way* is applied to the utterance *"I couldn't find your underwear"*. The resulting proposition $\lambda w.by\_the\_way'(w)$ (*"I couldn't find your underwear"*) is evaluated relative to the context *c* whose worlds in *CG*(*c*) make true that with the utterance of the sentence *I couldn't find your underwear* of the declarative type c_S successfully performs a prototypical assertive speech act. The proposition denoted by the sentence *By the way, I couldn't find your underwear* provides the new information that the assertive speech act with the content that the speaker could not find the underwear of the addressee does not correspond to the *sequencing condition* (cf. part I, 4.3). The speaker gives the additional information that the assertive speech act performed with the utterance of the

host sentence does not elaborate on, concur with or is dissent from the established information in the common ground of the previous context.[32]

The extension of the parenthetical analysis to speech act adverbs has the same advantage as the application of the parenthetical analysis to the 'performative' verbs. The parenthetical analysis accounts for their speech act commenting function and for their truth conditional contribution to the truth conditions of the entire sentence.

As illustrated in part II, 4.1.5, the natural language provides shared resources for the execution and the description of speech acts. The 'performative' verbs exhibit two related meanings that I called the *execution-supporting* meaning and the speech act *reporting* meaning. In the same way, we can use speech act adverbs to comment on the execution of a speech act and to report the speech act commenting function:

(5) a. A to B: Frankly, you are boring.
b. speech act report: A told B frankly that B is boring.

Thus, *frankly* (and each manner and extrapositive speech act adverbial) is ambiguous between the meaning in (6)(i) and the meaning in (6)(ii):

(6) $[\![frankly]\!]^{c,g} =$
(i) reporting meaning:
$\lambda p \lambda w.frankly_1'(w)(p)$, type <<*s,t*>,<*s,t*>>
(ii) speech act commenting meaning:
$\lambda u \lambda w.frankly_2'(w)(u)$, type <*v*,<*s,t*>>

Similar as in the case of the ambiguity of the 'performative' verbs, one can regard this kind of ambiguity as structural. Here, there is an ambiguity between a structure including the coercion operator and a structure lacking it. Since the speech act commenting meaning is applied to utterances, the speech act commenting meaning in (ii) is the basic one.
Now consider the sentences in (8) below, where the explicit performative sentences are embedded under an adverbial or an adverbial clause. In line with Allan (1986), I assume that instead of commenting on the speech act whose force is expressed by the 'performative' verb, the speech act adverbs always comment on the utterance of the entire explicit performative sentences. As illustrated in part II, 2.2 Allan gives evidence by means of the examples repeated in (7) below:

(7) a. Once and for all, I promise never to see the girl again.
I say once and for all that I promise never to see the girl again.
b. In conclusion, I declare war.
My concluding statement is that I declare war.

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[32] Another kind of analysis of *by the way*, is given by Schmitz & Schröder (2004).

Remember the outcomes of the parenthetical analysis of explicit performative utterances. The entire explicit performative sentence denotes a proposition, which is evaluated relative to the common ground of a previous context where the speaker performs a speech act with the utterance of the complement clause. As discussed in part I, 2.2, speakers perform prototypical speech acts of the assertive kind with the utterance of declarative explicit performative sentences. Hence, the adverbs always comment on the assertive speech act, which is performed in a previous context with the utterance of the explicit performative sentence.

(8) a. Frankly, I tell you that I don't trust him.
b. To change the subject, I ask you when you leave.

In (8)(b) the meaning of the adverbial clause *to change the subject* of the type <*v*,<*s*,*t*>> takes the utterance of the explicit performative sentence, *"I ask you when you leave"*. The explicit performative sentence is declarative and declaratives are used in order to perform prototypical speech acts of the assertive kind. Thus, the resulting proposition is evaluated relative to a previous context *c* whose worlds in *CG*(*c*) make true that with the utterance *"I ask you when you leave"* c_S performs a prototypical assertive act with the content that c_S asks c_A with the utterance *"when you leave"*: $f_{Assert}(\lambda w.ask'(w)(c_S)(c_A)$ (*"when you leave"*)). Consequently, the resulting proposition denoted by the sentence *To change the subject, I ask you when you leave* provides the additional information that the assertive speech $f_{Assert}(\lambda w.ask'(w)(c_S)(c_A)$ (*"when you leave"*)) whose content describes the execution of the question act and that is performed in the previous context *c*, changes the topic of the conversation and tangles off the discourse.

In (8)(a), the meaning of the adverbial *frankly* of the type <*v*,<*s*,*t*>> takes the utterance of the explicit performative sentence, *"I tell you that I don't trust him"*. Again, the resulting proposition is evaluated relative to a previous context *c* whose worlds in *CG*(*c*) make true that with the utterance of the declarative explicit performative sentence *I tell you that I don't trust him* c_S performs a prototypical assertive speech act of the form f_{Assert} ($\lambda w.tell'(w)(c_S)(c_A)$ (*"that I don't trust him"*)). Thus, the resulting proposition denoted by the sentence *Frankly, I tell you that I don't trust him* provides the information that the sincerity condition of the assertive speech act f_{Assert} ($\lambda w.tell'(w)(c_S)(c_A)$ (*"that I don't trust him"*)) whose content describes the execution of the assertive speech act performed with the complement clause is fulfilled. Namely that the actual speaker is committed to the truth of the propositional content of the global assertive speech act performed with the utterance of the explicit performative sentence, and hence committed to the truth of the proposition that c_S tells c_A (something) with the utterance *"that I don't trust him"*. Since this global assertive speech act is already successfully and felicitously performed in a previous context, the information about the sincerity condition is already part of the common ground, therefore is redundant and merely used to em-

phasize that c_S believes in the truth of the proposition denoted by the explicit performative sentence.

Having applied the parenthetical analysis to speech act adverbials, I will illustrate in the following chapter the behaviour of explicit performatives embedded under modals such as *can, must,* and *could.*

2 Hedged Performatives

Fraser (1975) has discussed the case of utterances of explicit performative sentences, called *hedged performatives* embedded under modals like *must*, *can*, and *want*, which have the the illocutionary force named by the verb.

(9) a. I must order you to come.
b. I can promise you to come.
c. I want to ask you if you can help me to carry the piano.
d. I could order you to come.

2.1 The Parenthetical Analysis of Hedged Performatives - Reinterpretation

The problem for the parenthetical experiment is simply, that the the hedged performative in (10) below describes the utterance of the complement, the utterance of < *to free Willy*, c > and asserts that the speaker must order at the time of utterance instead of the assertion that he orders at the time of utterance.

(10) I must order you to free Willy.

Since the speaker of (10) merely announces that he will perform an order instead of performing an order he violates the Gricean maxim of relevance and the Gricean maxim of quality. For this reason (10) with its meaning in (11)[33] is reinterpreted such as in (12):

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[33] According to a short introduction to modalitygiven in 2.2 below, *g* is the deontic ordering source of *must* indicated by the phrase *in view of what the head of Greenpeace* demands: $g(c_w)$ = {…, *There are no trapped animals, Trapped animals will be rescued, If an animal*

(11) $[\![must : I\_order\_you\_to\_free\_Willy]\!]^{c,g} =$
$\forall w \in Best(g, f, c_w) : order'(w)(c_S)(c_A)(\langle to\_free\_Willy, c\rangle)$

(12) Reinterpretation: *I must say that I order you to free Willy*
$\forall w \in Best(g, f, c_w) : say'(w)(c_S)(c_A)([\![I\_order\_you\_to\_free\_Willy]\!]^{c,g})$

In (12) shows that *must* does not scope anymore over *I order you to free Willy* but over *I say that I order you to free Willy* ($[\![must : I\_say\_that\_I\_order\_you\_to\_free\_Willy]\!]^{c,g}$). Now the speaker does not merely announce at the utterance time that he orders the speaker to free Willy at a time after the utterance time. The speaker announces at the utterance time that he says that he orders the addressee to free Willy at a time after the utterance time – what the speaker in the following really does. If I announce that I say something, I simply say something.

In my point of view, the verb *say* is a mere locutionary verb. *Say* is used in cases the assertive performative verbs *claim* or *state* are redundant, that is, in cases the complement clause has no illocutionary force potential and is unambiguously assertive. The reason for its utterance is to emphazise the content of the assertive speech act. In the case of *I must say that I order you to free Willy*, the semantics of the explicit performative *I order you to free Willy* in (13) below – to which *say* in (12) is applied and which disambiguates the potencial illocutionary forces of the utterance $\langle to\_free\_Willy, c\rangle$ in order to establish the speech act of the order: $f_{order}(\lambda y \lambda w.free'(w)(willy)(y))$:

(13) $[\![I\_order\_you\_to\_free\_Willy]\!]^{c,g} =$
$\lambda w.order'(w)(c_S)(c_A)(\langle to\_free\_Willy, c\rangle)$

Importantly, reinterpration takes place in contexts where *I must order you* is not informative and redundant. Reinterpretation takes place in contexts, where the execution of the speech act is expected instead of the mere announcement. In contexts where it suffices that the speaker mere asserts that he must order, *I must order you* is informative and relevant. Since the expression order is interpreted not at the time of utterance but at a moment after the utterance time the speech act verb is used in these readings in its reporting meaning wich operates over propositions. The not reinterpreted reading in (11) is never realized.

Next, look on the following bit of dialog:

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is trapped, then an acitivist is ordered to rescue the trapped animal,…}. *f* is the modal base – here the belief worlds of the actual speaker $\forall w \in Bel(c_S)(c_w)$.

(14) A: I must order you to free Willy.
B: No, you do not have to order me anything. The statutes of Greenpeace demand that we have to free only small mammals.

In order to explain cases where the order is not successful, I follow Schwager (2005: chapter 6.3) in defining the rational authority of a speaker on a conversational background.

Performative cases of hedged performatives are confined to conversational backgrounds on which the speaker counts as a *rational authority*. If the ordering source comes with the rational authority of the speaker on it, the addressee assumes that the commitment or the possibility is considered by the speaker as being of an adequate strength such that he is forced or enabled to perform the speech act in question. If the ordering source does not come with the speaker's authority on it, the performative effect fails.
Hence, modal verbs come with an ordering source that has to invite the assumption that the speaker is a rational authority on the matter that his commitment or the possibility has an adequate strength to force or enable the performance of the speech act in question.
According to Zimmermann (2000), being an authority on a set of propositions can be captured by Groenendijk & Stokhof's (1984) notion of exhaustive knowledge. In general, if the speaker knows which objects x have a certain property P, and which ones do not then it suffices for an object x having P that x's having P be consistent with the speaker's knowledge. In other words, the speaker of c is an authority on a property P in c_W iff the speaker of c knows in c_W the extension of P. This is shown in (15) below, where *Bel* is a function that maps an individual and the context world c_W to the set of worlds that constitute the belief-worlds of the individual in c_W.

(15) Exhaustive knowledge (Schwager 2005, 6.3):
$\forall w \in Bel(c_s)(c_w), \forall x : w \in P(x) \leftrightarrow c_w \in P(x)$

Whereas (15) represents the authority of a speaker on a property, (16) represents the authority of a speaker over a set of propositions and hence over a conversational background. This is called by Schwager the authoritative background of c_S:

(16) Authoritative conversational backgrounds (Schwager 2005, 6.3):
c_S is an authority on a conversational background f iff
$\forall w \in Bel(c_s)(c_w), \forall p : p \in f(w) \leftrightarrow p \in f(c_w)$

Put into words, c_S is an authority on a set of propositions $f(w)$ in c_W iff in c_W c_S takes to be true the propositions that are the members of the set ($f(c_W)$).
With the definition of exhaustive knowledge respective authority in hand, we see that the order is not successful if the speaker has not the epistemic authority with

respect to the ordering source. The addressee B in (14) challenges the epistemic authority of the speaker A.
The following dialogs illustrate more examples of challenging the authority of the speaker on the ordering source. If the speaker says something that casts doubt on his authority, the addressee assumes that the commitment or the possibility is not strong enough for the speaker to perform the speech act in question:

(17) A: (According to what the head of Greenpeace demands) I must order you to free Willy.
B: You have no clue about the matter! The head of Greenpeace said that you have to free Willy.

(18) Nurse: (According to what the x-ray instructions require) I must ask you whether you are pregnant.
John-Boy: No, I read the x-ray instructions yesterday and you only have to ask female persons whether they are pregnant.

(19) A: (According to my experience) I can claim that this reduces the appearance of cellulite.
B: You have no clue! I saw you wearing a bikini.

Next, consider the examples in (20)(a) and (21)(a) below where the modals are stressed:

(20) a. I MÚST promise you to come to the party;
but this doesn't mean that I promise you to come./
and this means that I promise you to come.
b. (According to what my wife requires) I must promise you to come to the party; and this means that I promise you to come.

(21) a. I CÁN claim that there are aliens;
but this doesn't mean that I claim that./
and this means that I claim that there are aliens.
b. I can claim that there are aliens;
and this means that I claim that there are aliens.

Focus stress does not affect the semantic meaning. It does not alter entailments. What focus stress does is to call attention to the stressed linguistic material. The speaker's choice to use that material is contrasted with the set of the possible alternatives. Here, the focus stress is on the modals, and the most salient possible alternative is simply not using the modals at all. That is, I assume inspired by Roth (2004) that the focus stress of the (a) sentences above contrasts the unstressed (b) sentences against the bare explicit performative sentences in (22) and (23) below:

(22) I promise you to come to the party.

(23) I claim that there are aliens.

In the case of hedged performatives, by using focus stress the speaker is calling the addressee's attention to the fact that he has uttered a vague sentence, instead of the informative bare explicit performative sentence whose structural ambiguity is easy to resolve in favour of the individuation of the structure interpreted as execution supporting.
The bare explicit performatives in (22) and (23) are stronger than (20)(b) and (21)(b). According to the maxim of quantity, the utterance of a sentence that denotes a weak proposition implicates the negation of the stronger proposition. Thus, if the speaker utters (20)(a) the addressee implicates that it is not the case that the speaker must and therewith the negation of the reading which expresses that the speaker announces to perform the particular speech act. Thus, what remains is the reporting meaning, which is applied to propositions. This is why the subsequent positive utterances in (20)(a) and (21)(a) are odd.

Next, consider the performative sentences hedged by *should* and *could* in (24) and (25) below, whose utterances never have performative effects.

(24) I should order you to free Willy; ## and this means that I order you to free Willy.

(25) I could order you to free Willy; ## and this means that I order you to free Willy.

With the use of *should* and *could* in (24), the speaker contrasts the modal sentences against the unmarked bare explicit performative sentences *I order you to free Willy* and *I promise you to come to the party.* According to the maxim of quantity, the addressee implicates the negation of the stronger one and with it the reading which expresses that the speaker announces to perform the particular speech act. Thus, what remains is the reporting meaning, which is applied to propositions. This is why in the case of the modals *should* and *could* the subsequent positive utterances are odd.

Finally, consider the examples above:

(26) a. I want you to order to free Willy.
b. I want you to promise to free Willy – but I can't.
c. I want you to promise to free Willy – but I am not allowed.
d. I want you to order to free Willy – but I am not allowed.

In (26)(a) is reinterpreted to *I want to announce that I order you to free Willy*. *Want* operates over that *I announce that I order you with the utterance to free Willy*. (26)(b) signalizes that the sincerity condition for promise is not fulfilled and that the speaker is not able to realize the action. The same holds for (26)(c). (26)(d) signalizes that the preparatory condition for an order is not fulfilled – namely that the speaker has the needed assigned authority.

2.2 Modality – A short introduction

Modal elements such as *can* and *must* have a wide range of meanings. Thus, for instance, whereas the sentence *Joost can be in his office* expresses the possibility that Joost is in his office, the sentence *Joost can go on holiday* expresses that Joost is able to go on holiday. Kratzer (Kratzer, 1981, 1991 among others) accounts for this ambiguity of *can* in assuming that the interpretation of modals depends on two parameters, the *modal force*, and the *modal base*. The modal force is specified in the lexical entry as necessity (entailment) or possibility (compatibility). Modal bases *f* are functions from worlds into sets of propositions that describe the particular background supplied by the utterance context. According to Stechow (2004), the following conversational backgrounds are distinguished:

(i) Epistemic: what I know, what we know, what the pope knows,….
(ii) Circumstantial: the relevant facts, …
(iii) Dispositional: Angela's dispositions, Gerhard's dispositions,…
(iv) Physical: the laws of nature,…
(v) Deontic: what the law says, god's will,…
(vi) Doxastic: what I believe, what the pope believes, …
(vii) Teleological: our aims, our tasks,…
(viii) Buletic: what I want, what the pope wants,…
(ix) Stereotypical: the normal course of events,…

(i)-(iv) are realistic backgrounds that assign each world *w* a set of propositions that are true in *w* (cf. (27) below). In contrast (v)-(ix) are non-realistic backgrounds that assign each world *w* a set of propositions that does not have to be true in *w*.

(27) Realistic background:
A modal base *f* is realistic iff it holds that: $\forall w \in W : w \in \bigcap f(w)$

Note that the empty background is a special case of realistic backgrounds:

(28) Empty background:
A modal base *f* is empty iff it holds that: $\forall w \in W : f(w) = \varnothing$

The intersection of *f*(*w*) yields a set of worlds, relative to which necessity and possibility are computed. Backgrounds are functions from possible worlds into a set of propositions and have the type <*s*,<*st,t*>>. Since modals are applied to its modal base *f* and to a proposition in order to yield a proposition, they have the logical type <<*s*,<*st,t*>>, <*st,st*>>. Hence, the meaning of *can* (and hence of *may*, and *be*

allowed to that are equal in their modal force) and *must* (and hence of *have to,* and *need to*) is as illustrated below:

(29) a. $[\![must]\!]^{c,g} = [\![have\_to]\!]^{c,g} = [\![need\_to]\!]^{c,g} = \lambda f \lambda p \lambda w. \forall w' \in \bigcap f(w) : p(w')$

b. $[\![can]\!]^{c,g} = [\![may]\!]^{c,g} = [\![be\_allowed\_to]\!]^{c,g} = \lambda f \lambda p \lambda w. \exists w' \in \bigcap f(w) : p(w')$

Hence, the interpretation of the sentence *Joost can go on holiday* relative to a circumstantial modal base is as follows: Where $f(w) = \{..., Joosts\ application\ is\ finished,\ Joost\ stays\ in\ his\ office,\ if\ Joosts\ application\ is\ not\ finished\ then\ he\ stays\ in\ his\ office, ...\}$.

(30) $[\![can(f)(Joost\_goes\_on\_holiday)]\!]^{c,g}(w) = 1$ iff, $\exists w' \in \bigcap f(w) : Joost\ goes\ on\ holiday(w')$

Kratzer (1981) discussed three problems that cannot be handled with the semantics introduced so far: the problems of inconsistent backgrounds, graded necessity and possibility, and practical inferences with conflicting goals. In the further course of this section, I will confine myself in merely discussing the problem of inconsistent backgrounds illustrated by means of the example of the New Zealand law texts. According to the law in Auckland deer is responsible for any damage it causes, whereas according to the law in Wellington it is not. Murder is a crime in both places. Hence, (31)(a) is intuitively false, and (31)(b) is intuitively true.

(31) a. In the view of what the law provides, it must be the case that murder is not a crime.
b. In the view of what the law provides, it can be the case that deer is responsible for the damage it caused.

Unfortunately, the semantics of the modals in (29) predicts the opposite. Let $f(w)$ be the modal base of the New Zealand scenario above: $f(w) = \{..., murder\ is\ a\ crime,\ deer\ is\ responsible\ for\ the\ damage\ it\ causes,\ deer\ is\ not\ responsible\ for\ the\ damage\ it\ causes, ...\}$. Hence, $\bigcap f(w)$ is empty and (31)(a) is trivially true in W and (31)(b) is trivially false in W:

(32) a. $\forall w' \in W : w' \in \varnothing \rightarrow \neg murder\ is\ a\ crime(w')$
b. $\exists w' \in W : w' \in \varnothing \wedge deer\ causes\ for\ the\ damage(w')$

This problem can be avoided in taking a second conversational background into account that works as an ordering source $g(w)$ on $\bigcap f(w)$. Instead of evaluating the modal relative to all the worlds in the modal base, the modal is evaluated relative to a set of worlds that are regarded as close to the ideal fixed by the ordering

source. The worlds in $\bigcap f(w)$ can be ordered according to how close they are to the particular ideal.
This is illustrated in (33) below, where $w' \leq_{g(w)} w''$ is translated as according to the ordering source in w, w' is a better world than world w''. The set *Best* of the best worlds w in f according to g, is illustrated in (34) below.

(33) a. For any worlds w, w', and $w'' \in \bigcap m(w)$, $w' \leq_{g(w)} w''$ iff every proposition in $g(w)$ which is true in w' is also true in w''.
b. For any worlds w, w', and $w'' \in \bigcap m(w)$, $w' \prec_{g(w)} w''$ iff $w' \leq_{g(w)} w''$ and it is not the case that $w'' \leq_{g(w)} w'$.

(34) $Best\ (f,g,w) = \{ w' \in \bigcap f(w) \mid$ there is no w'' in $\bigcap f(w)$ where $w'' \leq_{g(w)} w' \}$

Since $f(w)$ is a set of inconsistent facts and hence cannot describe facts, $f(w)$ is taken as the ordering source $g(w) = \{...,$ *murder is a crime, deer is responsible for the damage it causes, deer is not responsible for the damage it causes*$,...\}$. $f(w)$ is taken to be empty, and $g(w)$ orders all the worlds $w \in W$. Hence, (31)(a)(b) can be translated as:

(35) a. $\forall w' \in Best(f,g,w): \neg$ *murder is a crime* (w')
b. $\exists w' \in Best(f,g,w):$ *deer is responsible for the damage* (w')

The best worlds according to what the law in New Zealand provides are the worlds that make all the propositions in $g(w)$ true. Since both *deer is responsible for the damage* as well as $\neg$*deer is responsible for the damage* are elements of the ordering source, the best worlds closest to $g(w)$ are simply those that make true *that murder is a crime*. To be more precise, assume that the world w_0 makes true *that murder is a crime* and *that deer is responsible for the damage*, that the world w_1 makes true *that murder is a crime* and *that deer is not responsible for the damage*. w_2 and w_3 are worlds that make true *that murder is not a crime* and *that deer is responsible for damage*, or *that deer is not responsible for damage*. Hence, the set of the best worlds that make as many as possible laws true, is $Best(f,g,w) = \{w_0, w_1\}$. Consequently, (35)(a) is false relative to $Best(f,g,w)$ (no entailment), and (35)(b) is true relative to $Best(f,g,w)$ (compatibility).

Now, with these ingredients at hand one can establish the revised semantics of *can* and *must*. Since the interpretation of modals depends on their modal base whose members are ordered, modals have three arguments: they are applied to a modal base, to an ordering source, and to a proposition in order to yield a proposition. Backgrounds are functions from possible worlds into a set of propositions and have the type $\langle s,\langle st,t\rangle\rangle$. Since modals are applied to the two backgrounds f and g and to a proposition in order to yield a proposition, they have the logical type

<<*s*,<*st,t*>>,<<*s*,<*st,t*>>, <*st,st*>>>. Consequently, the meaning of *can* (and hence of *may*, and *be allowed to* that are equal in their modal force) and *must* (and hence, of *have to,* and *need to*) is as illustrated in (36):

(36) a. $[\![must]\!]^{c,g} = [\![have\_to]\!]^{c,g} = [\![need\_to]\!]^{c,g} =$
$\lambda f \lambda g \lambda p \lambda w. \forall w' \in Best(f, g, w) : p(w')$

b. $[\![can]\!]^{c,g} = [\![may]\!]^{c,g} = [\![be\_allowed\_to]\!]^{c,g} =$
$\lambda f \lambda g \lambda p \lambda w. \exists w' \in Best(f, g, w) : p(w')$

In order to account for hedged performatives, I will assume that the modal base is constituted by what the speaker and addressee mutually assume to be true. That is, the conversational background relative to which the hedged performatives are interpreted is the Stalnakerian common ground *cg* of type <*s*,<*st,t*>> that is applied to an utterance context *c*, and yields a set of propositions. Remember that, in part I, 4.1 the common ground *CG*(*c*) is defined as the context set of Stalnaker, namely as a single proposition that is compatible with what is presupposed in the Stalnakerian common ground. *CG*(*c*) can be achieved by means of the intersection of the set of propositions, that is, by means of $\bigcap cg(c)$.

In the next chapter, I propose an analysis for explicit performatives embedded under negation. There are two kinds of negative explicit performatives. Negative performatives with an inherent negative performative verb such as *I deny that there are aliens* and negative performatives with an overt negation such as *I do not promise you that I will kill Bill* that I call *do-not* performatives. I will show that by means of the assertion of inherent negative performatives and *do-not* performatives, speakers retract discourse-old information from the common ground of their utterance context. Whereas *do-not* performatives retract discourse-old information about the mutually assumed illocutionary force of a previous utterance, inherent negatives retract the semantic content of a previous utterance.

3 Negated Explicit Performative Utterances

There are two ways to negate explicit performative utterances. In (37)(a) below the embedded proposition is negated and according to the parenthetical analysis the sentence in (37)(a) denotes the proposition that the actual speaker claims with the utterance *"that it is not the case that there are aliens"*. Next, consider the negative utterances in (37)(b). Pretheoretically, in (37)(b), the negation scopes over the 'performative' verb and negates that the actual speaker claims that there are aliens.

(37) a. I claim that it is not the case that there are aliens.
b. I do not claim that there are aliens.

The aim of this chapter is to illustrate that performative utterances with overt negation, such as in (37)(b), lack the execution-supporting meaning and behave pragmatically different than their positive explicit performative counterparts. Roughly, the overt negation *not* scopes over the discourse-old information about the assertive illocutionary force in order to retract that information from the common ground.
First, consider the sentence in (38) below. (38) shows that unlike the positive explicit performative, the negated one does not allow for a parenthetical paraphrase.

(38) I do not state that Madonna has the greatest singing voice.
Madonna has, I do not state this, the greatest singing voice.

Thus, in the negated case, the parenthetical analysis is not applicable. The utterance of the explicit performative sentences cannot be regarded as consisting of two utterances simultaneously performed by the same speaker.
In order to explain why negated explicit performatives cannot be paraphrased into parenthetical constructions, that is, why the inherent or overt negation blocks the parenthetical analysis, I assume following Givón (1978) that negation triggers a presuppositional reading of its argument. Consequently, the negated information is discourse-old and already part of the common ground relative to which the utterance of the negative explicit performative is evaluated. In the case of *do-not* performatives the entire positive explicit performative sentence is scoped by the negation. The negation triggers a presuppositional reading of the proposition denoted by the entire positive explicit performative sentence. Hence, the entire proposition denoted by the positive explicit performative sentence is discourse-old, and there is no new information that could be provided by the actual speaker by means of uttering the complement clause. Hence, due to the presuppositional nature of the arguments of the negation, negated performatives cannot allow for a parenthetical analysis. The negative performative sentences do not denote a proposition that is evaluated relative to a context where the actual speaker utters the complement

clause in order to perform a speech act whose illocutionary force is expressed by the meaning of the 'performative' verb.

Wit the utterance of *I do not claim that there are aliens* in (37)(b) above, the actual speaker negates the mutually assumed discourse-old information about the illocutionary force of his previous utterance *"there are aliens"*. The presuppositional reading of the entire positive explicit performative sentence brings about that the actual speaker uses the overt negation in order to take up and to negate discourse-old information about the illocutionary force.
Hence, I assume that *do-not* performatives react to old information provided by previous utterances. And indeed, negative sentences are odd if uttered 'out of the blue', and rather occur in dialogues like the following in (39) below:

(39) Higgins: You took the Ferrari. [previous context *c*]
Magnum: Do you accuse me of taking the Ferrari?
Higgins: No, I do not (#hereby) accuse you of taking the Ferrari.
(I guess that you took the Ferrari.) [actual context *c'*]

By means of his second utterance, Higgins reacts to Magnum's utterance *"Do you accuse me of taking the Ferrari?"* because it conveys that Magnum seeks the information whether Higgins's first utterance *"You took the Ferrari"* has the illocutionary force of an accusation. Here, the important point to note is that the illocutionary force objected to is not a property of Higgins's actual utterance in *c'* but the illocutionary force associated with Higgins's first utterance in *c*. The overt negation of the *do-not* performative refutes the information about the presumed illocutionary force of *"You took the Ferrari"* that is mutually assumed in the common ground of the actual context *c'*.

Evidence for the view that *do-not* performatives echo the semantic content or the conveyed information of a previous utterance, is given by the fact that positive polarity items, such as *each* that avoid downward entailing contexts created by negation, occur in negative performative utterances. Their acceptable use suggests that the corresponding non-negated sentence has been uttered just before and is echoed by means of the utterance of the negative performative sentence:

(40) Magda ate *each* of the cookies; but I do not accuse her of eating *each* of the cookies. (I merely guess that she ate each of the cookies)

In the following, I will introduce an analysis for *do-not* performatives that rests on the assumption that with the utterance of negative performatives speakers refer to a sentence previously uttered in order to refute the information about the illocutionary force of its utterance. How can the overt negation scope over discourse-old

information previously established? In order to elaborate this, I will develop an analysis that is inspired by Van der Sandt's (1991) echo operator.

As illustrated above, the acceptable occurrences of positive polarity items gives evidence for the view that negative performatives echo sentences previously uttered in order to take up and to refute the information about its illocutionary force. Thus, Do-not performatives react to previous utterances of previous speakers and negate their illocutionary force. To account for this I adopt Van der Sandt's idea that speaker's use echoes, represented as the echo operator '*', in order to deny the semantic content of a previously performed utterance (Van der Sandt, 1991).

As mentioned above, even though negation in natural language should be analyzed as the logical operator $\neg$ of the type $\langle\langle s,t\rangle,\langle s,t\rangle\rangle$, it additionally has to its logical aspect a pragmatic function and triggers a presuppositional reading of its argument. To account for this, first remember that utterances are defined as sentences in contexts: $u = \langle d,c\rangle$. Furthermore, contrary to Van der Sandt, I think that to echo a sentence previously uttered in a context c is to utter that sentence again in the actual context c'. Hence, I assume that the echo operator * is of type $\langle r,v\rangle$. That is, the operator takes a sentence d of type r which is, as I will show below, uttered and evaluated in the previous context c and yields the utterance (of type v) of the same sentence together with its interpretation relative to c that takes place in the actual context c'.[34]

In order to account for the fact that speakers not merely react to their own utterances but also to utterances of previous speakers, I follow Van der Sandt (1991) and define turns that divide the discourse into subsequences of utterances having the same speaker. A turn is any pair of utterances $\langle u,u'\rangle$, such that $c_S \neq c_S'$. A participant P takes a turn in c', in case $\langle u,u'\rangle$ is a turn and $P = c_S'$. The effect of turns is simply that the speaker and hearer coordinates switch. If an utterance u of a sentence d in c ($u = \langle d,c\rangle$) initiates a turn then $c_S = c_A'$ and $c_A = c_S'$.
Furthermore, following van der Sandt, I assume that the echoic utterance leads to a shift of the denotation of the sentence echoed to the sentence that takes it up (that is, to the echoic sentence). The semantic object assigned to the echoic sentence scoped by the echo operator * is not the proposition which would have been expressed by the echoic sentence in the actual context c'. Rather, the semantic object assigned to the echoic sentence d is the propositional content of the previous utterance evaluated relative to the previous context c. The echo operator * of type $\langle r,v\rangle$ takes the sentence d of type r previously uttered in c and yields the echoic utterance u of d in c': $u = \langle d,c'\rangle$, whose semantic content and hence the meaning of d

[34] I modified van der Sandt's analysis who considers the echo operator as a one place operator on sentences d and hence of type $\langle r,r\rangle$.

is already evaluated relative to the previous context *c*: $[\![d]\!]^{c,g}$. Note that in contrast to ordinary utterances where the speaker wants the addressee to recognize his R-intention in order to perform a speech act, an echoic utterance is performed without any R-intentions.

As already illustrated, the acceptable occurrences of positive polarity items give evidence for the reactive behavior of *do-not* performatives such as in (41) below.

(41) I will kill Bill. But, I do not promise you that I will kill Bill.

Here again, the negation presupposes its argument as discourse-old. For the reason that the negation scopes over the entire positive explicit performative (*not: I promise you that I will kill Bill*), the information which is given with the explicit performative sentences is presupposed that is, mutually believed and already part of the common ground of the utterance context of the negative explicit performative.
In the following, I will propose that the positive explicit performative sentence which is scoped by the negation echoes the previously uttered sentence *I will kill Bill* and in addition the information conveyed by its utterance: the information that the utterance of *I will kill Bill* has the illocutionary force of a promise which is inferred in the previous context. Thus, the negative performative reacts to a previous utterance and negates the information about its illocutionary force. Hence, the positive explicit performative which is scoped by negation is entirely echoed. The performative verb is not applied to an echoic utterance of the actual speaker and there is no performative effect of not-promising achieved by virtue of any echoic utterance. This explains the unacceptability of *hereby*: *I will kill Bill. But, I do not (# hereby) promise you that I will kill Bill.*

Note that the echo of information conveyed by a previous utterance is a familiar phenomenon of echoes in general. See for instance the echo questions below where the conversational implicature of the previous utterance of A is asked and echoed:

(42) A: Claudia has eaten some of the cookies.
B: Claudia has eaten not all of the cookies?

Since the negation presupposes its argument the overt negation is applied to the echoic utterance **I promise you that I will kill Bill* of the type *v*. The *do-not* performative is represented as $\neg$**I promise you that I will kill Bill*. Again, let *c* be the previous context of the previous utterance of *I will kill Bill*, and *c'* the actual utterance context of *I do not promise you that I will kill Bill*, where the sentence obtains its meaning, and where the illocutionary force of the utterance is inferred and the prototypical speech act is determined.
The information conveyed by the utterance of *I will kill Bill* in *c* that is taken up by the echoic utterance **I promise you that I will kill Bill* in the actual context *c'* which is scoped by $\neg$, is illustrated in (43) below. *"I will kill Bill"* is the previous utterance and is an ordered pair of the sentence uttered and the previous context *c*:

"I will kill Bill" = < *I will kill Bill, c* >. *IF* is the Information about the illocutionary Force conveyed by the previous utterance *"I will kill Bill"* namely, a set of possible worlds where c_S promises c_A with the utterance *"I will kill Bill"*:

(43) The information conveyed by *"I will kill Bill"* in *c* that is taken up by the echoic utterance **I promise you that I will kill Bill* in the actual context *c'*:
IF(*"I will kill Bill"*) = {*w*∈ *W* | c_S promises c_A with *"I will kill Bill"*}

Hence, the information conveyed by the previous utterance *"I will kill Bill"* which is echoed and grasped by the positive explicit performative in the actual context *c'*, is a set of possible worlds which makes true that c_S promises c_A with the utterance *"I will kill Bill"*.

Since the negation presupposes its argument, the overt negation is applied to the echoic utterance **I promise you that I will kill Bill* of the type *v*. Since the truth-functional negation is of the type <<*s,t*>,<*s,t*>> there is a type mismatch. Therefore, instead of being applied to the echoic utterance **I promise you that I will kill Bill* = < *I will kill Bill*, *c'*> of the incompatible type *v*, the negation is applied to its semantic content and hence to the information in (43) above which is grasped by the echoic sentence *I promise you that I will kill Bill*: to the set of possible worlds where is true that c_S promises c_A with *"I will kill Bill"* and hence to a proposition of the type <*s,t*>. The result of the application is a set of possible worlds where it is not the case that c_S promises c_A with *"I will kill Bill"*. Hence, the meaning of the negative performative *I do not promise you that I will kill Bill* is as in (44) below. *c'* is the actual context, **I promise you that I will kill Bill* is the echoic utterance of type *v*. *IF*(*"I will kill Bill"*) is the information about the illocutionary force of the previous utterance *"I will kill Bill"* in the previous context *c*. $\overline{IF}$ (*"I will kill Bill"*) is the complement of the set *IF*(*"I will kill Bill"*) and hence the negation of the information about the illocutionary force of the utterance *"I will kill Bill"*:

(44) The meaning of *I do not promise you that I will kill Bill*:
$[\![\neg$ **I promise you that I will kill Bill* $]\!]^{c',g} = \overline{IF}$ ("*I will kill Bill*"), type <*s,t*>

Due to the sentence mood of declaratives, the prototypical assertive illocutionary force of the utterance of *I do not promise you that I will kill Bill* is inferred. If c_A is willing to believe in the truth of the proposition that it is not the case that c_S promises c_A that c_S will kill Bill then, according to the perlocutionary effect of assertive speech acts, the context *c'* is changed to the context *c''*, and the possible worlds *w*∈ *CG*(*c''*) make true that it is not the case that c_S promises c_A that c_S will kill Bill:

(45) *CG*(c') ∩ $[\![\neg$ **I promise you that I will kill Bill* $]\!]^{c',g}$ = *CG*(*c''*)

Since negation has the type <<*s,t*>,<*s,t*>> and cannot be applied to the echoic utterance with the incompatible type *v*, the negation is applied to its semantic content namely, to the discourse-old information which is taken up by the echoic sentence *I promise you that I will kill Bill* and hence to the information about the mutually assumed commissive illocutionary force of the utterance *"I will kill Bill"* which was previously performed in *c*. Again, if the truth functional negation is interpreted as complementation, the set *IF*(*"I will kill Bill"*) that is echoed and grasped by *I promise you that I will kill Bill* which is scoped by the echo operator * is retracted from the common ground of the utterance context *c'* of the *do-not* performative:

(46) $CG(c') \setminus IF(\text{"}I\ will\ kill\ Bill\text{"})) = CG(\ c'')$

Since the negation is applied to an echoic utterance whose semantic content consists of the discourse-old and echoed information *IF*(*"I will kill Bill"*) the truth functional negation also has a pragmatic effect with respect to the discourse. The negation of the echoic utterance **I promise you that I will kill Bill* brings about that its discourse-old semantic content *IF*(*"I will kill Bill"*) is removed from the common ground of the utterance context of the *do-not* performative.
Yet, with the assertion of *do-not* performatives the speaker does not additionally provide new information. If someone asserts *I do not promise that I will kill Bill* he does not give new information with respect to the intended actual illocutionary force of his utterance. If the speaker wants to provide further information about the actual intended illocutionary force, he uses a correction:

(47) I do not promise that I will kill Bill. I swear to god that I will kill Bill.

Generally, positive explicit performative sentences such as *I promise you that I will kill Bill* are uttered in contexts where the information provided by the corresponding implicit utterance, here *I will kill Bill*, does not suffice for the determination of the intended illocutionary force of the corresponding implicit speech act and therefore for its success. In contexts where the information provided by the corresponding implicit utterance does not suffice for the determination of the intended illocutionary force, the corresponding implicit utterance partitions the common ground with respect to the information about its various possible illocutionary forces (the so-called *illocutionary force potential* (Bach & Harnish, 1979)). In order to secure the uptake and the further course of conversation, the speaker utters the explicit performative sentence whose meaning resolves the partition and disambiguates the illocutionary force potential of the corresponding implicit utterance.
In case of the *do-not* performatives the previous utterance also effects that the common ground is partitioned with respect to the information about its possible illocutionary forces. Here, by means of the utterance of *I do not promise that I will kill Bill* that retracts the information that the previous implicit utterance *"I will kill Bill"* has the illocutionary force of a promise, the number of the cells of the partition on the common ground are reduced and hence also the illocutionary force

potential of the previous utterance. Although the partition is not resolved, the utterance of the *do-not* performative brings about that the resulting common ground of the context *c''* in (46) above is more informative. Even though the utterance of *I do not promise that I will kill Bill* does not provide new information with respect to the issue which illocutionary force is the intended one, it excludes one possibility and brings about that the resulting common ground is more informative.

Finally, consider the sentences below that suggest that there are contexts where speakers use *do-not* performatives to refute the content of their previous utterance:

(48) I do not promise to kill Bill. I hereby promise to free Willy.

Here, the utterance of the *do-not* performative is not reactive with respect to an previous utterance. The positive explicit performative scoped by the negation is not echoed. The negation is applied to the proposition that the actual speaker promises to kill Bill. By means of the utterance of *I do not promise to kill Bill*, the speaker merely asserts the non-performance of a promise. There is no echoic utterance whereon the negation applies and hence no pragmatic effect.

In conclusion, *do-not* performatives give no new information and reduce the illocutionary force potential of an utterance that took place in the previous context. The overt negation induces the perlocutionary effect of the retraction of the discourse-old information from the common ground. Moreover, even though *do-not* performatives are also reactive with respect to a utterance previously performed and are not uttered 'out of the blue', they are not execution supporting and merely negate the information about the illocutionary force of an utterance previously performed. Here, the meaning of the positive explicit performatives scoped by the negation is entirely echoed. The positive explicit performatives are not used with their own meaning that could be execution supporting and could refer to an utterance, but merely denote the discourse-old information about the presumed illocutionary force. This explains the inacceptability of the adverb *hereby*. For the same reason *do-not* performatives are not parenthetically paraphrasable. If the 'performative' verbs are scoped by negation, they are not used with the execution-supporting meaning of the type $\langle v,\langle e,\langle s,t\rangle\rangle\rangle$, and they are not applied to an utterance of type v. [35]

[35] Inherent negative perfomatives such as *I deny that there are aliens* works in a related way. Such as the positive performative verbs, the negated one is of type $\langle v,\langle e,\langle s.t\rangle\rangle\rangle$ and is applied to an echoic utterance. Thus, wth the utterance of *I deny that there are aliens* the speaker echoes the previously utterd *there are aliens* and takes up its meaning in order to state that he denies the content of a previous utterance. The consequence is that the utterance of *there are aliens* (uttered by a previous speaker A in a previous context) is objected and indicated as not accepted to be part of the common ground. Hence, according to Bruce

The assumption that negative performative sentences echo the sentence previously uttered, incorporates the following idealizations constituting well familiar problems of the analysis of echoes in general (cf. Graf (2006)):
First, it is not necessary that a negative performative utterance is a reaction to an immediately preceding utterance. It may instead be related to any utterance of the previous contribution[36]. Second, the actual speaker cannot only refute the utterances previously made but also information tacitly taken for granted in the previous common ground. Third, the actual speaker does not need to echo exactly the same sentence previously uttered. In the case of negative performatives with inherent negative predicates, the interrogative sentence echoed reoccurs in form of a declarative, and the pronoun *I* is substituted by *you* in order to retain its value:

(49) a. A: Do you claim that I look like an alien?
B: No. I do not claim that you looks like an alien.
b. Echo question:
A: Ahhh, You are here.
B: I am what?

However, these problems concern the pragmatic analysis of echoes in general and go beyond the scope of explicit performatives.

4 The Progressive Aspect

At first glance, it seems to be impossible to report the action of performing the speech act whose force is expressed by the 'performative' verb in the present con-

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& Farkas (2007) the proposal of speaker A to add the content of its assertion *there are aliens* to the common ground is rejected. His assertion is successful but not felicitous. As in the case of do-not performatives, the echoic treatment of inherent negative performatives explains the acceptable occurrence of PPI (*I deny that I have eaten <u>each</u> of the cookies*) and the fact that they do not allow for a parenthetical paraphrase (#*I have stolen the money, I deny this, in order to buy a Ferrari*). Moreover, since the inherent negative predicate is applied to an utterance (even though echoic) the proper insertion of the adverb *hereby* is explained. Roughly *hereby* means by virtue of this utterance and expresses the utterance reference of the negative sentence. With the use of *hereby* the speaker emphasizes that the objection of the *there are aliens* is achieved by virtue of an echoic utterance. Moreover, the negative performative verb contributes its meaning to the truth-conditions even though its negation has a pragmatic effect – the objection.

[36] Since I have designed the common ground $CG(c)$ as a set of possible worlds rather than as a set of propositions, it results in loss of information when dealing with sequences of contexts. Hence, modelling the $CG(c)$ as a set of worlds has the drawback of precluding the possibility to identify a particular proposition in a later stage of the conversation and to remove it in case of negative performatives. Yet for the sake of clarity, I will retain the notion of common ground as a set of possible worlds.

tinuous. If a performative is an assertive speech act about what the speaker is doing now, it should have the same form as in (50)(a) below. Yet, at least in contexts where no emphatic utterance is made, the progressive aspect is odd:

(50) a. I am reading 'The Lord of the Rings'.
b. # I am ordering you to close the door.

However, at least in some contexts, performatives can occur in the progressive aspect (cf. Allan 1986: 169). Consider (51)(a)-(c) where the use of the imperfective aspect constitutes an emphatic performative utterance:

(51) a. I am hereby promising you not to scatter chips on the carpet.
b. That horse has won its third race in a row, and I'm betting you $10 it'll win on Saturday.
c. I am requesting you to tell me your decision.

As mentioned in part II, 2.2 Harnish suggests that a possible explanation for the oddity is that there is a contrast between the semantics of the sentences, which is imperfective and the notion of speech acts that are completely performed at the time of utterance. For this reason, the use of the imperfect aspect comes across as odd; at least in situations where no emphatic assertive act is made.

In the following, I will propose an explanation why the use of progressive in explicit performative sentences is odd and why in paricular contexts the imperfective can be used to perform emphatic assertions.

As illustrated in part I, 4.1, a context c is the tuple $< c_S , c_A , c_T , c_w > \in (E \times E \times T \times W)$. The set of times T includes all the possible past and future times that are ordered by the precedence relation $\prec$ which is irreflexive, transitive, asymmetric, and dense. In (52) the set of all possible intervals of time is defined as the set of all subsets I of T:

(52) $I = \left\{ i \subseteq T \middle| (t_i \in i \,\&\, t_k \in i \,\&\, t_i \prec t_j \prec t_k) \rightarrow t_j \in i \right\}$

Furthermore, since time is a deictic category the utterance time c_t is given by $DS(c_0)$. Note that c_t is also the reference time with respect to which the present, the past, and the future are ordered.

In contrast to the perfective aspect, the imperfective aspect describes the speech action as ongoing or incomplete. In order to represent the imperfective aspect I follow the usual practice and assume in (53) below, a semantic operator *Impf*, which is interpreted as requiring the proposition ϕ denoted by the explicit performative sentence to be true at an interval of time j properly containing the utterance interval i at which the imperfective formula is being assessed. Note that the utter-

ance interval *i* is an interval merely containing the utterance time c_t and hence corresponds to a singleton set: $i = [c_t] = \{c_t\}$.[37]

The imperfective formula $Impf(\phi)$ is interpreted relative to the illocutionary context *c,* where the utterance of the imperfective explicit performative has taken place and whose common ground $CG(c)$ includes the information that c_S utters the imperfective explicit performative sentence. Note that, as before, the context change induced by the assertive speech act is understood as simultaneously taking place at the utterance time c_t. Hence, the context time c_T of the updated contexts corresponds to the utterance time c_t and does not induce a temporal change. The utterance time *i*, or $[c_t]$ is provided by the context *c* relative to which the formulas are interpreted. In contrast, the bigger time interval *j* is $j = [t', t''] = \{t \in T \mid t' \prec c_t \prec t''\}$ and contains the utterance interval *i* as a proper part: $i \subset j$. Therefore, in order to avoid confusion, I will additionally superscript the time parameters *j* und *i*, even though strictly speaking they are reducible to the context *c*.

The semantics of the imperfective formula $Impf(\phi)$ is illustrated in (53) below. $Impf(\phi)$ is true at the utterance time *i* iff ϕ is true at the bigger time interval *j* that goes around *i*:

(53) $[\![Impf(\phi)]\!]^{g,i,c} = 1$ iff $\exists j \; i \subset j$, and $[\![\phi]\!]^{g,j,c} = 1$

For illustration, consider first the sentence *Jiro is yawning*. $[\![Impf(Jiro\_yawns)]\!]^{g,i,c}$ is true iff there is an interval *j* such that *i* is a proper subinterval of *j* and $[\![Jiro\_yawns]\!]^{g,j,c}$ is true. This means that the proposition denoted by *Jiro yawns* has to be true at a time interval *j* that goes around the utterance time *i* with respect to which $[\![Impf(Jiro\_yawns)]\!]^{g,i,c}$ is interpreted. Next, suppose that the utterance time of *Jiro is yawning* is $i = [t_5]$ and that Jiro yawns at the interval *j* $= [t_3,t_8]$ that properly includes the time interval $[t_5]$. Then $[\![Jiro\_yawns]\!]^{g,[t_3,t_8],c}$ is true, and hence qua (53) $[\![Impf(Jiro\_yawns)]\!]^{g,[t_5],c}$ is true as well.

Next, consider the odd sounding explicit performative *I am ordering you to close the door* in (50)(a). Here, $[\![Impf(\text{I order you to close the door})]\!]^{g,i,c}$ is true iff there is an interval *j* such that *i* is a proper subinterval of *j*, and $[\![\text{I order you to close the door}]\!]^{g,j,c}$ is true. This means that the execution-supporting proposition denoted by the explicit performative sentence has to be true at all time intervals *j* that goes around the utterance time *i* with respect to $[\![Impf(\text{I order you to close the door})]\!]^{g,i,c}$ is interpreted. Yet, in order to be true $[\![\text{I order you to close the door}]\!]^{g,j,c}$ has to be evaluated relative to a set of possible worlds where the speaker successfully and hence completely performs a directive speech act with the

[37] Of course, strictly speaking the time of utterance is not a single moment of time. Yet, for the sake of simplicity, I regard the utterance time as a singleton set.

utterance *"to close the door"*. Since with *"to close the door"* the directive speech act is completely performed, $[\![$ *I order you to close the door* $]\!]^{g,j,c}$ is true relative to c iff in $CG(c)$ the success conditions for the directive speech act are true.
However, the time interval j relative to which the proposition is evaluated requires that the directive speech act is somehow not completely performed since $[\![$ *I order you to close the door* $]\!]^{g,j,c}$ should to be true at a bigger interval j including the utterance time i of the entire imperfective sentence.
Suppose that the utterance time of *I am ordering you to close the door* is $i = [t_5]$, and that the actual speaker orders with *"to close the door"* at the interval $j = [t_3,t_8]$ that proper includes $[t_5]$. Under these circumstances $[\![$ *I order you to close the door* $]\!]^{g,[t_3,t_8],c}$ would be true and hence $[\![$*Impf* (*I order you to close the door*) $]\!]^{g,[t_5],c}$ would be true as well. Yet, the requirement that the actual speaker orders with *"to close the door"* at the interval $j = [t_3,t_8]$ contradicts the perfective nature of speech acts that are either successfully and hence completely performed at a moment of time (the utterance time), or failed to be performed totally.
$[\![$ *I order you to close the door* $]\!]^{g,[t_3,t_8],c}$ is false, because $[t_3,t_8]$ is not a moment of time but a bigger interval including the utterance time of the entire imperfective explicit performative sentence. Consequently, qua (53), the imperfective formula $[\![$*Impf* (*I order you to close the door*) $]\!]^{g,[t_5],c}$ is false as well.

Remember that the execution-supporting proposition denoted by the mere explicit performative sentence *I order you to close the door* disambiguates the illocutionary force potential of the embedded PRO-clause. The proposition denoted by *I order you to close the door* creates new facts in $CG(c)$ and all worlds in $CG(c)$ make true that c_S orders with *"to close the door"*. Hence, even though the proposition denoted by the explicit performative sentence is false at the bigger interval j, the speaker completely performs at $i \subset j$ the directive speech act with the utterance *"to close the door"*. This explains that the odd sounding form *I am ordering you to close the door* can nevertheless do the job of ordering the addressee to close the door.

As illustrated in part I, 4.3.1, an assertive speech act of the form $f_{Assert}(\phi)$ is felicitous, that is, nondefective, only if (i) ϕ is not redundant, and (ii) ϕ is not contradictory (Stalnaker, 1978):

(54) $f_{Assert}(\phi)$ is felicitous w.r.t $CG(c)$ only if
(i) the resulting $CG(c')$ is non-contradictory:
$CG(c) \cap \phi \neq \emptyset$, i.e $\exists w(w \in CG(c) \,\&\, \phi(w))$
(ii) the resulting $CG(c')$ is not redundant:
$CG(c) \setminus \phi \neq \emptyset$, i.e. $\exists w(w \in CG(c) \,\&\, \neg\phi(w))$

Hence, using the progressive aspect, the assertive speech act f_{Assert} ($[\![$*Impf* (*I order you to close the door*) $]\!]^{g,c,i}$) is defective, that is, successfully but not felicitously performed. The new information provided with the content of the assertion, namely

that c_S orders at a bigger time interval *j* including the utterance time *i*, contradicts what is already true in *CG*(*c*), namely that with the utterance *"to close the door"* c_S has completely and hence perfectively performed a directive speech act at *i.* Hence, the infelicity of the assertive speech act brings about that the use of the progressive aspect in explicit performative utterances is odd.

Next, following the suggestion of Mike Harnish, I will propose that in (51), where the progressive aspect is appropriate, the contradiction and hence the infelicity of the assertive act brings about that the speaker uses the progressive aspect in order to perform an emphatic assertive speech act; thereby emphasizing the fulfillment of the sincerity condition of the particular speech act performed with the utterance of the complement clause.
Consider for instance (51)(c). Again, according to (54) above, the speech act $f_{Assert}(\llbracket Impf\ (I\ request\ you\ to\ tell\ me\ your\ decision) \rrbracket^{g,c,i})$ is infelicitous since its information provided with $\llbracket\ I\ request\ you\ to\ tell\ me\ your\ decision\ \rrbracket^{g,c,j}$ is contradictory with respect to *CG*(*c*). Yet, the addressee assumes that the actual speaker is rational and cooperative and obeys the maxim of quality (Grice, 1975). Hence, due to the contradictory meaning of $\llbracket\ I\ request\ you\ to\ tell\ me\ your\ decision\ \rrbracket^{g,c,j}$ the addressee pragmatically infers that, instead of the illocutionary force of requesting, the sincerity condition of the directive speech act remains non-completed at the time interval *j*. The sincerity condition for requests is that the actual speaker wants the action described by the meaning of the complement clause to be done. That is, in (51)(c) the condition that the actual speaker really wants the actual addressee to tell him the decision. This condition is true at the bigger interval *j* including the utterance time of the imperfective explicit performative sentence, and this condition is emphasized by the actual speaker when he uses the progressive aspect.
The same holds for the other uses of the progressive. For instance with the utterance of the imperfective sentence in (51)(a), by using the progressive the actual speaker emphasizes that he is committed not to scatter chips on the carpet. With the utterance of the imperfective sentence in (51)(b) the actual speaker emphasizes that he is committed to give the addressee $10 in case the horse loses the race.

The "sincerity-meaning" of the progressive performative utterances in (51) passes the tests for conversational implicatures. First, the meaning is *calculated* by means of an apparent violation of conversational principles, namely, the maxim of quality. Second, conversational implicatures are *cancelable*: If *q* is merely conversationally implicated, and not part of what is said, then some other utterances, in different conversational contexts, will not convey *q*. The fact that the sincerity-implicature is cancelable is shown in (55) below:

(55) a. I am requesting you to tell me your decision – o.k. you don't have to.
b. I am betting you $10 that the horse will win – shit, I have no money.

c. I am promising you not to scatter chips on the carpet – but I cannot guarantee for it.

A further test consists in their *non-detachability*. If by saying *p*, one implicates *q*, all alternate ways of saying *p*, in the relevant context, will implicate *q* as well:

(56) a. I request you (and I really want that done), to tell me your decision.
b. I promise you (and I really will be careful), not to scatter chips on the carpet.

Importantly, this implicature is an instance of the so-called particularized conversational implicatures. In contrast to generalized conversational implicatures that are carried by a certain form of words, regardless of a context, the particularized implicatures heavily depend on their contexts. Hence, it is not the case that they are normally carried by the utterance that in special contexts carries them. Maybe this explains why the use of the progressive is odd in most contexts: the assertive speech act is infelicitously performed in a context where there is no need for extra emphasizing the sincerity condition and where no implicature has to be calculated in order to rescue the speaker's compliance with the maxim of quality. In contrast, whenever a context makes it necessary to emphasize the sincerity condition, the particularized implicature is calculated.

Summarized, in this chapter I have given a proposal why in most cases the imperfective progressive aspect is odd. In contrast to the perfective aspect, the imperfective aspect describes the speech action as ongoing or incomplete. My explanation for the oddity is that there is a contrast between the semantics of the sentences, which is imperfective, and the notion of speech acts that are perfectively performed at the time of utterance. For this reason, the use of the imperfect aspect appears to be odd. Nevertheless, it seems to be possible that in some contexts performatives are appropriate in the progressive aspect. Here, the speaker uses the progressive aspect in order to perform an emphatic assertive speech act, thereby emphasizing that the sincerity condition of the particular speech act performed with the utterance of the complement clause is fulfilled. This is explained by means of a particularized implicature.

Summary and Closing Remarks

Even though there is the widely accepted and appealing indirectness account for explicit performative utterances developed by Bach & Harnish (1979), the boundary between semantics and pragmatics can be drawn in many various ways. There are other perspectives regarding the interface between the truth-functional treatment of the declarative explicit performative sentences and the speech acts performed by uttering them that are expressed by the meaning of the performative verbs. Hence, my thesis consisted in the experiment to develop an analysis of explicit performative utterances that casts another light on the interface between the level of semantics and the level of pragmatics.

According to the parenthetical analysis, the 'performative' verbs, indexical pronouns and in addition speech act adverbials contribute their meanings to the truth conditions of the entire sentence, and therefore are semantically visible. Even though the illocutionary adverbs are *speech act commenting*, they contribute their meanings to the truth conditions of the entire sentence. Similarly, the meaning of the 'performative' verbs is not purely performative but *execution supporting*. For instance, the speaker utters the explicit performative sentence *I promise you to kill Bill* for describing what he is simultaneously doing. Moreover, the performativity is the result of the utterance of the complement sentence. Therefore, there are ordinary implicit, and in opposition to Bach & Harnish (1979), direct speech acts. Analyzed that way, it is not necessary to develop a special inferential mechanism to handle the performativity. Hence, even though the 'performative' verb is semantically visible and does not have a pure performative meaning, the parenthetical analysis is able to account for the performance of the speech act whose force is expressed by the meaning of the 'performative' verb.

As illustrated in part II, 4.1.2, and in more detail in 4.3.2.1, the architecture of the parenthetical analysis stresses the special function of utterances of explicit performative sentences with respect to the discourse. Explicit performative sentences are used in contexts c where the information provided by the utterance of the complement sentence is not sufficient for the determination of the intended illocutionary force of the corresponding implicit speech act, and therefore for its success. The lack of information induces that in $CG(c)$ the success conditions for several speech acts are fulfilled. In order to be cooperative and informative and to secure the further course of conversation, the speaker resolves this ambiguity by uttering the 'performative' verb.

Thus, according to this analysis it is not the case that explicit performative sentences are trivially true when uttered. Their function is more complex. Their *self-verifying* property ('*saying so makes it so*') is explained by means of *disambiguation*.

The view that the meaning of the 'performative' verbs leads to the resolution of the partition on the common ground and fully specifies what in fact the speaker is doing does not imply that "illocutionary force is exhausted by meaning", as Strawson (1964:456) claims. As usual, the addressee infers the illocutionary force by means of the information about the success conditions in the common ground of the illocutionary context. The meaning of the 'performative' verb is a device for the issue which success conditions in the illocutionary context are relevant for the determination of the illocutionary force of the utterance of the complement clause. Here, meaning does not conventionally determine the illocutionary force. Rather, the meaning of the 'performative' verb delimits the illocutionary force potential of the utterance of the complement clause. The 'performative' verb may fully specify what the speaker is in fact doing but does not conventionally determine the illocutionary force solely by virtue of its meaning. As usual, the illocutionary force is given by means of the utterance of a sentence and information of the utterance context. The semantic content of the assertive speech act performed with the explicit performative utterance, and in particular the 'performative' verb, does not conventionally determine the illocutionary force expressed by the verb. This is apparent in those cases where the meaning of the 'performative' verb is redundant (cf. part II, 4.3.2.2). Here, the information about the illocutionary force of the utterance of the complement sentence and hence the inferred illocutionary force itself effects that the meaning of the explicit performative sentence provides redundant information that is already established.

The indirectness account of Bach & Harnish (1979) explains the performativity of explicit performatives by means of the derivation of an indirect speech act. Since in the indirectness account the entire work is done at the level of the pragmatics, they do not have to stipulate two meanings for the performative verbs. However, I think this is not problematic since there are many expressions that show the same systematic polysemy as the 'performative' verbs (cf. part II, 4.1.5): a reporting meaning that is used to describe the execution of a speech act, which is supported by means of the execution-supporting meaning. For instance the lexeme *and* whose truth functional meaning is used also to report the speech act conjunction that corresponds to the second meaning of *and*. Furthermore, as illustrated in part II, 4.1.5 in line with Pustejovsky (1995) we can regard this ambiguity as structural.

Further results of the application of a parenthetical analysis are the following:
Even though the optional adverb *hereby* is redundant since the utterance reference already is expressed by the execution-supporting meaning of the 'performative' verbs, its acceptable insertion individuates the explicit 'performative' verb as execution supporting. Hence, the insertion of *hereby* or the lack thereof can be regarded as a test for the execution supporting function of the explicit performative utterance (cf. part II. 4.1.5). Thus, in the case of *do-not* performatives the adverb *hereby* is odd simply because *do-not* performatives are not execution supporting.

Their discourse function is different. By means of their utterances, speakers negate the mutually assumed illocutionary force of a previous utterance. In contrast, the fact that inherent negative performatives are execution supporting, explains the acceptable insertion of *hereby* (part III, chapter 3).

The parenthetical analysis explains that in some contexts the use of explicit performatives is redundant. In contexts where the determination of the prototypical implicit speech act is already sufficient for the course of conversation, there is no need for providing further information by means of a 'performative' verb. Hence, if the speaker nevertheless uses the explicit performative sentence (instead of solely performing the sufficient implicit speech act), the meaning of the 'performative' verb is redundant. Due to redundancy, the Schifferian (1972) infinite regress of e.g. *I state that I state that I state that I promise you that I will be courteous* is always stopped at the first step (cf. part II, 4.3.2.3). The meaning of *state* is redundant since in contexts where the explicit performatives are uttered, the information about the sentence mood and the prototypical assertive force provided with the utterance of *I promise you that I will be courteous* is sufficient for the further course of conversation. Hence, the propositional content of the utterance of an explicit performative of the form *I state that I promise you that I will be courteous* is redundant and the utterance is always a non-felicitous and hence defective assertion.

Part III shows the consequences of embedded explicit performatives. Surprisingly, my nearly stoic application of the parenthetical analysis leads to plausible results – albeit as unorthodox as the parenthetical analysis in fact is.
In my judgement, the acception of the parenthetical analysis depends first on the readers individual taste with respect to unconventional analysis and secondly, on his perspective on the interface of semantics and pragmatics. I do not want to claim the analysis as the right one – for me the analysis is merely an experiment that gives an alternative way to look on *the saying so, makes it so* phenomena of explicit performative utterances.

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