Causation and Reasoning:
A Construction Grammar Approach
to Conjunctions of Reason

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Acknowledgements

Because of its favorable environment for studying linguistics, everyone must feel lucky to have been able to spend his or her graduate years in Tsukuba. I am another such student who considers himself to be lucky. For the last six years in Tsukuba, I have met a lot of people to whom I am indebted for teaching me a lot of things (about linguistics, about being a researcher, and about life).

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The notion of constructional networks plays an important role in

construction grammar. Indeed, it is a keyword of the thesis (as you will see particularly in chapters 4 and 6). In order for me to finish this thesis, human network is a keyword. The present thesis thus has been completed thanks to the support of all the people listed above. Once again, I'd like to express my sincere gratitude to all of them.

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Table of Contents

Chapter 1
Introduction

1.1 Overview

This thesis is concerned with the following conjunctions of reason in English: *because*, *since*, and *for*. The sentences in (1) exemplify that these conjunctions introduce a clause that represents a reason:

(1) a. He is called Mitch, *because* his name is Mitchell.

b. I'm forever on a diet, *since* I put on weight easily.

c. He had a great desire to have a home of his own *for* he had always lived with my grand mother.

(COBUILD[4] [italics are mine])

Superficially, these conjunctions seem to be synonymous. Some dictionaries indeed give paraphrase relations of *since* and *for* with *because*. Take the following dictionary definitions as examples:

(2) a. since: conjunction *because*

b. for: conjunction dated or literally *because*

(CIDE)

As shown in (2), the meaning of *since* and *for* are defined as *because* in *CIDE*.

However, there are a number of differences between them, of which I simply point out three here as a first step to our argument (while details will be discussed later on). First, as is well known, *because* has a causal use as in (3a) and an inferential use as in (3b) (e.g. Jespersen (1949), Rutherford (1970), Schourup and Waida (1988), Sweetser (1990), Hirose (1991, 1992, 1998, 1999), Nakau (1994), among many others), while *since* and *for*, though the definitions vary, are said to have only an inferential use (e.g. Kanbayashi (1988), Sweetser (1990), Nakau (1994), Kanetani (2005c, 2006c)).[1]

(3) a. The ground is wet because it has rained.

b. It has rained, because the ground is wet.

The situation described in the *because*-clause in (3a), that it has rained, is understood as the cause of the ground being wet, while that in (3b), that the ground is wet, is understood as providing the premise from which to draw the conclusion that it must have rained.[2]

Second, while inferential *because*-clauses may not be in sentence-initial position as in (4a), *since*-clauses, even if they provide the premise for inference, may be in such a position, as in (4b):

(4) a. * Because the ground is wet, it has rained.

(Hirose (1991:27))

b. Since he isn't here, he has (evidently) gone home.

(Sweetser (1990:78))

Third, *for*-clauses, unlike *because*- and *since*-clauses, cannot be in sentence-initial position, as shown in (5):

(5) * For he was unhappy, he asked to be transferred.

(Quirk et al. (1985:922))

(cf. He asked to be transferred, for he was unhappy.)

Thus, all of these three conjunctions invite reasons of some kind, but their syntactic and semantic behaviors are different. We need a grammatical system that can comprehensively account for both similarities and differences between them.

The aims of this thesis are (i) to give an integrated account of these conjunctions within the framework of construction grammar (e.g. Fillmore et al. (1988), Goldberg (1995, 2005), Hirose (1999), among many others), and (ii) to show the validity of the proposed analysis.

1.2 Organization

This thesis is composed roughly of three parts. "Roughly," because the three parts are so intimately related that I cannot draw clear lines (i.e., the parts that I mention here are just groupings of convenience; not discrete ones). The first part, which corresponds to chapters 2 and 3, is an overview of previous studies and the framework of construction grammar, within which I present proposals in chapters that follow.

Chapter 2 reviews how these conjunctions have been treated in the literature and points out problems with their analyses. Specifically, I overview (i) Talmy's (1978b) Gestalt psychological view of subordination, (ii) Chafe's (1984) observation of the relation between clause position, i.e. sentence-initial or sentence-final, and boundedness, i.e. the presence or absence of a comma intonation, (iii) Sweetser's (1990) analysis of pragmatic ambiguity in *because* and *since*, (iv) Nakau's (1994) view of *because* and *since* as either a propositional element or a marker of modality, and (v) Hirose's (1998, 1999) construction grammar approach to the *because*-clause subject construction (e.g. *just because he's a linguist doesn't mean he speaks many languages*).

Chapter 3 overviews construction grammar theory, since my proposal to be presented in chapter 4 and the descriptive analyses that follow (chapters 5-7) are dependent largely upon the theory. Various approaches have been proposed under the name of construction grammar (cf. Croft and Cruse (2004)), of which I introduce in chapter 3 Fillmore and Kay's Construction Grammar, Goldberg's construction grammar, and Croft's Radical Construction Grammar, making clear their similarities and differences. After illustrating basic concepts of construction grammars, I introduce an important notion that is used in the theory: inheritance links (cf. Goldberg (1995), Hirose (1998, 1999), Kanetani (2006b)). Inheritance links, which capture how existing constructions are related, play a particularly important role in my thesis.

The second part, which comprises only chapter 4, makes the main proposal in the thesis: I postulate and examine in detail constructions in

which conjunctions *because*, *since*, and *for* are used. They will be called causal constructions and reasoning constructions. The former express a causal relation between the two situations described, and the latter the speaker's reasoning process. These meanings pair with certain syntactic forms to realize the form-meaning correspondences. As I shall discuss in chapter 4, there are two types of causal constructions and four types of reasoning constructions. I will point out that although they are independent constructions, they are related in some sense. It is the notion of inheritance links that helps capture the relations. By postulating the constructions and describing their relations, I will claim that both similarities and differences between the conjunctions, such as those observed in section 1.1 and other syntactic and semantic behaviors to be discussed later on, are best accounted for not by focusing only on the conjunctions themselves but by considering what constructions the conjunctions are used in.

The third part, which consists of chapters 5 through 7, is a descriptive application of the analysis proposed in chapter 4, i.e., these chapters offer support for the proposal made in chapter 4. Chapter 5 examines the focalizability of *because* and *since*. Despite the widely accepted view that *because*-clauses can be focalized by focusing adverbs whereas *since*-clauses cannot, there are many cases in which certain focusing adverbs focalize *since*-clauses, as exemplified in (6):

(6) Wearing a different one every time she went out would be only natural, *particularly since* a sari does not have to be washed as frequently as a dress…. (BNC[3] [italics are mine])

Chapter 5 explains the focalizability of *because*- and *since*-clauses in terms of (i) the types of constructions that these conjunctions participate in and (ii) the types of focusing adverbs used.

Chapter 6 investigates a certain metalinguistic use of *because*, which is exemplified by a sentence like (7):

(7) The Blackwell collection was reputed to be the most valuable private collection in the world. *Reputed*, because no one outside of invited guests was permitted to see it.

(Hirose (1992:82))

In the second sentence, the speaker explains why he used the word *reputed* in the preceding context. This construction is marked in the following two senses: (i) the main clause is only a word or phrase used in the preceding context,[4] although the conjunction *because* canonically connects two clauses, as in (1a), repeated as (8), and (ii) as we shall see in chapter 6, the use of the sentence in (7) is more restricted than the use of the corresponding canonical sentence as in (9):

(8) He is called Mitch, *because* his name is Mitchell. (= (1a))

(9) I say "reputed," because no one outside of invited guests was permitted to see it.

In order to explain both generalities and specificities of constructions of metalinguistic reasons like (7), chapter 6 compares them with other constructions in which *because* is used.

Thus, chapters 5 and 6 provide support for the analysis presented in chapter 4 applying it to the related phenomena in English. The argument in chapter 7 supports the proposed analysis from a different perspective. Chapter 7 compares *because* constructions in English and *kara* constructions in Japanese. Like *because*, the Japanese conjunction (or conjunctive particle) *kara* has causal and inferential uses (e.g. Takeuchi (1999), Higashiizumi (2006)):

(10) a. Taro wa Hanako o aishiteiru kara
Taro Top Hanako Acc love because
modottekita
came.back[5]
'Taro came back because he loved Hanako.'

b. Taro wa modottekita kara, Hanako o
Taro Top came.back because Hanako Acc
aishiteiru no daroo
love Nomi I.guess
'Taro loved Hanako, because he came back.'

(Higashiizumi (2006:117f.))

The situation described in the *kara*-clause in (10a), *Taro ga Hanako o aishite-iru (koto)* '(that) Taro loves Hanako,' expresses the cause of Taro's

coming back, while that in (10b), *Taro ga modottekita (koto)* '(that) Taro came back,' is understood as providing the premise from which to draw the conclusion that Taro loved Hanako. Pointing out similarities between Japanese *kara* constructions and English *because* constructions, I will show that the analysis to be proposed in chapter 4 is valid not only language-specifically but also cross-linguistically.

Chapter 8 concludes the thesis with summaries of the claims in chapters 4 through 7.

Notes to Chapter 1

1. One may be skeptical about this view of *since* and *for*, given sentences like (ia, b) in which the *since*- and *for*-clauses seem to represent the cause of the situations expressed in the main clauses, but I argue for this view in chapter 4 (details shall be discussed there).

(i) a. Since John wasn't there, we decided to leave a note for him. (Sweetser (1990:78))
b. John came back, for he loved her.

2. The word "situation" is used as a cover term for both event and state of affairs (cf. Lyons (1977:483)).

3. BNC=British National Corpus [www.natcorp.ox.ac.uk/]

4. The term "main clause" may not be proper to refer to the expression *reputed*, because such a simple word or phrase is not technically a clause. In this thesis, I simply use the term to refer to the syntactic position equivalent to the main clause.

5. The abbreviations used in the glosses of the examples are as follows: Acc=accusative case marker, Nomi=nominalizer, and Top=topic marker.

Chapter 2
Previous Studies*

2.1 Introduction

In the previous chapter, I have stated the goal of the thesis: To give an integrated account of *because*, *since*, and *for*, and to show its validity. Before presenting my own analysis of these conjunctions, it is necessary and helpful to see how they have been treated in previous studies. In this chapter, I review (i) Talmy's (1978b) Gestalt psychological view of subordination (section 2.2), (ii) Chafe's (1984) observation of the relation between clause position, i.e. sentence-initial or sentence-final, and boundedness, i.e. the presence or absence of a comma intonation (section 2.3), (iii) Sweetser's (1990) analysis of pragmatic ambiguity in *because*- and *since*-clauses (section 2.4), (iv) Nakau's (1994) view of *because* and *since* as either a propositional element or a marker of modality (section 2.5), and (v) Hirose's (1998, 1999) construction grammar approach to the *because*-clause subject construction (e.g. *just because he's a linguist doesn't mean he speaks many languages*) (section 2.6).

Although I speak of "conjunctions of reason," the works that I review in this chapter are mostly concerned with the conjunction *because*. As I see it, a great amount of researches have been carried out about *because*, whereas not so much attention has been paid to *since* and *for*. Of the five

works under review, only Sweetser (1990) and Nakau (1994) describe *since* in some detail, comparing it with *because* (which will be of a great help in presenting my proposal in chapter 4).[1] As far as my knowledge goes, there is no in-depth research about *for*, and so in the course of observing the previous studies in this chapter, I refer to *for* in the context of their analyses.

2.2 Talmy (1978b)

Talmy (1978b) points out the importance and relevance of the Gestalt psychological categories, Figure and Ground, in cognitive semantics (for those Gestalt psychological categories, see for example, Koffka (1935:Ch.5)). Talmy attempts to account for subordination in terms of their distinctions (cf. Talmy (1978a, 2000), Ohori (1991, 1992)). Used in cognitive semantics, Figure and Ground objects are defined as follows:

(1) a. The Figure object is a moving or *conceptually* mov*able* point whose path or site is conceived as a variable, the particular value of which is the salient issue.

b. The Ground object is a reference-point, having a stationary setting within a reference-frame, with respect to which the Figure's path or site receives characterization.

(Talmy (1978b:627))

Using the Figure-Ground distinction can account for contrasts like the one

below:

(2) a. The bike is near the house.

b. ?? The house is near the bike.[2]

(Talmy (1978b:628))

The two sentences above represent the same logical relation, i.e. the quantity of distance between the two objects. However, Talmy observes that these two sentences do not convey the same "meaning" (cf. Ohori (1992)). In (2a), *the house* is used as a reference-point by which to characterize the location of *the bike*. That is, *the house* is construed as the Ground object. In (2b), the relations are completely inverted, i.e., *the bike* is used as a reference-point by which *the house*'s location is characterized. Given the definition of Figure and Ground objects as in (1a, b), we may account for the anomaly of sentence (2b) as follows. While sentence (2a) follows the general tendency or principle of our construal, sentence (2b) does not: *The bike*, which is (potentially) a moving object, is more readily construed as the Figure than *the house*, which is a static object. That is, the assignment of the Figure and Ground objects in sentence (2b) is unnatural.

Based on the observation that the Figure-Ground distinction plays an important role in cognitive semantics, Talmy further argues that the same distinction is observed not only in the relation between two objects, e.g. *the bike* and *the house* in (2a, b), but also in the relations between two events. According to Talmy, the Figure and Ground objects that are defined in

terms of the relative location of objects in space, i.e. (1a, b), are extended to the relative location of events in time. Observe the following examples:

(3) a. The explosion took place during the performance.
b. The performance went on for three hours.

(Talmy (1978b:632))

In (3a), the event of explosion is considered as the Figure object with respect to the reference point set in the temporal reference-frame, *during the performance*. Likewise, in (3b), *the performance* is construed as the Figure object, and the temporal expression *for three hours* as the Ground object. That is, the temporal adverbials introduced by *during* and *for* are reference-points, with respect to which the events of explosion and performance going on receive their characterizations, respectively.

Interestingly, just as with the relations between two objects, e.g. (2a, b), there exist favored patterns of Figure-Ground assignments to events. To see this, compare the following examples:

(4) a. He exploded after he touched the button.
b. He touched the button before he exploded.

(Talmy (1978b:632f.))

In (4a), the Ground interpretation is assigned to the event of touching the button; the Figure interpretation to the event of explosion. The Figure-Ground assignment in sentence (4b) is completely opposite. Talmy

says, "since either asymmetric relation in an 'inverse-pair' equally well specifies the same relational information, the advantage to a language in having lexification for both [e.g. *after* and *before*] is precisely that either of the related events can be specified as functioning as the Figure (p.633)." That is, since English has both *before* and *after* to specify temporal relations between the two events expressed, either the event of explosion or the event of button-touching can be construed as the Figure object. Nevertheless, Talmy observes that sentence (4b) sounds unnatural although it is "conceptually synonymous" with sentence (4a).[3] This unnaturalness, Talmy argues, stems from the Figure and Ground objects being very near (if not the same as) the notions of assertion and presupposition. That is, sentences (4a, b) convey the same logical meaning, but the event of explosion should be asserted, or more readily construed as the Figure object. Thus, Talmy observes that even if sentence (4b) is grammatical, it sounds natural only in a special context such as an official searching into the possible causes of a known death.

Likewise, such Figure-Ground distinctions and the favored pattern of their assignments may be applied to causal relations as well. According to Talmy, sentence (5a) below represents the favored or unmarked relation between the two events, and hence can be indicated by the simple expression *because of*, while the inverted relation in (5b), as describing a marked relation, can be indicated only by a "devised phrase" such as *to-the-occasioning-of- (the-decision-of)*.

(5) a. We stayed home because of his arrival (=because he had

arrived).

b. He arrived to-the-occasioning-of-(the-decision-of) our staying home.

(Talmy (1978b:637))

Sentence (5a) expresses a causal relation between the event of their staying home and that of a man's arrival, i.e., his arrival has caused them to stay home. In sentence (5b), the reversed causal relation holds and the devised English phrase *to-the-occasioning-of-(the-decision-of)* connects the two events expressed. Thus, Talmy takes the causal relation represented in (5a) as being more natural than that in (5b). From these arguments, Talmy presents the following generalization:

(6) The unmarked (or only possible) linguistic expression for a causal relation between two events treats the causing event as Ground and the resulting event as Figure. Where the complete surface is a full complex sentence, the two events are in the subordinate and main clause, respectively.

(Talmy (1978b:639))

As Ohori (1992) points out, without the Figure-Ground distinction, contrasts like the one in (2a, b) above could not be explained. Thus, Talmy's work is important to the extent that his research makes it possible to account systematically for many contrasts resulting from some pragmatic factors, and that it is because of his study that linguists have recognized the

importance of the Figure-Ground distinctions.

Yet there are some serious problems with Talmy's analysis. First, his analysis cannot capture the difference between the reasons introduced by *because* and *since*. Even if Talmy's observation is correct that subordinate clauses are understood as the Ground, how *because*-clauses and *since*-clauses (and other subordinate clauses) are different is still not clear. We need a grammatical system that makes it possible to capture both their similarities and differences. Thus, just saying that *because*- and *since*-clauses are equally understood as Ground is not adequate.

Second, *because*-clauses (and some other types of subordinate clauses) are not always treated as Ground, but may be asserted as if they were an independent clause (e.g. Hooper and Thompson (1973), Lakoff (1987), Haegeman (2002), among others). Consider the following examples:

(7) a. I'm leaving, because here comes my bus.

(Lakoff (1987:473))

b. I'd better leave, since here comes my bus!

(Lakoff (1987:479))

In (7a, b), the deictic *here* construction *here comes my bus* occurs in the *because*- and *since*-clauses. Hooper and Thompson (1973) observe that it is only in an asserted clause that such constructions ("speech act constructions" in Lakoff's (1987) terms) occur. Crucially, as seen above, Talmy notes that Figure and Ground are very near, if not the same as,

assertion and presupposition for propositions. If, as Talmy argues, subordinate clauses were always understood as the Ground object, or being presupposed, how could the asserted *because*- and *since*-clauses be accounted for? Talmy notes that generalization (6) is true for "the *unmarked* … linguistic expression for a causal relation [italics are mine]." Thus, he does not say that this generalization always holds. One may then argue that the causal relations described in sentences (7a, b) are marked, and the Figure-Ground relation may be inverted. Even if they are, it is not clear what determines the "unmarked" or "marked" causal relation.

Some *because*-clauses, even without speech act constructions like the deictic *here* constructions in (7a, b), need to be construed as Figure objects. For example, a *because*-clause can be a focus of the answer to a *why*-question with its main clause being backgrounded. Consider the following dialogue:

(8) A: Why is the ground wet?
B: (The ground is wet) because it has rained.

In this dialogue, speaker B needs to assert the reason why the ground is wet. He can start the answer either with the main clause or with the *because*-clause. What is important is that the information conveyed by the main clause (whether it is repeated or not) is not asserted but presupposed, or backgrounded, because it has already been given by speaker A (cf. Lambrecht (1994)). In contrast, the *because*-clause, which introduces new information to the discourse, is asserted as the focus of the answer.

Talmy's generalization cannot correctly predict such asserted *because*-clauses.

These two problems result from the view of subordinate clauses as a natural class, i.e. as the Ground object. There is another problem of a different kind. He argues in (6) that a causal relation treats the causing event as Ground and the resulting event as Figure and that only a devised phrase such as *to-the-occasioning-of-(the-decision-of)* can connect the inverted causal relation, as in (9):

(9) He arrived to-the-occasioning-of-(the-decision-of) our staying home. (= (5b))

However, the conjunction *because* does connect two events expressing not only a causal relation, as in (10a), but also an inferential relation, or an inverted causal relation, as in (10b):

(10) a. The ground is wet because it has rained.

b. It has rained, because the ground is wet.

Jespersen (1949) argues that an inference can be drawn either from cause to result or from result to cause; the latter pattern is exemplified by a sentence like (10b). In this sentence, contradictory to Talmy's generalization, the cause event would be treated as Figure, and the resulting event as Ground. Nevertheless, no devised phrases are necessary. Whereas the simple prepositional phrase *because of* cannot connect the inverted causal relation,

as in (9), the simple conjunction *because* can, as in (10b). This stems not from the unnatural assignment of Figure and Ground, but from the nature of an inference and the difference between *because* and *because of*. I will argue about this point in chapter 4.

2.3 Chafe (1984)

Chafe (1984) treats some adverbial subordinate clauses as "a single, undifferentiated category," of which, in this subsection, I focus on reason subordinate clauses. He observes them from the viewpoints of (i) their positions with respect to their main clauses, i.e. sentence-initial or sentence-final position, and (ii) how tightly they are bound to their main clauses, i.e. the presence or absence of a comma intonation between the main clause and the subordinate clause. All these patterns are exemplified in (11a-d):[4]

(11) a. sentence-initial/bound [Type A]
Because it has such a big money I decided to buy it.

b. sentence-final/bound [Type B]
I decided to buy it because it has such a big money.

c. sentence-initial/free [Type C]
Because it has such a big money, I decided to buy it.

d. sentence-final/free [Type D]
I decided to buy it, because it has such a big money.

(Chafe (1984:439))

Chafe surveys both spoken and written English and discusses the relation between the combination of clause ordering and clause boundedness, on one hand, and the information structure, on the other. In addition to these notions, what Chafe calls "intonation units" plays an important role in his analysis. Intonation units are spurts of words that have a coherent intonation contour, and have a single coherent intonation contour.[5] As Chafe notes, intonation units range from one word to a clause or multiple clauses. For the purpose of the present argument, it is meant to refer to a single bound clause or bound clauses.

Now, let us take a closer look at his arguments. First, both in spoken and written English, adverbial clauses of Type A, i.e. sentence-initial bound adverbial clauses, are not so likely to be used as the other patterns. That is, if a *because*-clause appears in the same intonation or punctuation unit with its main clause, the *because*-clause almost always follows the main clause. Chafe observes that this is related to information structures or information flows, pointing out that main clauses, but not adverbial clauses, may very well express familiar information, and thus the normal progression is one which moves from a main clause to an adverbial clause.[6] He notes that English speakers usually create information/ punctuation units which begin with familiar information (cf. Halliday (1967)).

Second, using adverbial clauses of Type B, i.e. sentence-final bound adverbial clauses, signals that sentence-initial main clauses convey familiar information; the adverbial clauses that follow convey unfamiliar information. Consider the following example:

(12) He causes the death of many people…He has the right to destroy precisely because he is the creator himself.

(Chafe (1984:441f.))

In (12), the proposition expressed in the main clause *he has the right to destroy* may be regarded as conveying familiar information on the basis of the preceding statement *he causes the death of many people*. According to Chafe, sentence-final bound *because*-clauses, on the other hand, present unfamiliar information. Thus, Chafe's arguments about bound adverbial clauses can be summarized as follows: (i) When two clauses occur within the same intonation or punctuation unit, only one of them is likely to express unfamiliar information, (ii) unfamiliar information typically comes at the end of an intonation or punctuation unit, and (iii) the small number of the usage of Type A being concerned, adverbial clauses typically express unfamiliar information.

Let us turn to considering free adverbial clauses, i.e. Type C and Type D. Chafe argues that adverbial clauses of Type C, i.e. sentence-initial free adverbial clauses, serve as "guideposts" to information flow (p.444). That is, they signal paths or orientations in terms of how the following information should be understood. Consider sentence (11c), repeated here as (13):

(13) Because it has such a big memory, I decided to buy it.

(= (11c))

In this sentence, the *because*-clause provides a cause of the speaker's decision, and indicates that the proposition expressed by the main clause that follows should be understood as its result. Chafe also observes that in this type, both the *because*-clause and the main clause convey unfamiliar information.

Adverbial clauses of Type D, i.e. sentence-final free adverbial clauses, are similar to those of Type C to the extent that both the adverbial and main clauses convey unfamiliar information. In Type D, however, adverbial clauses do not serve as guideposts. Rather, they convey additional information after sentence-initial main clauses are expressed, i.e., the reason is given as something like an afterthought. Thus, as Chafe suggests, sentence (14a) can be paraphrased as sentence (14b):

(14) a. That in itself was scary, cause I never fainted before.

b. That in itself was scary, and the reason was that I had never fainted before.

(Chafe (1984:445f.))

He observes that in sentences like (14a), both the main clause and the adverbial clause are focused. More precisely, the speaker focuses first on the information in the main clause, and subsequently on the cause represented in the *because*-clause. Hence, a sentence like (14a) can be paraphrased as a coordinate sentence like (14b).

As noted at the beginning of this subsection, Chafe, like Talmy

(1978b), treats adverbial subordinate clauses as a single, undifferentiated category. However, Chafe's analysis has some advantages over Talmy's. First, unlike Talmy's, Chafe's analysis correctly expects the naturalness of the following dialogue:

(15) A: Why is the ground wet?
B: The ground is wet because it has rained.

(= (8))

As I have pointed out in the previous subsection, this cannot be expected by Talmy's (1978b) analysis. In Chafe's terms, speaker B uses a sentence of Type B, in which the main clause conveys familiar information, and the adverbial clause that follows is unfamiliar. Then, the naturalness of the dialogue is straightforwardly accounted for. In a dialogue like (15), the information in the main clause is assumed to be familiar to both speakers A and B, on the ground of speaker A's utterance, while the reason for the ground being wet is newly introduced by speaker B's utterance. That is, it is considered as conveying unfamiliar information. Hence, speaker B's utterance is natural.

Furthermore, Chafe's analysis will expect using a sentence of Type C, e.g. (16), to be inappropriate as an answer to speaker A's question in (15), and the expectation is borne out:

(16) A: Why is the ground wet?
C: # Because it has rained, the ground is wet.

Following Chafe's observation, we may say that the main clause of speaker C's utterance in (16) conveys unfamiliar information, which is contradictory.

Another advantage is that Chafe's analysis implies the difference between *because* and *since*. Crucially, while *because*-clauses follow the four types in (11a-d), *since*-clauses (in the sense of reason), whether sentence-initial or sentence-final, are always used with a comma intonation (e.g. Schourup and Waida (1988), Sweetser (1990), Kanetani (2005c, 2006c), among others).[7] Consider the following sentence:

(17) * Do you like him since he speaks fluent Danish?

(Schourup and Waida (1988:97))

This unacceptable sentence belongs to Type B, in which a comma intonation is not present between the main clause and the *since*-clause. Thus, a *since*-clause and its main clause cannot be in the same intonation unit. As seen above, Chafe claims that sentence-final bound adverbial clauses present unfamiliar information. If so, *since*-clauses cannot present unfamiliar information. Indeed, some linguists observe that *since*-clauses typically convey familiar information (e.g. Schourup and Waida (1989), Swan (2005)). It seems that Chafe's observation also correctly explains the grammar of *since*, though Chafe himself does not argue about *since*.

However, when treating subordinate clauses as a single, undifferentiated category, Chafe's analysis has a similar problem to

Talmy's (1978b). That is, while, as I have mentioned above, Chafe's analysis does imply the information-structural difference between *because* and *since*, it is still not clear precisely where the difference comes from. More specifically, if *because* and *since* are treated as the single, undifferentiated category, as subordinators, why does *since* not fit Types A and B while *because* does. Once again, we need a grammatical system that makes it possible to clearly account for both similarities and differences between *because* and *since*.[8]

2.4 Sweetser (1990)

Sweetser (1990) points out that we use the same vocabulary in many cases to express relationships in the speech act and epistemic (reasoning) worlds that we use to express parallel relationships in the real-world, or sociophysical, events and entities. For example, the same modal auxiliary *must* is used either to denote real-world obligations (i.e. *must* as root modality), as in (18a), or to denote necessities (i.e. *must* as epistemic modality), as in (18b):

(18) a. John must be home by ten; Mother won't let him stay out any later.

b. John must be home already; I see his coat.

(Sweetser (1990:49))

Sweetser argues, from historical, sociolinguistic, and psycholinguistic perspectives, that the epistemic use of modals is an extension of a more

basic root meaning, not vice versa (for more details, see Sweetser (1990:49ff.)).

Sweetser argues that the conjunctions *because* and *since* are also used in what she calls "content," "epistemic," and "speech-act" domains. When used in the content domain, these conjunctions connect two real-world situations and the sentence denotes a causal relation between them.[9] In the epistemic domain, the sentence expresses an inferential process, in which the speaker draws the conclusion expressed by the main clause from the premise expressed in the subordinate clause. Used in the speech-act domain, the conjunctions introduce a reason why a certain speech act is performed in the main clause. Examples of *because* and *since* as used in these three domains are given below:

(19) *because*

a. content: John came back because he loved her.

b. epistemic: John loved her, because he came back.

c. speech-act: What are you doing tonight, because there's a good movie on.

(Sweetser (1990:77))

(20) *since*

a. content: Since John wasn't there, we decided to leave a note for him.

b. epistemic: Since John isn't here, he has (evidently) gone home.

c. speech-act: Since you are so smart, when was George Washington born?

(Sweetser (1990:78))

Sentence (19a) denotes the causal relation between his love and his coming back. In (19b), *because* does not introduce a cause of his love, but rather introduces a premise from which to draw the conclusion that he loved her. In (19c), the *because*-clause conveys the reason for asking what the addressee is doing that night. Likewise, in (20a-c), the *since*-clauses are understood as the reason for our decision, a premise to conclude that he has gone home, and the reason for asking the addressee when George Washington was born, respectively.

Another important point that Sweetser makes is the correlation between the readings and the presence or non-presence of a comma intonation between the main clause and the subordinate clause. She argues that in the epistemic and the speech-act readings, a comma intonation is required between the main clause and the subordinate clause, whereas in the content domain, a comma intonation is optional. This is because, Sweetser argues, without a comma intonation, sentence-initial main clauses tend to be understood as being presupposed (cf. Chafe (1984)). The main clauses in the epistemic and speech-act readings represent the speaker's logical conclusion and the speech-act being performed by the very utterance, respectively. These elements are unlikely to be taken as being presupposed. Hence, a comma intonation is required so that sentence-initial main clauses are asserted. Sweetser further notes that

although *because* is triply ambiguous, *since* already has a strong tendency towards an epistemic or a speech-act reading, rather than towards a content reading. This, according to Sweetser, leads to the non-occurrence of *since* in a commaless context.

So far, we have seen Sweetser's analysis of *because* and *since*. Note in passing that although Sweetser does not deal with *for*, it seems that *for* is also used in the three domains, as exemplified below:

(21) *for*

a. content: John came back, for he loved her.

b. epistemic: John must have loved her, for he came back.

c. speech-act: What are you doing tonight, for there's a good movie on.

In (21a), the *for*-clause denotes the reason why John came back. The *for*-clause in (21b) gives a premise from which to draw the conclusion that John must have loved her. In (21c), the reason for asking the addressee what she is doing tonight is expressed by the *for*-clause. However, Kanbayashi (1989:48) notes that *for* has only an inferential use. This may not be surprising if we assume that *for*, like *since*, has a strong tendency towards an epistemic or speech-act reading.[10] Crucially, Sweetser argues that the conjunctions themselves are not polysemous but they are pragmatically ambiguous, i.e., one single meaning of the conjunction is pragmatically applied in different ways according to the context. That is,

it is difficult, if not impossible, for the meaning of *for* to be applied in the way of expressing the real world causation.

It is then predictable that *for* should be used with a comma intonation, and indeed, it has to be used with a comma intonation. In this sense, Sweetser's observation of the correlation between a comma intonation and the reading of the sentence seems correct. Thus, Sweetser argues that when applied to different domains, an essentially unitary semantic entity, e.g. *because*, cannot only be ambiguous but can even have different grammatical behaviors, e.g. the presence or absence of a comma intonation.

It is true that Sweetser's arguments, especially on the correlation between the readings and the presence or absence of a comma intonation, are insightful, but there are several problems that need to be solved. First, if, as Sweetser argues, the conjunction *because* itself is pragmatically ambiguous, that is, if *because* may freely be used in the three domains, why can sentence-initial *because*-clauses not be understood as an epistemic or a speech-act conjunction? Consider the following examples:

(22) a. * Because the ground is wet, it has rained.

(Hirose (1991:27))

b. * Because you are a linguist, what do you think of Chomsky?

(cf. Because it has rained, the ground is wet.)

Sentence (22a) is intended to describe the inferential process, in which the speaker draws the conclusion that it has rained from the premise that the

ground is wet. In (22b), the speaker means to ask about Noam Chomsky, a famous linguist at MIT, based on his knowledge that linguists in general have a good knowledge of him. In these cases, as opposed to the parenthesized example of the content domain, sentence-initial *because*-clauses are not allowed. As seen above, Sweetser argues that when applied to different domains, the conjunction cannot only be ambiguous but can even have different grammatical behaviors. If so, we may say that the unacceptability of sentences (22a, b) is also pragmatically conditioned. That is, some "pragmatic factors" may prevent *because*-clauses from being in sentence-initial position. However, Sweetser does not clearly mention what, if any, the factors are like. Therefore, we need to explain the reason for the unacceptability of sentences (22a, b).

Second, why is it possible that *since*, unlike *because*, may be interpreted as epistemic or speech-act conjunctions even in sentence-initial position? The relevant examples are reproduced below:

(23) a. Since John isn't here, he has (evidently) gone home. (= (20b))

b. Since you are so smart, when was George Washington born? (= (20c))

The *since*-clause in (23a) provides the premise from which to draw the conclusion that John isn't there, and that in (23b) the reason for asking when George Washington was born. Thus, they are understood as an

epistemic conjunction and a speech-act conjunction, respectively. Notice that *since*-clauses in these sentences are in sentence-initial position with no problems (cf. (22a, b)). If the position of *because*-clauses is pragmatically conditioned, the same condition might as well prevent sentence-initial *since*-clauses in the epistemic and speech-act domains. Unlike *because*, however, *since* may appear in sentence-initial position in these readings. Why should this be so?

Third, while Sweetser acknowledges that *since* already has a strong tendency towards an epistemic or a speech-act reading, she still asserts that it may express content causal relations as well. Why then can *since*, as well as *because*, be used as a content conjunction? Sweetser gives the following paraphrases to sentences (19b, c), where *because* is used as an epistemic- and speech-act-conjunctions, respectively:

(24) a. The speaker's knowledge of John's return causes the conclusion that John loved her.

(cf. John loved her, because he came back. (=19b)))

b. I want to know what you are doing tonight because I want to suggest that we go see this good movie.

(cf. What are you doing tonight, because there's a good movie on. (= (19c)))

(Sweetser (1990:77))

The above paraphrases suggest that even in the epistemic and speech-act domains, certain causal relations hold. This is plausible, because the

conjunction *because* lexically introduces a cause.[11] That is, while in the content domain, e.g. (19a), sentences express literal causal relations, sentences in the other domains, e.g. (19b, c), can be taken as expressing "metaphorical" causal relations (cf. Hirose (1999)). Thus, following Sweetser, we may say that in the epistemic and speech-act domains, *because*-clauses give a "cause" of drawing a certain conclusion and a "cause" of performing a certain speech act, respectively. Such causal relations may be guaranteed by the conjunction *because*, a conjunction of causation. It is then mysterious why *since* can also be used in the three domains. *Since*, unlike *because*, does not lexically express a cause (at least in the etymological sense). I will argue in chapter 4 that *since*-clauses do *not* express a cause of event but provide the premise of an inference, and explain the reason.

2.5 Nakau (1994)

Nakau (1994) argues that the full sentence meaning consists of the modal component and the propositional component (cf. Lyons (1977)). The former is defined as "a mental attitude on the part of the speaker only accessible at the time of utterance (Nakau (1994:42))," and the rest of the elements in a given sentence are propositional elements. His bistructure model of sentence meaning can be schematized as in (25), where D-MOD indicates discourse modality, S-MOD sentence modality, and PROP proposition:

(25) [D-MOD [S-MOD [PROP]]][12]

As in (25), Nakau divides the modal expressions into D-MOD and S-MOD: the former is a mental attitude towards the utterance, and the latter a mental attitude towards the proposition (Nakau (1994:21)).

From this viewpoint of sentence meaning, Nakau analyzes the mechanism of modifications by adverbial subordinate clauses including *because*- and *since*-clauses. Crucially, Nakau (1994:101ff.) argues that *because* can be either a propositional element or a marker of D-MOD, while *since* is always a marker of D-MOD. Conjunctions as propositional elements roughly correspond to Sweetser's content conjunctions, while those as markers of D-MOD roughly correspond to Sweetser's epistemic/speech-act conjunctions (Nakau (1994:453)). Thus, in Nakau's terms, the semantic structures of sentences (19) and (20) may be represented as follows:[13]

(26) a. [PROP John came back *because* he loved her].

b. [S-MOD Φ[PROP John loved her]], [D-MOD *because* [S-MOD Φ [PROP he came back]]].

c. [S-MOD Φ[PROP What are you doing tonight]], [D-MOD *because* [S-MOD Φ [PROP there's a good movie on]]].

(27) a. [D-MOD *Since* [S-MOD Φ [PROP John wasn't there]]], [S-MOD Φ [PROP we decided to leave a note for him]].

b. [D-MOD *Since* [S-MOD Φ [PROP John isn't here]]], [S-MOD Φ [PROP he has (evidently) gone home]].

c. [D-MOD *Since* [S-MOD Φ [PROP you are so smart]]], [S-MOD Φ [PROP when was George Washington born]]?

In the above structures, the subordinate clauses introduced by the italicized conjunctions modify the underlined expressions. In (26a), the *because*-clause is a propositional element that modifies another element in the same propositional component. In (26b, c) and (27a-c), the *because*- and *since*-clauses are D-MOD elements that, by definition, restrict S-MOD elements. In the b-examples, the null elements in the S-MOD slots of the main clause *Φ* could be filled with what Nakau calls modality of truth judgment, e.g. *I think*, *must*, and the like, while in the c-examples and (27a), the slot could be filled with some performative expressions, e.g. *I ask you*, *I say*, and the like. All of these expressions are, of course, markers of S-MOD (cf. Nakau (1994:54ff.)).

Notice that the S-MOD slots in the modal *because*- and *since*-clauses in (26b, c) and (27a-c) are also empty. Nakau argues that some explicit S-MOD expressions may appear in such slots. In contrast, as easily predictable from the structure in (26a), propositional *because*-clauses do not allow S-MOD expressions to appear in it. To see this, consider the following examples that Nakau cites from Ross (1973):

(28) a. Since I {take it/gather} that you and Miss Pecan are acquainted, I will be happy.

b. * Because I {take it/gather} that you and Miss Pecan are acquainted, I will be happy.

(Ross (1973:162))

I take it and *I gather*, used in (28a, b), are S-MOD expressions. According to Nakau, modal *because*-clauses must be in sentence-final position with a comma intonation (cf. Sweetser (1990)). That is, the sentence-initial *because*-clause in (28b) cannot be a D-MOD element, but a propositional element. Hence, the sentence is unacceptable. By contrast, as Nakau observes, such S-MOD expressions may appear in sentence-final, free *because*-clauses, as exemplified in (29):

(29) I will be happy, because I {take it/gather} that you and Miss Pecan are acquainted. (Nakau (1994:107))

This *because*-clause, according to Nakau, is a D-MOD element, and therefore, sentence (29) is no less grammatical than sentence (28a) is.

Another argument for the bistructure model that Nakau presents is concerned with contrasts in clefting. Consider the following examples:

(30) a. It's because he's sick that he's not coming to class.
b. * It's because his wife told me that he's not coming to class.
c. * It was since they wanted to save lives that they retreated.
(Nakau (1994:162))

The *because*-clause in (30a) is a propositional element, while that in (30b)

and the *since*-clause in (30c) are modal elements. The above contrast ((30a) vs. (30b, c)) shows that subordinate clauses introduced by a modal subordinator cannot be clefted. According to Nakau, it is only propositional elements that may be focalized. Thus, sentences (30b, c) are not acceptable, whereas sentence (30a) is.

Nakau's observations above are thoughtful and indeed are of great help in developing my proposals in later chapters, but it is unclear why *because* can be either a propositional element, as in (26a), or a marker of D-MOD, as in (26b, c), while *since* is always a marker of D-MOD, as in (27a-c). This is, in essence, the same problem as the one with Sweetser's (1990) analysis. That is, despite Sweetser's argument observed in the previous subsection that *since* already has a strong tendency towards an epistemic or a speech-act reading, she does not discuss the reason. Similarly, the reason needs to be explained for Nakau's observation that *because* is either a propositional element or a marker of D-MOD, while *since* is always a marker of D-MOD.

There is another problem with Nakau's argument. As seen above, Nakau proposes the generalization that only propositional elements can be focalized, based on which he explains the reason for modal *because*- and *since*-clauses not being clefted. This generalization, however, is not always true. Consider the following attested sentences:

(31) a. Normally they were military officers, *partly because* the army provided a supply of trained talent,... and *mainly because* the organization of defence was the crucial part

of their work. (BNC [italics are mine])

b. Wearing a different one every time she went out would be only natural, *particularly since* a sari does not have to be washed as frequently as a dress…

(BNC [italics are mine])

In (31a), the *because*-clauses provide the premise from which to draw the conclusion that they were military officers. In Nakau's terms, they are modal *because*-clauses. Nevertheless, they are focalized by the focusing adverbs. Likewise, the *since*-clause in (31b) is focalized by the focusing adverb *particularly*. Nakau is right, of course, in saying that these subordinate clauses may not be clefted. However, the grammaticality of the focalized subordinate clauses in (31a, b) is left unexplained. Thus, simply saying that propositional elements can be focalized is inadequate. As I will argue in later chapters, focalizations by clefting and by using focusing adverbs are allowed or not allowed for different reasons. I will argue about the clefting of *because*- and *since*-clauses in chapter 4; their focalizations by focusing adverbs in chapter 5.

2.6 Hirose (1998, 1999)[14]

Hirose (1999), following Hirose (1991), fully discusses semantic peculiarities of the subject *because*-clause construction as exemplified by a sentence like (32) and describes in terms of inheritance links (see section 3.3.2; cf. Goldberg (1995)) how it is related with other related constructions:

(32) Just because I'm a linguist doesn't mean that I speak many languages. (Hirose (1999:596))

In the course of his analysis, Hirose suggests the existence of what he calls the causal *because*-clause construction and the inferential *because*-clause construction.

Hirose's observation of the causal *because*-clause construction and the inferential *because*-clause construction is summarized as follows. The form of the causal *because*-clause construction is [P(,) *because* Q], and its meaning is "the situation Q causes the situation P as a result." When the cause situation is contextually presupposed, the *because*-clause may precede the main clause, i.e., the form [*Because* P, Q] is possible. As for the inferential *because*-clause construction, the form [Q, *because* P] corresponds to the function of presenting the premise P from which to draw the conclusion Q. Since the situation expressed in the *because*-clause is newly presented by uttering the sentence, the *because*-clause cannot be contextually presupposed in the inferential *because*-clause construction. Hence, sentence-initial *because*-clauses are incompatible with the (pragmatic) function of the construction.

However, Hirose does not investigate these constructions in detail, since his main interests are in discussing semantic/pragmatic peculiarities of the subject *because*-clause construction, e.g. (32), and describing how it is related to the causal *because*-clause construction and the inferential *because*-clause construction. In chapter 4, I will closely examine Hirose's

observations of the causal and inferential *because*-clause constructions, and propose an analysis based on it.

2.7 Summary

In sections 2.2 through 2.5, I have overviewed (i) Talmy's (1978b) Gestalt psychological view of subordination in general (section 2.1), (ii) Chafe's (1984) relational analysis between the clause ordering and the boundedness (section 2.3), (iii) Sweetser's (1990) pragmatic ambiguity analysis in *because*- and *since*-clauses (section 2.4), and (iv) Nakau's (1994) semantic analysis of *because* and *since* as either a propositional element or a marker of modality (section 2.5). As I have pointed out in each subsection, all of these approaches correctly capture and account for some aspects of the phenomenon in question, but they all have some inadequacies.

An analysis to be proposed should compensate for these inadequacies. It is a construction grammar approach, I believe, that satisfies this requirement, because construction grammar approaches make it possible to capture the syntactic, semantic, and pragmatic aspects of the expression in question simultaneously (e.g. Lakoff (1987), Fillmore et al. (1988), Goldberg (1995, 2005), Michaelis and Lambrecht (1996), Hirose (1998, 1999), Kay and Fillmore (1999), Croft (2001), Östman and Fried (2005), and many others). To this end, in section 2.6, I have referred to Hirose's (1999) construction grammar analysis of the subject *because*-clause construction, in which he points out the existence of the causal and inferential *because*-clause constructions.

Given the existence of the causal *because*-clause construction and the inferential *because*-clause construction, in chapter 4, I will analyze them in more detail, and show that the construction grammar approach provides an integrated account of conjunctions of reason. Before that, in chapter 3, I will overview what construction grammar approaches are all about.

Notes to Chapter 2

* Parts of the arguments in this chapter have appeared in Kanetani (2005c, 2006c). For their useful comments, thanks are due to Yukio Hirose, Naoaki Wada, and reviewers for *Eigo Goho Bunpo Kenkyu* 12 and *Tsukuba English Studies* 25.

1. It is well known that *because*-clauses have two (or more) readings, i.e. casual and inferential readings (Jespersen (1949), Rutherford (1970), Sweetser (1990), Nakau (1994), Hirose (1998, 1999), among many others; see sections 2.4-2.6), and that their behaviors vary with the readings (see chapter 4). The conjunction *since* has been argued in relation with its temporal meaning from various perspectives (e.g. Traugott and König (1991), Wickboldt (1998)), but as for its meaning of reason, it does not show such various behaviors as *because.* For these reasons, *because* may have been more fascinating to linguists.

It should be noted here that the reason why Hirose does not refer to *since* in his articles is that it is beyond the scope of his research. In his earlier work (Hirose (1991)), some remarks have been made about *since*, but it is not directly relevant to the arguments in the present chapter.

2. The judgment is Ohori's (1992:82) (cf. Croft (2001:Ch.9)).

3. Although Talmy puts no symbol such as "?" or "*" in front of sentence (4b), he observes that the sentence *does* sound "comical (p.633)."

4. The bound-free distinction here is simply a stylistic one. That is, if a comma intonation is not present between the main clause and the subordinate clause, the subordinate clause is bound; with a comma intonation between them, on the other hand, the subordinate clause is free.

5. As Chafe notes, the term "intonation units" corresponds to his earlier terms "idea units" (cf. Chafe (1982)).

6. Notice that this observation seems opposite to Talmy's (1978b)

(see section 2.2). Talmy argues that subordinate clauses are construed as Ground objects, which are typically presupposed. As I have argued in section 2.2, this is not always true, however. Then, one may argue that Chafe's observation is superior to Talmy's, but crucially Chafe does not give any positive evidence for main clauses conveying familiar information and subordinate clauses unfamiliar. Thus, we cannot immediately decide on which clause conveys familiar or given information and which conveys unfamiliar or new information.

7. This is not true for a temporal use of *since*. Temporal *since*-clauses, when in sentence-final position, do not require a comma intonation, as in (i):

(i) So much has changed in the sport since I was a teenager.
(COBUILD[4], s.v. *since*)

8. It should be noted, however, that the notions of the clause ordering and the clause boundedness that Chafe proposes play important roles in constructing my proposals later on. Thus, I do not argue against Chafe's observation. Rather, his observation is fundamental for my analysis to be proposed in chapter 4, which will also account for why a comma intonation is required between a *since*-clause and its main clause.

9. The word "situation" is used as a cover term for both event and state of affairs (cf. Lyons (1977:483)).

10. For reasons to be discussed in chapter 4, I will eliminate the distinction between the epistemic and speech-act domains and will treat them as a natural class. Thus, if, as Kanbayashi observes, *for* has such a strong tendency towards an epistemic reading, it then easily gets a speech-act reading, as well.

11. It is worth noting that the conjunction *because* was originally the prepositional phrase that introduces a cause; the prepositional phrase has

been grammaticalized to the conjunction: *by cause>because*.

12. In Nakau's terms, PROP does not have a monolayer structure, as in (25), but has a quaternary layer structure. Here, I simply represent PROP to cover all the layers of the propositional elements because the detailed internal structure of PROP is not necessary for the present discussion. For the detailed internal structure of PROP, see Nakau (1994:15).

13. Sentences with *for*-clauses, e.g. (21a-c), cannot be described in the same way as (26) and (27), because, as I will argue in chapter 4, *for* is not a subordinator but a coordinator (cf. Quirk et al. (1985)). This, however, does not mean that Nakau's bistructure model of sentence meaning cannot describe the structure of the meaning of sentences with *for*. It should be noted that coordinated conjuncts should be parallel both in their structure and in their meaning (e.g. Quirk et al. (1985:947)). Observe the following example:

(i) * a student [$_{\text{ARGUMENT PP}}$ of physics] and [$_{\text{ADJUNCT PP}}$ with long hair] (Radford (1981:99))

In (i), the coordinator *and* connects two prepositional phrases, i.e. structurally parallel elements, but functionally, they are not parallel. One serves as an argument, and the other as an adjunct to the head NP, *a student*. Hence, the whole NP is not grammatical.

As a coordinator, *for* should follow this general principle. If, as Kanbayashi (1989) notes, *for* has only an inferential use, it must connect S-MOD expressions, and the meaning of sentence (iia), for instance, may be represented as (iib):

(ii) a. John must have loved her, for he came back. (= (21b))

b. [$_{\text{S-MOD}}$ must [$_{\text{PROP}}$ John have loved her]], for

$[_{S\text{-}MOD}\Phi[_{PROP}$ he came back]].

In (iib), *for* connects two S-MOD elements. What is important for now is that Nakau's bistructure model can represent sentence meanings of coordinate structures as well. I will argue about *for* in more detail in chapter 4.

14. Hirose (1999) is an extended version of Hirose (1998), which means that the discussion of the former subsumes that of the latter. Thus, hereafter, I refer only to Hirose (1999).

Chapter 3
Construction Grammar Approaches to Human Language

3.1 Construction Grammars at Glance

As I have mentioned in the preceding chapters, I will propose an integrated account of conjunctions of reason within the framework of construction grammar (cf. Hirose (1998, 1999)). In the present chapter, I overview construction grammar approaches to human language.

The word "constructions (which was derived from Latin *constructio*)" has been used as a grammatical term for more than two thousand years (Goldberg and Casenhiser (2006)), although it is over the last two decades that the new theoretical approaches to language, i.e. constructionist approaches, have been developed (e.g. Lakoff (1987), Fillmore et al. (1988), Goldberg (1995, 2005), Michaelis and Lambrecht (1996), Hirose (1998, 1999), Kay and Fillmore (1999), Croft (2001), and many others).[1]

As the plural form of the chapter title "construction grammar approache*s*" indicates, various analyses have been proposed under the name of construction grammar. However, they all conform to the basic principles listed in (1a-c) below (Croft and Cruse (2004:265)), and generally assume that in order for a linguistic pattern to be recognized as a construction, some aspect of its form or function is not strictly predictable from its component parts or from other constructions which are recognized to exist.

(1) a. The independent existence of constructions as symbolic units

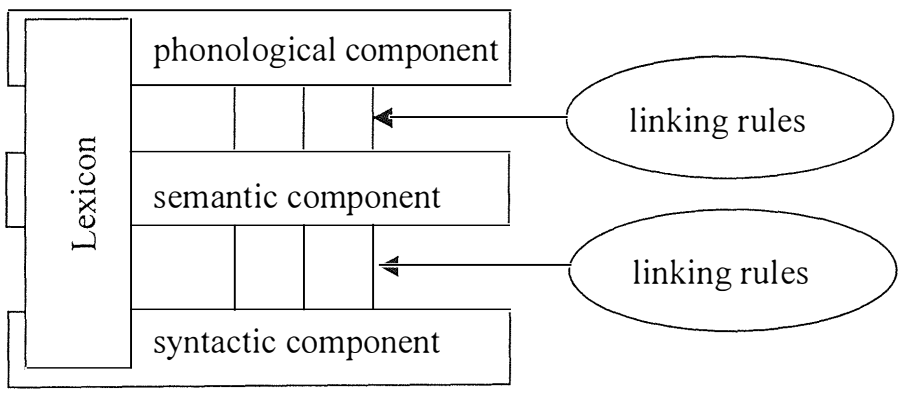
b. The uniform representation of grammatical structures

c. The taxonomic organization of constructions in a grammar.

As mentioned in (1a, b), constructionist approaches, as opposed to componential syntactic approaches (e.g. Culicover and Jackendoff (2005)), see particular correspondences of the form and meaning, i.e. constructions, as symbolic units and treat them as central in describing grammar of human language.

In componential syntactic approaches, grammatical properties of different types are placed in different components such as syntactic, semantic, and phonological components, and they are linked by certain linking rules, except for the lexicon, in which these grammatical properties are integrated. This can be represented as follows:

(2)

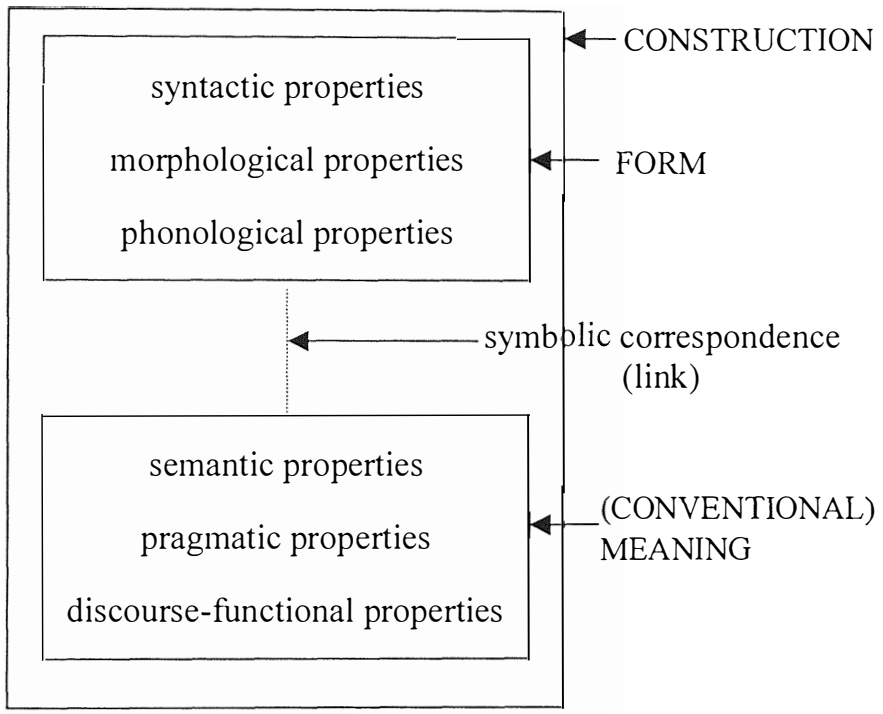


(Croft and Cruse (2004:227))

By contrast, in constructionist approaches, syntactic and semantic

properties are not placed in separate components. Rather, they are paired together and their pairings are regarded as constructions. Thus, the symbolic structure of a construction may be represented as follows:

(3)



(Croft and Cruse (2004:258))

That is, constructionist approaches make it possible to account for the formal (i.e. syntactic, morphological, and phonological) and functional (i.e. semantic, pragmatic, and discourse-functional) aspects of given expressions in an integrated way. This is nicely reflected in the following quote:

(4) To adopt a constructional approach is to undertake a commitment in principle to account for the entirety of each language. (Kay and Fillmore (1999:1))

In such a view, constructions are considered to be all levels of grammatical units, including morphemes (e.g. (5a)), words (e.g. (5b)), idioms (e.g. (5c)), partially lexically filled and fully general phrasal patterns (e.g. (5d)) (Goldberg (2006:5)). That is, unlike componential syntactic approaches, which place a special status on lexicon, as in (2), in constructionist approaches, lexicon, e.g. (5b), and syntactic constructions, e.g. (5c, d), are not discrete categories, but there is a continuum between them.

(5) a. *pre-*, *-ing*

b. *avocado*, *anaconda*, *and*

c. *going great guns*, *give the Devil his due*

d. *The* X-*er the* Y-*er* (e.g. *the more you think about it, the less you understand*)

(Goldberg (2006:5))

In (5d), for example, the conditional meaning that the syntactic string *the* X-*er*, *the* Y-*er* expresses is not predictable from any elements in the construction or their combinations. Likewise, in (5b), the meaning of *avocado* is not predictable from its component parts. Rather, *avocado* itself represents a symbolic unit of form and meaning. Hence, a lexical element like *avocado* also counts as a construction.

The taxonomic organization in (1c) is postulated so that information of constructions can be stored efficiently and made easily modifiable (Goldberg (1995:72)). Haiman (1985) argues that making generalizations is a necessary function of language, because human languages recognize a

limited inventory of phonemes and sememes (i.e. concepts), rather than recognize infinity of sounds and of concepts. The same holds for the knowledge of constructions, given that constructions and lexicon have the same status in construction grammar. That is, constructions are not merely unstructured list but they form a structured inventory. In the following subsections, I will investigate three types of constructionist approaches, each of which differently defines the notion of taxonomic organization of constructions. The constructional networks that Goldberg (1995) proposes are particularly important for the present thesis (for details, see section 3.3.2).

In addition to (1a-c), Östman and Fried (2005:1) point out the following requirements as original tenets of Construction Grammar (e.g. Fillmore (1988) Fillmore et al. (1988), Kay and Fillmore (1999), among many others):[2, 3]

(6) a. Construction Grammar should be consistent with what we know about cognition and social interaction.

b. Construction Grammar should be a grammar with universal impact.

The issue noted in (6a) is related to the history of Construction Grammar, which has been developed from Frame Semantics theories (e.g. Fillmore (1975, 1982, 1985), Fillmore and Atokins (1992)). In this connection, it is worthwhile briefly observing what Frame Semantics theories are like. Here, I simply describe some basic concepts of the theories (for further arguments of the relation between Frame Semantics and construction grammar, see

Fillmore (1982) and Goldberg (1995), for example). Fillmore and Atokins (1992:76f.) describe a word's meaning as being "understood only with reference to a structured background of experience, beliefs, or practices, constituting a kind of conceptual prerequisite for understanding the meaning." That is, meanings are defined relative to some particular background frame, not according to simple truth-conditional checklists.

Take the commercial transaction frame as an example (Fillmore and Atokins (1992:78f.)). A commercial transaction creates a frame, in which one person acquires control or possession of something from a second person, by agreement, as a result of surrendering to that person a sum of money. The constructed frame then requires categories for describing the lexical meanings linked to it, such as *Buyer*, *Seller*, *Goods*, and *Money*. Thus, it is not until one understands this frame and those props and roles in the scene (i.e. the italicized items above) that one can "understand" the meanings of verbs of commercial transaction, e.g. *buy*, *sell*, *charge*, *spend*, *pay*, *cost*, etc.

In short, understanding word meanings requires understanding the frame in which the word is used. Such a view of meaning is reflected in Construction Grammar (or construction grammar), and therefore it is considered that the grammar should be consistent with what we know about cognition and social interaction.

As for the issue noted in (6b) above, I just note the importance of the matter without going into any further details at present. In order to satisfy this requirement, I shall present a contrastive analysis of constructions of causation and reasoning in English and Japanese in chapter 7.

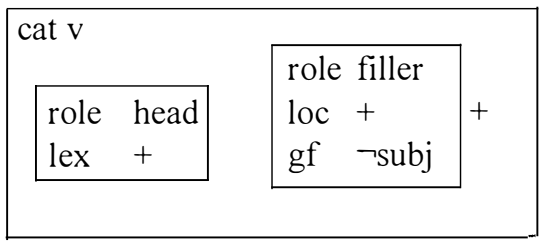
The rest of this chapter introduces Construction Grammar as originally

developed by Fillmore and Kay (section 3.2), Goldberg's construction grammar (section 3.3), and Croft's Radical Construction Grammar (section 3.4), making clear their similarities and differences. In particular, I focus on (i) how each approach treats relations between lexical elements and the constructions in which they appear, and (ii) how each approach captures relations between constructions. While each approach captures the relations between constructions in various ways, the notion of inheritance links that Goldberg (1995) proposes plays a particularly important role in the discussions in chapters 4 and 6 (cf. Hirose (1998, 1999), Kanetani (2005b, c, 2006a, b, c)). This is closely investigated in section 3.3.2.

3.2 Construction Grammar as Developed by Fillmore and Kay

Construction Grammar, a variant of construction grammars, is a theory developed mainly by Fillmore and Kay (see fn.2). In this model, all grammatical properties, both formal and functional, are uniformly represented as features with value. Hence, the uniform representation of grammatical structures. A simple example is given in (7):

(7)



(Kay and Fillmore (1999:8))

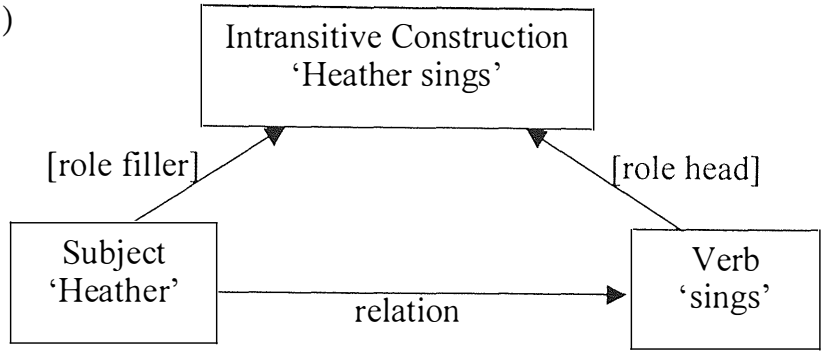
This structure represents the Verb Phrase (= VP) construction and is read as

follows. The two inner boxes specify the features of the verb and its complement. The feature-value pairs in the left box indicate that the first constituent of the VP construction is its head ([role head]), and must be lexical ([lex +]), i.e., the first constituent of the VP construction is the lexical head verb (the category is designated by the feature-value pair indicated in the top line inside the box [cat(egory) v]). The feature-value pairs in the right box indicate that the second constituent of the VP construction functions as its filler ([role filler]), that it is the sister to the preceding lexical head ([loc(ality) +]),” and that its g(rammatical) f(unction) is not subject ([gf ¬subj]).” The + sign following the box means that there may be zero, one or more complements. Thus, in Construction Grammar, constructions are described in terms of combinations of atomic units such as [cat v], [gf ¬subj], and the like (cf. Michaelis and Lambrecht (1996), Kay and Fillmore (1999), Kay (2002), Michaelis (2004)). For Fillmore and Kay, Construction Grammar should be a generative grammar and formalizable (cf. Östman and Fried (2005:1)). Thus, they focus on formalizing constructions, using feature-bundles such as the one in (7).

3.2.1 Relations between Lexical Elements and the Construction

Construction Grammar distinguishes part-whole relations, i.e. relations between a construction as a whole and the elements that appear in it, and part-part relations, i.e. relations between elements that appear in an identical construction (cf. Kay and Fillmore (1999)). This is illustrated in (8):

(8)



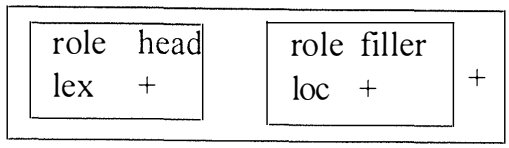
(adapted from Croft and Cruse (2004:268))

In the intransitive construction *Heather sings*, the verb *sings* bears the head role of the construction; *Heather* bears the grammatical role of the subject (filler of the construction), i.e., *Heather* is the subject defined by the whole-part relation. At the same time, it describes a syntactic relation with another element of the same construction, i.e., *Heather* is the subject defined by the part-part relation. Therefore, one may say that *Heather* is either the subject of the intransitive sentence or the subject of the verb *sings*. That is, in Construction Grammar, lexical elements are seen as bearing not only part-part relations but also part-whole relations.

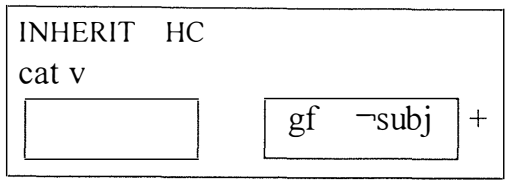
3.2.2 Relations between Constructions

Let us now turn to the question how constructions are organized in Construction Grammar. It uses taxonomic relations between constructions to describe the relations between constructions. Take the VP construction in (7) as an example. It is an instance of the more schematic construction, the Head-Complement (HC) construction (i.e. (9)). Since all the information that appears in (9) also appears in (8), the VP construction may be represented as (10):

(9)



(10)



(Kay and Fillmore (1999:7f.))

That is, the VP construction inherits all the information that the HC construction has (indicated as INHERIT HC), and the former, being more specific, has the additional information, i.e. [cat v], [gf ¬subj], and +. Thus, in Construction Grammar, inherited information is not represented in dominated constructions, e.g. the VP construction; it is stored only in dominating constructions, e.g. the HC construction.

Needless to say, the VP construction is still a highly schematic construction, and it instantiates various levels of constructions, as illustrated below:

(11) [VERBPHRASE]

[VERB OBJ]

[*kick* OBJ]

[*kick* [*the habit*]]

(Croft and Cruse (2004:263))

In the idiomatic verb phrase *kick the habit*, the noun phrase *the habit* bears the object grammatical function to the verb *kick*. The feature-value set [gf obj] is represented in the possible highest level, i.e. the [VERB OBJ] construction in (11). As seen above, this property, even without being represented, is inherited by the constructions at the lower levels, i.e. the [*kick* OBJ] and [*kick* [*the habit*]] constructions. Thus, shared properties are represented in the construction at the possible highest level, making it possible for information to be represented nonredundantly at the lower levels (Kay and Fillmore (1999), cf. Goldberg (1995)). In this way, constructions are stored in taxonomic hierarchies from highly schematic ones, e.g. the HC construction in (9), to specific instances, e.g. the [*kick* [*the habit*]] construction in (11). The less schematic the construction is, the more information it requires for the representation. In this way, adding information to schematic constructions, Construction Grammar "generates" less schematic constructions from more schematic ones. This is why Construction Grammar is regarded as a generative grammar.

As seen in this subsection, Construction Grammar focuses on formalizing constructions using the feature-bundles. Note, however, that my analysis to be proposed in chapter 4 is not concerned with such formalizations. In this sense, my analysis is rather similar to Goldberg's (1995) construction grammar and Croft's (2001) Radical Construction Grammar, which will be investigated in the following subsections.

3.3 Goldberg's Construction Grammar

3.3.1 Relations between Lexical Elements and the Construction

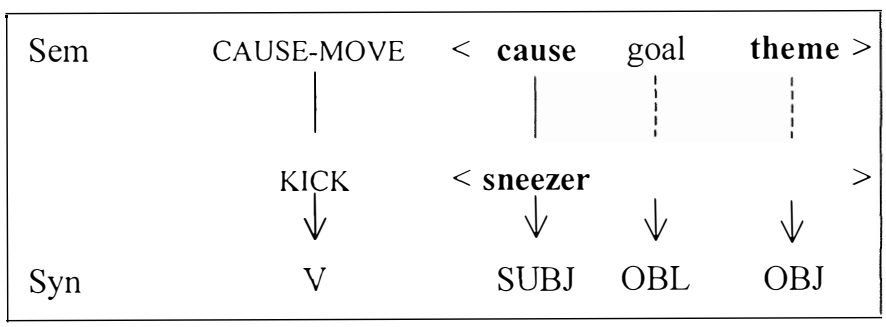
Unlike Construction Grammar as observed in the previous subsection, Goldberg does not put so much emphasis on relations between lexical elements and a construction as a whole. She puts more focus on the constructional networks, which I shall take a close look at in section 3.3.2. It does not mean, however, that Goldberg ignores relations between lexical elements and the construction that they appear in. In her study of argument structure constructions, she captures the relations by considering how the argument roles, i.e. roles of the construction, are associated with participant roles, i.e. roles of the verb.

In order to see how the associations are described, let us take the following caused-motion construction with the verb *sneeze* as an example:

(12) He sneezed the napkin off the table. (Goldberg (1995:55))

According to Goldberg's (1995) notation, the association of the argument and participant roles for sentence (12) can be represented as follows:

(13)



(Goldberg (1995:54))

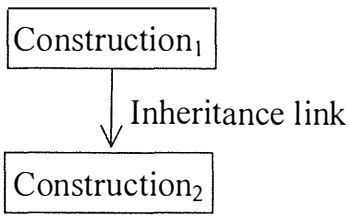
The semantics directly associated with the caused-motion construction is CAUSE-MOVE <**cause** goal **theme**>. That is, the "cause" argument causes the "theme" argument to move to the "goal" argument. The roles in boldface are profiled (for details about "profiling," see Langacker (1987) and Goldberg (1995:44ff.)): The goal argument is not profiled, and hence it is represented as an oblique. The solid lines indicate the argument roles obligatorily fused with the participant roles; the dashed lines, on the other hand, indicate argument roles that are not obligatorily fused with participant roles. The only participant of the verb *sneeze* is the sneezer, and the arguments of the caused-motion construction are cause, goal, and theme. As shown in (13), the cause role is fused with the sneezer role, while the goal and theme roles of the construction cannot be associated with any participant role of the verb. That is, a mismatch occurs between the participant roles and the argument roles. This mismatch is not a problem, however. The theme and goal roles are directly contributed by the construction. In other words, a construction may introduce arguments that are not necessarily fused with the participant roles of the verb in it.

Thus, Goldberg describes constructions as monostratal syntactic structures associated with simple semantic representations, as in (13). What is important in her analysis is to describe how the argument roles are associated with participant roles. More important is to represent how existing constructions are related to each other. As I have stated in section 3.1, this plays a particularly important role in the present thesis. In the following subsection, I observe in detail how Goldberg captures relations between constructions.

3.3.2 Relations between Constructions

In order to explain relations among constructions, Goldberg (1995) proposes the notion of "inheritance link." She notes, "by postulating abstraction hierarchies in which lower levels inherit information from higher levels, information is stored effectively and made easily modifiable (p.72)." This can be illustrated as follows:

(14)



The arrow indicates an inheritance link, through which $construction_2$ inherits its information from $construction_1$. Note that inheritance links are asymmetric, and as noted above, the direction is determined by abstraction hierarchies, which require $construction_1$ to be more abstract or general than $construction_2$. Note also that unlike Construction Grammar, Goldberg's model allows the same information to be stored redundantly both in $construction_1$ and $construction_2$, taking them as static objects, not on-line products. She says, "instead of stating the specifications twice, aspects of the patterns that are inherited are shared by two overlapping patterns (p.74)." This follows from Goldberg's construction grammar adopting the usage-based model, which considers the frequency of occurrence of the grammatical forms and structures, and meaning to affect grammatical representation (Croft and Cruse (2004:292)).

In order for an inheritance link to be posited between $construction_1$ and

construction$_2$, the former needs to "motivate" the latter. More accurately, if construction$_2$ is related to construction$_1$ syntactically, the system of construction$_2$ is motivated to the degree that it is related to construction$_1$ semantically. Such motivation is maximized (*The Principle of Maximized Motivation*: Goldberg (1995:67); cf. Haiman (1985)). Based on how the more general construction is motivated, Goldberg distinguishes four major types of inheritance links, of which the following three are relevant for the present thesis: Instance links (I-links, for short), metaphorical extension links (M-links, for short), and subpart links (S-links, for short). They are defined as follows (Goldberg (1995:78ff.)):

(15) a. An I-link is posited when a particular construction is a special case of another construction.

b. An M-link is posited when two constructions are found to be related by a metaphorical mapping.

c. An S-link is posited when one construction is a proper subpart of another construction and exists independently.

Hirose (1999) shows how these inheritance links work, providing some practical examples. First, I-links are helpful to capture the common feature of the following constructions, for example:

(16) a. V-Comp (e.g. *kick the ball*)

b. P-Comp (e.g. *on the table*)

c. N-Comp (e.g. *top of the mountain*)

d. A-Comp (e.g. *fond of dogs*)

The constructions listed in (16a-d) are instances of the more general construction, the HC construction, in which it is specified that a lexical head must precede its complement (cf. section 3.2). In other words, each construction (16a-d) is an instance of the HC construction, and hence I-links are posited between the HC construction and each construction listed in (16a-d). Note that I-links are close (or equivalent) to the taxonomic hierarchies used in the Construction Grammar.

Second, as an example of M-links, Hirose (1999) considers the following ditransitive constructions (cf. Goldberg (1995)):

(17) a. Bob gave Jack a book.

b. Bob told Joe a story.

A typical ditransitive construction like (17a) expresses transfer of an object. Sentence (17b) does not express such transfer, but expresses a communication of some information between the speaker Bob and the hearer Joe. Communication of some information is metaphorically understood as transfer via the COMMUNICATION AS TRANSFER metaphor. That is, in (17a), *a book* is transferred from Bob to Jack; in (17b), *information* (of the story) is transferred from Bob to Joe. Hence, sentence (17b) is related to sentence (17a) via M-link.

Thirdly, Hirose (1999) takes the relation between the nominal extraposition construction (e.g. (18a)) and the bare-NP exclamative

construction (e.g. (18b)) as an example of an S-link being posited (cf. Michaelis and Lambrecht (1996)).

(18) a. It's amazing the amount I spent.

b. The amount I spent!

Bare-NP construction (18b) is subsumed under nominal extraposition construction (18a). Therefore, an S-link is posited between them. The former inherits information from the latter, resulting in the exclamative sense of sentence (18b).

As noted above, the taxonomic hierarchies in the sense of Construction Grammar correspond to Goldberg's I-links. In addition to such taxonomic hierarchies, Goldberg proposes other mechanisms that can capture relations among constructions, i.e. M-links and S-links. Thus, inheritance links make it possible to describe richer relations between constructions.[4]

Finally, it is worthwhile considering the possibility of multiple inheritance links. Goldberg (1995:97f.) argues that multiple inheritance links are allowed, in which a construction inherits information from two (or more) independently existing constructions. She cites Bolinger's (1971) observation of some resultative constructions showing similar behaviors to the verb-particle construction. Observe the following examples:

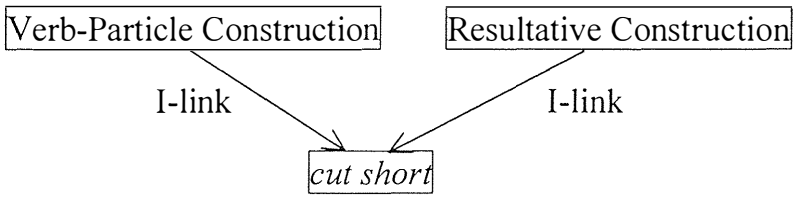
(19) a. He cut short the speech.

b. He cut the speech short.

(Goldberg (1995:97))

In sentences (19a, b), the resultative phrase *short* can occur either before or after the postverbal NP *the speech*, as in the verb-particle construction (e.g. *He put the light on*/*He put on the light*); i.e., sentences (19a, b) can be instances of the resultative construction, and at the same time, can be instances of the verb-particle construction. Goldberg argues for multiple inheritance links to account for the bilateral characteristics of sentences like (19a, b). That is, these sentences are understood to inherit information both from the verb-particle construction and the resultative construction, as shown in (20):

(20)



(adapted from Goldberg (1995:98))

Thus, allowing multiple inheritance makes it possible to account for instances which can be simultaneously motivated by two distinct constructions.

3.4 Croft's Radical Construction Grammar

3.4.1 Relations between Lexical Elements and the Construction

Radical Construction Grammar is developed by William Croft (e.g. Croft (2001)) in order to account for typological variation in the construction grammar framework, i.e. the cross linguistic generalization by drawing not on language universals, but on general cognitive and pragmatic factors. In

this subsection, I observe relations between lexical elements and the constructions in which they appear, with the consideration of what makes this model "radical."

Radical Construction Grammar is a nonreductionist model (Croft and Cruse (2004:283)). Reductionist models, such as Construction Grammar, consider that a construction is made up of parts that are defined independently of the construction. For example, verbs are considered to belong to the same part of speech no matter what construction they appear in. Consider the following examples:

(21) a. Judith danced.

b. Judith danced a kopanica.

(Croft and Cruse (2004:284))

As shown in (21a, b), the verb *dance* may occur either in the intransitive construction or in the transitive construction. Reductinst models thus take the classical categorization of parts of speech as primitive.

However, Croft points out a shortcoming in the reductinist view of parts of speech as primitive elements. As shown in (22a, b), verbs like *sleep* can occur in the intransitive construction, but not in the transitive construction, and as in (23a, b), the verb *find* can occur only in the transitive construction.

(22) a. Judith slept.

b. * Judith slept bed.

(23) a. * Judith found.

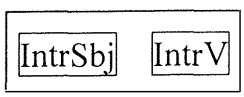
b. Judith found a 20 dollar bill.

(Croft and Cruse (2004:284))

That is, some verbs, e.g. *dance*, can occur either in the transitive construction or in the intransitive construction, some, e.g. *sleep*, only in the intransitive construction, and others, e.g. *find*, only in the transitive construction. Then, Croft's question is as follows: If verbs are primitives that cannot be analyzed further, how can we account for the different distributions of words of the same category?

Radical Construction Grammar considers constructions as the basic units of syntactic representation, and categories as being derived from construction(s) in which they appear. Thus, in contrast to reductionist models, it is constructions, and not lexicon, that are primitive, and in this sense, the model is called "Radical" Construction Grammar (cf. Iwata (2006)). To see how it works, let us take the intransitive construction and the transitive construction for example. Since it is constructions, not their constituents, that are considered to be the basic units of the grammatical representation, Radical Construction Grammar labels the subject used in the intransitive construction "intransitive subject," and the one used in the transitive construction "transitive subject," and so forth. Thus, the intransitive and transitive constructions are represented as follows:

(24) a. Intransitive Construction



b. Transitive Construction

(adapted from Croft (2001:54))

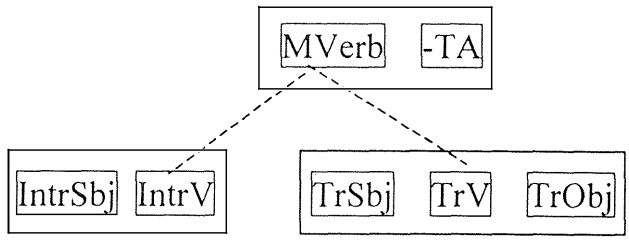
In sum, grammatical categories can be defined construction-specifically, as the class of fillers of a particular role in a single construction (Croft (2001:46)).

3.4.2 Relations between Constructions

Let us now turn to the question how Radical Construction Grammar represents relations between constructions. As seen in the previous subsection, the categories of constituents are defined by what construction they appear in. Croft (2001:46) argues that grammatical categories can be defined not only construction-specifically, as seen in the previous subsection, but also cross-constructionally, i.e. as the class of fillers that has an identical distribution across the relevant roles for all constructions.

For example, the category Verb may be established as a superordinate category to InrV and TrV in (24a, b) above. It is the cross-constructional generalizations that motivate the category Verb. That is, the abstraction from the transitive construction and the intransitive construction generalizes the category Verb, which Croft calls MVerb (M for morphological). However, there needs to be some linguistic motivation for the category MVerb. Croft argues that the ability of its members to be inflected with the tense and agreement suffixes (abbreviated as -TA) motivates the existence of the category MVerb. These facts may be illustrated as follows:

(25)



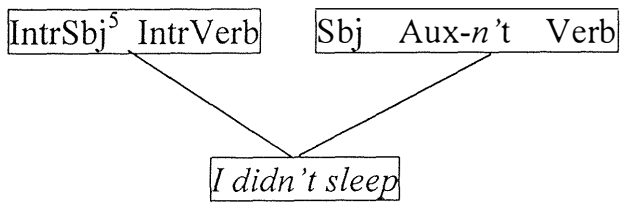
(adapted from Croft (2001:56))

The dashed-lines indicate the meronomic relations between the MVerb, on one hand, and the IntrV and TrV, on the other. Again, it is important to note that the category MVerb is not primitive but derived as a result of the abstraction from parts of the lower-ranked constructions.

Croft also postulates multiple inheritance. Importantly, any construction is a partial specification of the grammatical structure. For example, the intransitive construction specifies nothing but the structure associated with the intransitive verb and its subject, as in (24a) above. A sentence like (26a) inherits information not only from the intransitive construction but also from the negative construction, as represented in (26b):

(26) a. I didn't sleep

b.



(Croft (2001:26))

The negative construction in (26b) only specifies the structure associated with the subject, auxiliary, and verb; it does not specify anything about transitivity of the verb. Hence, the transitivity of the subject and verb in the

negative construction is underspecified, and there is no representation of the verb's object. Likewise, the intransitive construction only specifies the intransitive verb following its subject; it does not convey any information about, say, negation, tense, etc. Using such a multiple inheritance explains the fact that the structure of any specific utterance is specified by a number of distinct schematic constructions.

Thus, Radical Construction Grammar represents relations between constructions in a similar way to Construction Grammar, using taxonomic hierarchies. They are differentiated, however, in the following respect. Construction Grammar, in which constructions are represented by sets of syntactic features and values (section 3.2.1), uses classical categorizations for the representations of relations between constructions, while Radical Construction Grammar does not, because each part of a construction is derived from the construction that it is used in. In this connection, Radical Construction Grammar is similar to Goldberg's theory in that it allows for full-entry representations of each construction (Goldberg (1995:74)), i.e., the same information may be stored redundantly both in the governing and governed constructions.

3.5 Summary

I have observed in this chapter that there are several types of construction grammar approaches, and that they are differentiated in the way of formalization of constructions and the way of representation of the relations between constructions. What we have seen so far may be summarized as follows:

(27)

	Reductionist	Inter-constructional relations
Fillmore-Kay	yes	taxonomic hierarchies
Goldberg	N/A[6]	inheritance links[7]
Croft	no	taxonomic hierarchies

First, in section 3.1, I have observed Construction Grammar as originally developed by Fillmore and Kay. Construction Grammar uses sets of syntactic features and values for the representation of each construction and sees constructions as listed in the taxonomic hierarchies. Next, as observed in section 3.2, Goldberg's (1995) model does not focus much on the status of the syntactic elements and relations with the construction that they are used in. What she is interested in is matching argument roles with participant roles, and much more interesting to her is to establish constructional network by using inheritance links. Lastly, Croft's (2001) Radical Construction Grammar takes a thoroughly nonreductionist approach, according to which the syntactic elements are defined by the construction that they are used in. Relations between constructions are captured by the taxonomic hierarchies, as in Construction Grammar. However, it is differentiated from Construction Grammar in that it allows for redundant (or full-entry) representations of constructions, as Goldberg's model.

No matter how different the three approaches are, they all conform to the essential principles of construction grammar listed in (1a-c), repeated here as (28a-c):

(28) a. The independent existence of constructions as symbolic

units

b. The uniform representation of grammatical structures

c. The taxonomic organization of constructions in a grammar

(= (1))

As taking a constructional approach, I will also accept these principles in making my proposals.

Although I have compared the three types of construction grammar approaches, I do not mean to make my proposals only within any specific theory of the three. Rather, my proposals are similar to Goldberg's model in some respects, and Croft's Radical Construction Grammar in others. As noted in section 3.3.2, I am not concerned with formalizing constructions by using sets of syntactic features and values. In this sense, the analysis to be proposed may not be similar to Construction Grammar, but still being a constructionist approach, the analysis will be proposed in the same spirit. Thus, as an original tenet of Construction Grammar requires, the analysis will consider the grammar as being consistent with what we know about cognition and social interaction (cf. (6a)). Furthermore, as mentioned in section 3.1, I will show in chapter 7 that the analysis to be proposed in the next chapter has a universal impact (cf. (6b)).

Notes to Chapter 3

1. It is often argued that constructionist approaches have been developed as a reaction to Chomskian generative grammar (e.g. Hirose (1999), Goldberg (2006), Iwata (2006)). The present thesis is not concerned with differences between these two paradigms.

2. Written in capital letters, "Construction Grammar" refers to the theory developed by Fillmore, Kay, and collaborators (Croft and Cruse (2004:257); see section 3.2 for details about Construction Grammar). Following this convention, I use "Construction Grammar (in capital letters)" to refer to the theory developed mainly by Fillmore, Kay, et al., and "construction grammar (in lower cases)" to refer to constructionist approaches in general (or otherwise mentioned).

3. The requirements in (6a, b), especially the first one, are not postulated only in Construction Grammar, but accepted in other constructionist approaches as well.

4. Note, however, that I do not mean to say here that Goldberg's proposals are superior to Kay and Fillmore's (1999), or vice versa. The representations of relations between constructions depend largely upon how each theory defines constructions.

5. Croft (2001:26) simply represents the subject as "Sbj." Here, in order to avoid confusion, I represent it as "IntrSbj," following the notation in (24a).

6. Croft and Cruse (2004:272) observe that Goldberg takes both nonreductionist and reductionist approaches in her book.

7. The notion of inheritance link does not deny taxonomic hierarchies, but it does rely upon taxonomic hierarchies of constructions. Goldberg postulates both schematic constructions and specific constructions, and it is via I-links, a subsystem of the inheritance links, that information is inherited

from the former to the latter. Thus, I-links are motivated by taxonomic hierarchies. As noted in section 3.3.2, Goldberg's (1995) theory is differentiated from the others in that the former can represent richer relations between constructions (cf. fn. 4).

Chapter 4
Constructions of Causation and Reasoning*

4.1 Introduction

In chapter 2, I have reviewed some previous studies of *because*, *since*, and *for*, and pointed out some problems with them. I have thus suggested in section 2.7 that a construction grammar approach (cf. Hirose (1999)) can deal with these problems in an integrated account, and then in chapter 3, I have overviewed what construction grammar approaches are all about.

Now that basic ideas of construction grammar approaches are given, this chapter presents a detailed construction grammar analysis of *because*, *since*, and *for*. In particular, based on differences as to how people understand a causal relation and a reasoning process, I propose a schematic construction of causation and that of reasoning:[1] The former is called the casual construction, and the latter the reasoning construction. Crucially, the conjunction *because* participates both in the causal construction and in the reasoning construction, whereas *since* and *for* are used in the reasoning construction, but not in the causal construction (for reasons to be discussed in section 4.5). Through an investigation of these constructions, I show that the proposed analysis is not only consistent with the facts pointed out in the literature but also capable of handling the potentially difficult matters that previous studies could not adequately explain.

This chapter is organized as follows. Section 4.2 observes how we understand a causal relation and a reasoning process in general. Based on the observations, sections 4.3 and 4.4 propose and analyze the causal construction and the reasoning construction. Section 4.4.1 observes in detail the reasoning construction in which *because* is used, comparing it with the causal construction. Section 4.4.2 points out similarities and dissimilarities between the reasoning construction in which *because* is used, on one hand, and the reasoning construction in which *since* or *for* is used, on the other. That is, section 4.4.1 makes clear differences between what has traditionally been called causal *because*-clauses and inferential *because*-clauses; section 4.4.2 clarifies the difference between reason clauses introduced by *because*, *since*, and *for*. After describing relations between constructions and the conjunctions used in them (section 4.5), section 4.6 discusses some related issues pointed out in the literature, and shows how the proposed analysis handles them. Section 4.7 describes relations among constructions in terms of inheritance links (cf. Goldberg (1995), Hirose (1999); for details, see section 3.3.2). Section 4.8 summarizes the arguments, followed by an appendix on the form-meaning mismatch found in the constructions.

4.2 Causal Relations and Reasoning Processes

In this subsection, I am concerned with how we understand a causal relation and a reasoning process. As we have seen in the previous chapter, the grammar (in construction grammar terms) should be consistent with what we know about cognition and social interaction (see (6a) in chapter 3). That

is, the causal construction needs to be consistent with what we know about a causal relation; the reasoning construction should be consistent with what we know about a reasoning process. Thus, before starting the analysis of these constructions, it is helpful to consider how we understand a causal relation and a reasoning process.

First, in order to see how a causal relation is understood, observe the following example:

(1) It has rained and the ground is wet.

This sentence may be interpreted as expressing a causal relation among many possible readings (cf. Lakoff (1971), Blakemore and Carston (1999)). In the causal reading, the first conjunct *it has rained* is understood as the cause of the second conjunct *the ground is wet*. Thus, the sentence conveys almost the same meaning as a sentence like *the ground is wet because it has rained*.

The two situations described in *and*-conjunctions, like (1), generally have a strong cohesion and form one proposition as a whole (Blakemore and Carston (1999), cf. Quirk et al. (1972); *combined process*). To see this, observe the following example:

(2) Did Peter [[tell a lie] and [hurt his friend]]?

(Quirk et al. (1972:592))

What is asked by the sentence is whether the two processes denoted, i.e.

Peter told a lie and *Peter hurt his friend*, occurred as a single process. Thus, the two coordinated verb phrases are taken as a single process.

These facts suggest that given a causal relation, we see the cause situation and the result situation as a single process as a whole, rather than as two separate situations.

Let us now consider how we conceptualize reasoning processes. Compare the following examples:

(3) a. John broke his leg. He tripped and fell.

b. John broke his leg and tripped and fell.

(Blakemore and Carston (1999))

In (3a), two sentences are simply juxtaposed, and in (3b), these two sentences are coordinated by *and*. Blakemore and Carston suggest that sentence (3a) may express a reasoning process, in which the speaker concludes that John broke his leg from the premise that he tripped and fell, while sentence (3b) may not. A possible interpretation that sentence (3b) obtains is, for example, that John broke his leg (for some reason) *and then* he tripped and fell, i.e., the described situations occur in a temporal sequence. The fact that two juxtaposed sentences, e.g. (3a), can describe a reasoning process shows that in contrast to a causal relation, a reasoning process requires that the two situations described be independent of each other. Thus, reasoning can be viewed as a process in which the speaker takes two situations separately and relates them based on his knowledge. For example, given the two situations *John broke his leg* and *he tripped and fell* (separately), the speaker restores a

relation based on his knowledge that tripping and falling generally cause someone to have a broken bone. In other words, the "restored" causal relation does not have to hold in the real world, because the two situations are merely related in the speaker's mind. The fact that *and*-conjunctions, e.g. (3b), cannot describe a reasoning process makes this observation more plausible, since, as seen above, two situations coordinated by *and* are understood as a single process.

A piece of supporting evidence for the above observation comes from Traxler et al.'s (1997) psycholinguistic research. Traxler et al. time a person understanding a sentence with a causal *because*-clause (e.g. (4a)) and a sentence with a reasoning *because*-clause (e.g. (4b)); they observe that the latter takes longer to understand than the former.

(4) a. The streets are wet because it is raining.

b. It is raining because the streets are wet.

(Traxler et al. (1997:88))

As I have argued so far, in a reasoning process, the speaker needs to restore a causal relation between the two situations given to him separately. Thus, it may take longer to understand, or restore, the relation between the two situations in (4b) than to understand the causal relation described in (4a), where the relation described is directly understandable.

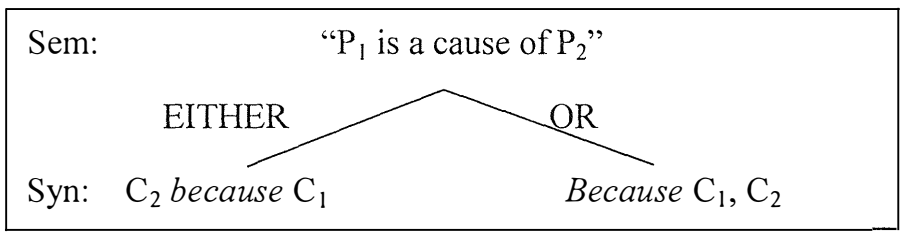
In sum, a causal relation requires the cause situation and the result situation to have a strong cohesion so that they can be understood as a single process, whereas reasoning is a process in which the speaker perceives two

situations separately and relates them based on his knowledge. Again, the causal construction and the reasoning construction to be proposed should be consistent with these facts about a causal relation and a reasoning process. Keeping this in mind, I will investigate these two constructions in the following subsections.

4.3 The Causal Construction

In this subsection, I investigate the causal construction. The causal construction is defined as follows: The causal relation between P(roposition)$_1$ and P_2 is mapped onto either [C_2 *because* C_1] or [*Because* C_1, C_2], where C(lause)$_1$ and C_2 denote P_1 and P_2, respectively. Their form and meaning correspondences may be represented as follows:

(5) causal construction

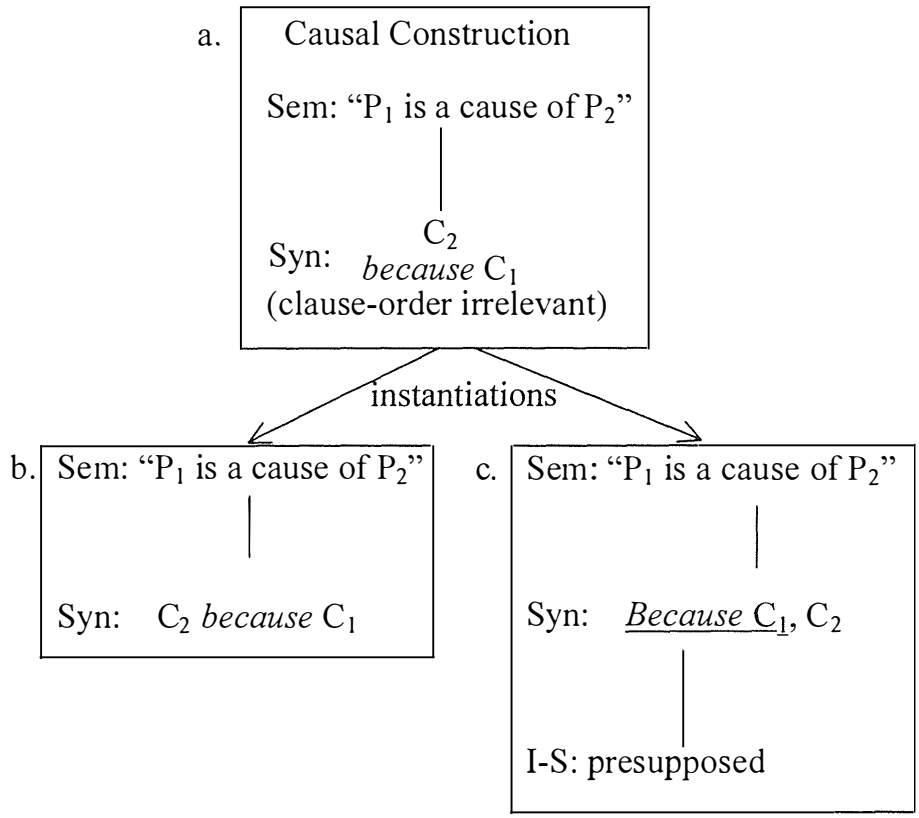


The semantics associated directly with the causal construction is "P_1 is a cause of P_2." The construction specifies that the *because*-clauses represent cause situations and the main clauses the result situations, and that the two situations are understood as a single process. As represented in (5), the causal construction, whose schematic meaning of causal relation is specified, has two instances of different syntactic forms. That is, the syntactic forms [C_2 *because* C_1] and [*Because* C_1, C_2], with which the same meaning is

associated, are two distinct constructions. If so, the above representation may be somewhat misleading.

The two constructions, being syntactically distinct and semantically identical, should be pragmatically distinct. Goldberg (1995:67) notes that if two constructions are syntactically distinct and semantically synonymous, then they must not be pragmatically synonymous (cf. Haiman (1985)). When the *because*-clause appears in sentence-initial position, an additional information structural specification is required: The *because*-clause is contextually presupposed (cf. Hirose (1991, 1999)). Thus, the schematic causal construction and its two instances may be represented as follows:[2]

(6)



In (6a), the causal meaning is specified in the schematic causal construction. At the highly schematic level, as in (6a), the clause-order in the syntactic

specification is not relevant. At the lower level, as in (6b, c), however, the clause-orders in their syntactic specifications are crucial: The different clause-orders account for the information-structural distinction between them. "I-S" in (6c) stands for information structure. That is, when the *because*-clause precedes its main clause, as in (6c), it is contextually presupposed. In contrast, when the *because*-clause follows its main clause, as in (6b), such a specification is not required. This is how the two constructions are differentiated.

In what follows, I show that the causal construction has a general property of causal relations such as the one discussed in the previous subsection. As argued in the previous subsection, in order for a causal relation to hold, the cause situation and the result situation need to be understood as a single process. Let us first consider the construction in which the *because*-clause follows its main clause, i.e. the one represented in (6b). In constructions of this kind, sentence-final *because*-clauses are inside the scope of matrix question or negation. Consider the following example:

(7) Is the ground wet because it has rained?↗

The arrow indicates that the rising intonation is used at the end of the sentence. This suggests that both the main clause and *because*-clause are inside the scope of the matrix question. By uttering this sentence, the speaker does not simply ask whether the ground is wet or not, but asks whether the rain has caused the ground to become wet or not. Thus, sentence (7) performs one speech act as a whole. Therefore, in analogy

with the case of *and*-conjunctions, e.g. (2), we can say that the situations described in sentence-initial main clauses and sentence-final *because*-clauses are understood as a single process.

Let us now turn to the construction with a sentence-initial *because*-clause, i.e. the one in (6c). As defined above, sentence-initial *because*-clauses generally convey old information, or they are contextually presupposed. To see this, take the following dialogue as an example:

(8) A: Why is the ground wet?
B: # Because it has rained, the ground is wet.
B': The ground is wet because it has rained.

The above dialogue shows that using a sentence-initial *because*-clause is not appropriate as an answer to a *why*-question, whereas using the sentence-final counterpart is appropriate. As we have already seen, when sentence-final *because*-clauses are used, the cause situation and the result situation are understood as a single process. Thus, the answer given by speaker B', which expresses a causal relation between the rain and the wet ground, is informative to speaker A, even if speaker B' repeats a given piece of information, i.e. the ground is wet (cf. Lambrecht (1994)). In contrast, the utterance of speaker B is not appropriate. The inappropriateness stems from sentence-initial *because*-clauses being presupposed. Although speaker A asks the reason why the ground is wet, the answer given by speaker B, using the sentence-initial *because*-clause, indicates that the reason is already known to speaker A. Hence, the contradiction.

In addition to being presupposed, sentence-initial *because*-clauses cannot perform speech acts on their own. Lakoff (1987) observes that speech act constructions do not occur in sentence-initial *because*-clauses.[3] Consider the following sentence:

(9) * Because here comes my bus, I'm leaving.

(Lakoff (1987:474))

In (9), the deictic *here* construction *here comes my bus*, a kind of speech act construction, cannot occur in the sentence-initial *because*-clause. As the very name indicates, a speech act construction performs a speech act on its own. Thus, the unacceptability of sentence (9) suggests that a sentence-initial *because*-clause cannot perform a speech act on its own.

Chafe (1984) argues that a sentence-initial *because*-clause serves as something like a guidepost to information flow (see section 2.3): It provides a cause of a certain situation, and indicates that the proposition expressed by the main clause that follows should be understood as its result. That is, the information expressed by the main clause is understood in relation to the (presupposed) information that the sentence-initial *because*-clause conveys. Besides, sentence-initial *because*-clauses cannot perform speech acts on their own. In other words, they alone do not make sense, and it is not until the main clause is given that sentence-initial *because*-clauses make sense. Thus, the sentence-initial *because*-clause and the sentence-final main clause in (6c) are interpreted depending upon each other, and it is in this manner that the two situations described are viewed as

a single process.

In sum, there are two instances of the causal construction, as shown in (6b, c). Whether the *because*-clause is in sentence-final position or in sentence-initial position, the cause situation and the result situation are understood as a single process. This is compatible with what we know about causal relations in general.

4.4 The Reasoning Construction

In this subsection, I analyze the reasoning construction. Before that, however, I make clear the reason for using the term "reasoning" rather than "inferential."

As seen in section 2.4, Sweetser (1990) argues that conjunctions of reason are used in the content, epistemic, and speech-act domains. However, as far as the discussion of conjunctions of reason is concerned, the distinction between the epistemic and speech-act domains, I believe, is not crucial for the three reasons mentioned below. Hence, integrating causal relations that hold in Sweeter's epistemic and speech-act domains, I use the term "reasoning process" as a cover term. It seems that the term "inference" has already been preempted; i.e., it seems to refer only to causal relations that hold in the epistemic domain, and therefore sounds misleading. Thus, I use the word "reasoning," rather than "inference," consistently in the present thesis.

A first reason to eliminate the distinction between the epistemic and speech-act domains is that sentences in these two domains behave so similarly, as listed in (10), that their distinction seems not to be crucial:

(10) a. Sentence-initial *because*-clauses are not allowed.
(e.g. Schourup and Waida (1988), Hirose (1991, 1999))

b. The main clause and the subordinate clause form two separate intonation units. (sections 4.4.1-4.4.2)

c. What Lakoff (1987) calls speech act constructions may occur within *because*-clauses used in these domains and *since*-clauses. (sections 4.4.1-4.4.2)

d. *Because*-clauses are not nominalized into *because of*.
(section 4.6.2)

Of the four properties or behaviors listed above, I have already mentioned the first one; the others will be discussed in the sections specified in the parentheses. What is important is that none of them is observed in *because*-clauses used in the content domain. Thus, it is true that the distinction between the content domain, on one hand, and the epistemic and speech-act domains, on the other, is important, but there seems to be no positive reason for the distinction of the epistemic domain from the speech-act domain.

Secondly, in both the epistemic and the speech-act domains, a mental attitude on the part of the speaker is involved. In other words, what is important is whether such a mental attitude is present or not (cf. Nakau (1994)). In the epistemic domain, for example, the speaker draws a conclusion from the premise expressed by the subordinate clause. Consider the following sentence:

(11) John is not coming to class, because he just called from San Diego.

In (11), the speaker arrives at the conclusion that John *cannot* come to class from the premise that he is in San Diego, a city far away from their school. The modal auxiliary *cannot* represents a mental attitude on the part of the speaker; i.e., the speaker is sure that "John's coming" is not true. Likewise, in the speech-act domain, such a mental attitude needs to be present, because it is the speaker of the sentence that performs the speech act. Take the following sentence as an example:

(12) What are you doing tonight, because there's a good movie on.

(Sweetser (1990:77))

Suppose that the speaker utters this sentence in order to ask out the addressee that night. The speech act of question in the main clause may be performed according to a script like the following:

(13) a. The speaker *knows* that there is a good movie on tonight.

b. The speaker *wants* to ask the addressee out for the movie if she is not busy tonight.

c. The appropriate way to do that *must* be asking what she is doing tonight.

d. The speaker *says*, "What are you doing tonight?"

In the above script, expressions of mental attitudes on the part of the speaker are italicized. Thus, causal relations that hold in the epistemic and speech act domains have the following properties in common: Mental attitudes on the part of the speaker are present and sentences express a process in which a certain conclusion is drawn from the premise in these domains.

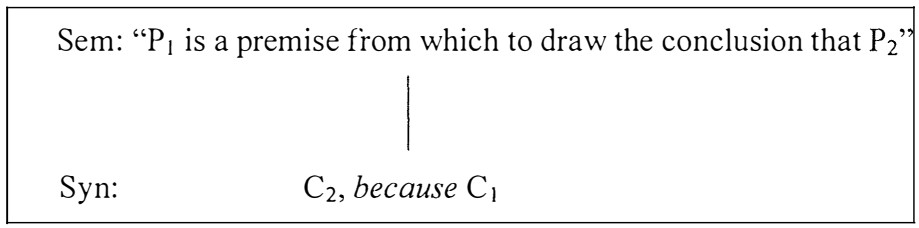
The last reason for eliminating the distinction of the speech-act and epistemic domains is that, as Sweetser (1990) observes, *since* has a strong tendency towards these two readings. This observation suggests that Sweetser herself acknowledges that the distinction between the epistemic and the speech-act domains is less important than the distinction between the content domain and the epistemic/speech-act domains.

For the above reasons, I integrate what Sweetser calls causal relations in the epistemic and speech-act domains, and call them reasoning processes. Now that the reasons for integrating Sweetser's epistemic and speech-act domains are clear, let us turn to defining the reasoning construction. The reasoning construction has four instances and they are defined as follows: The meaning of a reasoning process in which the speaker draws the conclusion (expressed by the main clause) from the premise (i.e. situation described in the subordinate clause) is mapped onto either [C_2, *because* C_1], [*Since* C_1, C_2], [C_2, *since* C_1], or [C_2, *for* C_1]. That is, the reasoning construction, whose schematic meaning of reasoning process is specified, has four instances of different syntactic forms, and their form and meaning correspondences can be represented as follows (for the convenience of reference, I refer to the reasoning construction in which *because*, *since* and *for* are used as the reasoning *because* construction, the reasoning *since*

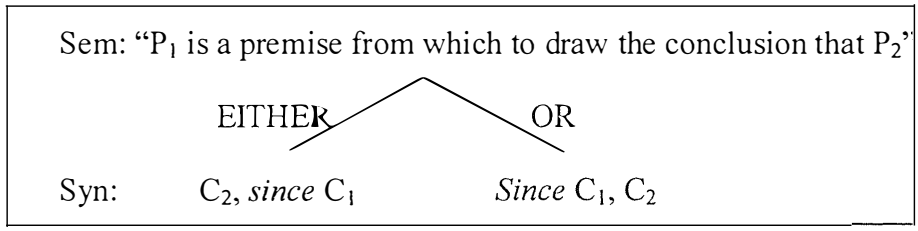
construction, and the reasoning *for* construction, respectively):

(14) Reasoning Constructions

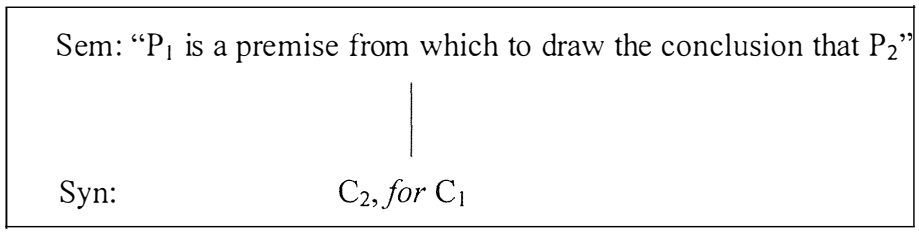
a. Reasoning *Because* Construction



b. Reasoning *Since* Constructions[4]



c. Reasoning *For* Construction



As one may notice, *since* and *for* are used in the reasoning construction, but not in the causal construction. Then, a question immediately arises: How do we deal with examples of *since* and *for* used in Sweetser's content domain, i.e. sentences that express causal relations, by using *since* or *for*? The relevant examples are given below:

(15) a. Since John wasn't there, we decided to leave a note for him. (Sweetser (1990:78))

b. John came back, for he loved her.

According to Sweetser, sentence (15a) describes the causal relations in the real world, and is an example of *since* being used in the content domain. Similarly, *for* may be used in the content domain, as in (15b).[5] Here, I assume following Nakau (1994) that *since*-clauses are always modal expressions. That is, although sentence (15a) seems to represent real world causation, it does not express the simple causal relation but expresses the reasoning process. Assuming that *for* has only a reasoning use (Kanbayashi (1989)), we can explain in the same way why *for* seemingly can express real world causation. That is, even if John's loving Mary has indeed caused him to come back in the real world, sentence (15b) does not express the causal relation between them but expresses the speaker's reasoning process.

To see the validity of these assumptions, consider the following contrast:

(16) John died {because/?since/?for} the bullet hit him in the head.

Sentence (16) describes the causal relation between the bullet hitting him in the head and John's death. The causal relation expressed by the sentence is so direct and so easy to understand that it is difficult for the speaker's reasoning to lie between the two situations. In such a context, *since* and *for* are less acceptable than *because*. Thus, even if a given sentence seems to express a causal relation in the real world, *since*- and *for*-clauses should be understood as providing the premise from which to draw a conclusion.

As discussed in section 4.2, in a reasoning process, two situations or propositions are perceived separately, and they are related based on the

speaker's knowledge. Reasoning constructions, as those expressing reasoning processes, should be consistent with this property.[6] Keeping this in mind, I will closely investigate the reasoning *because* construction in the section 4.4.1, and reasoning *since/for* constructions in section 4.4.2.

4.4.1 The Reasoning *Because* Construction

As described in (14), there are four instances of the reasoning construction, of which I investigate the reasoning *because* construction in this subsection. Since *because* is used both in the causal construction and in the reasoning construction, by comparing behaviors of *because*-clauses used in these constructions, I make clear differences between them.

As we have seen in section 4.2, in a reasoning process, the speaker relates the two situations perceived separately based on his knowledge. Then, the main clause and the *because*-clause of the reasoning *because* construction should be understood as forming separate information units. Assuming that one information unit corresponds to one speech act (cf. Haliday (1985), McCarthy (1991)), I show that the reasoning *because*-clause and its main clause perform two speech acts independent of each other. First, an interrogative sentence of a reasoning *because* construction shows a different intonation pattern from the corresponding causal construction (e.g. (7) above). Observe the following interrogative sentence of the reasoning *because* construction:

(17) Has it rained, because the ground is wet.↘

(cf. Is the ground wet because it has rained?↗ (= (7)))

As indicated by the arrows, the rising intonation is used at the end of the main clause, and the sentence-final *because*-clause is pronounced with falling intonation. Note also that the sentence-final punctuation is a period, not a question mark. These facts show that the *because*-clause is not inside the scope of the matrix question. This means that sentence (17) performs two speech acts, i.e. the question in the main clause and the statement in the *because*-clause. Thus, the main clause and the *because*-clause belong to different information units.

Another piece of evidence for the *because*-clause performing a speech act independently of the main clause comes from Lakoff's (1987) observation. Lakoff observes that speech act constructions that convey statements can occur in sentence-final *because*-clauses, as in (18):

(18) I'm leaving, because here comes my bus!

(Lakoff (1987:473))

In (18), the deictic *here* construction occurs in the *because*-clause. As the very name suggests, speech act constructions perform speech acts on their own. This means that the *because*-clause in (18) performs a speech act on its own.

Note in passing that although Lakoff observes that speech act constructions conveying statements can occur in *because*-clauses only when they are in sentence-final position, it is not sufficient. Consider the following examples:

(19) a. * He's not going out for dinner because Japanese food, his wife is cooking.

b. He's not going out for dinner because his wife is cooking Japanese food. (Hooper and Thompson (1973:494))

In (19a), even if the *because*-clause is in sentence-final position, the topicalization, a kind of speech act construction conveying a statement, cannot occur in the *because*-clause. The original counterpart (19b), in which the *because*-clause is inside the scope of matrix negation, is an instance of the causal construction (cf. Rutherford (1970)). That is, even in sentence-final position, if the *because*-clause is a causal one, speech act constructions, like the topicalization in (19a), are not allowed. Hence, in order to give an appropriate description of the occurrence of speech act constructions in *because*-clauses, simply saying that *because*-clauses should be in sentence-final position is not sufficient: What provides the sufficient condition is the *because*-clause of the reasoning construction.[7] It is quite natural that speech act constructions can occur in reasoning *because*-clauses if they form an information unit independently of main clauses. At the same time, we may straightforwardly explain why speech act constructions are not allowed in causal *because*-clauses, as in (19a). In the causal construction, the cause situation and the result situation are understood as a single process (see section 4.3). Its *because*-clause cannot perform a speech act on its own, and therefore speech act constructions cannot occur in causal *because*-clauses.

Thus, as is expected, the main clause and the *because*-clause of the

reasoning *because* construction form information units independent of each other.

4.4.2 The Reasoning *Since* Construction and the Reasoning *For* Construction

In the previous subsection, I have analyzed the reasoning *because* construction and showed that the main clause and the *because*-clause are understood as forming separate information units. This subsection investigates the reasoning *since* and *for* constructions. First, in section 4.4.2.1, I argue that they both have similar behaviors to the reasoning *because* constructions. By comparing the reasoning *since/for* constructions with the reasoning *because* construction, I show that not only are the reasoning *since/for* constructions similar to each other but also they are similar to the reasoning *because* construction, and the abstraction of their similarities leads us to posit a schematic construction, namely, the reasoning construction. Next, I point out in section 4.4.2.2 that the reasoning *since* construction and the reasoning *for* construction have a dissimilarity as well, despite the fact that they are instances of the same schematic construction. This is not surprising, however. Rather, this is a natural corollary of use of the different lexical elements.

4.4.2.1 Similarities

The reasoning *since/for* constructions are similar to the reasoning *because* construction in the following two respects. First, a rising intonation of interrogative sentences is used at the end of the main clause, not

at the end of the sentence. Consider the following examples:

(20) a. Is the ground wet, {since/for} it has rained. ↘

b. * Is the ground wet, {since/for} it has rained? ↗

The sentence should be read with the intonation pattern indicated in (20a), but not with the one as in (20b). This suggests that the *since*- and *for*-clauses are not inside the scope of matrix question, which is parallel to the reasoning *because* construction (cf. (17)), and opposite to the causal construction (cf. (7)).

Recall that in the reasoning construction, while *because*-clauses cannot appear in sentence-initial position, *since*-clauses can. Even in sentence-initial *since*-clause configurations, the main clause performs a speech act independently of the *since*-clause. Observe the following example:

(21) Since you're so smart, when was George Washington born?

(Sweetser (1990:78))

The main clause in (21) by itself asks when George Washington was born; the *since*-clause is not inside the scope of the question, but provides the reason for asking the question.

Another similarity is that *since*- and *for*-clauses, like the reasoning *because*-clauses, allow speech act constructions to occur in them, as exemplified below:

(22) a. I'm going to cheat my taxes, since who will ever find out? (Lakoff (1987:479))

b. ...since in no real sense could they be said to have had the opportunity of availing themselves of the action project, they are omitted...from most of the following analysis. (BNC)

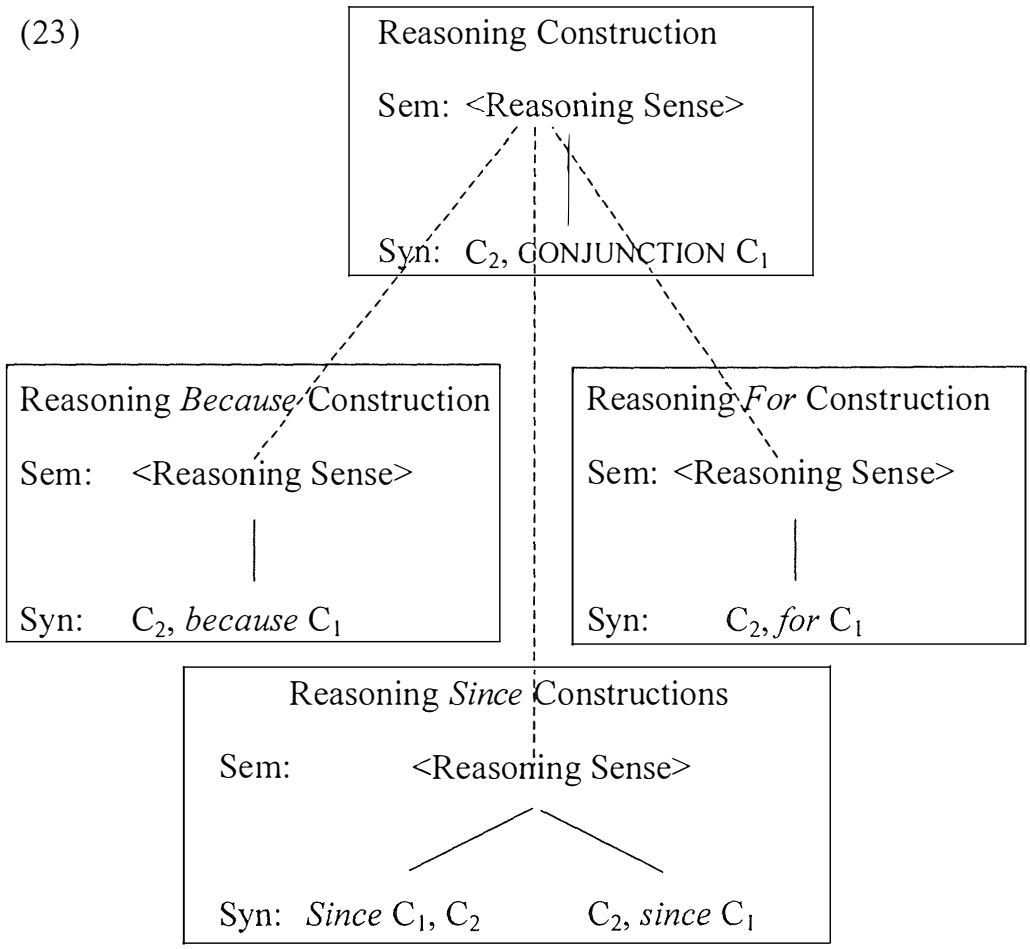
c. Gay, she knew, must be desperate to write a letter like that, for never before had she lowered her flag to such an extent. (BNC)

In (22a), the rhetorical question occurs in the sentence-final *since*-clause. In (22b), the subject-auxiliary inversion occurs in the sentence-initial *since*-clause, and in (22c), the same construction occurs in the *for*-clause. They are all speech act constructions that convey statements (Lakoff (1987)), and therefore, these *since*- and *for*-clauses perform speech acts of statement independently of the main clauses. This is also parallel to reasoning *because*-clauses. Thus, like reasoning *because*-clauses, *since*- and *for*-clauses perform speech acts on their own.

In sum, the reasoning *since/for* constructions behave similarly. Their behaviors are also similar to those of the reasoning *because* construction: The main clause and the subordinate clause perform speech acts independent of each other, and therefore are understood as separate information units. These similarities lead us to posit a schematic construction, i.e. the reasoning construction. It is the abstraction of the common meaning from the reasoning *because/since/for* constructions that makes it possible to posit the

schematic construction, and the abstraction generalizes the meaning of a reasoning process. Thus, the relation between the (schematic) reasoning construction and its instances may be represented as follows:

(23)



In (23), the meaning of the construction is simplified as <Reasoning Sense> due to the limitations of the space (for the detailed semantic representation, see (14a-c)). The dashed lines indicate the abstraction of the reasoning sense from the relevant constructions. As many conjunctions are used in the reasoning construction, its syntactic representation is something like [C_2, CONJUNCTION C_1]. Notice that the presence of a comma intonation is specified in the syntactic representation. Thus, whatever conjunction it is

combined with, a comma intonation is obligatory.

4.4.2.2 Dissimilarity

In the previous subsection, we have observed similarities between the reasoning *since* construction and the reasoning *for* construction. However, they do not always behave alike. Consider the following contrast:

(24) a. * For he was unhappy, he asked to be transferred.

(Quirk et al. (1985:922))

b. Since he was unhappy, he asked to be transferred.

The above contrast shows that *for*-clauses cannot take place in sentence-initial position, while *since*-clauses can.

Quirk et al. (1985) note that *for* is a "semi-coordinator," which has properties of both a coordinator and a subordinator. They argue that *for* is like a subordinator in that it does not allow subject ellipsis, as exemplified in (25a); otherwise it behaves like a coordinator.

(25) a. He did not want it, for *(he) was obstinate.

b. I may see you tomorrow or (I) may phone later in the day.

(Quirk et al. (1985:923f.))

c. John is happy, since *(he) is rich.

As shown in (25b), coordinators can, in essence, connect either clauses or clause constituents, e.g. verb phrases, while, as in (25c), subordinators cannot

connect clause constituents. In this respect, Quirk et al. argue, *for* is distinct from other coordinators, and is somewhat similar to subordinators. However, given the property of the reasoning construction, we can explain why *for*-clauses cannot connect clause constituents without postulating such a fuzzy category as semi-coordinator: We have only to say that *for* is a *coordinator* used in the reasoning construction.

If it is a coordinator, then why can *for* not connect clause constituents? Taking into consideration the fact that the main clause and the subordinate clause of the reasoning construction form separate information units, we may account for the reason as follows. Since the construction in which *for* is used is the reasoning construction, *for*-clauses have to perform a speech act independently of its main clause.[8] If subject ellipses were allowed in *for*-clauses, as in other coordinated structures, they would not perform speech acts on their own. For example, if sentence (25a) were acceptable without the parenthesized *he*, the *for*-clause would have to be interpreted depending upon the main clause, i.e., it would be *he* in the main clause that *was obstinate*. In other words, despite belonging to the category (i.e. conjunction) that can essentially connect clause constituents, *for* has to connect two clauses because of the property of the construction that it is used in.

Thus, the reason that *for*-clauses do not appear in sentence-initial position is very simple: *For* is a coordinator. That is, sentence (26a) is no more grammatical than sentence (26b) is:

(26) a. * For he was unhappy, he asked to be transferred. (= (24a))

b. * Or they are spending a vacation there, they are living in England. (Quirk et al. (1985:921))

(cf. They are living in England, or they are spending a vacation there.)

4.5 Status of the Conjunctions

To sum up, the categories of the conjunctions in question and the constructions that these conjunctions are used in can be summarized as follows:

(27) a. *Because* is a subordinator used in the causal construction and the reasoning construction.

b. *Since* is a subordinator used in the reasoning construction.

c. *For* is a coordinator used in the reasoning construction.

Given the summary in (27), both similarities and differences between the conjunctions are clear. First, while *because* and *since* are similar in that they are both subordinators, the range of constructions that they appear in is not the same. Second, the range of the constructions in which *since* and *for* are used is the same, but they belong to different categories. Third, *for* is categorially distinct from *because* and *since*, while *for* is similar to *since* in that the two conjunctions are used only in the reasoning construction.

4.6 Further Issues

In the previous subsections, I have investigated the causal construction

and the reasoning construction, showing that the constructional approach provides a clear explanation of both similarities and differences of the conjunctions of reason. In this subsection, I show that the proposed analysis gives answers to the questions raised in chapter 2, as well as it explains the facts observed in the literature. The issues to be discussed in this subsection are listed below:

(28) a. Why can *since* not be used in the causal construction? (Nakau (1994); cf. Sweetser (1990))

b. In the reasoning construction, while *because*-clauses cannot be in sentence-initial position, *since*-clauses can. The reason for *because*-clauses not being in sentence-initial position has already been explained (e.g. Hirose (1991, 1999)). Why then can *since*-clauses be in sentence-initial position?

c. Why can causal *because*-clauses be nominalized into *because of* {NP/Gerund}, while reasoning *because*-clauses cannot? (cf. Rutherford (1970))

d. Why may *since*-clauses not be nominalized into *since* {NP/Gerund}? (cf. Wickboldt (1998))

e. Why can reasoning *because*-clauses and *since*-clauses not clefted? (cf. Nakau (1994))

The answers to questions (28a) and (28b) are intimately related, and so are the answers to questions (28c) and (28d). I will first give answers to

questions (28a, b) in section 4.6.1, and then to questions (28c, d) in section 4.6.2. Lastly, I will answer question (28e) in section 4.6.3.

4.6.1 *Since* as a Subordinator Only for the Reasoning Construction

As summarized in (27) in section 4.5, while *because* is used both in the causal construction and in the reasoning construction, *since* is used only in the reasoning construction. Importantly, it is metaphorical extensions that make it possible for both *because* and *since* to be used in the reasoning construction. In order to answer question (28a), we need to consider two types of metaphorical extensions, each of which has a different source domain, i.e. what a reasoning process is compared to.

Recall first that Sweetser sees a reasoning process as a metaphorical causal relation (see section 2.4; cf. Hirose (1999)). Thus, when *because*, i.e. the conjunction that introduces a cause of another situation, is used, a reasoning process may be compared to a causal relation: Along with the REASONING IS CAUSATION metaphor, *because* may be used to introduce the premise from which to draw a conclusion.

As for *since*, it is often pointed out that its reasoning sense has been developed from its temporal meaning (e.g. Traugott and König (1991)). That is, when *since* is used, a reasoning process is compared to a period of time, not to a causal relation. Thus, postulating the REASONING IS TEMPORAL SEQUENCE metaphor, we may say that the reasoning is a process that begins with the time of giving the premise (designated by the *since*-clause) and ends by drawing a conclusion.[9]

Crucially, Lakoff and Johnson (1980:56ff.) argue that metaphorical

mappings occur unidirectionally: Abstract concepts are compared to concrete ones, and not vice versa. Note also that as Sweetser (1990:23ff.) discusses at length, we conceptualize our internal mental world by mapping it onto the external world. Then, we may say that reasoning processes can be compared to causal relations, but not vice versa, because causal relations, which occur in the external world, is more concrete than reasoning processes, which occur inside the speaker's internal mental world. Therefore, *because* can be used in both the causal construction and the reasoning construction by the metaphorical mapping of a reasoning process onto a causal relation, while *since* cannot be used in the causal construction, because a casual relation cannot be compared to a reasoning process, i.e., it is not plausible to compare the less abstract concept to the more abstract one.

In sum, the reasoning sense of *because* is compared to its causal sense, and therefore, *because* may be used both in the causal construction and in the reasoning construction. In contrast, the reasoning sense of *since* is compared to its temporal sense, and crucially, we cannot compare a causal relation to a reasoning process. Therefore, *since* is used in the reasoning construction but not in the causal construction.

Let us now turn to question (28b): Why can *since*-clauses be in sentence-initial position while reasoning *because*-clauses cannot? As argued above, *since* is used only in the reasoning construction. Therefore, whether in sentence-initial or sentence-final position, *since*-clauses are understood with no ambiguity as providing the premise from which to draw a conclusion (see fn. 4). Unlike *since*, *because* is ambiguous: It can be understood as introducing either a cause or a premise. These two readings

are disambiguated by the position of the *because*-clause (and the presence or absence of a comma intonation). That is, a reasoning *because*-clause must appear in sentence-final position with a comma intonation; otherwise it is a causal one.

4.6.2 Nominalization of *Because*- and *Since*-Clauses

In this subsection, I give answers to questions (28c, d): Why can reasoning *because*-clauses and *since*-clauses not be nominalized? Rutherford (1970) observes that causal *because*-clauses can be nominalized into *because of* {NP/Gerund}, while reasoning *because*-clauses cannot.[10] Observe the following causal constructions, in which the *because*-clauses are nominalized into *because of* NP:

(29) a. John is not coming to class because of his sickness.
(Hirose (1992:85))
(cf. He's not coming to class because he was sick.)

b. Because of the law in Ireland, we had to work out a way of getting her over to Britain. (COBUILD[4], s.v. *because*)

Sentences (29a, b) indicate that the nominalization of *because*-clauses is allowed in the causal construction, whether they are in sentence-initial or sentence-final position. Now, consider the following ill-formed sentence:

(30) * He's not coming to class, because of his having just called from San Diego. (Rutherford (1970:105))

(cf. He's not coming to class, because he just called from San Diego.)

The ill-formed sentence is meant to express the reasoning process in which to draw the conclusion that he is not coming to class from the premise that he just called from San Diego. The unacceptability suggests that reasoning *because*-clauses, unlike the causal counterparts, may not be nominalized into *because of* {NP/Gerund P}.

The contrast can be explained based on the different properties of each construction discussed in sections 4.2 through 4.4. That is, the main clause and the subordinate clause in the causal construction are understood as forming one information unit as a whole, while those in the reasoning construction are understood as forming two separate information units. If *because*-clauses are nominalized, they will no longer perform speech acts on their own. As a result, the information conveyed by such nominalized *because*-clauses cannot be seen as an independent information unit, but is regarded as merely a part of larger information unit.

As one might notice, this is exactly the same reason as the one that *for*-clauses do not allow subject ellipsis (see section 4.4.2.2). The relevant example is repeated in (31):

(31) He did not want it, for *(he) was obstinate. (= (25a))

Since sentence (31) is a reasoning construction, *for*-clauses have to perform a speech act independently of its main clause. However, if this sentence were

acceptable without the parenthesized *he*, the *for*-clause would have to be interpreted depending upon the main clause, i.e., it would be *he* in the main clause that *was obstinate*. That is, if subject ellipses were allowed in the *for*-clause, it would not perform a speech act on its own.

For essentially the same reason, the nominalized *because*-clause in (30) above, i.e. *because of his just having called from San Diego*, is not allowed: The nominalization also forces such a dependent interpretation on the *because*-clause. In this case, we can identify who the person is that called from San Diego, independently of the main clause, because it is explicitly mentioned in the subordinate clause. However, when the phone-call takes place needs to be interpreted depending upon the tense of the main clause, because it is expressed by the nonfinite form, *having (just) called* (cf. Wada (2001:34ff.)).[11] That is, the nominalized *because*-clause cannot be seen as forming an independent information unit. Such a dependent interpretation is not problematic to the causal construction, in which the cause situation and the result situation are understood as a single process. Hence, while the nominalization of a *because*-clause is compatible with the causal construction, it is incompatible with the reasoning construction.

Given this answer to question (28c), the answer to question (28d) is straightforward. Wickboldt (1998), among others, observes that *since*-clauses cannot be nominalized. Consider the following example:

(32) * Since having written the book, Mary was writing the blurb.
(cf. Since Mary has written the book, she was writing the

blurb.)

(Wickboldt (1998:92))

We can account for the unacceptability of sentence (32) in exactly the same way as the unacceptability of the nominalization of reasoning *because*-clauses (e.g. (30)). If a *since*-clause were nominalized, it could not form an independent information unit. Considering that *since* is used only in the reasoning construction, it is quite natural that the nominalization of *since*-clauses is not allowed. The nominalization forces *since*-clauses to be interpreted depending upon the main clause; this is incompatible with the property of the reasoning construction. That is, *since*-clauses are not nominalized for the same reason that reasoning *because*-clauses cannot be nominalized.

The nominalizability of *because*- and *since*-clauses might not be accounted for in such an integrated way if one focuses only on the differences of these conjunctions. In this sense, it may be said that the arguments in this subsection have demonstrated the importance of considering the type of constructions.

4.6.3 Reasoning Subordinate Clauses Are Not Clefted

In this subsection, I answer the final question, i.e. (28e): Why can reasoning *because*-clauses and *since*-clauses not clefted? Recall Nakau's (1994) argument about clefting of *because*- and *since*-clauses (section 2.5). He claims that *because* can be either a propositional element or a modal marker (a marker of D-MOD in his terms). He observes that

because-clauses may be clefted if *because* is a propositional element, while they may not if it is a marker of D-MOD. Observe the following contrast:

(33) a. It's because he's sick that he's not coming to class.

b. * It's because his wife told me that he's not coming to class.

(Nakau (1994:162))

Nakau also observes that *since* is always a marker of D-MOD and that *since*-clauses cannot be clefted, as shown in (34):

(34) * It was since they wanted to save lives that they retreated.

(Nakau (1994:162))

From these facts, Nakau argues that only propositional elements can be focalized, and that it is S-MOD elements that focalize propositional elements.

However, it is not clear why S-MOD elements cannot be focalized. Besides, as I shall point out in chapter 5, reasoning *because*-clauses and *since*-clauses may be focalized by certain focusing adverbs. Hence, it is not likely that only propositional elements can be focalized. The proposed analysis can explain why reasoning *because*-clauses and *since*-clauses may not be clefted. First, recall the properties of the causal construction and the reasoning construction. The main clause and the subordinate clause in the causal construction are understood as forming one information unit as a whole, while those in the reasoning construction are understood as forming two separate information units. Consider the following examples:

(35) a. [He's not coming to class because he's sick].

b. [He's not coming to class], [because his wife told me].

c. [They retreated], [since they wanted to save lives].

Sentences (35a-c) are examples of the causal construction, the reasoning *because* construction, and the reasoning *since* construction, respectively. In (35a-c), a pair of brackets corresponds to one information unit.

Keeping this in mind, let us consider the information structure of cleft constructions. Cleft constructions may be schematized as follows:

(36) It is X that Y

In (36), while the proposition denoted by X, i.e. P(X), is focalized, the proposition denoted by Y, i.e. P(Y), is backgrounded with respect to P(X).

Thus, the reason for the unacceptability of sentences (33b) and (34) may be explained as follows. As the brackets in (35b, c) indicate, in the reasoning construction, the main clause and subordinate clause form separate information units, and each should be asserted independently. Since the element in the *that*-clause of a cleft construction is understood as being backgrounded, clefting reasoning *because*- and *since*-clauses results in the backgrounded main clause. Hence, the contradiction. Thus, it is the information structural mismatch that prevents reasoning *because*- and *since*-clauses from being clefted.

4.7 Relations among Constructions

So far, I have fully discussed the causal construction and the reasoning construction, and shown that the proposed analysis provides reasonable answers to questions raised in chapter 2. In this subsection, I describe in terms of inheritance links (e.g. Goldberg (1995), Hirose (1999)) how the causal and reasoning constructions are related to each other and how they are related to other constructions.

As I have observed in section 3.3.2, in order to capture the relations among constructions, Goldberg (1995) proposes the notion of inheritance links. She notes, "by postulating abstraction hierarchies in which lower levels inherit information from higher levels, information is stored efficiently and made easily modifiable (Goldberg (1995:72))." Recall that there are several types of inheritance links, among which instance links (I-links) and metaphorical extension links (M-links) are helpful to describe relations among the constructions under discussion. Their definitions are repeated as in (37):

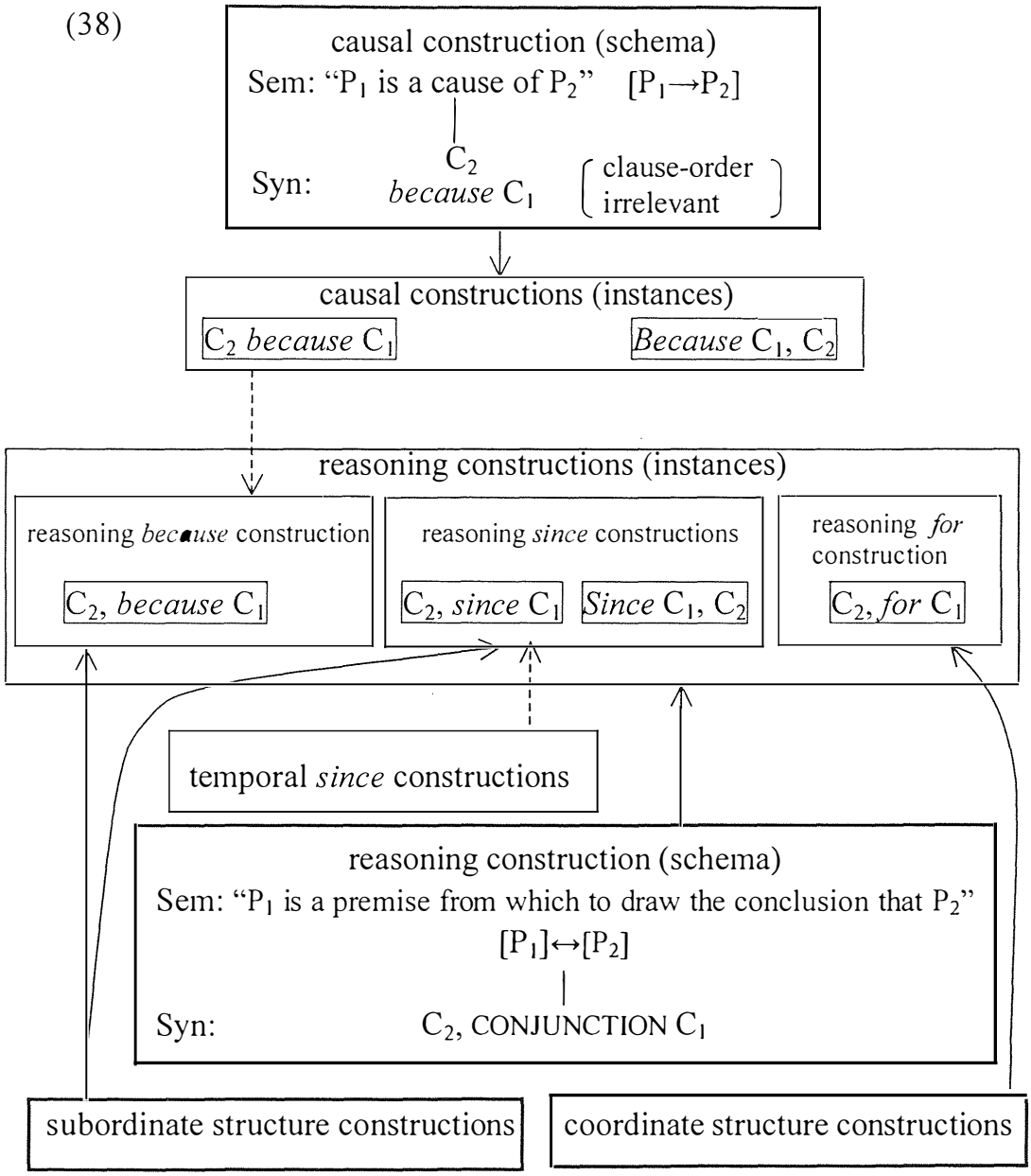
(37) a. Instance links are posited when a particular construction is a special case of another construction.
(Goldberg (1995:79))

b. Metaphorical extension links are posited when two constructions are found to be related by a metaphorical mapping. (adapted from Goldberg (1995:81))

With the notion of inheritance links, relations among the relevant

constructions can be represented as follows:

(38)



The above diagram is read as follows. The boxes represent constructions whose names and/or semantic/pragmatic or syntactic specifications are indicated therein. The boxes with the thick lines represent construction schemas, and those with thin lines construction instances (though the degree of the instantiations varies). Each construction schema has a meaning such

as the one enclosed in the quotation marks. The meaning of the causal construction can be schematized as [$P_1 \rightarrow P_2$]: The arrow represents the causal relation; the brackets mean that the causal relation described therein is understood as forming one information unit as a whole. Likewise, the schematic meaning of the reasoning construction may be represented as [P_1]$\leftrightarrow$[P_2], in which the two propositions are understood as forming independent information units (indicated by the two separate brackets) and they are related by the speaker's subjective reasoning process (indicated by the left-right arrow). Note that only relevant information is represented in each box for the sake of simplification. For example, the semantic representation is not repeated in each instance of the causal and reasoning constructions. The solid arrows and the dashed arrows between constructions indicate I-links and M-links, respectively. Correlations between the arguments through the present chapter and what are illustrated in (38) are noted below.

Firstly, as I have argued in sections 4.3 and 4.4, each of the syntactic forms of causal constructions and reasoning constructions is an instance of the schematic constructions. For example, [C_2 *because* C_1] is an instance of the causal construction; hence, an I-link is posited between them. Note here that if two constructions are syntactically distinct and semantically synonymous, they must be pragmatically distinct (Goldberg (1995:67)). Indeed, the two instances of the causal construction are information-structurally distinct, i.e., sentence-initial *because*-clauses are contextually presupposed (e.g. Hirose (1991)). For this reason, the reasoning *since* constructions of different clause-order must be pragmatically

distinct, as well. At this point, however, how they are differentiated cannot be answered (see fn. 4). I leave it for future research.

Secondly, the reasoning *because* construction is an instance of the reasoning construction, and at the same time, it is related to the causal construction by a metaphorical mapping. The reasoning processes expressed by the reasoning *because* construction may be understood as metaphorical causal relations due to the causal meaning of *because* (cf. Sweetser (1990), Hirose (1999)). Thus, an M-link is posited between the causal construction and the reasoning *because* construction.

Thirdly, like the reasoning *because* construction, the reasoning *since* construction is an instance of the reasoning construction, but it is not related to the causal construction. In the reasoning *since* construction, a reasoning process is compared to a period of time (section 4.6.1). Therefore, an M-link is posited between the reasoning *since* construction and constructions of temporal *since*. It is in this way that the difference between the reasoning *because* construction and the reasoning *since* construction is captured.

Lastly, the difference between the reasoning *for* construction and the other types of reasoning constructions can be captured by considering what syntactic categories the conjunctions belong to (section 4.4.2.2): *Because* and *since* are subordinators; *for* is a coordinator. In terms of construction grammar, the reasoning *since* construction is an instance of subordinate structure constructions, while the reasoning *for* construction is an instance of coordinate structure constructions.[12] Therefore, I-links are posited between them.

4.8 Summary

In this chapter, I have proposed two schematic constructions that express a causal relation and a reasoning process, i.e. the causal construction and the reasoning construction. The conjunction *because* is used in both of them, whereas *since* and *for* participate only in the reasoning construction. Analyzing these constructions in detail, I have claimed that both similar and different behaviors of the conjunctions are best accounted for not by focusing only on the conjunctions themselves but by considering what constructions the conjunctions are used in.

Appendix A: Form-Meaning Mismatches and Coercion

As I have argued in the present chapter, reasoning *because*-clauses have to be in sentence-final position. Observe the following sentences:

(39) a. It has rained, because the ground is wet.
b. * Because the ground is wet, it has rained.

(40) a. What do you think of Chomsky, because you are a linguist.
b. * Because you are a linguist, what do you think of Chomsky?

In (39a), the main clause, *it has rained*, represents the speaker's conclusion drawn from the premise that the ground is wet; in (40a), the speaker asks about Noam Chomsky, a famous linguist at MIT, based on his knowledge

that linguists in general have a good knowledge of Chomsky. I have already explained why sentence-initial *because*-clauses, as in b-sentences above, are not allowed in the reasoning construction (cf. Schourup and Waida (1988), Hirose (1991, 1999), Nakau (1994), Kanetani (2005c, 2006c)). As Hirose (1991) observes, sentence-initial *because*-clauses are generally presupposed. The premise from which to draw a conclusion cannot be presupposed, because it is newly introduced to the hearer by the utterance of the sentence. Thus, sentence-initial *because*-clauses are not compatible with the meaning of the reasoning construction.

Interestingly, however, with an expression of the speaker's thought, request of information, or the like, some speakers accept sentence-initial *because*-clauses, even if the sentences seem to express the reasoning process. Examples are given below:

(41) a. Because the ground is wet, {*I think* it has rained/it *must* have rained}.

b. Because you are a linguist, *I want to know* what you think of Chomsky.

While sentences (41a, b) express the same meaning as sentences (39a) and (40a), respectively, their *because*-clauses are in sentence-initial position, and the sentences are acceptable. Hence, the form-meaning mismatch is observed. What makes sentences (41a, b) different from ill-formed sentences (39b) and (40b) is the existence of expressions that explicitly indicate the speaker's thought and the speaker's request of information, such

as *I think/must* (in (41a)), and *I want to know* (in (41b)). How then are the sentences interpreted?

To answer this question, arguments about "coercion" are helpful. De Swart (1998) and Michaelis (2004, 2005), for instance, discuss mismatch phenomena and coercion, or type-shifting, observed in some constructions (cf. Pustejovsky (1996)). To see how coercion works, consider the following simple examples cited from Michaelis (2005):

(42) a. She read *a book*. [lexical match]

b. Did you eat *a pudding*? [lexical mismatch]

(Michaelis (2005:53))

In (41a, b), the italicized phrases represent the Indefinite Determination construction, in which the indefinite article *a* requires a singular countable noun as its complement. In (41a), *a book* transparently reflects the semantics of the construction: The input lexical item *a* shares semantic value with the right daughter of the construction *book*, because *book* is a singular countable noun. By contrast, *a pudding* in (41b) shows lexical mismatch: The noun *pudding* is a mass noun, and therefore fails to unify with the construction's right daughter. Michaelis (2005:53f.) explains this mismatch phenomenon as follows:

> …the relevant feature of the input noun will switch to those required by the construction. This means that mass nouns like *pudding* will receive the value [count +] in combination with the Indefinite Determination construction.

That is, upon the request from the construction that the lexical item is used in, the semantic feature of the mass noun *pudding*, i.e. uncountable, is canceled and switched into countable. This is generalized as follows:

(43) The Override Principle: If a lexical item is semantically incompatible with its syntactic context, the meaning of the lexical item conforms to the meaning of the structure in which it is embedded. (Michaelis (2005:51))

The mismatch phenomenon in (41a, b) above may be explained in accordance with the Override Principle. In (41a), for example, despite the reasoning sense of *I think* or *must*, because of the syntactic context in which it appears, the whole sentence expresses a causal relation. That is, those who can recognize a causal relation between the ground being wet and the speaker concluding that it has rained may accept this sentence.[13] The acceptability of sentence (41b) may be explained in the same way. In other words, sentences (41a, b) may be accepted not as irregular instances of the reasoning construction, but as instances of the causal construction. Without those italicized expressions in (41a, b), that is, if a causal relation cannot be recognized at all, the sentences are not acceptable. Therefore, even if the italicized expressions in these examples denote the speaker's thought or request of information, such semantic features are overridden by the sentence forms; the interpretations of the sentences are coerced into the causal ones.

Notes to Chapter 4

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1. I use the term "reasoning" rather than "inferential" for reasons to be discussed in section 4.4.

2. Details about the instantiations will be discussed in section 4.7.

3. Note that, as we shall see in section 4.3.3.1, speech act constructions *do* occur in inferential *because*-clauses. That is, just because *because*-clauses are subordinate clauses does not mean that speech act constructions, a.k.a. root transformations (Emonds (1970)), do not occur in them (cf. Hooper and Thompson (1973), Lakoff (1987), Haegeman (2002, 2003, 2004), etc.).

4. The two distinct forms of reasoning *since* constructions should be pragmatically differentiated for the same reason that I have pointed out for the two distinct forms of causal constructions in section 4.3. At present, however, how they are differentiated is not clear. Some linguists observe that sentence-initial *since*-clauses are preferred to the sentence-final equivalents (e.g. Ford (1993), Swan (2005)). It is also well known that *since*-clauses convey given or old information (e.g. Schourup and Waida (1989), Swan (2005)). These facts could be a key to the question. At any rate, however, I leave it for future research, and here I simply represent reasoning *since* constructions as in (14b).

5. Although, as mentioned in section 2.4, Sweetser (1990) does not discuss *for*, I take sentence (15b) as an example of *for* used in the seeming content domain, because the sentence has the same logical meaning as the

sentence *John came back because he loved her*.

6. Note here that no matter what conjunction is used, the main clause and the subordinate clause of the reasoning construction are separated by a comma intonation (see (14a-c)). The presence of a comma intonation symbolically reflects this characteristic of a reasoning process in general, i.e., the two situations described are understood separately (section 4.2).

7. I do not mean to argue against Lakoff's (1987) observation, but his generalization is a little coarse-grained. Since the reasoning *because*-clause is always in sentence-final position, the analysis here is not incompatible with Lakoff's observation. Lakoff's generalization, however, cannot explain the unacceptability of sentence (19a). Thus, in order to capture the fact more accurately, it is necessary to take into consideration the constructional distinction that I propose in this chapter.

8. If *for* is a coordinator, the term "main clause" may not be appropriate. Here, for want of a better term, I use the term merely to refer to the clause that expresses the conclusion.

9. The question remains open as to why the temporal meaning of *since* extends to the reasoning one, not to the causal one.

10. Rutherford does not explicitly distinguish the causal and reasoning *because*-clauses. He argues that bound *because*-clauses may be nominalized, while free *because*-clauses may not.

11. For detailed arguments of how the tense of the gerund is defined at the base time, i.e. the tense of the main clause, see Wada (2001). In the present thesis, I do not go any further.

12. Needless to say, the causal construction, in which *because* is used, is an instance of subordinate structure constructions. For the sake of simplification, however, the arrow that indicates the inheritance relation is not represented in diagram (38).

13. Of course, those who cannot recognize such a causal relation are not expected to accept sentence (41a).

Chapter 5
Focalizations of *Because* and *Since*

5.1 Introduction

It has often been pointed out that while *because*-clauses can be focalized by adverbs such as *just*, *only*, and *simply*, *since*-clauses cannot (e.g. Quirk et al. (1985), Schourup and Waida (1988), Wickboldt (1997), among others):

(1) a. He went to college just {because/*since} his parents asked him to.

b. Don't expect me to marry you simply {because/*since} you're rich.

(Schourup and Waida (1988:95))

According to Schourup and Waida (1988), the above grammaticality contrasts stem from the fact that the reason introduced by *because* conveys new information, while the reason introduced by *since* represents old information.

This claim, however, is not plausible for the following reasons. First, there are cases in which *since*-clauses can be focalized by focusing adverbs, as shown in (2):

(2) Wearing a different one every time she went out would be only natural, *particularly since* a sari does not have to be washed as frequently as a dress… (BNC [italics are mine])

Secondly, just because the reason is introduced by *because* does not always make it possible for the *because*-clause to be modified by focusing adverbs. Observe the following example:

(3) * It has rained, just because the ground is wet.
(cf. It has rained, because the ground is wet.)

Furthermore, the contrasts between old and new information seem irrelevant in accounting for the focalizability of *because*- and *since*-clauses by focusing adverbs for reasons to be explored later.

In this chapter, based on the argument in the previous chapter, I propose a generalization that accounts for when *because*- and *since*-clauses can or cannot be focalized by focusing adverbs. In particular, I argue that the focalizability of *because* and *since* is best explained by considering the interaction between characteristics of the constructions that these conjunctions are used in and the types of focusing adverbs. In chapter 4, I have postulated the causal construction and the reasoning construction, arguing that *because* participates in both of them while *since* is used only in the latter. The present chapter demonstrates the validity of the argument by applying it to the analysis of the focalizability of *because* and *since*.

This chapter is organized as follows. Section 5.2 makes a brief argument against information structural accounts of the focalizability of *because* and *since*. Section 5.3 then investigates characteristics of the constructions where *because* and *since* are used, reviewing the discussion in chapter 4. Section 5.4, following Quirk et al. (1985), classifies focusing adverbs into two groups, and shows how they focalize what follows them. Based on the discussion in sections 5.3 and 5.4, section 5.5 presents an alternative account of the grammaticality or ungrammaticality of sentences (1)-(3) above and other examples to be given later on, and proposes a generalization about the focalizability of *because*- and *since*-clauses by focusing adverbs. Section 5.6 summarizes the argument in this chapter.

5.2 Against Information Structural Accounts

As seen in the previous subsection, Schourup and Waida (1988) attempt to account for the focalizability of *because*- and *since*-clauses in terms of their information structural distinction, claiming that the reason introduced by *because* conveys new information, while that introduced by *since* presents old information.[1] As shown in (2) and (3) above, however, there are many counterexamples to Schourup and Waida's generalization about the focalizability of *because*- and *since*-clauses. Thus, their information structural account does not satisfactorily explain the facts.

The generalization based on the information structural distinction is not only empirically inadequate but also poses two theoretical problems. One is that although the generalization states that *because*-clauses convey new information, this is not always true. Hirose (1991:31) notes that

sentence-initial *because*-clauses generally convey old information (cf. chapter 4). To see this, consider the following dialogue:

(4) A: Why is the ground wet?
B: # Because it has rained, the ground is wet.
(cf. The ground is wet because it has rained.)
(Kanetani (2005:85))

The above dialogue shows that using a sentence-initial *because*-clause is not appropriate to answer a *why*-question. The inappropriateness of speaker B's utterance stems from the sentence-initial *because*-clause being presupposed. Although speaker A asks the reason why the ground is wet, the answer given by speaker B, with the sentence-initial *because*-clause, indicates that the reason is already known to speaker A. Hence, the incompatibility between A and B. That is, just because the reason is introduced by *because* does not necessarily mean that it conveys new information.

Another problem, which is similar to the first one, is that *since*-clauses do not always convey old information. They may present new information and be asserted as if they were independent clauses (cf. Hirose (1991:fn.13)). Observe the following sentence:

(5) I'm going to cheat my taxes, since who will ever find out?
(Lakoff (1987:479))

In (5), the rhetorical question *who will ever find out* occurs in the

since-clause. Lakoff observes that speech act constructions that convey statements, such as the rhetorical question in (5), may occur in *since*-clauses as well as in *because*-clauses.[2] Crucially, Hooper and Thompson (1973) argue that it is only in asserted clauses that speech act constructions ("root transformations" in their terms) can occur. Thus, *since*-clauses may be asserted as if they were independent clauses: At least the *since*-clause in (5) is asserted. Therefore, it is not likely that the reason introduced by *since* always presents old information.

In brief, just because the reason is introduced by *because* does not mean that it always conveys new information. Likewise, just because the reason is introduced by *since* does not necessarily mean that it conveys old information. It then follows that Schourup and Waida's (1988) account of the focalizability of *because* and *since* based on the information structural distinction is not plausible. I will present an alternative account in section 5.5, which is not dependent upon the information structural distinction. Before that, however, we need to consider (i) characteristics of the constructions that *because* and *since* are used in (cf. chapter 4), and (ii) the meanings of relevant focusing adverbs (cf. Quirk et al. (1985)), i.e. the two main factors that the analysis to be proposed is dependent upon.

5.3 Interpretations of *Because*-Clauses and *Since*-Clauses: Causal vs. Reasoning

5.3.1 *Because*-Clauses

As is well known, the conjunction *because* has two interpretations (e.g. Jespersen (1949), Rutherford (1970), Sweetser (1990), Hirose (1991), Nakau

(1994), among many others; see chapters 2 and 4). One is the causal interpretation. In this interpretation, the *because*-clause expresses the cause of (non-)occurrence of the situation described in the main clause. The other is the reasoning interpretation. Reasoning *because*-clauses are understood as providing the premise from which to draw a conclusion that is expressed in the main clause. The two uses of *because*-clauses are exemplified in (6):

(6) a. He's not coming to class because he's sick.

b. He's not coming to class, because he has just called from San Diego.

(Rutherford (1970:97))

In (6a), the *because*-clause expresses the reason for his not coming to class. The *because*-clause in (6b) does not give a reason for his not coming to class, but is understood as providing the premise to conclude that he is not coming to class.

I have argued in chapter 4 that this functional difference between causal and reasoning *because*-clauses is reflected in some syntactic behaviors of the *because*-clause. First, as Rutherford (1970) observes, causal *because*-clauses can be nominalized into *because of* NP, while reasoning ones cannot, as indicated in (7a, b):

(7) a. He's not coming to class because of his sickness.

b. * He's not coming to class, because of his having just called from San Diego. (Rutherford (1970:105))

The grammatical sentence in (7a) is gained by nominalizing the causal *because*-clause in (6a). In contrast, the sentence in (7b), which involves the nominalization of the reasoning *because*-clause in (6b), is ungrammatical.

Second, when a negation occurs in the main clause, causal *because*-clauses can be inside the scope of the negation, whereas reasoning *because*-clauses cannot (e.g. Rutherford (1970), Hirose (1991), among others). Observe the following:

(8) a. He doesn't beat his wife because he loves her.
(Rutherford (1970:100))

b. NEG [he beats his wife] because he loves her

c. NEG [he beats his wife because he loves her]

(9) a. He's not coming to class, because he just called from San Diego. (= (6b))

b. NEG [He's coming to class] because he just called from San Diego

c. * NEG [He's coming to class because he just called from San Diego]

According to Rutherford (1970), the sentence in (8a) is ambiguous between the two readings in (8b, c). That is, the causal *because*-clause in (8a) can be either inside or outside the scope of the negation in the main clause. The reasoning *because*-clause in (9a), on the other hand, is not ambiguous. The

sentence does not allow a wide-scope interpretation such as the one shown in (9c).

Third, causal *because*-clauses can be in sentence-initial position, while reasoning *because*-clauses cannot (cf. Schourup and Waida (1988) and Hirose (1991)). Observe the following:

(10) a Because it has rained, the ground is wet.

b. * Because the ground is wet, it has rained.

(Hirose (1991:27))

The fact that it has rained is a cause of the ground being wet. Hence, the *because*-clause in (10a) is a causal one. In (10b), on the other hand, the *because*-clause cannot be causal. The intended reading of the sentence is something like this: "From the fact that the ground is wet, I conclude that it must have rained." In such a case, sentence-initial *because*-clauses are not allowed (see Hirose (1991) for a more detailed discussion).

Fourthly, as Nakau (1994) observes, a causal *because*-clause can be clefted, as in (11a), whereas a reasoning *because*-clause cannot, as in (11b):

(11) a. It's because he's sick that he's not coming to class.

b. * It's because his wife told me that he's not coming to class.

(Nakau (1994:162))

Lastly, speech act constructions that convey statements can occur in sentence-final *because*-clauses (e.g. Lakoff (1987)). Consider the following

contrast:

(12) a. We should go on a picnic, because isn't it a beautiful day!

b. * Because isn't it a beautiful day, we should go on a picnic.

(Lakoff (1987:474))

The rhetorical question *isn't it a beautiful day*, a kind of speech act construction, occurs in the sentence-final *because*-clause in (12a), and the sentence is acceptable. Such constructions, however, cannot occur in the sentence-initial *because*-clause as in (12b). Reviewing Lakoff's analysis, I have argued in section 4.4.1 that it is in reasoning *because*-clauses, and not in causal ones, that speech act constructions can occur. To see the validity of this analysis, observe the following examples:

(13) a. Sam is not going out for dinner because his wife is cooking Japanese food.

(Hooper and Thompson (1973:494))

b. * Sam is not going out for dinner because Japanese food, his wife is cooking.

Since the sentence in (13a) allows a wide-scope reading of the matrix negation, the *because*-clause is a causal one (cf. (8c)). Thus even in sentence-final position, if the *because*-clause is a causal one, speech act constructions like the topicalization in (13b) are not allowed.[3] Since sentence-initial *because*-clauses, in which speech act constructions are not

allowed, are always causal ones, we can say, along this line, that reasoning *because*-clauses allow speech act constructions to occur in them, while causal *because*-clauses do not.

So far, we have observed five syntactic behaviors of causal and reasoning *because*-clauses. Their different behaviors may be used for diagnosis of causal and reasoning *because*-clauses. The diagnosis table is shown below:

(14)

		causal	reasoning
a.	nominalization	OK	*
b.	wide scope of matrix negation	OK	*
c.	sentence-initial position	OK	*
d.	clefting	OK	*
e.	speech act constructions	*	OK

5.3.2 *Since*-Clauses

Let us now turn to *since*-clauses. The conjunction *since* arguably has only a reasoning use (see chapter 4, in particular section 4.6.1; cf. Sweetser (1990), Nakau (1994)). Here, I use the term "reasoning" in a wide sense. That is, as I have argued in section 4.4, even if the situations described in the main clause and the *since*-clause seem to express a causal relation between them, some kind of speaker's reasoning process must be involved. This can be demonstrated by the following contrast:

(15) John died {?since/because} the bullet hit him in the head.

The sentence above describes the causal relation between John's death and the bullet hitting him in the head. The causal relation in this sentence is so direct and so easy to understand that it is difficult for the speaker's subjective reasoning process to lie between the two situations. In such a context, only marginally can *since* connect the two situations.

In the previous subsection, the diagnosis of causal and reasoning *because*-clauses (= (14)) has been presented. Note here that the different syntactic behaviors listed in (14) should be attributed to the different interpretations; thus, the diagnosis is not restricted to *because*-clauses, but can be extended to other conjunctions of reason. In what follows, to show that *since*-clauses have only reasoning uses, I investigate syntactic behaviors of *since*-clauses, applying the diagnosis in (14) to *since*-clauses in the order of (14a)>(14b)>(14d)>(14e)>(14c).

First, like reasoning *because*-clauses, and unlike causal *because*-clauses, *since*-clauses cannot be nominalized, as shown in (16):

(16) * Since John's death, Mary remarried. (Wickboldt (1997:85))

The sentence in (16) is intended to mean "John died, and for that reason, Mary remarried." The sentence is not grammatical, although its clausal counterpart *Since John died, Mary remarried* is perfectly acceptable.

Second, as Hirose (1991) argues, *since*-clauses are not inside the matrix negation. Consider the following:

(17) a. John is not happy since he's rich.

b. NEG [John is happy] since he's rich

c. * NEG [John is happy since he's rich]

(Hirose (1991:29))

The behavior regarding the scope of negation is parallel to reasoning *because*-clauses, but is different from causal *because*-clauses (cf. (14b)).

Third, as Nakau (1994) observes, *since*-clauses cannot be clefted, as shown in (18) (cf. Wickboldt (1997)):

(18) * It was since they wanted to save lives that they retreated.

(Nakau (1994:162))

Again, this is a parallel behavior to reasoning *because*-clauses and is a different behavior from causal *because*-clauses (cf. (14d)).

Fourthly, as we have already seen in section 5.2, Lakoff (1987) observes that speech act constructions that convey statements can occur in *since*-clauses as well. The relevant example is repeated below:

(19) I'm going to cheat on my taxes, since who will ever find out?

(= (5))

Here, the rhetorical question, *who will ever find out*, occurs in the *since*-clause and the sentence is grammatical. This is also the same behavior as reasoning *because*-clauses (cf. (14e)).

So far, our examination of *since*-clauses based on the diagnosis of *because*-clauses in (14) has revealed that the conjunction *since* introduces the premise of an inference rather than the cause of a situation. The third item of the diagnosis table (14c), i.e. sentence-initial subordinate clauses, however, seems to be contradictory to the present view, because *since*-clauses can appear in sentence-initial position, expressing the premise of an inference. Consider the following sentence:

(20) Since John isn't here, he has gone home. (Sweetser (1990:78))

In this sentence, the speaker draws the conclusion that John has gone home from the premise that he "is not here." The sentence-initial *since*-clause, however, is not a counterexample. On the contrary, it is a piece of supporting evidence for *since*-clauses having only reasoning uses. The reason why sentences with the sentence-initial *since*-clause can describe a reasoning process is, as I have argued in section 4.6.1, that the conjunction *since*, unlike *because*, unambiguously introduces the premise of an inference. That is, while *because*-clauses may have a reasoning interpretation only when they are in sentence-final position, *since*-clauses do not need such a requirement to have a reasoning interpretation.[4] From these observations, we can conclude that *since*-clauses do not have causal uses.

There is another good piece of evidence to show that sentence-initial *since*-clauses behave in the same way as reasoning *because*-clauses. Observe the following example:

(21) …since in no real sense could they be said to have had the opportunity of availing themselves of the action project, they are omitted… from most of the following analysis. (BNC)

The subject-auxiliary inversion, a kind of speech act construction expressing a statement, occurs in the sentence-initial *since*-clause in this sentence. The occurrence of this type of speech act constructions in subordinate reason clauses is characteristic to their reasoning uses (cf. (14e)). Hence, the reason introduced by *since*, even in sentence-initial position, is considered not to be a cause of the situation described in the main clause, but to be the premise from which to draw the conclusion described in the main clause.

In sum, the conjunction *since* unambiguously has a reasoning use.

5.3.3 Characteristics of the Constructions

In the last two subsections, I have argued that the reason introduced by *because* is ambiguous between a cause of another situation and the premise of a reasoning process, while the reason introduced by *since* is unambiguously the premise of an inference. In chapter 4, I have proposed a construction grammar approach to the conjunctions in question (cf. Hirose (1999), Kanetani (2005c, 2006c)). I have stated that the differences at issue are the constructional differences rather than the difference of conjunctions themselves and argued that different syntactic behaviors such as those listed in (14) should be attributed to the characteristic of each construction. More specifically, the causal relation between situation$_1$ and situation$_2$ is mapped onto either [C_2 *because* C_1] or [*Because* C_1, C_2], in which C_1 and C_2 denote a

situation$_1$ and another situation$_2$, respectively. These form-meaning correspondences are understood as grammatical units called causal constructions. Likewise, a reasoning process in which the speaker draws a conclusion (situation$_2$) from the premise (situaition$_1$) is mapped onto either [C_2, *because* C_1], [C_2, *since* C_1], or [*Since* C_1, C_2]. Each of these form-meaning correspondences is an instance of the reasoning construction (for details, see chapter 4).

What is important for the present discussion is that as I have repeated in the previous chapter, causal constructions perform one speech act in a whole sentence, while reasoning constructions perform two. The following contrast demonstrates this point:

(22) a. Is the ground wet because it has rained?

b Has it rained, because the ground is wet.

Sentence (22a) is an interrogative sentence of the causal construction, while sentence (22b) is an interrogative sentence of the reasoning *because* construction. The arrows indicate intonation patterns. The different intonation patterns (and punctuations) suggest that the causal construction performs one speech act, i.e. the question asking whether the rain caused the ground to become wet, while the reasoning construction performs two, i.e. the question asking whether it has rained and the statement that the ground is wet.

The difference reflects how we conceptualize causal relations and reasoning processes. As for causal relations, the speaker takes as a single

process the whole process in which a situation causes another situation. Consider the following example:

(23) The ground is wet because it has rained.

In this sentence, the whole causal chain in which the rain has caused the ground to be wet is taken at once. On the other hand, sentences that describe reasoning sense denote the process in which the speaker (subjectively) connects two situations that may not necessarily be related in the real world. Take the sentence in (24) as an example:

(24) It has rained, because the ground is wet.

Logically, the cause of the wet ground does not have to be the rain. However, the speaker sees the wet ground, and then concludes that it has rained based on his common knowledge of the world or experience. In other words, it may not have rained, and even if it has, there need not be a necessary causal relation between the rain and the wet ground. Besides, there may be other possible reasons for the speaker to conclude that it has rained, say, to see a rainbow in the sky, to see someone get home wet, to hear the news about the rain, etc.

Note in passing that the reasoning construction, whether *because* or *since* is used, requires a comma intonation between the main clause and the subordinate clause (e.g. Rutherford (1970), Sweetser (1990), Nakau (1994), Hirose (1999), Kanetani (2005c, 2006c)). The obligatory comma intonation

symbolically functions as separating speech acts between the main clause and the subordinate clause.

Lastly, it is important to note that what is crucial in describing the focalizability of conjunctions by certain focusing adverbs is not the type of conjunctions, but the type of constructions that the conjunctions participate in. More precisely, the characteristics of causal and reasoning constructions discussed in this subsection are the most important; that is, causal constructions perform one speech act as a whole and the whole sentence is taken as one information-unit, while the main clause and the subordinate clause of reasoning constructions are taken as independent information-units.[5]

5.4 Two Types of Focusing Adverbs: Exclusives and Particularizers

In the previous subsection, I have discussed the characteristics of the constructions that *because* and *since* participate in. In this subsection, I investigate how focusing adverbs focalize what follows them, i.e. another important factor crucially involved in the focalizability of *because*-clauses and *since*-clauses by focusing adverbs.

Quirk et al. (1985) draw a line between two types of focusing adverbs. One group is called exclusives, and includes *just*, *simply*, *only*, *precisely*, and the like. The other group, called particularizers, includes *especially*, *particularly*, *largely*, and the like. According to Quirk et al., these adverbs indicate that the utterance concerned is true in respect of the part focused, and the ways adverbs in each group restrict the utterance are different. Specifically, exclusives restrict the application of the utterance exclusively to

the part focused; particularizers restrict the application of the utterance predominantly to the part focused.

Now that the basic characteristics of each group of focusing adverbs are given, let us observe the meaning of some adverbs more closely and investigate how they restrict the utterances. First, observe the dictionary definitions of some exclusives and particularizers listed in (25)-(26):

(25) exclusives

a. only: as a single fact or instance and nothing more or different (WEBSTER)

b. just: *simply* (WEBSTER)

c. simply: without ambiguity (WEBSTER)

d. merely: used meaning 'only' or simply' to emphasize a fact or s[ome]th[ing] that you are saying (OALD^6)

e. solely: only; not involving s[ome]b[ody] /s[ome]th[ing] else (OALD^6)

f. precisely: emphasize that a reason or fact is the only important one there is… (COBUILD^4)

(26) particularizers

a. particularly: distinctive among other examples or cases of the same general category (WEBSTER)

b. especially: in particular (WEBSTER)

c. largely: in a large manner; *especially* (WEBSTER)

d. mainly: used to show that a statement is true to a large

degree (OALD[6])

e. mostly: indicate that the statement is generally true … in most respects (COBUILD[4])

f. principally: more than anything else (COBUILD[4])

The dictionary definitions of exclusives in (25) show that adverbs in this group exclude other possibilities than the one described. Exclusives thus highlight what follows them by singling it out and denying other possibilities. Considering the definitions of particularizers in (26), on the other hand, we can see that they do not exclude other possibilities. Rather, they imply that there are other possibilities than the one described. Particularizers thus highlight what follows them by comparing it with other similar examples or cases.

Let us then observe more clearly how focalizations are done by exclusives and particularizers. First, consider the following example:

(27) You can tell just by looking at me that I am all right…

(COBUILD[4], s.v. *just*)

In (27), the *by*-phrase is focalized by the exclusive *just*. The sentence indicates that the only way the addressee can tell the speaker is right is by looking at him: No other way can be evoked.

Next, to see how particularizers focalize what follows them, observe the following sentence, which involves the focalization by the particularizer *especially*:

(28) Millions of wild flowers color the valleys, especially in April and May... (COBUILD[4], s.v. *especially*)

In this sentence, the period during which the valleys are colored by wild flowers is not limited to April and May. Rather, the focalization of the period by the particularizer implies that there are other seasons when people can enjoy the colored valleys, say, March, June, etc.

Huddleston and Pullum (2002) divide focusing adverbs into two groups from a similar point of view.[6] They refer to adverbs such as *only*, *just*, *precisely*, *simply*, and the like, as total restrictive focusing modifiers; adverbs such as *especially*, *mainly*, *particularly*, *mostly*, and the like, as partial restrictive focusing modifiers. The former corresponds to Quirk et al.'s (1985) exclusives and the latter to their particularizers. Henceforth, in order to avoid confusion, I use Quirk et al.'s (1985) terms. Consider the following sentence, where the particularizer *mainly* focalizes the prepositional phrase that follows:

(29) I was concerned mainly about the cost.

(Huddleston and Pullum (2002:592))

Huddleston and Pullum (2002:592) say that this sentence "do[es] not say (as [it] would with *only*) that I wasn't concerned with anything except the cost, but rather that I wasn't concerned with anything else to the same extent: *any other concerns* are relatively minor [emphasis is mine]." As the italicized phrase "any other concerns" suggests, focalization by a

particularizer implies that there are other possibilities that are not explicitly mentioned in the given sentence. Furthermore, as indicated by the parenthesized phrase "as [it] would with *only*," Huddleston and Pullum also acknowledge that when an exclusive like *only* is used, such an implication is not present.

In sum, if exclusives restrict utterances, there are no other possibilities than those described. If particularizers are used, there are other implicit possibilities than those described.[7]

5.5 Analysis

The last two subsections have investigated the characteristics of causal and reasoning constructions and the ways exclusives and particularizers restrict utterances. Based on those observations, I propose in this section a generalization about the focalizability of *because*-clauses and *since*-clauses by focusing adverbs. Before that, however, let us observe what type of focusing adverbs can focalize what type of conjunctions and argue about why.

First, causal *because*-clauses can be focalized by exclusives, as illustrated in (30):

(30) He went to college just because his parents asked him to.

(= (1a))

In this sentence, the situation of his parents' asking a favor of him has caused another situation, i.e. his going to college. The exclusive *just* in front of the

because-clause restricts the cause to the one expressed in the sentence. Thus, the sentence in (30) denotes that only the fact that his parents asked him to go to college is the cause of his going to college. Recall that in causal constructions, the whole sentence is taken as one information-unit. In other words, the cause situation and the result situation are not taken independently, but taken as a kind of combined process. Hence, the inseparability of cause from result. That is, if there is a certain result, its cause must exist. Focalizations of *because*-clauses by exclusives assert that there are no other causes or reasons than the one expressed, and at the same time, presuppose that the situation described in the reason clause exists (cf. Horn (1969)).[8] Therefore, exclusives may focalize causal *because*-clauses, restricting the cause situation exclusively to the one described.

Second, causal *because*-clauses may be focalized by particularizers as well as exclusives. One such example is given in (31):

(31) It was largely because of you that he failed.

(KDEC, s.v. *because*)

The *because*-clause in (31) is nominalized and clefted, which means that the *because*-clause is a causal one (see (14a, d)). In fact, the sentence denotes the causal relation between the addressee's action and the failure of the person referred to as *he*. The *because*-clause is focalized by *largely*, a particularizer. Again, the important characteristic of causal constructions is that the cause and result are inseparably linked. This, however, does not necessarily mean that there is only one cause for one result; there may be

more than one cause for one result as far as they are inseparably linked. Consider the following example:

(32) Above all, it is because I can distinguish the narrating from the narrated and because I can (re)constitute the latter with the former that I can begin to talk about the world represented.[9]

(Prince, G., *Narratology*, 1982:60)

The *because*-clauses in this sentence are clefted; that is, they are causal ones. What is important here is that there are two *because*-clauses and that the two situations therein, i.e. that the speaker can distinguish the narrating from the narrated and that the speaker can (re)constitute the latter with the former, jointly cause another situation, i.e. that the speaker can begin to talk about the world represented (cf. Rutherford (1970)).[10] Thus, there may be multiple causes for one result. If so, focalizations of causal *because*-clauses by particularizers, like the one involved in (28), do not present any problem. Such focalizations imply that there are other situations than the one expressed in the *because*-clause, which jointly cause the result expressed in the main clause. In (31), for example, "his failure" has been caused by not only the addressee's action but also some other additional factors, but the addressee's action was the most noteworthy or the most important. Therefore, not only exclusives but also particularizers may focalize causal *because*-clauses, implying that there are other possible situations that, together with the situation described in the sentence, cause the one result.

Third, reasoning *because*-clauses and *since*-clauses cannot be focalized

by exclusives. The relevant examples are repeated below:

(33) a. * It has rained, just because the ground is wet. (= (3))

b. * He went to college just since his parents asked him to. (= (1a))

In (33a, b), the reasoning *because*-clause and the *since*-clause are focalized by the exclusive *just*, and the sentences are not acceptable. Since exclusives exclude other possibilities than the one described, using them in front of subordinators excludes other reasons than those described. For example, in (33a), if the sentence were grammatical, the focalization of the *because*-clause by the exclusive *just* would exclude other reasons to conclude that it has rained. However, this is not plausible. As I mentioned in section 5.3.3, there may be other reasons to conclude that it has rained, since reasoning is merely a process in which the speaker subjectively connects two situations that need not have a necessary causal relation in the real world. Hence, it is not possible to restrict the reason for the inference only to the one expressed. A similar explanation holds for the ungrammaticality of (33b). Therefore, subordinators in the reasoning construction cannot be focalized by exclusives.

Fourthly, and as can be expected, reasoning *because*-clauses and *since*-clauses may be focalized by particularizers, as exemplified in (34):

(34) a. Normally they were military officers, *partly because* the army provided a supply of trained talent,... and *mainly*

because the organization of defence was the crucial part of their work. (BNC [italics are mine])

b. Wearing a different one every time she went out would be only natural, *particularly since* a sari does not have to be washed as frequently as a dress… (= (2))

In (34a), the *because*-clauses are used to express the premises from which to draw the conclusion that they were military officers. Those *because*-clauses are focalized by such particularizers as *partly* and *mainly*. In (34b), the *since*-clause is focalized by the particularizer *particularly*. As I have repeatedly mentioned, in reasoning processes, there is no necessary causal relation between the two situations described. Rather, the two situations happen to be related to each other by the speaker. To see this, consider sentence (24), repeated here as (35):

(35) It has rained, because the ground is wet. (= (24))

In this sentence, the situation of the ground being wet happens to be used as the premise to conclude that it has rained, but at the same time, there are other possible situations that may be used as premises from which to draw the conclusion (see section 5.3.3). Reasons described in the reasoning subordinate clauses are thus chosen from many other possible candidates. Since particularizers highlight one among other examples or cases of the same general category, they can focalize the subordinate clause in the reasoning construction, without denying other possible reasons. Hence,

there is no reason to ban the focalization of reasoning *because*-clauses and *since*-clauses by particularizers.

The above discussion is summarized as follows:

(36)

	exclusives	particularizers
causal constructions	OK	OK
reasoning constructions	*	OK

That is, the following generalization is made about the focalizability of *because*-clauses and *since*-clauses by focusing adverbs: Causal *because*-clauses can be focalized by both exclusives and particularizers; reasoning *because*-clauses and *since*-clauses can be focalized by particularizers, but not by exclusives.

Given the above generalization, despite the widely accepted view that *since*-clauses cannot be focalized by focusing adverbs (e.g. Quirk et al. (1985), Schourup and Waida (1988), Wickboldt (1997)), one may predict that there are many examples like (34b) in which *since*-clauses are focalized by particularizers. This prediction is borne out:

(37) a ….since I've just sworn an oath to this effect, it might seem pointless to offer further assurances, *particularly since* I can't back them up. (BNC)

b. *Specifically since* you're from Midwest City, are you aware of any around Interstate 40 between Oklahoma City and Midwest City?

(edition.cnn.com/US/9703/okc.trial/transcripts/may/051497.am.html?eref=sitesearch)

c. Measuring biomass in vegetation monitoring is used infrequently *mostly since* it involves some degree of destructive sampling.

(www.nps.gov/plants/restore/pubs/intronatplant/caring.htm)

d. Spring is generally a calm, cool and dry season, *principally since* the Atlantic has lost much of its heat throughout the autumn and winter.

(en.wikipedia.org/wiki/Climate_of_the_United_Kingdom)

((37a-d): italics are mine)

In (37a-d), the *since*-clauses are focalized by *particularly*, *specifically*, *mostly*, and *principally*, all of which belong to particularizers. These findings are not surprising at all under the proposed analysis. If, as Schourup and Waida (1988) claim, *since*-clauses conveyed old information and were not focalized, how would the grammaticality of these examples be explained?[11] Under the proposed analysis, their grammaticality can be explained in the same way as that of sentence (34b), and no problem arises. There are so many examples of *since*-clauses being focalized by focusing adverbs as in (37a-d) that we may say that the focalized *since*-clause in (2) (= (34b)) is not exceptional but just one example of a wider phenomenon.

I conclude this subsection by considering the following attested example:

(38) Carl's Jr. has done it again.

I mean, showing us a half-clad, car-washing Paris Hilton was one thing, but they may have gone too far this time. *Especially since, who really cares about Paris Hilton*, anyway?

(www.newsreview.info/section/BLOG08 [italics are mine])

In this example, the speaker criticizes the content of a commercial for the burger restaurant chain Carl's Jr., whose broadcast was prohibited because of the extreme content. The *since*-clause is focalized by the particularizer *especially*. In addition, the rhetorical question *who really cares about Paris Hilton* occurs in it. Note also that the *since*-clause in (38) no longer syntactically subordinates to the main clause, i.e., the *since*-clause behaves as an independent clause, though it still provides the premise from which to draw the conclusion that Carl's Jr. may have gone too far. That is, the *since*-clause is focalized and asserted as an independent clause at the same time. These facts are exactly what is predicted by the proposed analysis; they will be difficult to account for in terms of the previous analyses which claim that *since*-clauses convey old information. Therefore, the proposed analysis is both empirically and theoretically more convincing than the analysis based on information structural distinction.

5.6 Summary

I have argued (especially in section 5.5) that conjunctions used in the causal construction may be focused by exclusives and particularizers, while those in the reasoning construction can be focalized only by particularizers.

This generalization is obtained by considering the characteristics of the causal and reasoning constructions (section 5.3; see also chapter 4) and the ways focusing adverbs focalize what follows them (section 5.4). As is clear from the discussion in section 5.2, the status (old vs. new) of information conveyed by *because*- and *since*-clauses is not relevant to accounting for the focalizability of *because*-clauses and *since*-clauses. Thus, the validity of the construction grammar analysis of *because* and *since* proposed in chapter 4 is shown.

Notes to Chapter 5

* The present chapter is a revised and extended version of Kanetani (2005a, to appear). For helpful comments on the present article, I am indebted to Yukio Hirose, Nobuhiro Kaga, Naoaki Wada, and two anonymous reviewers for *English Linguistics*. My deep gratitude goes to Patrick Farrell, who has kindly and patiently acted as an informant.

1. Such an information structural distinction has also been observed by other researchers (e.g. Poutsma (1904), Swan (2005), among others).

2. Lakoff (1987) observes that not all kinds of speech act constructions can occur inside subordinate clauses: Only speech act constructions that convey statements may occur in them. The rhetorical question used in (5), *who will ever find out*, for example, conveys the statement *no one will find out*.

3. The topicalization in the sentence-final *because*-clause in (13b), *Japanese food, his wife is cooking*, conveys a statement like *his wife is cooking Japanese food* (see fn.2). Nevertheless, the sentence is not acceptable. Thus, I have pointed out in chapter 4 that *because*-clauses being in sentence-final position is not a sufficient condition for speech act constructions to occur in them, and that the reasoning *because*-clause, which must appear in sentence-final position, provides the sufficient condition for speech act constructions to occur therein.

4. In order to distinguish sentence-final causal *because*-clauses from reasoning *because*-clauses, another elaboration is required. In Rutherford's (1970) terms, the former are restricted and the latter non-restricted. The difference is particularly important for distinguishing a causal relation from a reasoning process for reasons to be mentioned in section 5.3.3 (cf. chapter 4).

5. Haegeman (2002), who mainly focuses on interpretations of

conditional *if*-clauses and the applicability of topicalization in them, presents a similar observation from a generative perspective, using minimalist terminology (cf. Chomsky (1995)). Haegeman distinguishes central and peripheral adverbial clauses in terms of the different timings of their merger with the main clause, and points out that while the central adverbial clause (our *because*-clause in the causal construction) is part of the speech act of the matrix clause, the peripheral adverbial clause (our subordinate clause in the reasoning construction) has independent illocutionary force. Haegeman's analysis thus supports our view. For the purpose of the present discussion, however, detailed internal structures of adverbial clauses such as the ones that Haegeman presents in the latter part of her paper are, presumably, not necessary. Therefore, I will not go into detail about the internal syntactic structures.

6. I thank an anonymous *EL* reviewer for calling my attention to Huddleston and Pullum (2002).

7. Biber et al. (1999:780-781) do *not* distinguish exclusives and particularizers, integrating them as restrictive adverbials. They say that "restrictive adverbials [*especially* and *only* in (ia, b)] emphasize that the proposition is true in a way which *expressly excludes some other possibilities* [italics are mine]."

(i) a. The villagers say jokingly that *only* a sick man would choose such a remote place to build.

b. A heart born *especially* for me, Jackie used to tease.

(ibid.)

As far as (ia) is concerned, their observation is true. However, as I have argued so far, the adverb *especially* in (ib) does not exclude other possibilities than *for me*, but rather implies the presence of some other possibilities. In this respect, their observation seems inappropriate. The

distinction of exclusives and particularizers (Qurik et al. (1985), Huddleston and Pullum (2002)) is crucial (especially for the present discussion), and therefore, I do not follow Biber et al.'s (1999) observation.

8. Horn (1969) discusses the semantics of *only*. He argues that "Only X" presupposes the affirmative proposition, P(X), and asserts the negative proposition, P(X and no other than X). A similar point is made by Huddleston and Pullum (2002:588). At present, I simply assume that a similar explanation holds for other exclusives, because the ways they restrict the utterance are all the same.

9. I thank Naoaki Wada for providing me with this example.

10. Rutherford (1970) provides the following example:

(i) He's not coming to class because he's sick and because he doesn't like school anyway. (Rutherford (1970:98))

This sentence also expresses two causes for one result; his sickness and his school phobia cause him not to come to class.

11. The examples of ungrammatical *since*-clauses given by Schourup and Waida (1988) are focalized by the exclusives *just* and *simply*, as in (ia, b). (It should also be noted that Quirk et al.'s (1985) and Wickboldt's (1997) examples of unacceptable *since*-clauses are focalized by the exclusive *only* (with no explanation about the unacceptability).)

(i) a. He went to college just {because/*since} his parents asked him to. (= (1a))

b. Don't expect me to marry you simply {because/*since} you're rich. (= (1b))

(Schourup and Waida (1988:95))

As far as these examples are concerned, their observation is correct. What

I would like to emphasize is that information structural accounts would wrongly rule out even grammatical sentences such as (34b), (37a-d), and (38); in this respect, their account is inadequate.

Chapter 6
Constructions of Metalinguistic Reasons*

6.1 Introduction

In the previous chapters, I have investigated the causal and reasoning uses of *because*. In addition to these uses, *because* has a certain metalinguistic use, as in (1):

(1) The Blackwell collection was reputed to be the most valuable private collection in the world. *Reputed*, because no one outside of invited guests was permitted to see it.

(Hirose (1992:82))

In the second sentence in (1), the *because*-clause expresses the reason why the speaker used the word *reputed* in the preceding sentence. In the present chapter, I am concerned with this kind of metalinguistic use of *because*.[1] Little attention has been paid to this use of *because*: As far as my knowledge goes, Hirose (1992) is the only one that pays attention to this use of *because* and gives an account of it. Following Hirose, I refer to expressions of this kind as the expression-*because* construction (or the E-*because* construction, for short).

As Hirose points out, the E-*because* construction in (1) is semantically

equivalent to sentence (2):

(2) I say "reputed," because no one outside of invited guests was permitted to see it.

The main clause of this sentence is a finite clause, while that of (1) is only the expression used in the preceding sentence.[2] In order to distinguish constructions like (2) from the E-*because* construction, I call them the *I say* E *because* construction (or the ISE-*because* construction, for short).

In the present chapter, I discuss how the properties of these metalinguistic reason constructions can be accounted for in the construction grammar framework. In chapter 4, I have proposed a construction grammar approach to the conjunction *because*, and postulated the causal construction and the reasoning *because* construction, as exemplified in (3a, b), respectively:

(3) a. Sam is not coming to class because he's sick.

b. Sam is not coming to class, because he just called from San Diego.

(adapted from Rutherford (1970:95))

This chapter is organized as follows. Section 6.2 observes general properties of the metalinguistic reason constructions. Section 6.3 compares them with the causal construction and the reasoning construction, and points out three questions that emerge in the course of the comparison. Sections

6.4 through 6.6 answer these questions. Section 6.7 observes another type of metalinguistic reason construction. Section 6.8 describes in terms of inheritance links how the constructions at issue are related to each other. Section 6.9 summarizes the arguments, followed by an appendix that presents a possible alternative to an analysis to be proposed in section 6.6.

6.2 Facts on the Metalinguistic Reason Constructions

In this subsection, I observe properties of the E-*because*/ISE-*because* constructions.[3] First, their *because*-clauses do not appear in sentence-initial position. Consider the following examples:

(4) a. * Blackwell collection was reputed to be the most valuable private collection in the world. Because no one outside of the invited guests was permitted to see it, *Reputed.*

b. * Blackwell collection was reputed to be the most valuable private collection in the world. Because no one outside of the invited guests was permitted to see it, I say *reputed.*

(cf. (1)-(2))

As Hirose (1991) observes, sentence-initial *because*-clauses generally express the reason that is presupposed (see chapter 4). In the E-*because*/ISE-*because* constructions, the reason cannot be presupposed. More accurately, the reason must be asserted, because these constructions express the reason why the speaker used a certain expression in the preceding context. Therefore, it is natural that sentence-initial *because*-clauses are not

used in these constructions.

Second, as Hirose (1992) observes, the *because*-clause in the E-*because* construction can be nominalized into *because of* NP, as exemplified in (5):

(5) Talking about verbal defensiveness has proven to be a particularly effective way of making *linguists* defensive: "defensive" because of wide-scale disagreement concerning the validity of speech act interpretations which must be necessarily be highly context dependent, intuitive, and, in addition, must confront the controversial problem of discerning a speaker's intention. (Hirose (1992:85))

In this example, the reason why the speaker used the word *defensive* is expressed by the nominalized *because*-clause, i.e. *because of wide-scale disagreement*. Likewise, the *because*-clause of the ISE-*because* construction may be nominalized, as exemplified in (6):

(6) This is an historic session for a number of reasons. This is the 26th special session in our special state's special history.... And, finally, I say historic because of the subjects at hand. (mt.gov/racicot/spch/SpecSess99.htm)

Third, the *because*-clause of the ISE-*because* construction and the E-*because* construction can be focalized by exclusives, as exemplified in (7):

(7) a. Figure 2 shows the theoretical response of the filter. I say "theoretical", simply because it is unrealistic to expect any signal to be over 200dB down from the passband level. (sound.westhost.com/project99.htm)

b. Figure 2 shows the theoretical response of the filter. "Theoretical", simply because it is unrealistic to expect any signal to be over 200dB down from the passband level.

In (7a, b), the *because*-clause is focalized by *simply*, which belongs to exclusives. Exclusives other than *simply* involve *just*, *only*, *precisely*, and the like (Quirk et al. (1985:604); for details, see chapter 5).

Fourth, speech act constructions that convey statements (cf. Lakoff (1987)) can occur in the *because*-clause of the ISE-*because* construction and the E-*because* construction, as shown in (8a, b):

(8) a. …they serve for lunch the surprisingly delicious cucumber salad. I say surprisingly, because who would think one could turn the big, fat American (instead of the slim, English variety) into anything one would want a lot more of.
(www.sfexaminer.com/templates/print.cfm?storyname=010704e_tower)

b. Surprisingly, because who would think one could turn the

big, fat American (instead of the slim, English variety) into anything one would want a lot more of.

In (8a), the rhetorical question, a kind of speech act construction, appears in the *because*-clause of the ISE-*because* construction. As shown in (8b), such speech act constructions may also occur in the *because*-clause of the E-*because* construction.

The observations so far suggests that the E-*because* construction and the ISE-*because* construction behave alike. However, there is a difference between them, as well. The *because*-clause of the ISE-*because* construction can be clefted, as in (9a, b), whereas that of the E-*because* construction cannot, as exemplified in (10a, b):[4]

(9) a. …It is because of this "gripping," this "holding onto," that I say "behold!"
(www.toltec-foundation.org/extracts/qfm.pdf)

b. I currently live in Hanover Pennsylvania and why I say currently is because I have lived in 5 different places around the US mostly on the east coast though.
(students.juniata.edu/mclelnm2/)

(10) a. * …It is because of this "gripping," this "holding onto," that "behold!" (cf. (9a))

b. * I currently live in Hanover Pennsylvania and why *currently* is because I have lived in 5 different places

around the US mostly on the east coast though. (cf. (9b))

Thus, the properties of the E-*because* construction and the ISE-*because* construction may be summarized as follows:

(11) a. Sentence-initial *because*-clauses are not allowed.

b. The *because*-clause is nominalized into *because of* NP.

c. The *because*-clause can be focalized by exclusives.

d. Speech act constructions can occur in the *because*-clause.

e. The *because*-clause of the ISE-*because* construction can be clefted, while that of the E-*because* construction cannot.

In the following subsection, I will review the properties of the causal and reasoning constructions and compare them with those of the metalinguistic reason constructions.

6.3 Comparison with the Causal and Reasoning Constructions

In the previous subsection, I have observed the behaviors of the E-*because*/ISE-*because* constructions. In this subsection, I compare them with those of the causal construction and the reasoning *because* construction, reviewing the arguments in chapters 4 and 5. From the comparison, some problems arise. I will point them out in section 6.3.2.

6.3.1 The Causal Construction and the Reasoning Construction

The causal construction and the reasoning *because* construction are

exemplified by sentences (3a, b), respectively, repeated here as (12a, b):

(12) a. Sam is not coming to class because he's sick. (= (3a))

b. Sam is not coming to class, because he just called from San Diego. (= (3b))

Sentence (12a) describes the causal relation between Sam's being sick and his not coming to class. Sentence (12b) describes the speaker's reasoning process in which he draws the conclusion that Sam is not coming to class from the premise that he just called from San Diego. As I have argued in chapter 4, in the causal construction, the main clause and the *because*-clause are understood as forming one information unit as a whole, while in the reasoning construction, they are understood as forming separate information units. To see this, consider the following interrogative sentences:

(13) a. Is the ground wet because it has rained?

b. Has it rained, because the ground is wet.

Sentence (13a) is an instance of the causal construction, in which a rising intonation is used at the end of the sentence. Sentence (13b) is an instance of the reasoning construction, where a rising intonation is used at the end of its main clause; its *because*-clause is read in a falling intonation. This different intonation pattern suggests that sentence (13a) performs one speech act of question as a whole, while sentence (13b) performs two speech acts, i.e. the speech act of question in the main clause and the speech act of the

statement in the *because*-clause. I have argued in chapters 4 and 5 that a lot of phenomena may be accounted for by the different constructional properties.

First, causal *because*-clauses may be nominalized into *because of* {NP/Gerund}, while reasoning *because*-clauses may not (cf. Rutherford (1970)). Observe the following sentences:

(14) a. He's not coming to class because of (his) sickness.

b. * He's not coming to class, because of his having just called from San Diego. (Rutherford (1970:105))

If *because*-clauses are nominalized, as in (14a, b), they may no longer perform speech acts on their own. As a result, such nominalized *because*-clauses are regarded as merely a part, or a constituent, of larger speech act. Hence, the nominalization of a *because*-clause is incompatible with the reasoning *because* construction, whereas it is compatible with the causal *because* construction.

Second, as argued in chapter 5, causal *because*-clauses can be focalized by an exclusive, as in (15a), while reasoning *because*-clauses cannot, as in (15b):

(15) a. He went to college simply because his parents asked him to. (Schourup and Waida (1988:95))

b. * It has rained, just because the ground is wet.

Since it is the speaker that relates two situations expressed in the main clause and the *because*-clause in a reasoning process, even if one says, "it has rained, because the ground is wet," logically, the cause of the wet ground does not have to be the rain. In other words, it may not have rained, and even if it has, there need not be a necessary causal relation between the rain and the wet ground. Besides, there may be other possible reasons for the speaker to conclude that it has rained, say, to see a rainbow in the sky, to see someone get home wet, to hear the news about the rain, etc. Therefore, reasoning *because*-clauses may not be focalized by an exclusive that excludes other possible reasons.

Third, speech act constructions that convey statements, e.g. topicalizations, rhetorical questions, etc., may appear in reasoning *because*-clauses, but not in causal *because*-clauses (cf. Hooper and Thompson (1973), Lakoff (1987)). Consider the following sentences:

(16) a. * He's not going out for dinner because Japanese food, his wife is cooking.

(cf. He's not going out for dinner because his wife is cooking Japanese food. (Hooper and Thompson (1973:494)))

b. I think we have more or less solved the problem for donkeys here, because those we haven't got, we know about. (*Guardian* [online])

In (16a), the topicalization in the *because*-clause is not allowed. As the parenthesized original sentence shows, the *because*-clause is inside the scope

of the matrix negation. This means that sentence (16a) is an instance of the causal construction (cf. Rutherford (1970)). As in (16b), topicalization may occur in reasoning *because*-clauses. In the causal construction, the *because*-clause and its main clause need to be understood as a single process, and therefore perform one speech act as a whole. In the reasoning *because* construction, the *because*-clause and its main clause perform two speech acts independent of each other. As the very name suggests, "speech act" constructions perform speech acts on their own. Thus, *because*-clauses in which a speech act construction appears perform speech acts independent of the main clauses. Hence, speech act constructions are compatible with reasoning *because*-clauses, whereas they cannot occur in causal *because*-clauses.

Lastly, causal *because*-clauses can be clefted, whereas reasoning ones cannot (Nakau (1994)). Compare the following examples:

(17) a. It's because he's sick that he's not coming to class.

b. * It's because his wife told me that he's not coming to class.

(Nakau (1994:162))

In (17a), the causal *because*-clause is clefted. In contrast, the unacceptability of sentence (17b) indicates that clefting a reasoning *because*-clause yields an unacceptable sentence. In the reasoning construction, the main clause and subordinate clause form separate information units, and each should be asserted independently. However,

clefting reasoning *because*-clauses results in the backgrounded main clause, because the element in the *that*-clause of cleft constructions is understood as being backgrounded. Thus, reasoning *because*-clauses may not be clefted. A causal *because*-clause, on the other hand, may be clefted, as in (17a), because it is merely a part of larger information unit.

6.3.2 Comparison

From the observations so far, we may say that the E-*because*/ISE-*because* constructions are similar to the causal construction in terms of the nominalization of the *because*-clause and its focalization by exclusives (cf. (11b, c)). Indeed, the E-*because*/ISE-*because* constructions convey a causal meaning, rather than a reasoning one, i.e., they express the reason why the speaker used a certain expression in the preceding context. Then, the main clause and the subordinate clause of these constructions should be understood as forming one information unit as a whole. In this connection, Hirose (1992) argues that the main clause of the E-*because* construction, as a word or phrase that is contextually presupposed, cannot perform a speech act on its own: The construction performs one speech act as a whole. I assume that the ISE-*because* construction, as being semantically synonymous with the E-*because* construction (see fn.3), forms its information unit in the same way. Then, their similarities to the causal construction may straightforwardly be accounted for.

If, as argued above, the metalinguistic reason constructions are similar to the causal construction, the following two questions arise: (i) Why can the *because*-clause of the E-*because* construction not be clefted (cf. (11e))?

(ii) Why can speech act constructions occur in the *because*-clause of the metalinguistic reason constructions (cf. (11d))? In addition, we need to consider whether there are any functional differences between the E-*because* construction and the ISE-*because* construction. In sections 6.4 through 6.6, I will give answers to these questions.

6.4 Reason for the *Because*-Clause Not Being Clefted

Let us first consider why the *because*-clause of the E-*because* construction cannot be clefted. The relevant examples are repeated below:

(18) a. * …It is because of this "gripping," this "holding onto," that "behold!" (= (10a))

b. * I currently live in Hanover Pennsylvania and why *currently* is because I have lived in 5 different places around the US mostly on the east coast though. (= (10b))

Since this is an opposite behavior to the causal construction, one may be skeptical of viewing the E-*because* construction as being similar to the causal construction. However, just because these cleft constructions are not acceptable does not necessarily mean that the E-*because* construction is not similar to the causal construction. The unacceptability of sentences (18a, b) is simply due to the unusual syntactic form of the E-*because* construction, not due to its semantic/pragmatic factors. That is, the complementizers *that* and *why* used in the above examples must be followed by a finite clause, not a word or phrase.[5] Nevertheless, in (18a, b), the simple words *behold* and

currently follow *that* and *why*, respectively. Hence, the sentences are not acceptable. As observed in section 6.2, the *because*-clause of the corresponding ISE-*because* construction can be clefted with no problem (e.g. (9a, b)). This is because *that* and *why* are correctly followed by finite clauses. Thus, unacceptable E-*because* constructions with clefted *because*-clauses (e.g. (18a, b)) are not problematic for asserting the similarity between the E-*because* construction and the causal construction.

What is problematic is the second issue, i.e. why speech act constructions may occur in the *because*-clause of the E-*because*/ISE-*because* constructions. Before answering this question, I will investigate in the following subsection what, if any, difference exists between the E-*because* construction and the ISE-*because* construction.

6.5 The E-*Because* Construction and the ISE-*Because* Construction

So far, I have treated the E-*because* construction and the ISE-*because* construction as semantic equivalents, and ignored the difference between them even if there is any. It is generally assumed in construction grammar that if two constructions are syntactically distinct, their (semantic/pragmatic) functions are also distinct, and each construction is considered as existing independently (cf. Bolinger (1977), Haiman (1985), Lakoff (1987), Goldberg (1995)). Thus, the question is not whether a difference exists between them – for it does – but rather, what it is like.

Despite being semantically synonymous, the E-*because* construction is more restricted in its use than the corresponding ISE-*because* construction. Compare the following examples:

(19) a. Unfortunately, a person in some cases can be HIV positive for several years without having AIDS. (I say) unfortunately only because those diseases that are readily visible get treatment quicker.

b. Unfortunately, perhaps, a person in some cases can be HIV positive for several years without having AIDS. When they finally get AIDS they are often able to work for some time, and with treatment live a fairly normal life for several years. *(I say) unfortunately only because those diseases that are readily visible get treatment quicker. (enzi.senate.gov/aidsaf2.htm)

In (19a), both the E-*because* construction and the ISE-*because* construction may be used, whereas in (19b), only the ISE-*because* construction can be used. Crucially, in (19a), the speaker expresses the reason why he used the word *unfortunately* right after the word is used, while in (19b), because of the intervened sentence, there is a considerable distance between the use of the word and the expression of its reason. From this, I tentatively assume that the E-*because* construction can be used right after the expression in question is used.

In this connection, consider the following quote from Lambrecht (1994:93):

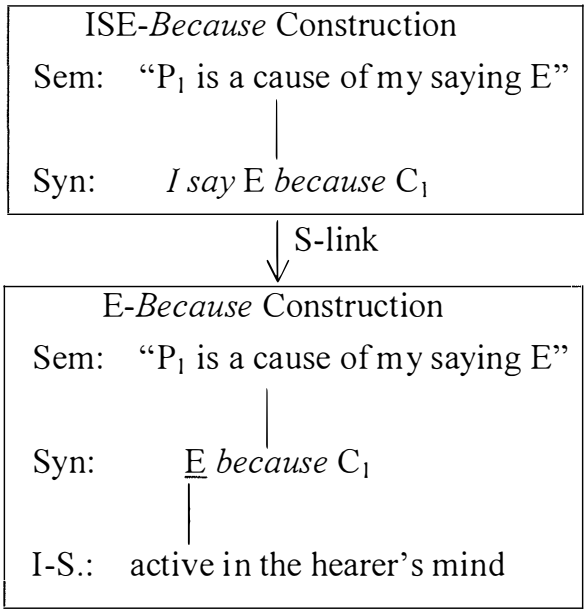
> In order for an addressee to be able to process the presupposition evoked by an utterance it is not only necessary that she be aware of

> the relevant set of presupposed propositions but that she have easy access to these propositions and to the elements of which they are composed.

Along with this line, we may say that even though the expression in question is presupposed, the speaker needs to activate it in the hearer's mind if it is assumed not to be active. It seems plausible to assume that the phrase *I say* in the ISE-*because* construction contributes to this activation, since the only formal difference between the two constructions is the presence or absence of this phrase. By saying *I say* E, the activation may occur in the following way: The speaker reasserts that he has used the expression E in the preceding sentence, and accordingly, it is activated in the hearer's mind. Thus, when the speaker needs to activate the expression in the hearer's mind, as in (19b), the E-*because* construction cannot be used. By contrast, when such activation is not necessary, as in (19a), either construction may be used.

In sum, although the E-*because* construction and the ISE-*because* construction convey the same meaning, the former can be used only when the expression E is assumed to be active enough in the hearer's mind. In terms of inheritance links, a subpart link (S-link) is posited between them, as illustrated in (20):

(20)



Since, as mentioned in section 6.3.2, these constructions express some kind of causal relation, their semantic specifications are defined as "P(roposition)$_1$ is a cause of my saying E."[6] As discussed in section 3.3.2, an S-link is posited when one construction is a proper subpart of another construction (Goldberg (1995:78)). As represented in (20), while sharing the semantic properties with the ISE-*because* construction, the E-*because* construction, having the more marked form, is more restricted in its use.[7] That is, the syntactic and information-structural specifications of the E-*because* construction are subsumed under those of the ISE-*because* construction. By viewing the E-*because* construction as a proper subpart of the ISE-*because* construction, we may safely say that what holds in the latter also holds in the former (as far as information-structural and syntactic conditions are met).

6.6 Reason for the Occurrence of Speech Act Constructions in the *Because*-Clause

This subsection gives an answer to the last question raised in section

6.3.2, i.e. why speech act constructions may occur in metalinguistic reason *because*-clauses. As I have discussed in chapter 4, the occurrence of speech act constructions in a *because*-clause reflects the fact that the *because*-clause and its main clause form two separate information units, and hence is characteristic to the reasoning construction. By contrast, the nominalization, focalization, and clefting of a *because*-clause are all accounted for by the fact that the *because*-clause and its main clause form one information unit as a whole. Thus, the question to be answered in this subsection may be rephrased as follows: Why do the E-*because* construction and the ISE-*because* construction have such bilateral, or contradictory, characteristics?

In order to answer the question, we need to revise the information structure of the metalinguistic constructions, taking into consideration the nature of metalinguistic reasons and metacognition in general (i.e. cognition about cognition). Using metalinguistic reason constructions like the E-*because*/ISE-*because* constructions, one connects the content being discussed with a proper linguistic form available within the context of the speech for referring to that content (cf. Dancygier and Sweetser (2000)). The mapping of the content onto the linguistic form is not an objective causal relation such as the one observed in a sentence like *the ground is wet because it has rained*, but rather a subjective process, in which the speaker chooses a particular linguistic form from a possible set of linguistic forms. This process may be illustrated as follows:

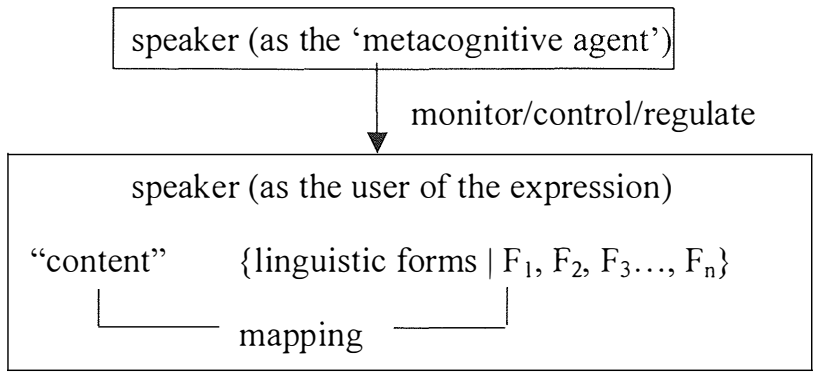
(21) "content" {linguistic forms | F_1, F_2, F_3, … F_n}

mapping

In (21), the speaker connects the content being discussed with linguistic form F_1, an element of the set defined as {linguistic forms | F_1, F_2, F_3, … F_n}. Here, it is the speaker that relates the linguistic form with its content. Therefore, like a reasoning process, the reason for the choice of the word is does not have any necessary causal relation in the real world. As I have argued in chapter 4, in such a case, the main clause and the subordinate clause are understood as forming separate information units. Then, it follows that speech act constructions may occur in the *because*-clause of the E-*because*/ISE-*because* constructions.

However, considering the nature of metacognition in general, we may say that expressing metalinguistic reasons is somewhat more "objective" in a sense to be discussed below. Metacognition is a second or higher level of cognitive process, i.e. a level of cognition which enables the speaker (which may be called 'metacognitive agent') to monitor, control, and/or regulate his cognitive processes (cf. Flavell (1971), Brown (1978)). That is, the speaker (as a metacognitive agent) sees himself mapping the content onto a certain linguistic form as if another person saw him doing it. This is illustrated in (22):

(22)



Although the mapping process, which occurs inside the speaker's mind, is arbitrary and there is no necessary causal relation, the higher-leveled speaker objectively monitors the mapping as if he saw it happening outside of him. Thus, postulating the two levels of speakers accounts for the bilateral characteristics of the E-*because*/ISE-*because* constructions. That is, which characteristic the construction shows depends on which viewpoint of the two-tiered speaker is taken: The viewpoint of the speaker that subjectively connects the content and a certain linguistic form based on his knowledge; the viewpoint of the speaker that objectively monitors this mapping process.[8]

It is worthwhile considering what part of the metalinguistic reason construction allows such two types of speakers to exist. In order to answer this question, Langacker's (1985, 1997) argument about performative sentences is helpful (cf. Austin (1962)). Langacker claims that in performative sentences like the one exemplified in (23), both the speech event and the participants involved therein are objectified.

(23) I say to you that this wasteful government spending must stop!

(Langacker (1985:131))

In (23), the very utterance of the sentence accomplishes the speech act of statement. Langacker observes that in performative sentences, the speech act itself is placed on stage as the focus of interest, and the speaker *I*, a participant of the speech event, is also an object of conceptualization. That is, the speaker is objectively seen like an actor in a play on stage. Thus, performative clauses, e.g. *I say to you* in (23), make the speaker (normally a subjectively construed entity) go on stage, i.e. objectified.

Turning to the ISE-*because* construction, we may say by analogy with Langacker's observation of performative sentences that the speaker objectifies his use of the word by saying *I say* E; accordingly, the speaker, as a participant of the objectified speech event, is also seen as an objective entity.[9] As a result, the speaker can see himself as if another person saw him. Therefore, the phrase *I say* in the ISE-*because* construction does not only reassert that he has used the expression in question but also objectifies the speech act of reassertion and the speaker himself.

Lastly, in order to account for the bilateral characteristics of the E-*because* construction, recall the argument in the previous subsection. I have argued that what holds in the ISE-*because* construction also holds in the E-*because* construction, since the latter is a proper subpart of the former. Therefore, even with no trigger of the objectification such as *I say*, the E-*because* construction, like the corresponding ISE-*because* construction, has the bilateral characteristics. That is, there exist two types of speakers' viewpoints in the E-*because* construction as well: One that subjectively connects the content and a certain linguistic form, and the other that objectively monitors the mapping process.

6.7 Another Type of Metalinguistic Reason Construction

Hirose (1992) points out that the speaker of the E-*because* construction is not necessarily identical with the speaker of the expression in question, as exemplified in (24):

(24) Their [Ross and Lakoff's] famous example was "Floyd broke the glass", of which they said the deep structure was "It happened that Floyd did Floyd caused that the glass became broken." "Did" because all action verbs have embedded in them the verb "do". (Hirose (1992:83f.))

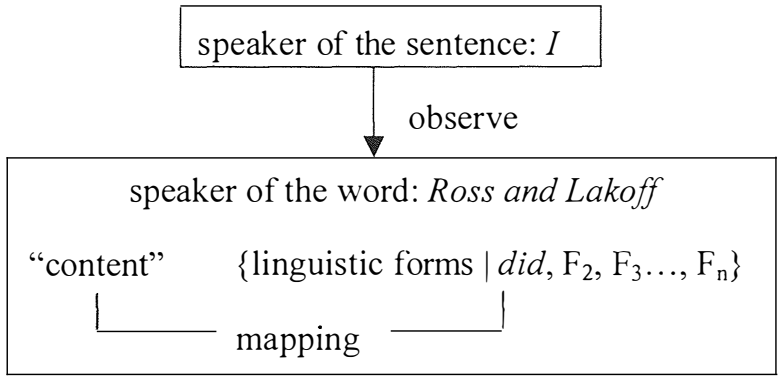
In this example, it is Ross and Lakoff that has used the word *did*, not the speaker of the sentence. Thus, the E-*because* construction in (24) corresponds to a sentence like the following:

(25) They say "did" because all action verbs have embedded in them the verb "do".

Sentence (25) is not an instance of the ISE-*because* construction, as the subject of the main clause is not *I*. I call a sentence like this the XSE-*because* construction, in which X is a variable. In the XSE-*because* construction and its E-*because* counterpart, the speaker of the sentence sees others (i.e. the speaker of the word) mapping the content onto a certain linguistic form. In accordance with the convention used in (22), this process in sentences (24) and (25), for example, may be represented as

follows:

(26)



As illustrated above, the speaker of the sentence merely sees Ross and Lakoff connecting the content with the linguistic form *did*.

Recall that in the ISE-*because* construction, the higher-leveled speaker is the same person as the lower-leveled speaker (cf. (22)), which accounts for its bilateral characteristics. Thus, the speaker of the ISE-*because* construction monitors, controls, and/or regulates *his own* use of the word, whereas the speaker of the XSE-*because* construction merely observes *another person's* use of the word. This difference poses a question of whether the XSE-*because* construction and the corresponding E-*because* construction, unlike the ISE-*because* construction and its E-*because* counterpart, cannot express a subjective mapping process.

The answer, quite obviously, is that it can. Observe the following sentence:

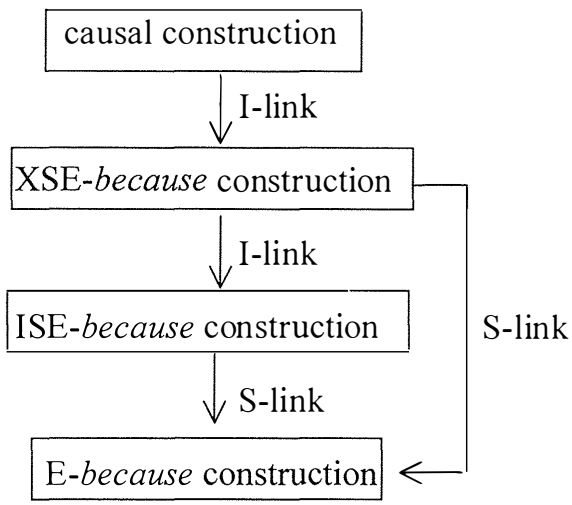
(27) They were all saying "no way". (They said) "no way" because who in their right mind would do such a thing![10, 11]

In this sentence, the rhetorical question, a kind of speech act construction conveying a statement, appears in the *because*-clause. As noted above, this may not be predictable. However, the construction grammar analysis, in particular the notion of inheritance links, provides the solution to this problem. That is, considering the relations among constructions may account for what is not predictable from the constituents of a construction or the construction itself. In the following subsection, I will describe how the constructions at issue are related to each other while explaining why sentence (27) is acceptable.

6.8 Relations among Constructions

From the arguments so far, the inheritance relations between the relevant constructions may be illustrated as follows:

(28)



First, as argued in section 6.5, the E-*because* construction is a proper subpart of the ISE-*because* construction, and thus an S-link is posited between them. I have argued in section 6.6 that the ISE-*because* construction by nature may

represent both the speaker's subjective mapping process and the objective causal relation. Such bilateral characteristics are inherited by the corresponding E-*because* construction, as being a proper subpart. Seeing the E-*because* construction as being a proper subpart of the ISE-*because* construction may not only account for their similarities but also their differences: As argued in section 6.5, the E-*because* construction, with the more marked grammatical form, is more restricted in its use than the corresponding ISE-*because* construction.

Second, as discussed in section 6.7, some E-*because* constructions (e.g. (24), (27)) are related to the XSE-*because* construction, not to the ISE-*because* construction, via an S-link. These E-*because* constructions have all the properties that the corresponding XSE-*because* constructions have.

Third, the ISE-*because* construction is a special instance of the XSE-*because* construction. That is, the former can be seen as the variable X in the latter being substituted for the first person singular pronoun *I*. Hence, an I-link is posited between them. The XSE-*because* construction, in turn, is an instance of the causal construction, whose main clause is substituted for the specific clause "X *say* E," and thus an I-link is posited between them. By positing I-links in this way, the causal sense of the XSE-*because*/ISE-*because* constructions may be accounted for.

Seeing the inheritance relations described in (28), one may wonder how we can account for the speech act constructions occurring in the *because*-clause of the XSE-*because* construction. If it is merely an instance of the causal construction, it predicts that speech act constructions may not

occur in the *because*-clause. Crucially, positing an I-link between the XSE-*because* construction and the ISE-*because* construction entails that the former is viewed as a proper subpart of the latter. Goldberg (1995:80f.) argues that an I-link always entails an inverse S-link in the way that every construction C_1, which is an instance of another construction C_2 and *is dominated* by C_2 via an I-link, simultaneously, *dominates* C_2 by an S-link.[12] That is, the XSE-*because* construction and the ISE-*because* construction mutually motivate each other, and therefore the former inherits its information from the latter as well.

More specifically, the ISE-*because* construction has the following three properties, of which the XSE-*because* construction has the first two but not the last one: (i) It represents the objective causal relation (when the higher-leveled speaker's viewpoint is taken), (ii) it also expresses the subjective mapping of the content and the linguistic form (when the lower-leveled speaker's viewpoint is taken), and (iii) the lower-leveled speaker is identical with the higher-leveled speaker. In short, the XSE-*because* construction is subsumed within the ISE-*because* construction, and what holds in the ISE-*because* construction also holds in the XSE-*because* construction. Hence, the bilateral characteristics of the XSE-*because* construction.

Incidentally, it follows that the causal construction is a proper subpart of the XSE-*because* construction, because the latter is an instance of the former. The causal construction has only the first one of the three properties that the ISE-*because* construction has.

6.9 Summary

In this chapter, following the comparison of the metalinguistic reason constructions with the causal and reasoning constructions, I have mainly argued three issues. First, the E-*because* construction, with a marked grammatical form, is more restricted than the corresponding ISE-*because* construction in its use. The former can be used only when the word in question is assumed to be active in the hearer's mind, while the latter does not have such a restriction. The pragmatic difference is captured by postulating an S-link between them. That is, the E-*because* construction is subsumed under the ISE-*because* construction both formally and information-structurally.

Second, the metalinguistic reason constructions have bilateral characteristics, i.e., they behave as if they form one information unit as a whole in some respect, while they also behave as if they consist of two different information units. However, just because they behave like the reasoning construction in some respect does not mean that they inherit information from the reasoning construction. Considering their meanings, I conclude that metalinguistic reason constructions are related only with the causal construction (section 6.5).[13] As for the ISE-*because* construction, its bilateral characteristics are accounted for by postulating two levels of speakers' viewpoints (i.e. either the viewpoint of the user of the expression in question or the viewpoint of the metacognitive agent). The nature of metalinguistic reasons and the phrase *I say* in the main clause jointly make it possible to postulate such two types of speakers' viewpoints. As for the E-*because* construction, viewing it as a proper subpart of the ISE-*because*

construction, we may account for the fact that the E-*because* construction also has the bilateral characteristics, just like the ISE-*because* construction.

Lastly, like the E-*because*/ISE-*because* constructions, the XSE-*because* construction and its E-*because* counterpart also have the bilateral characteristics. This fact is not predictable from the constructions themselves. The notion of inheritance links provides a solution to the problem. Seeing the ISE-*because* construction as an instance of the XSE-*because* construction, and thus positing an I-link between them entails the inverse S-link. That is, the XSE-*because* construction is a proper subpart of the ISE-*because* construction (section 6.8). Therefore, the XSE-*because* construction, as a proper subpart of the ISE-*because* construction, has such bilateral characteristics as the ISE-*because* construction has.

The arguments in this chapter show that considering how a construction is related with its neighbors may even explain its unpredictable behaviors, e.g. the bilateral characteristics of the E-*because* construction and the XSE-*because* construction. This suggests that constructions exist in relation with other constructions, with their information being transferred between them, rather than stand alone. I thus conclude this chapter by pointing out that the notion of inheritance links plays a particularly important role in understanding constructions.

Appendix B: A Possible Alternative

In section 6.6, I have accounted for the bilateral characteristics of the metalinguistic reason constructions by postulating two types of speakers'

viewpoints. A possible alternative to the analysis may be given by comparing the metalinguistic reason constructions with sentences like the one exemplified in (29):[14]

(29) My father likes animals, but he doesn't like dogs so much. Perhaps *it is because he got bitten by a dog when he was a little boy.*

(Sawada (2004:179) [italics are mine])

Note that the italicized sentence in (29) (which I call the *it is because* construction) is distinguished from the cleft construction, since the sentence is not followed by a *that*-clause. Sawada argues that *it is because* constructions are most naturally used when certain skepticism emerges from the preceding context. In (29), for example, the hearer may as well wonder why the speaker's father does not like dogs. The italicized sentence gives an answer to this question. Because of this function, while expressing a causal relation (not a reasoning process), the *it is because* construction only asserts what the cause situation is. The result situation is presupposed by the preceding sentence and it is not explicitly mentioned. In other words, the *it is because* construction is used to identify the cause. To this extent, the construction is similar to the metalinguistic reason constructions which only assert the reasons why the speaker used a certain expression in the preceding sentence with backgrounding the speech event itself. [15]

Interestingly, the *because*-clause of the *it is because* construction, despite being a causal one, allows speech act constructions to occur in it, as

exemplified in (30):

(30) It is rare that an individual with highly specialised knowledge can communicate it to a general audience. If Susan Greenfield [=Director of the Royal Institution] is a ubiquitous media figure *it's because not only does she talk about the brain so clearly* but she also passes on some of the excitement of working with scientific ideas.
(www.britishcouncil.org/science-testimonials-baroness-greenfield.htm [italics are mine])

In the second sentence of the above example, the negative constituent preposing, a kind of speech act construction of statement, occurs in the *because*-clause. As discussed above, the *it is because* construction merely gives an answer to the skepticism that naturally emerges from the preceding context: Why is Susan Greenfield a ubiquitous media figure despite a person with highly specialised knowledge? That is, the *it is because* construction may be analyzed as having a semantically (or pragmatically) independent clause structure despite its syntactically subordinate structure (cf. Culicover and Jackendoff (1997), Yuasa (2005), etc.).

If, as speculated here, the metalinguistic reason constructions are similar to the *it is because* construction, the occurrence of speech act constructions in the *because*-clause will not be surprising. The relevant examples are repeated below:

(31) a. (I say) surprisingly, because who would think one could turn the big, fat American (instead of the slim, English variety) into anything one would want a lot more of.

(cf. (8a, b))

b. They were all saying "no way". (They said) "no way" because who in their right mind would do such a thing!

(= (27))

As I have observed in sections 6.2 and 6.7, speech act constructions may occur in the *because*-clause of the E-*because*/ISE-*because*/XSE-*because* constructions. These constructions express the reason why the speaker used a certain expression (i.e. *surprisingly* and *no way*) in the preceding context. Suppose that these constructions, like the *it is because* construction, have semantically/pragmatically independent clause structures, while they have syntactically subordinate structures. Then, the occurrence of speech act constructions in their *because*-clauses may be accounted for in the same way as the *it is because* construction.

In order to verify this analysis, a more detailed research on the syntactic and semantic structures of the relevant constructions is necessary, but I cannot present it in this thesis. As a theoretical problem, it is not clear what kind of relation may be described in terms of inheritance links between the *it is because* construction and the metalinguistic reason constructions (even if metalinguistic reason constructions inherit their information from the *it is because* construction). Which one of the three types of metalinguistic reason constructions should be related to the *it is because* construction is also

not clear. Therefore, without going into any further detail, I only speculate on the possibility of the analysis here, and leave it an open question whether this possibility is plausible or not.

Notes to Chapter 6

* This chapter is a radically revised version of Kanetani (2005b, 2006b). I am indebted especially to reviewers for *Tsukuba English Studies* 24 and audience at the ICCG4 for their insightful comments. For useful comments on an earlier draft, I thank Yukio Hirose, Nobuhiro Kaga, and Naoaki Wada. I appreciate Patrick Farrell, who has kindly acted as an informant.

1. Leech (1974) argues that *since*, but not *because*, can introduce a metalinguistic reason, pointing out that sentence (ib) is "abnormal" while sentence (ia) is "normal":

(i) a. What's the answer to this problem – since you're so clever.
b. What's the answer to this problem – because you're so clever.

(Leech (1974:359))

However, these sentences are what we call reasoning constructions, or involve conjunctions used in the speech-act domain in Sweetser's (1990) terms (for details, see section 2.4 and chapter 4). In addition, in contrast to Leech's observation, Sweetser observes that there do exist sentences like (ib). At any rate, what I call metalinguitic reasons in the present chapter is different from what Leech calls so. Leech's metalinguistic analysis is based on a performative analysis (e.g. Ross (1970)), and "metalinguitic reasons" in Leech's terms seem to include reasons for performing any speech act. As I have pointed out above, this definition encompasses what I call reasoning conjunctions as well (cf. Schourup and Waida (1988)), and thus is misleading. In this thesis, the word "metalignustic reasons" is restricted to referring to the

reasons for the use of a certain expression.

2. Technically, a simple word or phrase, e.g. *reputed* in (1), is not a clause. Thus, it may sound strange to refer to such an expression as "main clause," but in the present chapter, I use this term to refer to the syntactic position that corresponds to the main clause.

3. As a working hypothesis, I take these constructions as semantic equivalents, i.e. (semantically) synonymous constructions.

4. The difference between cleft constructions, as in (9a), and pseudo-cleft constructions, as in (9b), is not crucial for the purpose of this paper. Henceforth, I will use the term "cleft constructions" as a cover term.

5. In terms of generative grammar, a finite clause also counts as a phrase whose head is assumed to be the category "tense," i.e. a tense phrase. In this thesis, the word "phrase" is meant to exclude tense phrases (and complementizer phrases). Tense phrases are called "clauses."

6. From this semantic specification, one may consider the ISE-*because* construction as an instance of the causal construction, whose main clause is substituted for the specific clause "*I say* E," and hence an I-link may be posited between them. Indeed, I posited an I-link between them in my earlier works (Kanetani (2005b, 2006b)). However, as I shall argue in sections 6.6 through 6.8, the ISE-*because* construction cannot be related directly to the causal construction because of the nature of metalinguistic reasons. We need to postulate an intermediate level of construction, which will be called the XSE-*because* construction (cf. Hirose (1992)). I shall closely investigate in section 6.8 how the constructions are related to each other.

7. Note in passing that this observation is compatible with a general pragmatic principle. Konno (2005) proposes the following generalization about the correlation between formal markedness and functional specialization:

(i) If a grammatical form is marked with reference to the grammatical convention of a given language, then the function of that form is more specialized than that of the corresponding unmarked form(s).

(Konno (2005:2))

Since the conjunction *because* typically connects two clauses, we may say that the grammatical form of the E-*because* construction is marked with reference to the grammatical convention of English. As I have argued through this subsection, such a formally marked construction is restricted in its use than its formally unmarked counterpart, i.e. the ISE-*because* construction. Thus, the argument in this subsection is supported by Konno's generalization above.

8. A possible alternative will be considered in appendix B.

9. Unlike performative sentences, however, the focus of interest in the ISE-*because* construction is not the speech act itself, because the primal function of the construction is to express the reason why the speaker has used a certain expression.

10. I thank Patrick Farrell for providing me with this example.

11. Strictly speaking, this example could not be called an instance of the XSE-*because* construction, since the past tense verb *said* is used. What is important here is, however, that the rhetorical question appears in the *because*-clause of the corresponding E-*because* construction.

12. Goldberg (1995:234) notes, "an S-link does not necessarily entail the existence of an I-link; there exist S-links between certain constructions which do not involve one construction being an instance of another construction." Thus, needless to say, we do not have to see the XSE-*because* construction as an instance of the E-*because* construction.

13. In my earlier works (Kanetani (2005b, 2006b)), I argued that the ISE-*because* construction is related to the reasoning construction as well as

the causal construction. However, as I argue in this thesis, such an analysis does not seem plausible. For pointing out the inadequacies in my earlier analyses, I thank especially Nobuhiro Kaga.

14. I thank Yukio Hirose for suggesting this possibility.

15. The phrase *it is* in sentence (29) may be analyzed as serving to activate in the hearer's mind what the result situation is, just like *I say* in the ISE-*because* construction activates the expression used in the preceding context.

Chapter 7
Towards Contrastive Construction Grammars: *Because* Constructions in English and *Kara* Constructions in Japanese*

7.1 Introduction

So far, I have proposed a construction grammar approach to conjunctions of reason in English (chapter 4), and have shown its validity by applying it to the argument of the focalizability of *because* and *since* (chapter 5) and the constructions of metalinguistic reasons in English (chapter 6). In this chapter, I show the validity of the proposed analysis from a cross-linguistic perspective; namely, I carry out a contrastive analysis of constructions of causation and reasoning in English and Japanese.

Over the last two decades, various approaches have been proposed under the name of construction grammar (e.g. Lakoff (1987), Fillmore et al. (1988), Goldberg (1995), Michaelis and Lambrecht (1996), Hirose (1999), Kay and Fillmore (1999), Croft (2001), and many others). Against this background, while researches of language-specific constructions have been fruitful, little attention has been paid to comparing constructions across languages (cf. Weilbacher and Boas (2006)). In want of contrastive analyses in construction grammar, Östman and Fried (2005:9) point out, "a great amount of detailed and cross-linguistically oriented work needs to be

carried out in order to determine what, if any, *types* of meaning-form patterns may have universal validity."

In response to the need of cross-linguistic researches in construction grammar, this chapter presents a contrastive analysis of constructions of causation and reasoning in English and Japanese. Comparing the constructions in these two languages, I argue that similar mechanisms lie in understanding causal relations and reasoning processes in English and Japanese. Examples of constructions to be discussed are given in (1)-(2):[1]

(1) a. John came back because he loved her.

b. John loved her, because he came back.

(Sweetser (1990:77))

(2) a. Taro wa Hanako o aishiteiru kara modottekita.
Taro Top Hanako Acc love because came.back[2]
'Taro came back because he loved Hanako.'

(Higashiizumi (2006:117))

b. Taro wa modottekita kara Hanako o aishiteiru
Taro Top came.back because Hanako Acc love
nodaro.
I.think
'Taro loved Hanako, because he came back.'

(Higashiizumi (2006:118))

Sentences (1a, b) show that the conjunction *because* introduces either a cause

or a premise. Sentence (1a) expresses the causal relation between John's love of her and his coming back, while sentence (1b) denotes the reasoning process in which the speaker draws the conclusion that John loved her from the premise that John came back. Likewise, sentences (2a, b) show that the Japanese conjunctive particle *kara* also introduces either a cause or a premise.

The organization of this chapter is as follows. Section 7.2 explains some basic concepts of contrastive construction grammars, with reviewing Weilbacher and Boas' (2006) contrastive construction grammar approach to some constructions in English and German. Sections 7.3 and 7.4 investigate syntactic and semantic properties of *because* constructions in English and *kara* constructions in Japanese, respectively. Lastly, section 7.5 summarizes the arguments.

7.2 Contrastive Construction Grammars

Although, as I have mentioned in the previous subsection, little attention has been paid to contrasting constructions across languages, the importance of such analyses has been emphasized recently (e.g. Weilbacher and Boas (2006)). In order to explain how and in what respects constructions in English and German are similar or different, Weilbacher and Boas compare three constructions in the two languages: Resultative constructions (cf. Boas (2003)), tag question constructions (cf. Kay (2002)), and *just because* X *doesn't mean* Y (JB-X DM-Y) constructions (cf. Hirose (1991, 1999), Bender and Kathol (to appear)). Of these three constructions, I briefly overview Weilbacher and Boas' observations of the JB-X DM-Y

constructions and the resultative constructions in English and their German counterparts.

First, the JB-X DM-Y construction in English, e.g. (3a), and its German counterpart (the NW-X HDN-Y construction), e.g. (3b), are very similar both in their forms and in their meanings. Consider the following examples:

(3) a. *Just because* John is rich *doesn't mean* that he's happy.
(Hirose (1991:19) [italics are mine])

b. *Nur weil* ich aus Deutschland komme *heisst*
Just because I from Germany come mean
das nicht, dass Ich Sauerkraut esse.
it not that I sauerkraut eat
'Just because I come from Germany doesn't mean that I eat sauerkraut.'
(Weilbacher and Boas (2006) [italics are mine])

Weilbacher and Boas observe that these two constructions have very similar syntactic structures. In both constructions, both clauses are headed by the comparable lexical items *just because/nur weil* and *doesn't mean/heisst das nicht*.[3] Not only are their syntactic forms similar but also their semantic properties are identical. They roughly describe the meaning of the JB-X DM-Y construction as "DM-Y cannot automatically be inferred from JB-X," and argues that its German counterpart exhibits the identical meaning. Thus, in the JB-X DM-Y construction and the NW-X HDN-Y construction, the

identical meaning is expressed in very similar ways at the syntactic level.

Next, let us consider resultative constructions in English and German. Weilbacher and Boas observe that resultative constructions in the two languages, despite their similar functions, differ with respect to the types of restrictions on verbs and postverbal constituents (cf. Boas (2003)). Consider the following resultative constructions with the verb *beat* (each of which is called "mini-constructions" in Boas' (2003) terms):

(4) a. They *beat* the olives *out of* the tree.

b. They *beat* the eggs *creamy*.

c. They *beat* the pebbles to a fine dust.

d. They *beat* some sense *into these people*.

e. The mob *beat* them *to death*.

(adapted from Boas (2003:353) [italics are mine])

Boas (2003) describes the sense of each mini-construction (4a-e) as follows:

(5) a. (4a)= "To hit repeatedly in order to knock something off or out."

b. (4b)= "To bring about fronting by mixing with air by means of repeated strong turning, whirling, or agitating."

c. (4c)= "To pound into a powder paste, or pulp."

d. (4d)= "To force or drive home by repeated strong admonition or injunction."

e. (4e)= "[To b]ring or make by hard or crushing blows."

(adapted from Boas (2003:353))

What is important here is that in order to represent senses (5a-e), German resultatives, as shown in (6a-e), use such different syntactic patterns from those of their English counterparts:

(6) a. Sie schlugen die Oliven *vom* Baum.

b. Sie schlugen die Eier *schaumig*.

c. Sie *zemahlten* die Steine zu Staub.

d. Sie *überzeugten* diese *Leute*.

e. Der Mob schlug sie *tot*.

(adapted from Boas (2003:353) [italics are mine])

The italicized words or phrases in (4) and (6) indicate how different the expressions are that are used to represent the same meaning in English and German.[4] For example, in order to express the meanings listed in (5a-e), English uses the same verb *beat*, while German uses different verbs. That is, although there do exist resultaive constructions of the same meanings in both English and German, as Weilbacher and Boas argue, English resultatives based on the verb *beat* and their German counterparts use such different expressions that more language-specific information is needed to make a cross-linguistic generalization (cf. fn.4).

From the observations of these constructions, Weilbacher and Boas (2006) argue that it is possible to posit the "contrastive JB-X DM-Y construction" and the "contrastive resultative construction" that are inherited

by the grammars of both English and German. The former contrastive construction exhibits similar syntactic, semantic and pragmatic properties, and thus few language-specific specifications are necessary for a cross-linguistic generalization. By contrast, the latter requires a lot of language-specific information for a cross-linguistic generalization, because different verbs and postverbal elements (i.e. resultative phrases) are used to represent the same meaning from a language to another. Crucially, they suggest that "in contrastive construction grammar, *there is a continuum of restrictions* placed on the application of contrastive constructions [italics are mine]." That is, the degree of contrast varies from very similar constructions (e.g. the JB-X DM-Y/NW-X HDN-Y constructions) to very different constructions (e.g. the resultative constructions based on the verb *beat*). Just because the corresponding constructions in the two languages are different, however, does not mean that they are not comparable. The degree of contrast reflects how much language-specific information is needed for cross-linguistic generalizations. In this regard, we may safely say that the less language-specific information the generalization needs, the more universal the constructions are. As seen in chapter 3, constructions should be consistent with what we know about cognition and social interaction (cf. Fillmore (1988) Fillmore et al. (1988), Kay and Fillmore (1999), among many others; see chapter 3 for detail). Thus, if comparable constructions in given two languages are very similar, it means that people construe the things in a similar way in the two languages.

7.3 *Because* Constructions in English

Now that the basic concepts of contrastive construction grammars are given, let us compare and contrast constructions of causation and reasoning in English and Japanese. First, I observe in this subsection the English constructions in which the conjunction *because* is used.

As is well known, the conjunction *because* introduces either a cause of another situation or the premise from which to draw a conclusion, as exemplified in (7a, b):

(7) a. John came back because he loved her. (= (1a))

b. John loved her, because he came back. (= (1b))

The *because*-clause in (7a) is the reason for his coming back, while that in (7b) is understood as providing the premise from which the speaker draws the conclusion that he loved her. I have argued in chapter 4 that the conjunction itself is not poloysemous but the conjunction *because* is used in two constructions, i.e. the causal *because* construction and the reasoning *because* construction (cf. Hirose (1999), Kanetani (2005c, 2006c)).[5] That is, sentence (7a) is an instance of the causal *because* construction, and sentence (7b) one of the reasoning *because* construction. In the causal *because* construction, a causal relation between P(roposition)$_1$ and P_2 is mapped onto the syntactic form [C_2 *because* C_1], where C(lause)$_1$ and C_2 denote P_1 and P_2, respectively. In the reasoning *because* construction, the reasoning process in which the speaker draws the conclusion (expressed by the main clause) from the premise, i.e. the situation described in the subordinate clause, is

mapped onto [C_2, *because* C_1]. Thus, their form-meaning correspondences can be represented as follows:

(8) a.

causal *because* construction
sem: "P_1 is a cause of P_2"
syn: [C_2 *because* C_1]

b.

reasoning *because* construction
sem: "P_1 is a premise from which to conclude that P_2"
syn: [C_2, *because* C_1]

What is important is that in causal relations, the cause situation and the result situation need to be understood as a single process, while in reasoning processes, the premise and the conclusion are understood separately. These facts reflect the generalization that constructions should be consistent with what we know about cognition and social interaction (cf. Fillmore et al. (1988), Kay and Fillmore (1999)). For example, when we see a causal relation, the cause and the result are perceived at once. In contrast, in an inferential process, we perceive the two situations or propositions (expressed in the main clause and the *because*-clause) separately, and relate them based on our common knowledge of the world.

As I have argued in chapters 4 and 5, a lot of phenomena observed in the literature should be attributed to the properties of the constructions. Let us review how the constructional approach can explain different behaviors of

causal and reasoning *because*-clauses. First, causal *because*-clauses can be inside the scope of matrix question or negation, while reasoning ones cannot (cf. Rutherford (1970), Hirose (1991)). Compare the following sentences:

(9) a. Is the ground wet because it has rained?↗

b. * Has it rained, because the ground is wet?↗

c. Has it rained↗, because the ground is wet↘

The arrows indicate intonation patterns. In (9a), the rising intonation is used at the end of the sentence. This suggests that both the main clause and *because*-clause are within the scope of the matrix question. By uttering this sentence, the speaker does not simply ask whether the ground is wet or not, but asks whether the rain has caused the ground to become wet or not. Thus, sentence (9a) performs one speech act as a whole. In contrast, as exemplified in (9b), interrogative sentences of the reasoning *because* construction will be unacceptable if they are read in the same intonation pattern as that of sentence (9a). As shown in (9c), the rising intonation is used at the end of the main clause, and the sentence-final *because*-clause is read with a falling intonation. Note also that a period, rather than a question mark, is used. These facts show that in the reasoning *because* construction, the *because*-clause is not within the scope of matrix question. Thus, in causal *because* constructions, the matrix question can range over the whole sentence, while in reasoning *because* constructions, only the main clause can be within its scope, as shown in (10a-c):

(10) a. Q [the ground is wet because it has rained]

b. * Q [it has rained, because the ground is wet]

c. Q [it has rained] because the ground is wet

From these facts, we may say that the causal *because* construction describes a causal relation as a single process and the whole process of causal relation can be subject to question. By contrast, the reasoning *because* construction describes two separate situations, i.e. the speaker's conclusion and its premise, of which only the former can be subject to question.

Second, speech act constructions that convey statements, e.g. topicalizations, rhetorical questions, etc., can appear in reasoning *because*-clauses, but not in causal *because*-clauses (cf. Hooper and Thompson (1973), Lakoff (1987)). Consider the following sentences:

(11) a. * He's not going out for dinner because Japanese food, his wife is cooking.

(cf. He's not going out for dinner because his wife is cooking Japanese food. (Hooper and Thompson (1973:494)))

b. I think we have more or less solved the problem for donkeys here, because those we haven't got, we know about. (*Guardian* [online])

In (11a), the topicalization in the *because*-clause is not allowed. As the parenthesized original sentence shows, the *because*-clause is inside the scope of the matrix negation. This means that sentence (11a) is an instance of the

causal *because* construction (cf. Rutherford (1970)). As in (11b), topicalization may occur in reasoning *because*-clauses. Given the properties of the constructions, this contrast can be accounted for straightforwardly. In the causal *because* construction, the *because*-clause and its main clause need to be understood as a single process, and therefore perform one speech act as a whole. In the reasoning *because* construction the *because*-clause and its main clause perform two speech acts independent of each other, because they are understood separately. As the very name suggests, "speech act" constructions perform a speech act on their own. Thus, *because*-clauses in which a speech act construction occurs perform speech acts independent of the main clauses (and therefore, Lakoff refers to subordinate clauses with speech act constructions in them as "performative subordinate clauses"). Hence, speech act constructions are incompatible with causal *because*-clauses, but they can occur in reasoning *because*-clauses.

Third, causal *because*-clauses can be nominalized into *because of* NP, while reasoning ones cannot (Rutherford (1970)). Observe the following sentences:

(12) a. He's not coming to class because of (his) sickness.
b. * He's not coming to class, because of his having just called from San Diego. (Rutherford (1970:105))

If *because*-clauses are nominalized as in (12a, b), they may no longer perform speech acts on their own. As a result, such nominalized

because-clauses are regarded as merely a part, or a constituent, of larger speech act. Hence, the nominalization of a *because*-clause is incompatible with the reasoning *because* construction, whereas it is compatible with the causal *because* construction.

Fourth, causal *because*-clauses can be clefted, whereas reasoning ones cannot (Nakau (1994)). Compare the following examples:

(13) a. It's because he's sick that he's not coming to class.

b. * It's because his wife told me that he's not coming to class.

(Nakau (1994:162))

In the reasoning *because* construction, both the main clause and the *because*-clause have to be asserted as performing their own speech acts. The main clause expresses the logical conclusion that the speaker draws from the premise given in the *because*-clause. As the nature of the logical conclusion, it is newly introduced in the discourse. The *because*-clause, on the other hand, introduces the premise from which the speaker has drawn the conclusion. As seen above, this is also asserted as an independent speech act. Thus, the main clause and the *because*-clause need to be focused equally. In other words, neither can be backgrounded. Clefting a *because*-clause makes it focused; accordingly, the main clause is backgrounded. Hence, clefting is incompatible with the reasoning *because* construction.

Fifth, as argued in chapter 5, exclusives, e.g. *merely*, *just*, *simply*, and

the like, may focalize causal *because*-clauses, as in (14a), but not reasoning *because*-clauses, as in (14b) (Kanetani (in press)):

(14) a. He went to college simply because his parents asked him to. (Schourup and Waida (1988:95))

b. * It has rained, just because the ground is wet.

As I have mentioned earlier in this subsection, in a reasoning process, it is the speaker that relates two situations expressed in the main clause and the *because*-clause (cf. chapter 4). That is, the situations in question do not necessarily have any causal relation in the real world. Thus, even if one says, "it has rained, because the ground is wet," logically, the cause of the wet ground does not have to be the rain. However, the speaker sees the wet ground, and then concludes that it has rained based on his common knowledge of the world or experience. In other words, it may not have rained, and even if it has, there need not be a necessary causal relation between the rain and the wet ground. Besides, there may be other possible reasons for the speaker to conclude that it has rained, say, to see a rainbow in the sky, to see someone get home wet, to hear the news about the rain, etc.

Thus, the proposed analysis correctly and comprehensively accounts for a lot of facts pointed out in the literature. What is important is that we understand a causal relation as a single process of cause and result situations, whereas in a reasoning process, the speaker relates two situations perceived separately. It is these different ways of understanding causal relations and reasoning processes that are reflected in different behaviors between causal

and reasoning *because*-clauses.

7.4 *Kara* Constructions in Japanese

In order to account for typological variation in a construction grammar framework, Croft (2001:51) notes that "constructions may be compared across languages according to their function."[6] The functions of the Japanese constructions to be investigated in this subsection are, of course, equivalent to those of their English counterparts. The Japanese counterpart of *because* is the conjunctive particle *kara* (cf. fn.1). Like *because*-clauses, *kara*-clauses either express the cause of another situation or provide the premise from which to draw a conclusion. Consider the following examples:

(15) a. Taro wa Hanako o aishiteiru kara modottekita.
Taro Top Hanako Acc love because came.back
'Taro came back because he loved Hanako.'
(= (2a)))

b. Taro wa modottekita kara Hanako o aishiteiru
Taro Top came.back because Hanako Acc love
nodaro.
I.think
'Taro loved Hanako, because he came back.'
(= (2b))

The *kara*-clause in (15a) is understood as the cause of Taro's coming back,

and the sentence expresses the causal relation between Taro's love of Hanako and his coming back. The *kara*-clause in (15b) provides the premise from which the speaker draws the conclusion that Taro loved Hanako.

In the previous subsection, I have shown the validity of the construction grammar approach to the English conjunction *because*. In this subsection, I extend the constructional view to the *kara* constructions in Japanese, and compare them with their English counterparts. For the sake of convenience, I refer to sentences like (15a) as the causal *kara* construction, and sentences like (15b) as the reasoning *kara* construction. Their form-meaning correspondences may be formalized as follows:

(16) a.

causal *kara* construction
sem: "P_1 is a cause of P_2"
syn: $[C_1$ *kara* $C_2]$

b.

reasoning *kara* construction
sem: "P_1 is a premise from which to conclude that P_2"
syn: $[C_1$ *kara,* $C_2]$

In the causal *kara* construction, a causal relation between P_1 and P_2 is mapped onto the syntactic form $[C_1$ *kara* $C_2]$. In the reasoning *kara* construction, the reasoning process in which the speaker draws the conclusion from the premise is mapped onto $[C_1$ *kara,* $C_2]$.

Now that the constructions of causation and reasoning in Japanese are

defined, let us observe more closely the causal and reasoning *kara* constructions. Specifically, I investigate the behaviors of *kara*-clauses and compare them with those of *because*-clauses. First, the causal *kara*-clauses can be within the scope of matrix question, while the reasoning *kara*-clauses cannot. Consider the following dialogue:

(17) A: Taro wa kaze o hiita kara jugyo ni
Taro Top cold Acc got because class to
konai no?
not.come Q
'Isn't Taro coming to class because he got cold?'

B: Uun, Taro wa kaze o hiita kara jugyo ni
No Taro Top cold Acc got because class to
konai nodewanaku, infuruenza ni kakatta
not.come not.but the flu Dat got
kara jugyo ni konai noda yo.
because class to not.come it.is I.tell.you
'No, it's not because Taro got a cold but because he got a flu that he's not coming to class.'

Speaker B's answer negates the causal relation between Taro's cold and his not coming to class. This suggests that speaker A asks whether the causal relation holds or not, rather than merely whether Taro is not coming to class, as shown in (18):

(18) Q [Taro wa kaze o hiita kara jugyo ni konai]

By contrast, as the unacceptable answer by speaker D in (19) below indicates, this kind of relational negation is an inappropriate answer to a question of the reasoning *kara* construction. The answer by speaker D', which only negates the statement that Taro is not coming to class, is appropriate.

(19) C: Taro wa sakki Osaka kara denwa o
Taro Top a.little.while.ago Osaka from phone Acc
kaketekita kara, jugyo ni konai no (kana)?
called because class to not.come Q (I.wonder)
'Isn't Taro coming to class, because he has just called from Osaka.'

D: * Uun, Taro wa sakki Osaka kara denwa
No Taro Top a.little.while.ago Osaka from phone
o kaketekita kara dewanaku, kare no okasan
Acc called because not.but 3sg. Gen mother
ga so itteita kara jugyo ni konai noda
Nom so was.saying because class to not.come it.is
yo.
I.tell.you
'(Lit.) No, it's not because Taro has just called from Osaka but because his mother told me so that (I conclude that) he's not coming to class.'

D': Uun, Taro wa sakki Osaka kara denwa
No Taro Top a.little.while.ago Osaka from phone
o kaketekita kedo, jugyo ni wa kuru
Acc called but class to Cont come
yo.
I.tell.you
'No, Taro has just called from Osaka, but he's coming to class.'

Thus, speaker C, judging from the fact that Taro has called from Osaka, simply asks whether Taro is not coming to class; he cannot ask whether the reason for asking the question is Taro's phone-call from Osaka or not, as shown below:

(20) a. * Q [Taro wa sakki Osaka kara denwa o kaketekita kara jugyo ni konai]
b. Taro wa sakki Osaka kara denwa o kaketekita kara, Q [Jugyo ni konai]

The contrast of the scope of question is parallel to the one observed in English: The causal subordinate clauses may be inside the scope of matrix question, while the reasoning ones may not.

Second, topicalization, i.e. a kind of speech act construction of statement, cannot occur in causal *kara*-clauses, whereas it may occur in reasoning *kara*-clauses (cf. Maki et al. (1999), Haegeman (2002)).

Consider the following contrast:

(21) a. ?? Taro no shukudai wa_i Hanako ga t_i yatta kara
Taro Gen homework Top Hanako Nom did because
Taro wa sensei ni okorareta.
Taro Top teacher by was.scolded
'(Lit.) Taro was scolded by the teacher because Taro's home work$_i$, Hanako did t_i.'

b. Kimi no shukudai wa_i boku ga t_i yatta kara,
2sg. Gen homework Top 1sg. Nom did because
isshoni asobo yo.
together let's:hang.out I.tell.you
'Let's hang out together, because your homework, I have done for you.'

In Japanese, sentence-initial topics are marked by the particle *wa*, In (21a, b), *Taro no shukudai* 'Taro's homework' and *Kimi no shukudai* 'your homework' are topicalized, respectively. Causal *kara*-clause (21a) does not allow the topicalization in it, while reasoning *kara*-clause (21b) does.[7]

Note in passing that the unacceptability of sentence (21a) does not result from the anomalous OSV word-order, but from the topicalization. To see this, observe the following sentence:

(22) Taro no shukudai o_i Hanako ga t_i yatta kara
Taro Gen homework Acc Hanako Nom did because

Taro wa sensei ni okorareta.
Taro Top teacher by was.scolded
'Taro was scolded because Hanako did his homework.'

In (22), the sentence-initial object *Taro no shukudai* 'Taro's homework' is marked by the accusative case marker *o*, not by the topic marker *wa*, and the sentence is acceptable. That is, the OSV word-order in this *kara*-clause is the result of scrambling, not topicalization. Saito (1989) claims that scrambling does not change the meaning of the sentence. Therefore, it is not prevented from occurring in causal *kara*-clauses. By contrast, as shown in (21a, b) above, topicalization is compatible only with reasoning *kara*-clauses. That is, although Japanese is a relatively free word-order language, topicalization, a kind of speech-act construction, is compatible only with reasoning *kara*-clauses. This is also parallel to the topicalization in English acceptable in reasoning *because*-clauses, but not in causal ones.

Third, causal *kara*-clauses can be nominalized into NP *notame*, while reasoning *kara*-clauses cannot.[8] Observe the following examples:

(23) a. Taro wa kaze o hiita kara jugyo ni
Taro Top cold Acc got because class to
konai.
not.come
'Taro is not coming to class because he got a cold.'

b. Taroo wa kaze notame jugyo ni konai.
Taro Top cold because.of class to not.come

'Taro is not coming to class because of a cold.'

(24) a. Taro wa Osaka kara denwa o kaketekita kara
Taro Top Osaka from phone Acc called because
(Tsukuba deno) jugyo ni konai daro.
(Tsukuba in) class to not.come I.guess
'Taro is not coming to class (in Tsukuba), because he just called from Osaka.'

b. ?? Taro wa Osaka kara no denwa notame,
Taro Top Osaka from Gen call because.of
(Tsukuba deno) jugyo ni konai daro.
(Tsukuba in) class to not.come I.guess
'(Lit.) Taro is not coming to class (in Tsukuba) because of his call from Osaka.'

The causal *kara*-clause in (23a) can be nominalized into *kaze notame* 'because of his cold' as in (23b), while such nominalization of reasoning *kara*-clause in (24a) is not acceptable, as shown in (24b). Thus, both in English and in Japanese, causal subordinate clauses may be nominalized, whereas reasoning ones may not.

Fourth, causal *kara*-clauses can be clefted, as in (25a), while reasoning *kara*-clauses cannot, as in (25b):

(25) a. Taro ga jugyo ni konai no wa
Taro Nom class to not.come Nomi Top

kaze o hiita kara da.

cold Acc got because Cop

'It's because Taro got cold that he's not coming to class.'

(cf. Taro wa kaze o hiita kara jugyo ni konai. (= (23a)))

b. ?? Taro ga jugyo ni konai no wa

Taro Nom class to not.come Nomi Top

sakki Osaka kara denwa o kaketekita

a.little.while.ago Osaka from phone Acc called

kara da.

because Cop

'(Lit.) It's because he just called from Osaka that he's not coming to class.'

(cf. Taro wa Osaka kara denwa o kaketekita kara jugyo ni konai daro. (= (23a)))

Again, this contrast is also parallel to the clefting of causal/reasoning *because*-clauses in English.

Lastly, the adverb *tada* can focalize causal *kara*-clauses, as in (26a), while it cannot focalize reasoning *kara*-clauses, as in (26b):

(26) a. Taro wa tada Hanako o aishiteiru kara

Taro Top only Hanako Acc love because

modottekita.

came.back

'Taro came back only because he loved Hanako.'

b. * Taro wa tada modottekita kara, Hanako o
Taro Top only came.back because Hanako Acc
aishiteiru nodaro.
Love I.guess
'(Lit.) Taro loves Hanako, only because he came back.'

Here, I assume that the adverb *tada* is an exclusive in Japanese. *Kenkyusha Shin Waei Chu Jiten* [Kenkyusha's New College Japanese-English Dictionary (5th edition)] gives the following translations to *tada*:

(27) *tada*: merely, simply, only, solely

Since the English words listed in (27) all belong to exclusives, it may be said that *tada* covers the same range of meaning as English exclusives. Then, the focalizability of causal/reasoning *kara*-clauses shows the same contrast as the focalizability pattern of causal/reasoning *because*-clauses in English.

Thus, the observations in sections 7.3 and 7.4 can be summarized as follows:

(28)

	causal *because/kara*	reasoning *because/kara*
wide-scope reading	OK	*
topicalization	*	OK
nominalization	OK	*
clefting	OK	*
focalization	OK	*

From table (28), we learn that causal *because*- and *kara*-clauses behave just alike, and that reasoning *because*- and *kara*-clauses show similar behaviors. I have argued in section 7.3 that these behaviors of *because*-clauses are reflections of the following properties of the causal and reasoning *because* constructions: The causal *because*-clause and its main clause form one information unit as a whole, while the reasoning *because*-clause and its main clause are understood as forming separate information units. Then, we may say that the causal and reasoning *kara* constructions also have the same properties as the English counterparts. That is, in both languages, a causal relation is understood as a combined process of the cause situation and the result situation; reasoning is a process in which the speaker relates two situations perceived separately based on his common knowledge of the world.

7.5 Summary

In the last two subsections, I have observed that the functionally equivalent constructions in English and Japanese also show parallel syntactic behaviors of their subordinate clauses with respect to (i) the possibility of the wide-scope reading of question, (ii) the (non)occurrence of topicalization in them, (iii) their nominalizability, (iv) the possibility of their clefting, and (v) their focalizability by exclusives. As I have argued in chapter 4, these behaviors of *because*-clauses are attributed to the properties of the causal *because* and reasoning *because* constructions (Kanetani (2005, 2006c)). By the same token, such behaviors of *kara*-clauses may be attributed to the causal *kara* and reasoning *kara* constructions.

These similarities lead us to posit the "contrastive causal construction" and the "contrastive reasoning construction" in English and Japanese. These contrastive constructions need very little language-specific information for arriving at cross-linguistic generalizations. That is, in English and Japanese, people construe causal relations and reasoning processes in very similar ways. In a causal relation, the cause and result situations are perceived as a single process, while in a reasoning process, the situations expressed in the main clause and the subordinate clause are perceived separately and the speaker relates them based on his common knowledge of the world. It is these similarities that many parallelisms in English and Japanese result from.

Thus, I have shown in this chapter that similar cognitive mechanisms are observed cross-linguistically (at least, in English and Japanese) in understanding causal relations and reasoning processes. That is, the proposed construction grammar approach not only explains a lot of phenomena in English but also provides generalizations across languages in combination with language-specific restrictions, such as different lexical items, different word-orders, etc.

Notes to Chapter 7

* For useful comments on an earlier version of this chapter, I am indebted to Yukio Hirose and Naoaki Wada. My deep gratitude goes to Patrick Farrell, who has kindly acted as an informant. I also thank the following people for sharing their intuitions on Japanese sentences: Shoichi Yamada, Ken-ichi Kitahara, Mai Osawa, and Tetsuya Kogusri.

1. Other conjunctive particles than *kara*, such as *node*, may be used to introduce a reason in Japanese, as exemplified in (i):

(i) Atsui *node* tui mizu o nomisugiru
hot because can't.help.but water ACC drink.too.much
'Because it is hot, we can't help but drink water too much.'
(Kojien[5])

The difference between *kara* and *node* has been a topic of heated debate (e.g. Nagano (1952, 1988), Kyogoku (1986), Tio (1988), Takeuchi (1997), among others). Although it would be interesting to examine their behaviors, it seems too complicated to deal with in this thesis. I leave it for future research, and here, I compare *because* and *kara*, assuming that they are comparable elements in English and Japanese (cf. Higashiizumi (2006)).

Higashiizumi presents a detailed observation of the historical development of *because* and *kara*, and argues that *because*- and *kara*-clauses have developed in the same way. That is, their syntactic extension is from more to less integrated clause-combining constructions, and semantic/pragmatic extension shows subjectification (cf. Traugott and Dasher (2002)). Roughly speaking, in both languages, the reasoning uses, as in b-sentences, have been developed from the causal uses, as in

a-sentences. Although their historical developments are beyond the scope of this thesis, Higashiizumi's comparative historical analysis of *because* and *kara* leads us to assume that they are comparable elements in English and Japanese.

2. The abbreviations used in the glosses of examples are as follows: 1/2/3sg.=first/second/third person singular pronoun, Acc=accusative case marker, Cop=copula, Gen=genitive case marker, Nom=nominative case marker, Nomi=nominalizer, Q=question morpheme, and Top=topic marker.

3. The German example provided Weilbacher and Boas (2006) has a complex sentence structure. That is, if literally translated, sentence (3b) will be: *Just because I'm from Germany, it doesn't mean I eat sauerkraut.* Indeed they consider the constructions in question as having complex sentence structures. In contrast, Hirose (1999) points out that the German language does have the same structure as English JB-X DM-Y constructions, as in (i), and considers the *because*-clause or the *weil*-clause as serving the subject.

(i) Nur weil ich Linguist bin, bedeutet nicht, dass ich
only because I linguist am means not that I
viele Spachen spreche
many languages speak
'Just because I'm a linguist doesn't mean I speak many languages.'

(Hirose (1999:606f.))

Whether or not the *because*-clauses or the *weil*-clauses are the subject of the sentence, however, is not a point here. See Matsuyama (2001) and Bender and Kathol (to appear) for detail arguments on this issue.

4. Weilbacher and Boas (2006) do not argue that all resultative constructions in English and German entirely have no one-to-one

correspondences (cf. Boas (2003)). They observe that resultatives based on the verb *wipe* and their German counterparts, for example, show roughly the same meaning extensions, and thus, need less language-specific information for a cross-linguistic generalization, compared with resultatives based on the verb *beat*.

5. The causal *because* construction has been simply called the causal construction in chapter 4. In order to avoid confusion with the Japanese counterpart to be dealt with in section 7.4, I use this term in the present chapter.

6. Note, however, that Croft (2001) argues that there are no universal constructions.

7. One may argue that the *kara*-clause used in (21b) belongs to speech-act conjunction in Sweetser's (1990) terms and that the sentence does not express a reasoning process. For the reasons mentioned in chapter 4, I do not distinguish Sweetser's epistemic and speech-act domains and consider sentences like (21b) as instances of the reasoning *kara* construction (see chapter 4 for details).

8. Whether *notame* is the counterpart of *because of* or not may be an issue that needs to be discussed. Note that *kara* by itself can follow a noun phrase. Of more note is that when it affixes to a noun phrase, as in (i), it functions as an ablative case marker, and the string "NP *kara*" does not express causal meaning (cf. Higashiizumi (2006:119f.)):

(i) Eki *kara* uchi made aruite juppun desu
station from my.house to on.foot ten.minutes COP
'It is a ten minutes' walk from the station to my house.'
(Higashiizumi (2006:119))

Thus, "NP *kara*" cannot be considered to be the counterpart of "*because of* NP." Then, we need another lexical item that affixes to a noun phrase and

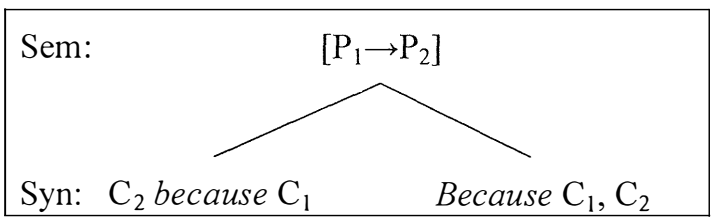
functions as a cause marker; *notame* can be a possible candidate for such a lexical item.

One may further argue that while *because* and *because of* seem morphologically and historically related, *notame* seems to have no such relations with *kara*. However, it is possible to consider that *because* and *because of* (as well as *kara* and *notame*) are totally different lexical items in Present Day English (cf. Matsuyama (2001)), whatever relation they have had before. Thus, despite the unrelated morphological status of *kara* and *notame*, I assume that the latter is the Japanese counterpart of *because of*, based on their semantic and syntactic similarities.

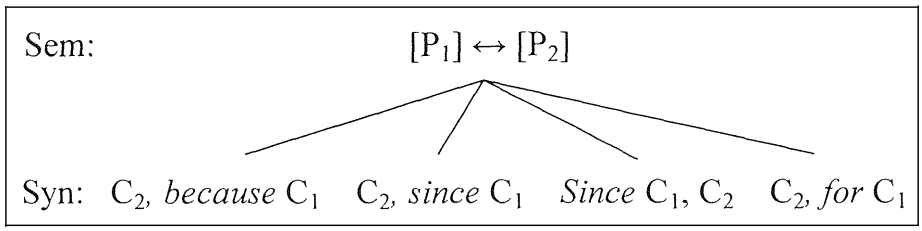
Chapter 8
Conclusion

Before concluding the thesis, let us briefly review what we discussed in chapters 4 through 7. In chapter 4, in order to give an integrated account of *because*, *since*, and *for*, I proposed a construction grammar analysis of these conjunctions. Postulating two construction schemas, i.e. the causal construction and the reasoning construction, I claimed that both similar and different behaviors of the conjunctions at issue are best accounted for not by focusing only on the conjunctions themselves but by considering what constructions they participate in. The conjunction *because* participates both in the causal construction and in the reasoning construction, whereas *since* and *for* are used in the reasoning construction, but not in the causal construction. Thus, the form-meaning correspondences of causal and reasoning constructions are roughly represented as follows:[1]

(1) a. causal constructions



b. reasoning constructions



Crucially, in a causal relation, the cause situation and the result situation are understood as a combined process as a whole, whereas in a reasoning process, the speaker subjectively connects two situations perceived separately (as represented with the brackets in (1a, b)). This common knowledge about causation and reasoning is reflected in various phenomena such as the nominalization of causal *because*-clauses, the (non-)occurrence of speech act constructions of statement in subordinate clauses, etc. In other words, it is the characteristics of the constructions that account for these phenomena.

Then, I showed the validity of the above proposal by applying it to the arguments of focalizability of *because* and *since*, and of metalinguistic reason constructions in English. The validity of the proposed analysis was also shown by contrasting *because* constructions in English with *kara* constructions in Japanese. First, chapter 5 discussed the focalizability of *because* and *since*. Despite the widely accepted view that *because*-clauses can be focalized by focusing adverbs whereas *since*-clauses cannot, there are many counterexamples, as in (2a, b):

(2) a. * It has rained, just because the ground is wet.

(Kanetani (to appear))

b. Wearing a different one every time she went out would be only natural, particularly since a sari does not have to be washed as frequently as a dress. (BNC)

I proposed the following generalization as to when *because*- and *since*-clauses can be focalized by focusing adverbs: Causal *because*-clauses can be focalized both by exclusives (e.g. *just*, *simply*, *only*, and the like) and by particularizers (e.g. *especially*, *particularly*, *partly*, and the like), whereas reasoning *because*-clauses and *since*-clauses (i.e. conjunctions used in the reasoning construction) can be focalized by particularizers but not by exclusives.[2] This generalization is derived by considering (i) characteristics of the causal and reasoning constructions and (ii) the meanings of relevant focusing adverbs. Thus, the distinction between the causal construction and the reasoning construction, as proposed in chapter 4, plays a particularly important role in explaining the focalizability of reason subordinate clauses.

Next, chapter 6 dealt with metalinguistic reason constructions in English, as in (3):

(3) The Blackwell collection was reputed to be the most valuable private collection in the world. *Reputed*, because no one outside of invited guests was permitted to see it.

(Hirose (1992:82))

The E-*because* construction (e.g. (3)) is similar to the causal construction in

some sense while it is similar to the reasoning construction in another. In order to account for the bilateral characteristics, it is necessary to consider a subpart relation between the E-*because* construction, as in (3), and the corresponding ISE-*because* construction, as in (4):

(4) I say "reputed," because no one outside of invited guests was permitted to see it.

In the ISE-*because* construction, which also exhibits the bilateral characteristics, the nature of metalinguistic reasons and the phrase *I say* in the main clause jointly make it possible to postulate the two levels of speakers' viewpoints, i.e. the viewpoint of the user of the expression E and the viewpoint of the metacognitive agent. Which characteristic the construction shows depends on which viewpoint of the two levels of speakers is taken. Because of the lack of the phrase *I say*, the E-*because* construction is not expected to take such two levels of speakers' viewpoints. However, the E-*because* construction, being subsumed under the ISE-*because* construction, inherits its characteristics (cf. Goldberg (1995), Hirose (1998, 1999)). Likewise, unpredictable behaviors of the XSE-*because* construction and its E-*because* counterpart (e.g. (5)) may be accounted for, as well.

(5) They were all saying "no way". (They said) "no way" because who in their right mind would do such a thing!

From these observations, I claimed that considering relations between constructions may even elucidate their unpredictable behaviors, and emphasized that constructions exist in relation with other constructions, rather than stand alone. That is, in order to understand a certain construction, not only the construction under investigation but also its neighboring, or related, constructions are necessary to be considered (cf. Kanetani (2006b)). Therefore, the analysis of the causal and reasoning constructions proposed in chapter 4 is essential to the analysis of metalinguistic reason constructions.

Finally, chapter 7, contrasting *because* constructions in English and *kara* constructions in Japanese, showed that the construction grammar analysis of conjunctions of reason is valid not only in English but also in other languages (at least in Japanese). Causal and reasoning subordinate clauses in English and Japanese behave alike with respect to (i) their inclusion within the scope of matrix question, (ii) the (non-)occurrence of speech act constructions in them, (iii) their nominalizability, (iv) the applicability of clefting, and (v) their focalizability by exclusives. I claimed in chapters 4 and 5 that these behaviors of *because*-clauses are accounted for in terms of the characteristics of the causal construction and reasoning construction. From the fact that *kara* constructions show similar behaviors to their English counterparts, I argued that in these languages, similar mechanisms lie in understanding causal relations and reasoning processes. That is, causal constructions and reasoning constructions may be generalized cross-linguistically with very few language-specific restrictions.[3]

In conclusion, I emphasized that causation is a combined process of cause and result situations, while reasoning is a process in which the speaker subjectively connects two situations perceived separately. Based on the widely accepted assumption that our grammar should be consistent with what we know about cognition and social interaction (e.g. Fillmore (1988), Fillmore et al. (1988), Goldberg (1995), Östman and Fried (2005), among many others), I argued that this common knowledge about causation and reasoning is reflected in our grammar; i.e., causal constructions and reasoning constructions exhibit the general properties of causation and reasoning. In addition, I showed that the proposed analysis is both language-specifically and cross-linguistically valid.

Notes to Chapter 8

1. The representations given in (1a, b) are simplified (for details, see chapter 4).

2. In discussing focalizations, *for* is not relevant and thus was excluded from the analysis, since, as I argued in chapter 4, it is not a subordinator.

3. However, language-specific information is still necessary to determine, for example, what lexical items are used (e.g. *because* vs. *kara*), how the constituents are aligned (e.g. *because*-C vs. C-*kara*), etc. (cf. Weilbacher and Boas (2006)).

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