The Semantics and Pragmatics of Conditionals in English

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Souma MORI

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List of Abbreviations

ACC	accusative
AUX	auxiliary
COP	copula
DAT	dative
GEN	genitive
NOM	nominative
PP	past-participle
PRF	perfect
PROG	progressive
PST	past

Chapter 1

Introduction

1.1. The Conditional Construction

Numerous and various studies have so far been done on conditionals. Among them, Palmer (1988, 1990), Sweetser (1990), Dancygier (1993, 1998), Declerck and Reed (2001), and Dancygier and Sweetser (2005) are important works. In this thesis, by the term 'conditionals' I mean the conditional sentence as a whole or conditional construction (*If p, (then) q*).[1]

First, let us look at Palmer (1988, 1990). According to Palmer (1988, 1990), conditionals, roughly speaking, are divided into four types, as illustrated in (1) - (4):

(1) Type I:

a. If it rains, the match will be cancelled.

b. If it rained, the match would be cancelled.

c. If it had rained, the match would have been cancelled.

(Palmer (1988: 151, 1990: 171))

(2) Type II:

If John comes, Mary (always) leaves. (Palmer (1988: 153, 1990: 174))

(3) Type III:

If John came yesterday, Mary left. (Palmer (1990: 175))

(4) Type IV:

If you want to know, I haven't seen him. (Palmer (1988: 154))

[1] In some previous studies the term 'conditionals' is used to refer to only *if*-clauses. In the present thesis, however, it refers to the whole conditional sentence.

Palmer (1988) refers to a set of examples like (1a-c) as "the basic pattern." They, as Palmer (1988: 150) states, have some kind of causal link between p and q. Examples like (2) are restricted to habitual actions (Palmer (1988: 153)), and no less causal than those like (1a-c): "Mary's leaving depends upon John's coming" (Palmer (1990: 175)). In examples like (3), there is no causal connection. Indeed, a causal connection is impossible in (3), because the event referred to in p is subsequent to that referred to in q. In example (3), the speaker infers that Mary left from the fact that John came (Palmer (1990: 175)). In sentences such as (4), furthermore, there is some kind of ellipsis, according to Palmer (1988). For example, sentence (4) has to be interpreted as something like:

(5) If you want to know, I'll tell you that I haven't seen him. (Palmer (1988: 154))

In other words, in the example in (4) "the leaving out of *I'll tell you*" occurs (see Palmer (1990: 176)).

Next, we will look at Declerck and Reed (2001) briefly. Within the framework adopted by Declerck and Reed (2001), conditionals can fall into at least five categories: "open-P conditionals," "tentative-P conditionals," "counterfactual-P conditionals," "closed-P conditionals," and "neutral-P conditionals" (see Declerck and Reed (2001: 51-54, 73-109)). The examples in (6) - (10) below exemplify open-P conditionals, tentative-P conditionals, counterfactual-P conditionals, closed-P conditionals, and neutral-P conditionals, respectively (cf. Declerck (1991a, b)):

(6) Open-P conditionals:

I will be happy if we find a solution. (Declerck and Reed (2001: 54))

(7) Tentative-P conditionals:

I would be happy if we found a solution. (Declerck and Reed (2001: 54))

(8) Counterfactual-P conditionals:

a. I would have been happy if we had found a solution.

(Declerck and Reed (2001: 54))

b. I would reconsider my assumptions if I were you.

(Declerck and Reed (2001: 100))

(9) Closed-P conditionals:

If, as they say, they were late yesterday, it cannot have been because of the weather.

(Declerck and Reed (2001: 81))

(10) Neutral-P conditionals:

If I go into town, I take the bus (Declerck and Reed (2001: 75))

In the framework of Declerck and Reed (2001: 54), the supposition is "open" if the speaker treats fulfilment of the supposition as uncertain, but as a real possibility. This is why conditionals like example (6) are called open-P conditionals. In Declerck and Reed (2001: 54), the supposition is "tentative" if the speaker treats fulfilment of the supposition as a rather unlikely or tentative possibility, and the supposition is "counterfactual" if the speaker presupposes that it is false in the real world, i.e. contrary to fact; indeed, conditionals like (7) and ones like (8a, b) are called tentative-P conditionals and counterfactual-P conditionals, respectively. Also, according to Declerck and Reed (2001: 53, 81), the supposition is "closed" if it is given in the context and the speaker assumes that it is true; that is, in closed-P conditionals, the protasis is accepted as being true in the actual world, as in (9). In addition, Declerck and Reed (2001: 72) state that it is typical of neutral-P conditionals that the speaker uses the protasis to express no more than a pure supposition about theoretical cases. For instance, because in

examples like (10) the speaker does not presuppose actualization of p at the time of speech, the p in (10) has a neutral present meaning, although the repetitive habit expressed by q is factual in that it exists at the time of speech (see Declerck and Reed (2001: 74-75)).

So far in this section, I have introduced the works of Palmer (1988, 1990) and Declerck and Reed (2001) in a brief way. At this point, we can point out some problems in Palmer's (1988, 1990) and Declerck and Reed's (2001) taxonomies. For example, Palmer does not explain why in sentence (4) the ellipsis of *I'll tell you* in sentence (5) occurs. Declerck and Reed, on the other hand, describe examples (11) and (12) below as open-P conditionals, treating them as being in the same class as conditionals like (6). As will be shown in chapters 3-6, however, they should be different from example (6) in classes of the conditional construction; in the former, p is formed by the general rules governing independent sentences, and in the latter, p is not formed by general rules: in the p of the latter, the simple present form is used even though it refers to the future time. As we will see in chapter 6, the former is different from the latter in the category status of an *if*-clause (see section 6.1 in detail).

(11) [I don't know if Liverpool won their match yesterday.] If they did, they must be top of the League now. (Declerck and Reed (2001: 91))

(12) ["I think that man may be a plainclothes policeman."] — "If he is, I wonder what he is doing here." (Declerck and Reed (2001: 91))

In this way, we have seen that Palmer (1988, 1990) and Declerck and Reed (2001) have problems with their taxonomies of conditionals. The works by Sweetser (1990), Dancygier (1993, 1998), and Dancygier and Sweetser (2005) will be discussed in the next chapter, because they provide key ideas such as backshift, distancing, general rules, and cause-effect relations for our framework.

1.2. Aim

The purpose of the present study is to present a theoretical framework of conditional constructions. First, this thesis proposes that the conditional construction has four constructional features, which are referred to as [±general-rule] and [±cause-effect] features, and assumes that conditionals can be classified by the combination of the four constructional features (see chapters 3 - 4). The present study also shows that the conditionals composed of [+general-rule] and [−cause-effect] features can be divided into three subclasses by whether they are constructed by deductive/abductive reasoning or not: deductive, abductive, and non-deductive and non-abductive conditionals. The present framework, furthermore, shows that the *if*-clause in non-deductive and non-abductive conditionals can be divided into three types in terms of the difference of its category status.

The theoretical model proposed in this thesis provides numerous and remarkable linguistic interests: for example, hierarchical structure of *if*-clauses, the scope of interrogation, the scope of negation, the insertion of *then*, the range in which the subjunctive mood can appear, and so on (see chapters 5 - 8). The framework adopted in this thesis also offers linguistic insights: for example, cross-linguistic analyses of deductive and abductive conditionals, (inter)-subjectification of *if*-clauses, the status of the *if*-clause in metalinguistic and meta-metaphorical conditionals, and two kinds of *if*-clauses with *be going to* (see chapters 9 - 13).

1.3. Organization

This thesis is organized as follows. Chapter 2 surveys the works of Sweetser (1990), Dancygier (1993, 1998), and Dancygier and Sweetser (2005), and points out problems with

their accounts. Chapter 3 outlines our theoretical framework. Chapter 4 explicates the nature of condition and cause-effect chain relations. Chapter 5 deals with what we call NCP conditionals in this thesis (NCP standing for "Neutral-Condition-P-clause"). Chapter 6 deals with what is called GRP conditionals in the present study (GRP standing for "General-Rule-P-clause). Chapter 7 discusses what the present framework calls generic conditionals. Chapter 8 develops a theory of subjunctive conditionals. Chapter 9 provides cross-linguistic analyses of deductive and abductive conditionals. Chapter 10 examines decategorialization and (inter)subjectification of *if*-clauses. Chapter 11 deals with metalinguistic conditionals. Chapter 12 explores meta-metaphorical conditionals. Chapter 13 deals with *if*-clauses with *be going to*. Chapter 14 offers concluding remarks.

Chapter 2

Theoretical Background

2.1. Predictive, Non-Predictive, Epistemic, and Speech-Act Conditionals: Sweetser (1990), Dancygier (1993, 1998), and Dancygier and Sweetser (2005)

The framework offered in this study has profited a great deal from the insights offered by the works of Sweetser (1990), Dancygier (1993, 1998), and Dancygier and Sweetser (2005). It is therefore worthwhile surveying their works.

2.1.1. Predictive and Non-Predictive Conditionals

Dancygier (1993, 1998) and Dancygier and Sweetser (2005) have proposed predictive and non-predictive conditionals as classes of English conditionals (*If p, (then) q*). The main criterion in their classification of conditionals is the presence or absence of "backshift." In Dancygier's framework, the term *backshift* is defined as "language use such that the time marked in the verb phrase is earlier than the time actually referred to" (Dancygier (1998: 37)).

(1) If it rains, the match will be canceled.

(2) If it rained, the match would be canceled.

(3) If it had rained, the match would have been canceled.

(Dancygier (1998: 25))

For example, the form *rains* in (1) marks the present tense, but in fact refers to the future, and *rained* in the protasis of (2), which marks the past tense, refers to the future (cf. James (1982)).

The verb form *had rained* in (3) too is backshifted. Similar backshifted forms are used in q of (2) and (3). In their frameworks, backshift is what distinguishes predictive conditionals from non-predictive ones: backshift is applied to the predictive ones, not applied to the non-predictive ones. Examples (1) - (3) are classified as predictive ones.[2] Dancygier (1993, 1998), further, refers to the backshift used in verbs in protases like (1) as "*if*-backshift," and the backshift used in verbs like (2) and (3) as "hypothetical backshift."[3, 4] Thus, we can see that the concept of backshift suggests the restriction on the tense forms of verbs used in conditional protases. (In this connection, Dudman (1983, 1984b) already pointed out that in *if*-clauses the verbs' tense forms do not match the time they actually refer to.)

Within the frameworks of Dancygier (1998) and Dancygier and Sweetser (2005), a predictive conditional has a causal relation between the state of affairs in the protasis and that in the apodosis. A causal relation or causality in the sense of Dancygier (1998: 46, 80-85) refers to a relationship in which p can bring about q via the knowledge of cause-effect chains.

A non-predictive conditional, on the other hand, is the one which backshift is not applied to, as in (4) and (5):

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[2] Declerck and Reed (2001) refer to tense patterns in examples like (1) - (3) as "canoni- cal patterns" of conditionals. They actually adduce (i) - (iii) below as examples of canonical patterns of conditionals.

(i) If she comes I will tell her everything.
(ii) If she came I would tell her everything.
(iii) If she had come I would have told her everything.

(Declerck and Reed (2001: 231))

[3] In Dancygier and Sweetser (2005), the phenomenon of the simple present-tense use in *if*-clauses with future reference, as in (1), is termed "backshifting," while the verb forms in *if*-clauses like those in (2) - (3) are described as "distancing" and are called "distanced verb forms."

[4] Declerck (1991a, b) calls protases like that in (1) open condition, protases like that in (2) hypothetical condition, and protases like that in (3) counterfactual condition. According to Huddleston and Pullum (2002: 748), conditionals (If p, (then) q) like (2) - (3) implicate that p is false, or at least likely to be.

(4) If she is in the lobby, the plane arrived early. (Dancygier (1998: 62))

(5) If she is giving the baby a bath, I'll call back later. (Dancygier (1998: 62, 150))

The verb forms in conditionals of this type refer to the time the tense in itself indicates (see Dancygier (1993: 417, 1998: 61), Dancygier and Sweetser (2005: 122)). Thus, in non-predictive conditionals, the verbs in the conditional and main clauses are formed by ordinary general rules (i.e. the rules which govern the tense-aspect interpretation of independent sentences) and are interpreted in the same way as ordinary independent clauses are. Also, in non-predictive ones there is no predictive relationship (see Dancygier (1998: 69), Dancygier and Sweetser (2005: 113. 122)). This suggests that non-predictive ones have no causal relations between p and q in the sense that applies to predictive ones.

2.1.2. Epistemic and Speech-Act Conditionals

Dancygier (1998) and Dancygier and Sweetser (2005) have classified non-predictive conditionals into epistemic and speech-act ones, which were originated in Sweetser (1990). In this subsection, we will, first, consider epistemic ones. Look at sentences (6) - (10) below. In Sweetser (1990), Dancygier (1998), and Dancygier and Sweetser (2005), they are given as examples of epistemic ones.

(6) If John went to that party, (then) he was trying to infuriate Miriam.

(Sweetser (1990: 116))

(7) If Mary said she liked the movie, she was just showing off. (Dancygier (1998: 62))

(8) If he typed her thesis, (then) he loves her.

(Dancygier and Sweetser (1997: 125, 2005: 117))

(9) If she is in the lobby, the plane arrived early. (= (4))

(10) If Mary is late, she went to the dentist. (Dancygier (1998: 86))

The most plausible reading of epistemic ones involves a causal relation in the "reverse" direction, where the event or state of affairs described in p (i.e. the protasis) expresses an effect, and the event or state of affairs described in q (i.e. the apodosis) expresses the cause (Dancygier (1998: 86)). For example, in (10), Mary is late because she went to the dentist (Dancygier (1998: 86)). According to Dancygier (1998: 86-87) and Dancygier and Sweeser (2005: 117), the epistemic conditionals express not 'prediction' but 'inference': the protasis presents a premise, and the apodosis the conclusion inferred from the premise.

Sweetser (1990) defines an epistemic conditional in the following way:

(11) "[K]nowledge of the truth of the hypothetical premise expressed in the protasis would be a sufficient condition for concluding the truth of the proposition expressed in the apodosis." (Sweetser (1990: 116))

In Dancygier's (1998: 87) words, "the knowledge of p is a sufficient condition for concluding q."

Furthermore, Dancygier and Sweetser (2005: 117) explain example (8) as: "my *knowledge* that the typing happened is a precondition for my conclusion about the loving." In addition, Sweetser (1990) states that sentence (12) may be understood as meaning "If I *know* that they have to leave a message, then I conclude that he's gone already."

(12) If they have to leave a message, (then) he's gone already. (Sweetser (1990: 123))

Dancygier and Sweetser (2000: 116) also note that in epistemic conditionals it is possible to paraphrase the *if*-clause by a clause with *know*: *If he finished the paper by Friday, his computer must have gotten repaired* is paraphrasable with "If I *know* that the paper was finished, then I must conclude that the computer was repaired." In this way, they consistently claim that in an epistemic conditional p is what speaker knows.

Next, we will turn to speech-act conditionals, which are exemplified as follows:[5]

(13) If you are hungry, there are biscuits on the sideboard.

(Dancygier (1998: 90, 103, 124), Dancygier and Sweetser (2005: 40, 110, 113))

(14) If I haven't already asked you to do so, please sign the guest book before you go.

(Sweetser (1990: 118))

(15) If it's not rude to ask, what made you decide to leave IBM? (Sweetser (1990: 118))

(16) If I may say so, that's a crazy idea. (Sweetser (1990: 118))

Sweetser (1990) defines a speech-act conditional as (17) below:

(17) "[T]he performance of the speech act represented in the apodosis is conditional on the fulfillment of the state described in the protasis (the state in the protasis enables or causes the following speech act)." (Sweetser (1990: 118))

Thus, (16) "purports to state an opinion only conditionally on the hearer's permission"

[5] It is Austin (1961) that first showed conditional sentences like (13) - (16).

(i) There are biscuits on the sideboard if you want them. (Austin (1961: 158))

Conditionals like (13) - (16) are also called "pragmatic conditionals" (Haegeman (1984), Athanasiadou and Dirven (2000)) or "biscuit conditionals" (Siegel (2006)).

(Sweetser (1990: 118)).[6] She, furthermore, paraphrases speech-act conditionals by a gloss: "If [protasis], then let us consider that I perform this speech act (i.e., the one represented as the apodosis)" (Sweetser (1990: 121)).[7]

Dancygier (1998), a follower of Sweetser (1990), characterizes speech-act conditionals in the following two ways: (i) "*if*-clauses can bear a relationship to the speech act performed in the main clause rather than to its propositional content," and (ii) "the protases of such sentences are largely independent of the content of their apodoses" (Dancygier (1998: 89)).

2.2. Problems with Sweetser's and Dancygier's Accounts

In the last section I presented an overview of Sweetser's and Dancygier's works. This section points out problems with their accounts.

2.2.1. Problem (i) — On Speech-Act Modality and the Application of an Analysis of Modality to an Analysis of Conditionals

Sweetser (1990: 113) herself, in the initial stage of the argument of conditionals, suggests that epistemic and speech-act conditionals are not a full theory of conditionals. This will be a problem. (Although no analysis can be a "full" theory, I can present a more useful and better theory of conditionals than epistemic and speech-act conditionals (see chapters 3 - 7).) It is

[6] Van der Auwera (1986: 202-203) characterizes examples like (14) - (16) in such a way that "the protasis is asserted to be a sufficient condition for a speech act about the apodosis."

[7] In this connection, Schwenter (1999: 13-14) remarks as follows: "Sweetser distin-guishes three types of conditionals—content, epistemic, and speech-act—in accordance with the cognitive domain in which they are employed and/or interpreted… These cognitive domains are held to be structured via metaphor: the content domain is taken to be the most basic to human experience, and the other two are connected to the content domain by means of metaphorical links."

because she applied the framework for an analysis of modality to an analysis of conditionals that such a problem has arisen. She assumes root, epistemic, and speech-act senses as the polysemy of modals, and proposes that the epistemic and speech-act senses are extensions of the root senses. She, in addition, applies the content, epistemic, and speech-act domains to conditionals as well.[8] However, as I will repeat again, the application of her framework for an analysis of modality to an analysis of conditionals is highly problematic.

Furthermore, the account she refers to as speech-act modality is untenable. As was mentioned above, she argues that root-modal senses can be extended to the speech-act domain (and she applies the framework for an analysis of modality to an analysis of conditionals). In her framework, speech-act modality is applied to examples (18) - (20) below:

(18) He *may* be a university professor, but he sure is dumb.

(19) Mondale advisor giving directions to speech writer:

"Reagan *will* be a nice guy (as far as the content of the speech is concerned), even if we criticize his policies."

(20) Editor to journalist:

"OK, Peking *can* be Beijing; you can't use 'Praha' for Prague."

((18) - (20): Sweetser (1990: 70-71))

With regard to *may* in (18), she states that the relevant reading of sentence (18) is the one which presupposes the truth of the first clause, and that sentence (18) means something like "I admit that he's a university professor, and I nonetheless insist he's dumb," and may be paraphrased as (18'):

[8] In Sweetser (1990), content, epistemic, and speech-act conditionals are usages corres-ponding to root, epistemic, and speech-act modalities, respectively.

(18') I *do not bar from our (joint) conversational world* the statement that he is a university professor, but…

She argues that the root sense of *may* is an absent potential barrier in the sociophysical world, and the meaning of epistemic *may* would be that there is no barrier to the speaker's process of reasoning from the available premises to the conclusion (Sweetser (1990: 59)). And further, she assumes that *may* in sentence (18) indicates the absence of a barrier in the conversational world, and calls *may* in (18) 'speech-act *may*' or 'speech-act-domain use' (cf. Papafragou (2000)). At this point, we can find the following problem with the approach called speech-act modality: in discussing speech act she is looking at only the first part of the sentence including *may*. According to Austin (1962) and Searle (1969, 1979), speech act is done by the entire sentence, not by a part of it. Thus, since sentence (18) ends up with "but he sure is dumb," the speech act done by (18) should be assertion.

With respect to examples (19) and (20), Sweeter (1990) claims that the relevant modality is clearly related to some speech act, and these are cases of modals being applied to the speech-act world (Sweetser (1990: 72)). However, I can offer more satisfactory ways to account for *will* and *can* in examples (19) and (20). As an account of the use of *will* in (19), Leech (1987: 86, 2004: 88) notes that this use of *will* seems to be a special use of the *will* of "prediction." Palmer (1988: 144) also treats *will* of this kind as a kind of modal future, that is, the "prediction" sense. Huddleston and Pullum (2002: 194), on the other hand, state that this use of *will* is a matter of implicature. In this way, with respect to *will* in (19), Huddleston and Pullum (2002) provide an argument not found in Leech (1987, 2004) and Palmer (1988). We can, therefore, assume that a use of *will* like the one in (19) has arisen from the implicature of order that a sentence including *will* of the "prediction" sense has. If Sweetser's idea is correct, it will

follow that a use of *will* in (19) is the extension from the root "volition" sense to the speech-act world. However, it would not be the case. Thus, with regard to a use of *will* in (19), the assumption put forward above is a more convincing and satisfactory account than Sweetser's analysis.

Can in an example like the one in (20) is often said to indicate the sense of "permission" (see Coates (1983, 1995), Quirk et al. (1985), Leech (1987, 2004), Declerck (1991b), Westney (1995)). In this study too, we should assume that the sense of "permission" is inherent in *can*. Assuming that *can* in itself has the sense of "permission," *can't* indicating "no permission" can be accounted for in terms of the scope of negation. For instance, as Leech (1987, 2004) states, in example (21) *not* negates *can* (= "permission"), and (21) is an example of AUXILIARY NEGATION.[9] In Huddleston and Pullum's (2002) words, the negative in sentence (21) has scope over the modal auxiliary, i.e. the negation is external to the scope of the modal (Huddleston and Pullum (2002: 175)).

(21) You *can't* smoke in here.

('You are not permitted [to smoke in here]') (Leech (2004: 94))

In this way, assuming that the sense of "permission" is inherent in *can* per se, the concept of the scope of negation can be ensured. In accordance with Sweetser's (1990) idea, *can* in (20) can be explained as a speech-act-domain use. However, in terms of speech-act-domain uses, it is difficult to account for *can't* as in (21), which indicates "no permission."

We have thus seen that Sweetser's speech-act modality has no explanatory power. This suggests that the validity of the speech-act domain and speech-act conditionals can be called

[9] According to Palmer (1990, 1995, 2003), *can't* like the one in (21) is deontic "not-possible."

into question.

2.2.2. Problem (ii) — On the Epistemic/Speech-Act Distinction

Next, turning to the epistemic and speech-act conditionals, we find the epistemic/speech-act dichotomy is no taxonomy for classifying non-predictive ones in a principled way. Actually, there are data in which it is very difficult to judge which meaning is intended, from the descriptive definitions of them (i.e. (11) and (17)). (As is well known, this is one of the reasons that Athanasiadou and Dirven (2000: 2-3) group epistemic and speech-act conditionals together under pragmatic conditionals following Morris (1946) and Comrie (1986).) According to Dancygier and Sweetser (2005), sentence (22) below is an epistemic conditional, not a speech-act one. Does this mean that the *if*-clause in (22) does not bring about the speech act of the main clause (cf. Sweetser (1990: 118))? The answer is negative. We can regard the *if*-clause in (22) as the speaker's reason for saying the main clause; that is to say, we can classify sentence (22) as a speech-act conditional.[10]

(22) If Mr. Armani is so desperate to be seen as an artist, he should have allowed himself to be treated as one. (Dancygier and Sweetser (2005: 122))

Also, is sentence (23) below an epistemic one, or a speech-act one? Although Dancygier (1998) presents sentence (23) herself, she does not clearly specify whether the sentence is an epistemic one or a speech-act one.[11] While in the sentence the speaker knows the content of

[10] Within the framework of Sweeter (1990), the "speech-act" in speech-act conditionals differs from the "speech-act" in speech-act modality in meaning. In my view, the latter is closer in meaning to speech acts in general (e.g. Searle (1976)) than the former.

[11] Comrie (1982) states that the content of the conditional clause in (23) is "contextually given."

the protasis (in this case, an epistemic one), the *if*-clause also brings about the speech act of the main clause (in this case, a speech-act one) (cf. Dancygier (2003: 319)).

(23) If he won't arrive before nine, there's no point in ordering for him.

(Comrie (1982: 148), Dancygier (1998: 62, 118))

In this way, it is very difficult to determine whether sentences like (22) and (23) are epistemic or speech-act conditionals. Examples like these are often found in conditional sentences in which the content of the protasis is contextually given/bound.[12] It is because sentences like (22) and (23) can apply to the descriptive definitions of both an epistemic and a speech-act conditional (i.e. (11) and (17)) that a problem like this has arisen.

In the *if*-clauses with *will*, in particular, some of the conditionals which are said to be speech-act ones can be considered as epistemic ones. For example, consider examples (24) and (25) below, where *will* appears in the *if*-clause. Sweetser describes sentences (24) and (25) as speech-act ones. However, because p and q express effect and cause respectively, it is possible for these sentences to be regarded as epistemic ones.

(24) If it *will* amuse you, I'll tell you a joke.

Dancygier (1998: 118-119), on the other hand, states that the p in this sentence is "contextually bound."

[12] Declerck (1984) states that p in example (i) below represents a closed condition. This suggests that the content of the conditional clause in (i) is contextually given/bound.

(i) If the lava will come down as far as this, all these houses must be evacuated at once.

(Close (1980: 103), Declerck (1984: 280))

The question is whether sentences like (i) are epistemic or speech-act ones. Within the framework of Sweetser (1990) and Dancygier (1998), example (i) can be regarded as an epistemic one, because p of (i) is what the speaker knows, but can also be regarded as a speech-act one, because the state of affairs in the protasis of (i) brings about the speech act of the main clause.

(Comrie (1982: 150), Palmer (1990: 178), Sweetser (1990: 121), Dancygier (1998: 118))

(25) If it *will* satisfy you to know it, Mary is already on her way here.

(Sweetser (1990: 124))

In this way, we have seen that the epistemic/speech-act taxonomy cannot identify examples (24) - (25) (as well as (22) - (23)).

The reason why the issues raised above have arisen is that the epistemic and speech-act classes are not a principled classification; moreover, the descriptive definitions of epistemic and speech-act conditionals in (11) and (17) do not accurately capture the phenomena observed in the conditionals presented by Sweetser. Indeed, scrutinizing the descriptive definitions in (11) and (17), we can see that they have things which cannot be overlooked. Whether the speaker "knows" the truth of p or not, for instance, is questionable as a criterion for classifying conditionals accurately (cf. (11)). In fact, example (14) is classified as a speech-act conditional (, not an epistemic conditional) even though the speaker knows the truth of p. Also, although I admit that in conditionals referred to as speech-act conditionals, p has some functions with regard to uttering q, we should consider that at least in sentences (13) - (16), the performance of the speech act represented in q is *not* conditional on the fulfillment of the state of affairs described in p, contra (17). In fact, in (13) - (16), even if the *if*-clauses are deleted, the speech acts can be performed. Moreover, unfortunately, with respect to (13) - (16) there is only a little discussion on politeness, and no discussion in terms of (inter)subjectivity and (inter)subjectification. Sweetser would have wanted to offer the accounts in (11) and (17) in order to specify the conditions of epistemic and speech-act ones 'descriptively.'

The dichotomy between epistemic and speech-act conditionals, furthermore, cannot account for why conditionals like (26) sound rhetorical.

(26) If you're the Pope, I'm God.

In general, the epistemic/speech-act distinction is not a principled classification, and the definitions in (11) and (17), which Sweetser presented, do not accurately describe phenomena which have occurred in the conditionals in question. In fact, there are some non-predictive examples to which the epistemic/speech-act classifications are difficult to apply (e.g. (22) - (25)). Although Sweetser (1990: 123-124) states that conditionals may be ambiguous between epistemic and speech-act conditional readings, we should offer a framework whereby conditionals can be classified more clearly than the epistemic/speech-act distinction (cf. Schwenter (1999: 49)). As we will see later, the taxonomy to be offered in the present study is not only a principled account but also a classification which can explain data on conditionals in cross-linguistic and historical terms (see chapters 3 - 10). The new classification, further, can also offer a theoretical account for resolving why examples like (26) sound rhetorical (see section 6.3.10 in detail).

2.2.3. Problem (iii) — On Non-Predictive Conditionals in Which P Presents Cause, and Q Presents Effect

According to Dancygier (1998) and Dancygier and Sweetser (2005), in non-predictive conditionals there is no predictive relationship: they do not represent predictive reasonings (Dancygier (1998: 61, 69, 86), Dancygier and Sweetser (2005: 113, 117, 122)). However, there are non-predictive conditionals in which p is a cause of q, as illustrated in (27) - (34):

(27) If interest rates are going to climb, we'll have to change our plans.

(Hopper and Traugott (2003: 3))

(28) If you're going to lose your temper, I'm not going to / won't play.

(Huddleston and Pullum (2002: 211))

(29) If you're leaving now, you'll be able to catch the 5 o'clock train.

(Hewings (2013: 166))

(30) We'll need more chairs if we're going to invite so many people to the performance.

(Hewings (2013: 166))

(31) If he submitted his paper to a journal, we won't include it in our book.

(Kaufmann (2005: 232))

(32) You should call a doctor if there is a fever. (Athanasiadou and Dirven (2000: 7))

(33) If John is rich, Mary will probably like him. (Tedeschi (1977a: 632))

(34) If it's raining, we won't go to the park.

(→ 'Since it's raining, we won't go to the park.') (Comrie (1986: 89))

Actually, Comrie (1986) explains sentence (34) using a *since*-clause, which suggests that p is a cause of q. Examples like (27) - (34) will be explained in detail later (see chapter 4).

2.2.4. Problem (iv) — On Backshift

Dancygier (1998) does not assume the subjunctive mood in non-predictive conditionals; in Dancygier's words, non-predictive conditionals are not backshifted.[13] However, as is exemplified in (35) and (36), there are subjunctive mood conditionals in non-predictive ones.

(35) If she were home by now, the train must have arrived in time. (subjunctive mood)

[13] In Dancygier and Sweetser (2005: 124), it is possible to get some epistemic condi-tional examples with distanced verb forms, i.e. subjunctive mood forms.

(36) If she really had been in the lobby yesterday afternoon at three, the plane would have landed early. (subjunctive mood)

In light of this linguistic fact, — although in Dancygier (1998) and Dancygier and Sweetser (2005), the main criterion in classifying conditionals is the presence or absence of backshift(ing)/distancing — we should propose parameters other than backshift(ing)/distancing as criteria for classifying conditionals (see chapters 3 and 4 in detail).

The analysis to be offered in the chapters that follow will address all the problems (i) - (iv) mentioned above. Furthermore, the framework to be proposed provides motivated and more fine-grained analyses of conditionals.

Chapter 3

Theoretical Framework

In this chapter, I will present a theoretical framework for conditional constructions. Section 3.1 shows a rough sketch of the framework the present study proposes. In sections 3.2 – 3.4, the theoretical model of conditional constructions outlined in section 3.1 will be explained in more detail.

3.1. A Theoretical Model of English Conditionals

This study assumes the [±general-rule] and [±cause-effect] features as components of conditional constructions (*If p, (then) q*), whereby we can classify conditionals into three major classes: (i) Neutral-Condition-P-clause conditionals (henceforth, NCP conditionals), (ii) General-Rule-P-clause conditionals (henceforth, GRP conditionals), and (iii) generic conditionals. A caveat is in order here. When I say "general rule" in this study, I mean "rules that govern the tense-aspect interpretation of independent sentences."

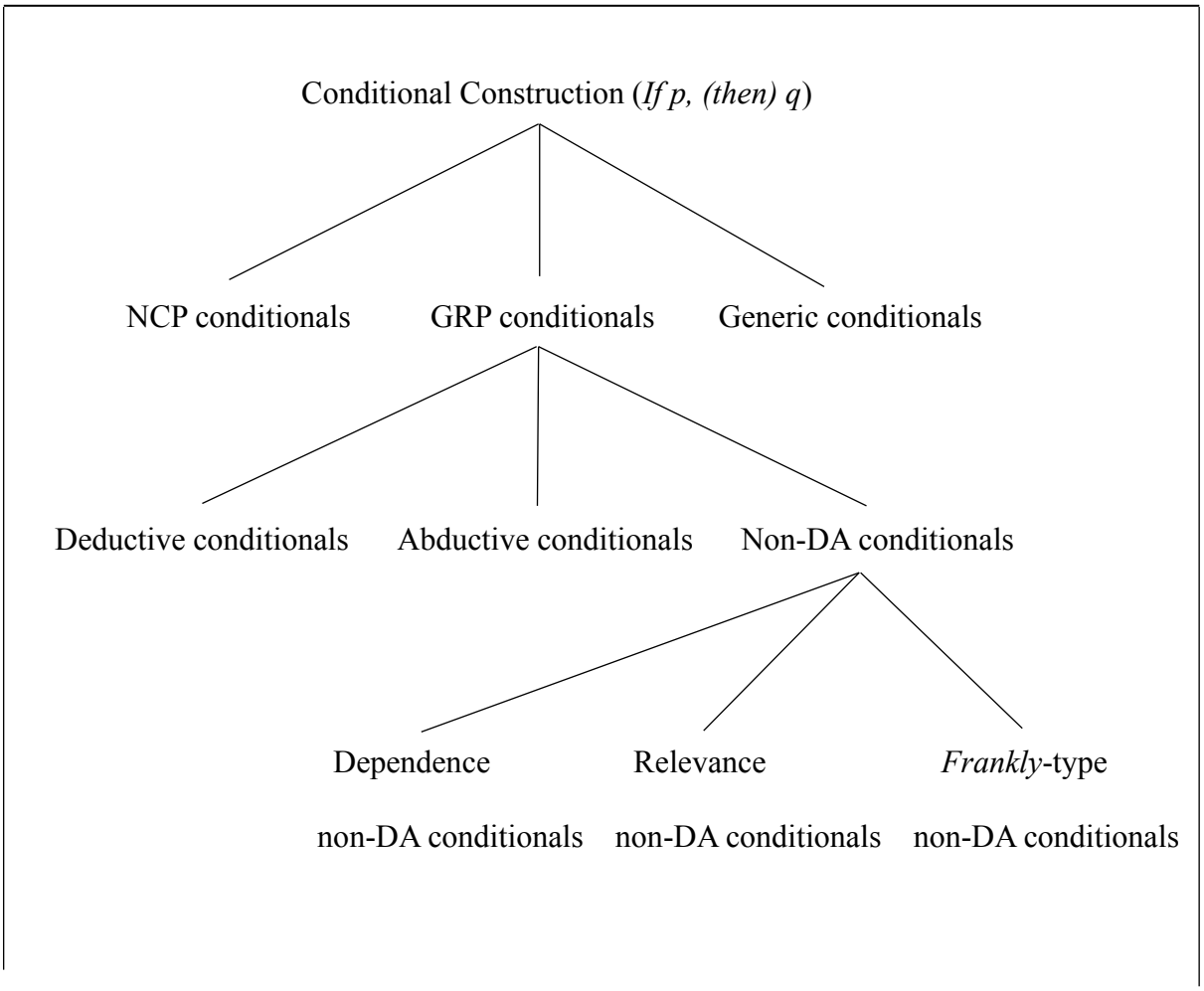
NCP conditionals are ones in which p is not formed by general rules in the above sense and denotes a 'neutral condition' (see sections 4.1 and 5.1 for a broader discussion of neutral conditions). GRP conditionals are ones in which p is formed according to general rules and in which the cause-effect relation between p and q is not ensured (see section 4.2 and chapter 6 on GRP conditionals and cause-effect relations). Generic conditionals are ones in which p is formed according to general rules and in which the cause-effect relation between p and q is ensured (see chapter 7 for discussion).

The present study also subclassifies GRP conditionals according to the criterion of whether they are constructed by deductive/abductive reasoning or not (see sections 6.1 and 6.2

in detail). In this study, the subclasses of GRP conditionals are called (i) deductive conditionals, (ii) abductive conditionals, and (iii) non-DA conditionals ("non-DA" is a shortened form of "**non-d**eductive and **non-a**bductive").

Furthermore, I argue that the protasis of non-DA conditionals can be divided by the difference of its category status into three types: (i) a dependence non-DA *if*-clause, (ii) a relevance non-DA *if*-clause, and (iii) a *frankly*-type non-DA *if*-clause (see section 6.2.4 on three types of non-DA *if*-clauses).[14]

This theoretical model will be verified by broad discussions in chapters 4-10. I will show a rough sketch of the present study's framework in Diagram 1 below:



[14] In the present thesis *a protasis, an if-clause,* and *a conditional clause* all indicate the identical referent.

(A) The taxonomy of the conditional construction

(A-1) The three major classes of conditionals:

(a) NCP conditionals [－general-rule, ＋cause-effect]

(b) GRP conditionals [＋general-rule, －cause-effect]

(c) Generic conditionals [＋general-rule, ＋cause-effect]

(A-2) The three subclasses of GRP conditionals:

(a) Deductive conditionals

(b) Abductive conditionals

(c) Non-DA conditionals

(A-3) The three types of non-DA conditional *if*-clauses:

(a) Dependence non-DA *if*-clauses

(b) Relevance non-DA *if*-clauses

(c) *Frankly*-type non-DA *if*-clauses

(B) Examples

(i) NCP conditionals ([－general-rule, ＋cause-effect]) :

If it rains tomorrow, the game will be canceled.

(ii) GRP conditionals ([＋general-rule, －cause-effect]) :

a. Deductive conditionals:

If Socrates is a man, Socrates is mortal.

(Chisholm (1946: 305), Dudman (1984a: 146, 1988: 115), Dancygier (1998: 40))

b. Abductive conditionals:

If Mary is late, she went to the dentist. (Dancygier (1998: 86))

c. Dependence non-DA conditionals:

Oh, if you are so busy, I can come back later.

(Dancygier and Sweetser (1997: 113))

d. Relevance non-DA conditionals:

If you are thirsty, there's beer in the fridge.

(Bhatt and Pancheva (2006: 664, 672))

e. *Frankly*-type non-DA conditionals:

If you don't mind my saying so, your slip is showing. (Quirk et al. (1985: 1095))

(iii) Generic conditionals ([＋general-rule, ＋cause-effect]):

If I drink too much milk, I get a rash. (Dancygier (1998: 63))

(C) The range of conditionals used in the subjunctive mood:

NCP conditionals, generic conditionals, deductive conditionals, abductive conditionals, dependence non-DA conditionals

Diagram 1. Rough sketch of a theoretical model of conditional constructions

3.2. NCP Conditionals, GRP Conditionals, and Generic Conditionals

The last section showed a rough sketch of the present study's framework. In this section, I explain constructional features of conditionals, i.e. [±general-rule] features and [±cause-

effect] features, and show how the classes of conditionals are characterized by the combination of the features.

The two parameters can classify conditionals except the subjunctive mood conditionals. One is the parameter of whether or not p is formed according to general rules (i.e. the rules governing the tense-aspect interpretation of independent sentences), and the other is the parameter of whether or not the cause-effect relation between p and q is ensured. The former is reflected by the [±general-rule] features, and the latter is reflected by the [±cause-effect] features.

This suggests that we can classify conditional constructions by the combination of the four features (i.e. [±general-rule, ±cause-effect] features). It should be stressed that the [±general-rule] features and [±cause-effect] features are constructional features by which conditionals are constructed, as will be explained in section 3.2.1 below. In section 3.2.2, three major classes of conditionals based on the combination of the constructional features are shown.

3.2.1. Features of the Conditional Construction

3.2.1.1. The [±General-Rule] Features

Let us begin with the [±general-rule] features. The [+general-rule] feature is the constructional feature which determines that p is formed according to general rules. Note again that the "general rules" here refer to the rules governing the tense-aspect interpretation of independent sentences. For example, in examples (1) and (2) below, the p's (i.e. *Socrates is a man* and *she is in the lobby*) are formed by the general rules in this sense.

(1) If Socrates is a man, Socrates is mortal.

(2) If she is in the lobby, the plane arrived early. (Dancygier (1998: 62))

Thus, the p of the conditionals which carry the [＋general-rule] feature is formed in accordance with general rules (see section 4.1 in detail).

The [－general-rule] feature, on the other hand, is the constructional feature which determines that the construction-specific tense and aspect forms (the simple present tense form, the present perfect form, the present progressive form, etc.) are used in p, as in examples (3a－c). This means that the p of the conditionals which carry the [－general-rule] feature is not formed according to the general rules governing independent sentences. In the conditionals which carry the [－general-rule] feature, the use of the simple present tense form, the present perfect form, or the present progressive form in p is obligatory even if p refers to the future time.

(3) a. If it *rains* tomorrow, the game will be canceled.

b. If he *has finished* reading the book by tomorrow, he will return it to the library.

c. If you *are standing* there at about 6 o'clock tomorrow evening, you will see a very beautiful scene when the sun is setting.

Note that the [±general-rule] features apply only to p, not to q; in other words, a non-subjunctive q, which is formed according to general rules, is irrelevant to the [＋general-rule] feature. Also, the [±general-rule] features do not apply to the subjunctive conditionals. (The subjunctive conditionals will be discussed in detail in chapter 8.)

3.2.1.2. The [±Cause-Effect] Features

Let us next consider the [±cause-effect] features. The [+cause-effect] feature is the constructional feature which determines the property in which the cause-effect relation between p and q is ensured. That is, in the conditionals which carry the [+cause-effect] feature, it is necessary that the state of affairs in q is the consequence of that in p. For example, in (3a-c), the states of affairs in p (i.e. raining tomorrow / his finishing reading the book / standing there at about 6 o'clock tomorrow evening) cause those in q (i.e. the game being canceled / returning the book to the library / seeing a beautiful scene). As will be shown in sections 4.2 and 5.2, in the conditionals which carry the [+cause-effect] feature, p and q are connected via cause-effect chains; in this case the relationship between cause and effect as a whole is asserted.

The [−cause-effect] feature, on the other hand, is the constructional feature which determines the property in which the cause-effect relation between p and q is not ensured. That is, in the conditionals which carry the [−cause-effect] feature, it is not necessary that the state of affairs in p causes that in q (see chapter 6 in detail). In fact, example (2) (i.e. *If she is in the lobby, the plane arrived early*.) does not have a causal relationship like those in (3a-c); also, as will be mentioned later, examples like (1) do not have the same causality as examples (3a-c) have (see section 6.2.2 in detail).

3.2.2. The Classification of Conditionals Based on the Combination of the Features: NCP, GRP, and Generic Conditionals

The observations in section 3.2.1 can lead us to the classification in (4):

(4) [－general-rule, ＋cause-effect] : NCP conditionals

[＋general-rule, －cause-effect] : GRP conditionals

[＋general-rule, ＋cause-effect] : Generic conditionals

Reformatting the descriptions and data in (4) into tables in (5) and (6), we can more easily see which constructional features a conditional involves:

(5)

	[＋cause-effect]	[－cause-effect]
[－general-rule]	NCP conditionals	————
[＋general-rule]	Generic conditionals	GRP conditionals

(6)

	[±general-rule]	[±cause-effect]
NCP conditionals	－	＋
————	－	－
Generic conditionals	＋	＋
GRP conditionals	＋	－

At this point, I have to explain why we do not have the representation [－general-rule, －cause-effect]. This is a systematic gap. The conditionals which involve the [－general-rule] feature, namely NCP conditionals, must involve the [＋cause-effect] feature: the cause-effect relation between p and q is ensured (see chapters 4 - 6 for a broader discussion of relations between p and q in conditionals). This is incompatible with the representation [－general-rule, －cause-effect]. Therefore, we have no conditionals represented by [－general-rule, －cause-effect].

I also want to argue that the p not formed by general rules is always a signal of the cause-

effect relation between p and q being ensured (cf. NCP conditionals). In addition, in the conditionals where the cause-effect relation between p and q is not ensured, the p is formed by general rules (cf. GRP conditionals).

3.3. Three Subclasses of GRP Conditionals: Deductive, Abductive, and Non-DA Conditionals

The last section has introduced the three major classes of conditional constructions, viz NCP, GRP and generic conditionals. This section takes a brief look at a classification of GRP conditionals.

My proposal is that the GRP conditionals should be classified in terms of types of reasoning: whether a GRP conditional is constructed based on deduction, abduction, or neither of the two. That is, GRP conditionals can be subclassified according to the criteria of whether or not deductive/abductive reasoning is performed. In this study, GRP conditionals based on deduction are referred to as 'deductive conditionals,' GRP conditionals based on abduction as 'abductive conditionals,' and GRP conditionals based on neither deduction nor abduction as 'non-DA conditionals.'

(7) Deductive conditionals:

If he's Italian, he's European. (offered by an anonymous *Ampersand* reviewer)

(8) Abductive conditionals:

If she is not at home, she went to the dentist as planned.

(Dancygier and Sweetser (2005: 113))

(9) Non-DA conditionals:

a. If it is raining heavily now, I will go to pick them up at the station.

b. If you are hungry, there are biscuits on the sideboard.

(Dancygier (1998: 90, 103, 124), Dancygier and Sweetser (2005: 40, 110, 113))

c. If I may say so, that's a crazy idea. (Sweetser (1990: 118))

Examples (7), (8), and (9) are deductive, abductive, and non-DA conditionals, respectively. The three subclasses of GRP conditionals will be discussed in section 6.2.

3.4. Three Types of Non-DA Conditional *If*-Clauses: Dependence, Relevance, and *Frankly*-Type Non-DA *If*-Clauses

As we have seen, non-DA conditionals are one subclass of GRP conditionals. This section outlines how the present framework classifies non-DA conditionals. We argue that three types of non-DA *if*-clauses need to be distinguished in terms of the difference of the category status of an *if*-clause. This thesis refers to each of the three types as 'dependence non-DA *if*-clauses,' 'relevance non-DA *if*-clauses,' and '*frankly*-type non-DA *if*-clauses.'

One type of non-DA *if*-clauses belongs under the same category as style adverbials / style disjuncts (see Greenbaum (1969), Quirk et al. (1985), Biber et al. (1999)). The present framework refers to such *if*-clauses as *frankly*-type non-DA *if*-clauses. This terminology comes from *frankly*, which is a typical style adverbial / style disjunct (see sections 6.2.4 and 10.1 in detail). The conditional sentences including *frankly*-type non-DA *if*-clauses (henceforth, *frankly*-type non-DA conditionals) are not used in the subjunctive mood, as is shown in the contrasts in (10a, b). Moreover, the connection between p and q in *frankly*-type non-DA conditionals is the weakest in all sorts of connections between p and q.

(10) *Frankly*-type non-DA conditionals:

a. If you need any help, my name is Ann.

b. # If you needed any help, my name would be Ann.

(Dancygier and Sweetser (2005: 114))

A second type of non-DA *if*-clauses can be used in the subjunctive mood, as in (11a, b). This type of *if*-clause can also be interpreted as focused on with the focus marker *only*, as illustrated in (12). In the present study, we term this type of non-DA *if*-clause a dependence non-DA *if*-clause. Although in this type of non-DA *if*-clause, some *if*-clauses have no causality in a strict sense, the connection between p and q in this type of non-DA conditional is the strongest of the three types of non-DA conditionals (see section 6.2.4 for a broader discussion of dependence non-DA *if*-clauses).

(11) a. If they left at nine, they will certainly be home by midnight.

b. If they had left at nine, they would certainly be home by midnight.

((11a, b): Leech (2004: 119-120))

(12) They will get home by midnight *only if they left at nine*.

The last type of non-DA *if*-clauses cannot either appear in the subjunctive mood, as in the contrasts in (13a, b), or be interpreted as focused on with the focus marker *only*, as in (14). The present study refers to this type of non-DA *if*-clause as relevance non-DA *if*-clauses. The term 'relevance' in relevance non-DA *if*-clauses is named after the "relevance conditional" by Declerck and Reed (2001) and Bhatt and Pancheva (2006).[15]

[15] With respect to "relevance conditionals," Declerck and Reed (2001) state that "the P-clause expresses the condition under which it is pragmatically relevant for the speaker to utter the Q-clause" (Declerck and Reed (2001: 320)), while Bhatt and Pancheva (2006) state that "the *if*-clause in relevance

(13) a. If you are hungry, there are biscuits on the sideboard. (= (9b))

b. # If you were hungry, there would be biscuits on the sideboard.

(14) # There are biscuits on the sideboard, *only if you are hungry*.

Relevance non-DA conditionals have no causal relationships between p and q. Furthermore, the connection between p and q in conditional sentences including a relevance non-DA *if*-clause (henceforth, relevance non-DA conditionals) is weaker than that between p and q in dependence non-DA conditionals. We return to the relevance non-DA *if*-clauses in section 6.2.4, where we discuss the difference in the category status of a non-DA *if*-clause of the three types.

The strength of the connection between p and q in the three types of non-DA conditionals is in the following order: dependence non-DA conditionals (the strongest), relevance non-DA conditionals (intermediate), *frankly*-type non-DA conditionals (the weakest). As will be seen in sections 6.2-6.3, the strength of the connection between p and q is a reflection of the difference in category status between the three types of non-DA *if*-clauses.

conditionals specifies the circumstances in which the consequent is discourse-relevant, not the circumstances in which it is true" (Bhatt and Pancheva (2006: 671)).

Chapter 4

The Nature of Condition and Cause-Effect Chain Relations

The last chapter assumed that the [±general-rule] and [±cause-effect] features are constructional features of conditional constructions, which are components of parameters for classifying conditionals. In this chapter, it is shown that conditional constructions (*If p, (then) q*) are structured by the [±general-rule] and [±cause-effect] features, and we will see the significance of the features.

4.1. The [±General-Rule] Features and Neutral Conditions

First, I will explain the [±general-rule] features. Consider the examples in (1) and (2). The p's in examples (2a, b) are formed according to general rules, while those in examples (1a, b) are not. The general rules here, as was stated in section 3.2, refer to the rules governing the tense-aspect interpretation of independent clauses.

(1) a. If you put the baby down, she'll scream. (Quirk et al. (1985: 1088))

b. If it rains tomorrow, the game will be canceled.

(2) a. If Mary is late, she went to the dentist. (Dancygier (1998: 86))

b. Oh, if you are so busy, I can come back later. (Dancygier and Sweetser (1997: 113))

Conditionals like (2a, b) carry the constructional feature which brings about the grammatical characteristics in which p is formed according to general rules. As was observed in chapter 3, this feature is termed the [+general-rule] feature. The [+general-rule] feature is motivated by the fact that independent clauses are embedded in p's without undergoing the change of the

tense and aspect forms. Indeed, in the p's of (2a, b), independent sentences (*Mary is late*. / *You are so busy*.) are embedded without undergoing the change of form. In addition, the verb phrase forms in the p's of (2a, b) (i.e. *is late* / *are so busy*) refer to the time the tense in itself (i.e. the present time) indicates.

Conditionals in examples (1a, b), on the other hand, carry the constructional feature which brings about the grammatical and formal characteristics in which p is not formed according to general rules; in fact, in the p's of (1a, b), which refer to the future time, the present tense is used. This feature, as was observed in chapter 3, is termed the [－general-rule] feature. As Huddleston and Pullum (2002: 744) state, there are no independent clauses that have precisely the same interpretation as the sentences embedded in the conditional protases in (1a, b), as shown below:

(1') a. You put the baby down.

b. # It rains tomorrow.

Example (1'a) represents a habitual activity. Example (1'b) is pragmatically anomalous, because it is used for a future event which is seen as part of a timetable or a regular schedule. From the interpretations in (1'a, b), which are different from those in the p's of (1a, b), we can definitely see that the conditional protases in (1a, b) undergo the restriction on tense and aspect, and are not formed according to ordinary general rules.

In this way, we can distinguish between the conditionals in which p is formed by general rules and the ones in which p is not formed by general rules. Although p's like those in examples (1a, b) are often called open conditions, the present study terms them 'neutral conditions': that is, the p of a conditional which carries the [－general-rule] feature denotes a neutral condition. Neutral conditions leave unresolved the question of the fulfillment or

nonfulfillment of p. More specifically, a neutral condition represents a condition in which the speaker's mental attitude toward the fulfillment or nonfulfillment of p is neutral. In (1b), for example, the speaker's mental attitude toward whether it will or will not rain tomorrow is neutral. P's like those in examples (2a, b), within the framework of this study, are not neutral conditions, because they are formed by general rules without undergoing the restriction on tense and aspect; indeed, the verb phrases in the p's of (2a, b), unlike those in the p's of (1a, b), do not refer to the future time.

At this point, I will define a neutral condition, as follows:

(3) Twofold definition of a neutral condition:

(a) The systematic definition: Neutral conditions are applied to only the protases in conditionals which carry the [－general-rule] feature. The protases which carry the [＋general-rule] feature, i.e. the GRP and generic conditional protases, do not denote neutral conditions.

(b) The conceptual definition: A neutral condition is one in which the speaker's mental attitude toward the fulfillment or nonfulfillment of p is seen as neutral. The p of the subjunctive mood conditionals is not a neutral condition.

As argued in chapter 3, the conditional construction which carries the [－general-rule] feature, that is, the conditional construction whose p is a neutral condition is referred to as NCP conditionals (see chapter 5 on NCP conditionals in detail).

In p's denoting neutral conditions, not only the simple present form but the present perfect and present progressive forms can be used. Look at examples (4) - (5), for instance. In the p of example (4) the present perfect form is used, and in the p of example (5) the present progressive form is. Despite the fact that the p's of (4) and (5) refer to the future, the present

perfect and present progressive forms are used. The p's of (4) and (5), which are not formed by general rules, denote neutral conditions. Thus, the present perfect and present progressive forms as well as the simple present tense can be used for expressing neutral conditions.

(4) If I *have finished* reading the book by tomorrow, I will return it to you.

(5) If he *is wearing* his safety belt tomorrow, he may be alive even if he has an accident.

In this section, we have proposed a neutral condition as a sort of condition, whereby we can distinguish between the p's in (1a, b), (4) and (5), which are neutral conditions, and the p's in (2a, b), which are not neutral conditions. Within our framework, sentences (1a, b), (4) and (5) are referred to as NCP conditionals, and sentences (2a, b) are referred to as GRP conditionals. NCP and GRP conditionals will be discussed in detail in chapters 5 and 6, respectively.

The definition in (3), specifically that in (3a), excludes from neutral condition the protasis in example (6), which Huddleston and Pullum (2002) treat as an open conditional. In short, the p of (6) is not a neutral condition, because it is formed according to general rules. This suggests that the *if*-clause of (6) is different from the protases of (1), (4) and (5) in the nature of condition.

(6) If he bought it at that price, he got a bargain. (Huddleston and Pullum (2002: 748))

In this way, neutral conditions are not simply another label for open conditions. Further, consider the example in (7). Lyons (1977, 1995) calls *may* in (7) objective epistemic modality.

(7) If it *may* be raining, you should take your umbrella. (Lyons (1977: 805))

The p in (7) is formed in accordance with general rules. Therefore, this p is not a neutral condition (cf. Verstraete (2001)). As we will argue later, example (7) is classified as a non-DA conditional (see section 6.2 in detail).

Thus, if we assume a neutral condition, we can recognize the p's in (6) and (7) as different from the p's in (1), (4) and (5) in the nature of condition.

Let us also consider conditional sentences which have *will* in the protasis, as in:

(8) (In a context where the doctor has just said, "Oh, he's sure to be better tomorrow.")
If he'*ll* get better by tomorrow, I won't cancel our theater tickets.
(Dancygier and Sweetser (2005: 88))

(9) I'll not go if (as you say) there *will* be trouble. (Declerck and Reed (2001: 148))

(10) I will come if it *will* be of any use to you.
(Jespersen (1931: 400), Palmer (1990: 178))

(11) If it *will* make you happier, I'll stop smoking. (Jacobsson (1984: 130))

(12) I don't want to call on Mrs Fustle, but I'll see her if it *will* do any good.
(Declerck (1984: 289))

(13) If Le Pen *will* probably win, Jospin must be disappointed. (Haegeman (2006: 1652))

In previous studies, *if*-clauses with *will* have often been treated as exceptional cases of conditionals (see Jespersen (1924, 1931), Poutsma (1926), Allen (1966), Palmer (1974, 1979, 1983, 1988, 1990), Close (1980), Comrie (1982, 1985, 1986), Haegeman and Wekker (1984), Jacobsson (1984), Declerck (1984, 1991a, b), Quirk et al. (1985), Nieuwint (1986), Leech (1987, 2004), Declerck and Reed (2001), etc.).[16] However, future expressions such as *be going to*,

[16] With respect to such examples as (8) - (13), Palmer (1974, 1990) notes that the time relation between p and q is reversed: the events in q are prior to those expressed in the proposition in p. Palmer,

may, and *would* as well can be used in an *if*-clause, as illustrated in (14) - (16). Thus, future expressions which can occur in *if*-clauses are not confined only to the auxiliary *will* (see chapter 13 on *if*-clauses with *be going to*).[17]

(14) If I *am going to* be late, I'll call you.

(15) If John *may* come tomorrow, Mary will leave.

(→ "Mary will leave (now), if there is a possibility that John will come tomorrow")

(Palmer (1988: 157))

(16) I will come if it *would* be of any use to you. (Shiratani (1994: 95))

As we have seen, the present study argues for the distinction between NCP conditionals and GRP conditionals. If NCP and GRP conditionals can be validated as classes of conditionals, *if*-clauses with *will* cannot be treated as exceptional cases of NCP ones.[18] The p's in examples

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after Jespersen, terms p like this "after-future."

Also, according to Comrie (1982), in conditionals with *will* in the protasis there is a causal relation in which the event in q causes that in p; for example, in (i), "telling a joke will amuse you" (see Palmer (1990: 178)).

(i) If it *will* amuse you, I'll tell you a joke. (Comrie (1982: 150), Palmer (1990: 178))

With regard to the rule for the occurrence of *will* in *if*-clauses, Comrie (1985: 120) states that if the time reference of the *if*-clause is subsequent to that of the main clause and there is a causal relation from q to p, then the future *will* must be used in the *if*-clause.

However, it is not difficult to find a counter-example to Palmer and Comrie, as in below:

(ii) (In reply to a dressmaker's statement: "Your dress will be ready tomorrow"):
If it*'ll* be ready tomorrow, I'll be able to wear it tomorrow night. (Tregidgo (1979: 196))

As Tregidgo (1979) states, in (ii), the being ready is prior to the event in the main clause. After all, conditionals with *will* in *if*-clauses should not be treated as exceptional cases of conditionals.

[17] The present progressive form expressing future events too can be used in the *if*-clause, as illustrated in:

(i) A: I*'m going* to the Winter LSA.
B: If you *are going*, I'm going, too. (Akatsuka (1985: 628))

[18] Dancygier (1998: 119) states that only in a non-predictive conditional can a predictive *will*

(8) - (13) are formed by general rules without undergoing the restriction on tense and aspect, so that they must automatically fall into the class of GRP conditionals.[19] Examples (8) - (13) and examples (14) - (16) are classified into non-DA conditionals in my approach, a subclass of GRP conditionals.

In this section, we have seen that it is a crucial criterion for classifying conditionals whether or not p denotes a neutral condition. We can thus see that the criterion of whether p is formed according to general rules or not is felicitous as a parameter for classifying conditional constructions.

4.2. The [±Cause-Effect] Features and Cause-Effect Relations

It is often said that while conditionals like (17) have causal relations between p and q, some conditionals have no causal relations between p and q, as in (18). Also, it has often been noted that the most plausible readings of conditionals like (19) involve a causal relation in the reverse direction, where the event or state of affairs in p may well be caused by that described in q (see Dancygier (1998: 86)). In this section we will focus on cause-effect relations between p and q in terms of a feature of the conditional construction.

(17) If it rains tomorrow, I will be at home.

(18) If you are hungry, there are biscuits on the sideboard.

(Dancygier (1998: 90, 103, 124), Dancygier and Sweetser (2005: 40, 110, 113))

(19) If Mary is late, she went to the dentist. (= (2a))

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occur in p.

[19] According to Radden and Dirven (2007: 226), *if*-clauses which have *will* do not serve as condition.

The relation between p and q in the example in (17) is traditionally called a causal relation / causality. This relation indicates a cause-effect chain. I define the cause-effect chain between p and q as: the event or state of affairs in q is caused by that in p. This means that in conditionals of the class example (17) belongs to (i.e. NCP conditionals), q is linked to p via cause-effect chains. In the present study, this feature is termed the [＋cause-effect] feature. As was observed in section 3.2.1, the [＋cause-effect] feature is defined as "the constructional feature which determines the property in which the cause-effect relation between p and q is ensured." Therefore, in the conditionals with the [＋cause-effect] feature, it is necessary that the state of affairs in q is caused by that in p.

At this point, let us confirm that the class of conditional constructions examples like (17) belong to — necessarily — has a cause-effect chain relation between p and q. Look at examples (17') and (20) below, where the event or state of affairs in q is unpredictable from that in p.

(17') If it rains tomorrow, she will slap him on the back.

(20) If it is humid, then the TV will work.

(Davis (1983: 58), Dancygier and Sweetser (1997: 118))

Generally, it is the case that her slapping him cannot be caused by rain's falling. However, example (17') is interpreted as there being a 'necessary' causal connection between p and q. Also, Davis (1983: 58) states that example (20) implies that there is some strange connection between humidity and the TV's functioning; as Dancygier and Sweetser (1997: 118) note, a listener of (20) "might wonder what kind of TV is rendered functional by humidity." Therefore, we must conclude that example (17) (as well as examples (17') and (20)) 'necessarily'

has a cause-effect chain between p and q.

As we saw in chapter 3, the present thesis refers to the conditionals with the [＋general-rule] and [＋cause-effect] features as generic conditionals. Let us now confirm that it is necessary that what we call generic conditionals have the cause-effect chain relation between p and q, as in the case of NCP conditionals. Look at examples (21) and (21') below:

(21) If it rains, Tom practices tennis indoors.

(21') If it rains, Tom practices tennis in the park.

Example (21) is a generic one. Palmer (1988: 153) states that 'if' in conditionals like (21) seems to have the sense of 'whenever.' Example (21') is a generic one, too. In example (21'), unlike in example (21), the event or state of affairs in q (i.e. practicing tennis in the park) is in no way predictable from that in p (i.e. rain's falling).[20] This means that example (21') has the interpretation in a 'necessary' causal connection between p and q. Therefore, we can conclude that it is necessary that example (21) as well as example (21') has a cause-effect chain between p and q.[21] (Generic conditionals will be discussed in detail in chapter 7.)

Next, we will move on to examples (18) and (19). As numerous previous studies say, they have no causality wherein p represents cause, and q effect. In the present study, this feature is termed the [－cause-effect] feature. As was remarked in section 3.2.1, the [－cause-effect] feature is defined as "the constructional feature which determines the property in which

[20] Bert Cappelle (p. c.) comments that in both examples (21) and (21') there is causality between p and q.

[21] Dancygier and Sweetser (1997) give example (i) below as generic conditional examples.

(i) If Mary bakes a cake, she always gives a party. (Dancygier and Sweetser (1997: 123))

In this example (i), as well as in example (21'), the event or state of affairs in q is unpredictable from that in p.

the cause-effect relation between p and q is not ensured." As we saw in section 3.2, the present study refers to the conditionals carrying the [＋general-rule] and [－cause-effect] features (e.g. (18) and (19)) as GRP conditionals.

Thus, if we accept GRP conditionals as a class of conditional constructions, we can classify example (22) as a GRP conditional, because the p of (22) is formed according to general rules; as we will see in chapter 7, example (22) is not a generic conditional.

(22) If Colin is in London, he is undoubtedly staying at the Hilton.

(Quirk et al. (1985: 1091))

Although Quirk et al. (1985) call this sentence as a "direct condition," we should say that in this example (22) the cause-effect relation between p and q is not ensured.

Some GRP conditionals seem to have cause-effect chains between p and q, as illustrated in examples (23)–(34) below. In fact, Comrie (1986) notes that the *if*-clause in (23) may well receive the interpretation of a *since*-clause; Edgington (2003) also states that examples (24) and (25) are causal. In this way, it is the case that examples (23)–(34) have a cause-effect chain between p and q. However, the cause-effect chain relationship between p and q in (23)–(34) is by no means inherent in the GRP conditional construction in itself.[22]

(23) If it's raining, we won't go to the park.

(→ 'Since it's raining, we won't go to the park.') (Comrie (1986: 89))

(24) If they caught the noon train, they will arrive at two. (Edgington (2003: 395))

[22] With respect to example (i) below, Haegeman (1984) says "there is no direct conditioning link between the main clause and the *if*-clause."

(i) If you like the country so much, why do you work in London? (Haegeman (1984: 486))

(25) If they caught the 10 a.m. train, they will have arrived at noon.

(Edgington (2003: 395))

(26) If she is giving the baby a bath, I'll call back later. (Dancygier (1998: 69))

(27) If you're leaving now, you'll be able to catch the 5 o'clock train.

(Hewings (2013: 166))

(28) We'll need more chairs if we're going to invite so many people to the performance. (Hewings (2013: 166))

(29) If he submitted his paper to a journal, we won't include it in our book.

(Kaufmann (2005: 232))

(30) Oh, if you are so busy, I can come back later. (Dancygier and Sweetser (1997: 113))

(31) You should call a doctor if there is a fever. (Athanasiadou and Dirven (2000: 7))

(32) X: I knew she was short of money.

Y: If you knew she was short of money you should have lent her some.

(Thomson and Martinet (1986: 200))

(33) A: Joyce went there last night.

B: Well, if Joyce went there, she saw what happened.

(Celce-Murcia and Larsen-Freeman (1999: 558))

(34) If John is rich, Mary will possibly/probably/necessarily like him.

(Tedeschi (1977a: 632))

Examples (23) - (34) are GRP conditionals, which carry the [－cause-effect] feature. Therefore, in (23) - (34) there may be a cause-effect chain between p and q, but this relationship is not ensured by a conditional constructional feature. Incidentally, the cause-effect relation in (23) - (34) is not due to the [＋cause-effect] feature. We will consider this issue in more detail in sections 6.2.4.1 and 6.3.5.

In this section, we have seen that the criterion of whether or not the cause-effect relation between p and q is ensured is a felicitous parameter for classifying conditional constructions.

Chapter 5

NCP Conditionals

As was shown in chapters 3 and 4, conditional constructions (*If p, (then) q*) are structured by the [±general-rule] and [±cause-effect] features, and conditionals can be classified into NCP, GRP and generic conditionals by the combination of the four features. This chapter deals with NCP conditionals.

5.1. Neutral Condition

The feature representation of NCP conditionals is [－general-rule, ＋cause-effect]. As was stated in section 3.1, NCP is a shortened form of **N**eutral-**C**ondition-**P**-clause. In this section, let us consider p in NCP conditionals, i.e. neutral condition. I will repeat the definition of a neutral condition here for convenience as (1):

(1) Twofold definition of a neutral condition:

(a) The systematic definition: Neutral conditions are applied to only the protases in the conditionals which carry the [－general-rule] feature. The protases which carry the [＋general-rule] feature, i.e. the GRP and generic conditional protases, do not denote neutral conditions.

(b) The conceptual definition: A neutral condition is one in which the speaker's mental attitude toward the fulfillment or nonfulfillment of p is seen as neutral. The p of the subjunctive mood conditionals is not a neutral condition.

The p's in examples (2) - (4) below are not formed by general rules, and denote a neutral

condition. Therefore, examples (2) - (4) are NCP conditionals. In the p's of NCP conditionals (i.e. neutral conditions), the verb phrase must be marked by the simple present tense form (e.g. (2)), the present perfect form (e.g. (3)), and the present progressive form (e.g. (4)) even if they refer to the future time.

(2) If it's warm tomorrow, they'll have a barbecue in the garden.

the simple present tense form

(3) If I have finished reading the book by tomorrow, I will return it to you.

the present perfect form

(4) If he is wearing his safety belt tomorrow, he may be alive even if he has an accident.

the present progressive form

The p in which the simple present tense form is used, as in (2), refers to a single action. The p in which the present perfect form is used, as in (3), refers to a single action with the perfect aspect. And further, the p in which the present progressive form is used, as in (4), refers to a single action with the progressive aspect.

The p's of NCP conditionals are thus formed in the simple present form, the present perfect form, or the present progressive form; they are not formed according to general rules. This is attributed to the [－general-rule] feature.

At this point, let us consider why in p's like (2) - (4), i.e. neutral conditions, the use of the present (tense) form is obligatory. The phenomenon in which verb phrases in *if*-clauses refer to the future time, but are marked by the present (tense) form, as in (2) - (4), has sometimes been referred to as "*will*-deletion" (see McCawley (1971), Close (1980), Wekker (1976); also Declerck (1991a, b), Dancygier (1998), Declerck and Reed (2001) for further

references).[23] However, I will take a different position on the explanation of this phenomenon. The present tense is the most unmarked form in the time expressions. At least, the present tense form is more unmarked than the past tense form and future expressions in terms of the expression forms relating to temporal distance, which I consider is motivated by iconicity.[24] In practice, the past tense — a more marked form than the present tense — in *if*-clauses can be used for representing the subjunctive mood (see chapter 8 in detail). Therefore, the reason why the use of the present (tense) form is obligatory in examples like (2) - (4) is that in a neutral condition, the most unmarked expression form must be used. Specifically, in the simple forms the most unmarked form is the simple present tense form, in the perfect forms the most unmarked form is the present perfect form, and in the progressive forms the most unmarked form is the present progressive form.

5.2. Cause-Effect Relations between P and Q

In NCP conditionals a cause-effect relationship between p and q is ensured and is asserted as such. The cause-effect relationship here means a cause-effect chain relation. This is attributed to the [+cause-effect] feature. This can be confirmed by the syntactic tests (i) - (iii) below:

[23] In Dancygier's (1998: 39, 48) words: "the modal-erasing backshift" or "the elimination of modality" appears in *if*-clauses.

[24] With respect to iconicity, Taylor (2002: 45) states that "a sign is iconic if there is a resemblance between the signified and the signifier." According to Taylor (2002: 46), the fact that in many languages plural nouns are longer (they contain more phonological material) than the corresponding singulars, iconically reflects that plural nouns designate more things than a singular noun (cf. Ungerer and Schmid (1996, 2006)).

(ⅰ) NCP conditionals can be used in the subjunctive mood:

(5) If it *rained* tomorrow, the game *would be* canceled.

Sentence (5) is an example of the subjunctive mood. As is seen in (5), the subjunctive mood can apply to NCP conditionals (see chapter 8 on the subjunctive in detail).

(ⅱ) NCP conditional *if*-clauses can be focused with the focus marker *only*:

(6) Tom will leave *only if John comes back by midnight*. (McCawley (1974: 633))

(7) *Only if rains* may we cancel the game. (von Fintel (1997: 45))

If-clauses of NCP conditionals can be focused with *only*, as is illustrated in (6) and (7). As will be seen in section 6.2.4, some non-DA *if*-clauses cannot be interpreted as focused on with *only*.

(ⅲ) In NCP conditionals, *then* can be inserted before the main clause:

(8) If you go, *then* John will go.

We can insert *then* before the main clause in an NCP conditional, as is illustrated in (8). As will be shown in section 6.3.8, in some non-DA conditionals *then* cannot be inserted before the main clause.

The syntactic tests (ⅰ)‐(ⅲ) above reflect that an NCP conditional is structured by a cause-effect chain relation between p and q. In particular, the relationship between cause (p)

and effect (q) as a whole is asserted, though the focus of assertion can be placed on either p or q (see section 6.1 for detailed discussion).

Chapter 6

GRP Conditionals

As was shown in chapters 3 and 4, in the framework of the present study, conditional constructions (*If p, (then) q*), based on the combination of the [±general-rule, ±cause-effect] features, is classified into three major classes: NCP, GRP, and generic conditionals. This chapter deals with GRP conditionals.

This chapter is organized as follows. Section 6.1 considers the validity of GRP conditionals. Section 6.2 offers a new typology of GRP conditionals. Specifically, GRP conditionals are divided by the criteria of whether they are based on deductive/abductive reasoning, and neither deductive nor abductive GRP conditionals are further divided by the difference in the category status of the *if*-clause. Section 6.3 shows linguistic implications of the new taxonomy. Finally, section 6.4 sums up this chapter.

6.1. The validity of GRP Conditionals

The feature representation of GRP conditionals is [＋general-rule, －cause-effect]. As was mentioned in section 3.1, GRP is a shortened form of **G**eneral-**R**ule-**P**-clause. The purpose of this section is to validate GRP conditionals as an independent class of conditional constructions.

In previous studies, conditionals seem to have often been classified into two types: indicatives and subjunctives (see Sweet (1898), Sonnenschein (1916), Jespersen (1924, 1949), Poutsma (1926), Onions (1929), Curme (1931, 1935, 1947), Fries (1940), Anderson (1951), Fowler (1965), Adams (1970, 1975), Davis (1979), Appiah (1985), Stalnaker (1991), Givón (1994), Edgington (1995, 1997), Palmer (2001, 2003), Bennett (2003), Ippolito (2004, 2013),

Radford (2009), Aarts (2012)). In ordinary subjunctive *if*-clauses the past tense or the past perfect form is used, as in (2a, b), whereas the indicative does not undergo such constraints, as in (1a, b).

(1) a. If you put the baby down, she'll scream. (Quirk et al. (1985: 1088))

b. If it rains tomorrow, the game will be canceled.

(2) a. If he went to the police, we would be in trouble. (Declerck (1991b: 429))

b. If she had opened it, they would have escaped. (Fillmore (1990: 140))

The indicative/subjunctive dichotomy, however, does not work well for examples like the following:

(3) If he was here yesterday, he certainly helped her. (Gomes (2008: 221))

(4) If he took arsenic, he's showing no signs. (Edgington (1995: 240), Gomes (2008: 236))

In previous studies, these examples have often been classified into conditionals of the same sort as (1a, b), namely indicative conditionals (see Jespersen (1924, 1949), Adams (1970, 1975), Brée (1982), Ellis (1984), Binnick (1991), Papafragou (2000), Edgington (2003), Haegeman (2003), Evans and Over (2004), Kaufmann (2005), Rieger (2006), Gomes (2008), Nickerson (2015)). This raises the question of whether or not examples like (3) and (4) may be treated as conditionals of the same kind as (1a, b). It seems to me that the examples in (3) and (4) are clearly not subjunctives, and therefore, in previous studies they were obliged to be classified as indicatives.

Note that while the p's of examples (1a, b), undergoing the restriction on tense and aspect, are not formed according to general rules, those of (3) and (4) are formed by general rules.

The general rules here, as was stated in section 3.2, refer to the rules governing the tense-aspect interpretation of independent sentences. In the frameworks of Quirk et al. (1985), Declerck (1991a, b), and Biber et al. (1999), the protases in (1a, b) are open conditions: they leave unresolved the question of the fulfillment or nonfulfillment of the condition. The conditions in (3) and (4), on the other hand, are called closed conditions (Declerck (1991a, b)) or closed P-clauses (Declerck and Reed (2001)): the conditions in these examples are accepted as being true in the actual world (Declerck and Reed (2001: 81)). As already stated, within the framework adopted in this study, the p's of examples (1a, b) are neutral conditions, and those of examples (3) and (4) are not. Thus, sentences (3) and (4) differ from sentences like (1a, b) fundamentally in the nature of condition.[25]

For this reason, examples (3) and (4) should be treated as conditionals of the type distinct from (1a, b) (cf. Dudman (1988)).[26] The observation thus far enables us to argue that GRP conditionals are valid as an independent class of conditionals. Since the p's in examples (3) and (4) are formed by general rules, they are GRP conditionals, which means that they belong under the distinct category from the conditionals in (1a, b) (cf. Palmer (1990: 171)).

Furthermore, I claim that the category status of the *if*-clause in a GRP conditional and

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[25] As was shown in section 4.1, there are no independent clauses that have precisely the same interpretation as the sentence embedded in the protases denoting neutral conditions (i.e. NCP conditional protases), as follows (Huddleston and Pullum (2002: 744)):

(i) a. If you put the baby down, she'll scream. (Quirk et al. (1985: 1088))
b. If it rains tomorrow, the game will be canceled.
(ii) a. You put the baby down.
b. # It rains tomorrow. (Huddleston and Pullum (2002: 744))

Example (iia) represents a habitual activity. Example (iib) is pragmatically anomalous.

[26] According to Akatsuka (1985), when the speaker has lost his memory, both (ia) and (ib) become ordinary conditionals:

(i) (An amnesiac to his doctor:)
a. If I am living in Japan now, …
b. If I lived in Japan, …

that of the *if*-clause in an NCP conditional are different from each other. The evidence in support of this claim is: while NCP conditional *if*-clauses can be moved into the focus-position of the cleft construction, GRP conditional *if*-clauses basically cannot appear in the focus-position. Examples (5) - (8) below are cleft sentences wherein NCP conditional *if*-clauses are moved into the focus-position:[27]

(5) It is if it rains tomorrow that the match will be cancelled.

(Haegeman and Wekker (1984: 48))

(6) It is if the student fails that the teacher will fire the TA.

(Bhatt and Pancheva (2006: 647))

(7) It is if Bill comes home that Mary will leave. (Bhatt and Pancheva (2006: 667))

(8) It is if John had come that Mary would have left. (Bhatt and Pancheva (2006: 658))

Examples (9) - (15) below, on the other hand, are cleft sentences wherein an *if*-clause of a GRP conditional is moved into the focus-position; they are not acceptable.

(9) * It is if you like her so much that you should invite her to tea.

(Haegeman and Wekker (1984: 48))

(10) * It is if she is giving the baby a bath that I'll call her back.

(11) * It is if you are so busy that I can come back later.

(12) ? It is if he was here yesterday that he certainly helped her.

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[27] *If*-clauses of generic conditionals can appear in the focus-position of the cleft construction, too:

(i) It is if John is here that Mary is happy.
(offered by an anonymous *Journal of Linguistics* reviewer)

(ii) It is if I drink too much wine that I get dizzy. (Haegeman and Wekker (1984: 48))

This is one of the syntactic features generic conditionals share with NCP conditionals.

(13) * It is if he took arsenic that he's showing no signs.

(14) * It is if it will rain tomorrow that we might as well cancel the match now.

(Haegeman and Wekker (1984: 48))

(15) ? It is if they haven't seen the museum that we'd better go there today.

Another piece of linguistic evidence whereby we can confirm that the category status of GRP conditional *if*-clauses are distinct from that of NCP conditional *if*-clauses is this: while NCP conditional *if*-clauses can serve as a response to *wh*-questions introduced by *Under what condition(s)*, GRP conditional *if*-clauses cannot, as illustrated in (16) and (17):

(16) a. A: *Under what condition* will you invite her to tea?

B: *If I see her again*.

b. A: *Under what condition* should I invite her?

B: * *If you like her so much*.

(Haegeman and Wekker (1984: 49))

(17) a. A: *Under what conditions* will he get a better job?

B: *If he gets a Ph.D.*

b. A: *Under what conditions* is there iced tea in the fridge?

B: * *If you'd care for a cold drink.*

(Takami (1988: 270))

We can, thus, conclude that the category status of a GRP conditional *if*-clause differs from that of an NCP conditional *if*-clause. This validates the distinction between NCP and GRP conditionals. We may also say that in NCP conditionals, since the relationship between cause p and effect q is relevant as a whole, the focus of assertion can be placed on either p or q; this

explains the acceptability of examples (5) - (8) and that of (16a) and (17a). In GRP conditionals, on the other hand, the relationship between p and q is like that of two independent clauses. Just as clefting and *wh*-question do not apply to two independent clauses, so they do not apply to GRP conditionals; this explains the unacceptability of examples (9) - (15) and that of (16b) and (17b).

This section has seen that the category status of a GRP conditional *if*-clause is distinct from that of an NCP conditional *if*-clause, and has argued that GRP conditionals are valid as an independent class of conditionals.

6.2. Deductive, Abductive, and Non-DA Conditionals

6.2.1. A Principled Classification of GRP Conditionals: A Reasoning Approach

As was shown in section 3.2, in the present study, conditionals wherein p is formed according to general rules (attributed to the [＋general-rule] feature) and wherein the cause-effect relation between p and q is not ensured (attributed to the [－cause-effect] feature) are termed 'GRP conditionals.' This section offers a way to subclassify GRP conditionals in a principled way. Specifically, I propose to subclassify GRP conditionals in terms of types of reasoning: whether they are constructed based on deduction, abduction, or neither of the two.

According to Hopper and Traugott (2003: 42), types of reasoning are exemplified by three propositions that constitute a syllogism:

(18) The Law (e.g., All men are mortal)
The Case (e.g., Socrates is a man)
The Result (e.g., Socrates is mortal)

Deductive reasoning applies a law to a case and predicts a result; for instance, *All men are mortal, Socrates is a man, therefore Socrates is mortal* (see Reilly (1970: 33, 59), Andersen (1973: 774-775), Anttila (1989: 196-8)).

The concept "abduction" was first proposed by C. S. Peirce. His definition of it is as follows:

(19) The surprising fact, R, is observed;

But if C were true, R would be a matter of course,

Hence, there is a reason to suspect that C is true.

(Peirce (1955: 151), Hobbs (2004: 729) with slight modifications)

In Hobbs's (2004: 727) words with respect to abduction, "[f]rom an observable [R] and a general principle [C ⊃ R], we conclude that [C] must be the underlying reason that [R] is true. We assume [C] because it explains [R]."[28] We can explain abduction using (18), as follows: "[a]bduction proceeds from an observed result, invokes a law, and infers that something may be the case. E.g. given the fact that Socrates is dead, we may relate this fact to the general law that all men are mortal, and guess that Socrates was a man" (Andersen (1973: 775), Hopper and

[28] In symbolic logic, the relation in P ⊃ Q is expressed in the following truth table:

P	Q	P ⊃ Q
T	T	T
T	F	F
F	T	T
F	F	T

In the table, *T* means "truth" and *F* means "falsehood" (see Reichenbach (1947), Geis and Zwicky (1971), Edgington (1995), Woods (1997), Rescher (2007), Nickerson (2015)).

Traugott (2003: 42-43)).[29]

The present study will argue that GRP conditionals can be divided by the criteria of whether or not they are constructed based on deductive/abductive reasoning: that is to say, they can be subclassified automatically according to whether they are deductive, abductive, or neither.

Deduction is a universal logical principle of reasoning. Actually, Hopper and Traugott (2003: 42) state that if human language were an artificial language, then deduction (and induction) might suffice. They also state that not only deduction (and induction) but also abduction is a universal principle (see Hopper and Traugott (2003: 43)).

Thus, I refer to GRP conditionals based on deduction as 'deductive conditionals,' GRP conditionals based on abduction as 'abductive conditionals,' and GRP conditionals based on neither deduction nor abduction as 'non-DA conditionals' ("non-DA" is a reduced form of "**non-d**eductive and **non-a**bductive"). (As will be argued in section 6.2.4, non-DA *if*-clauses can be further classified into three types: dependence, relevance, and *frankly*-type non-DA *if*-clauses.) An innovative point in this taxonomy is that GRP conditionals can be classified on the objective criteria of whether they are based on deduction, abduction, or neither of the two.[30]

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[29] I will introduce an interesting story with reference to abductive reasoning, below:

> In 1949 Professor Hideki Yukawa (1907-81), who was a Japanese physicist, won the Nobel Prize in Physics. In 1934 he had announced meson theory, which brought him the Nobel Prize later. In the physical society in those days, why proton and neutron are strongly combined with each other had been a mystery. He made the hypothesis that the elementary particle, meson exists and this meson serves to combine proton with neutron. Then, he thought that if the hypothesis was true, the mystery of the combination of proton with neutron would be resolved. — Imai and Nishiyama (2012: 48)

As we have seen in the story above, the meson theory, which Yukawa constructed, is concerned with abductive reasoning.

[30] Induction, as well as deduction and abduction, is a basic logical principle of reasoning. According to Hopper and Traugott (2003: 41-42), "inductive reasoning proceeds from observed cases and results to establish a law (e.g., Socrates is a man, Socrates is mortal, therefore all men are mortal)." If we accept inductive conditionals as a subclass of conditional constructions, examples like (i) - (iii) below will be indicative ones. However, they are generally judged as semantically or pragmatically anomalous.

The taxonomy is fundamentally different from the epistemic/speech-act classification by Sweetser (1990), Dancygier (1998), and Dancygier and Sweetser (2005). In fact, its scope is different from theirs. As will be argued later, for instance, examples (20) - (23), which their classification (i.e. the epistemic/speech-act distinction) could not identify, can be grouped under the category of non-DA conditionals (see sections 2.2 and 6.2.4).[31]

(20) If Mr. Armani is so desperate to be seen as an artist, he should have allowed himself to be treated as one. (Dancygier and Sweetser (2005: 122))

(21) If he won't arrive before nine, there's no point in ordering for him.

(Comrie (1982: 148), Dancygier (1998: 62, 118))

(22) If it will amuse you, I'll tell you a joke.

(Comrie (1982: 150), Palmer (1990: 178), Sweetser (1990: 121), Dancygier (1998: 118))

(23) If it will satisfy you to know it, Mary is already on her way here.

(Sweetser (1990: 124))

(i) # If Socrates is a man, all men are mortal.
(ii) # If Socrates is mortal, all men are mortal.
(iii) # If Socrates is a man and mortal, all men are mortal.

In this way, indicative conditionals do not function well as a subclass of conditionals. This is why the present study does not regard conditionals based on induction as a subclass or subtype of conditionals.

[31] A distinction between deductive and abductive conditionals has been made by Douven and Verbrugge (2010) and Krzyzanowska et al. (2013). Their studies, however, have not classified data on the criteria of what we call general rules (or "backshift" in Dancygier's framework). For instance, they treat example (i) below as a deductive (inferential) conditional, and example (ii) below as an indicative conditional:

(i) If Chelsea wins the Champions League in 2011, then that will be a first in the club's history.
(Douven and Verbrugge (2010: 304))
(ii) If Oswald did not kill Kennedy, someone else did. (Krzyzanowska et al. (2013: 316))

Since the p in (i) is not formed by general rules (i.e. backshifted) and the p in (ii) is formed by general rules (i.e. not backshifted), example (i) is an NCP conditional and example (ii) is a GRP conditional in my approach.

In this way, GRP conditionals can be automatically categorized in a principled way. This is a scientific merit in deductive/abductive/non-DA classifications. Again, I will show categories of GRP conditionals for convenience as Diagram 2 below:

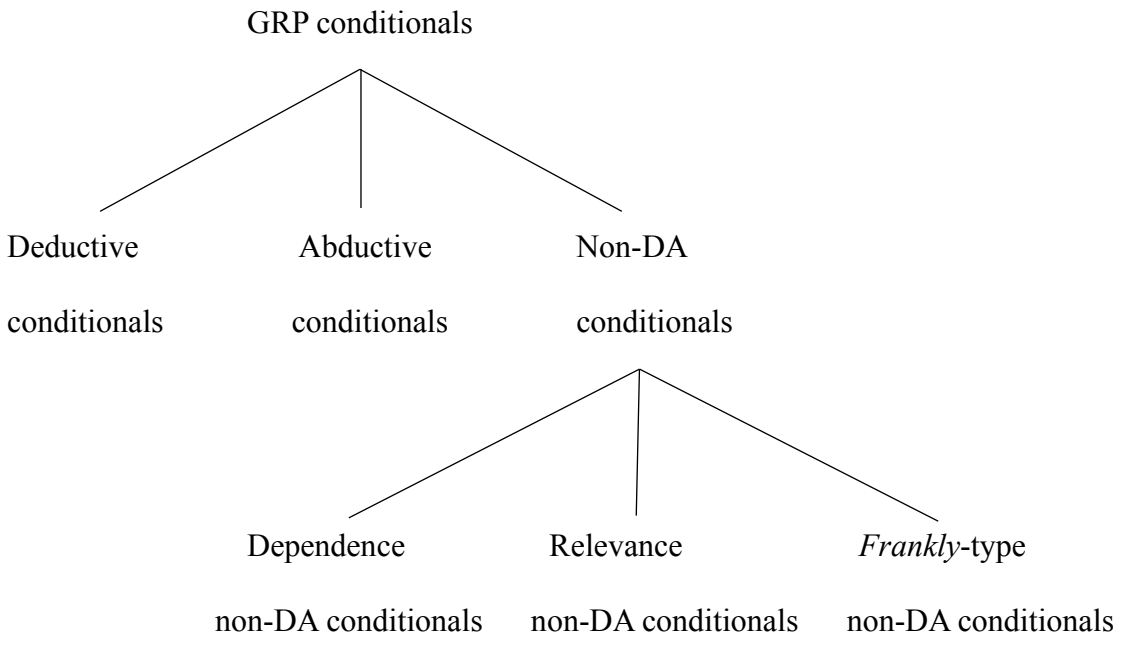

Diagram 2: Categories of GRP conditionals

Deductive and abductive conditionals form a unified natural class, because these are based on reasoning processes in logic. In addition, as will be shown in sections 9.3 and 9.4, in several different languages, p and q in deductive and abductive conditionals are formed according to each particular language's general rules. Therefore, the deductive/abductive class is motivated cross-linguistically as well.

What is more, as will be argued later, the deductive and abductive conditionals cannot be

diachronically (inter)subjectified, and (inter)subjectification is restricted to non-DA ones (see chapter 10 in detail). This validates the three-way subclassification of GRP conditionals (i.e. deductive, abductive, and non-DA conditionals), and is also one of the advantages in our taxonomy.

6.2.2. Deductive Conditionals

We first turn to GRP conditionals based on deduction. Look at examples (24) - (28) below. These conditional sentences are constructed based on deductive reasoning. Therefore, they are deductive conditionals.

(24) If Socrates is a man, Socrates is mortal.
(Chisholm (1946: 305), Dudman (1984a: 146, 1988: 115), Dancygier (1998: 40))

(25) If he's Italian, he's European. (offered by an anonymous *Ampersand* reviewer)

(26) If she's divorced, (then) she's been married. (Sweetser (1990: 116))

(27) If someone is in Paris, then he is in France. (Rescher (2007: 27))

(28) If Ann is wearing a wedding ring, she and Bob finally got married.
(Dancygier (1998: 86))

In (24), *Socrates is a man* is a case, and *Socrates is mortal* is a result. In (25), *he's Italian* and *he's European* are a case and a result, respectively. In (26), *she's divorced* and *she's been married* are a case and result, respectively. In (27), *someone is in Paris* and *he is in France* are a case and a result, respectively. In (28), *Ann is wearing a wedding ring* and *Ann and Bob got married* are a case and a result, respectively.

Thus, in this section, we have seen that in examples (24) - (28), a case and a result in a

syllogism are contained in p and q, respectively.[32, 33, 34] As will be mentioned in section 9.4, deduction is captured by a container image-schema.

6.2.3. Abductive Conditionals

We will move on to the second subclass of GRP conditionals, abductive conditionals. Look at the examples below:

(29) If John went to that party, (then) he was trying to infuriate Miriam.

(Sweetser (1990: 116))

(30) If Mary said she liked the movie, she was just showing off. (Dancygier (1998: 62))

(31) If he typed her thesis, (then) he loves her.

(Dancygier and Sweetser (1997: 125, 2005: 117))

(32) If Mary is late, she went to the dentist. (Dancygier (1998: 86))

(33) If they have to leave a message, (then) he's gone already. (Sweetser (1990: 123))

(34) If the ground is wet, then it has rained. (Rescher (2007: 26))

(35) If Socrates is dead, he was a man.

---

[32] With respect to example (26), in an anonymous *Ampersand* reviewer's words, "since having been married is part of the definition of being divorced, the conclusion contained in the apodosis is the result of the strict deduction."

[33] With respect to example (27), Rescher (2007) states that there is clearly no causality at issue.

[34] Examples (i) and (ii) below are deductive conditionals, too.

(i) If Tom is a member of the club, he may use its facilities. (Nickerson (2015: 24))
(ii) If one is 18 or older, one may vote. (Nickerson (2015: 24))

Example (iii) below is a deductive conditional based on the law that a week constitutes the following cycle: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.

(iii) If today is Tuesday, tomorrow is Wednesday. (Nickerson (2015: 85))

The examples in (29) – (35) are constructed based on abductive reasoning. In (29), *John went to that party* is a result, and *he was trying to infuriate Miriam* corresponds to a case. In (30), *Mary said she liked the movie* is a result, and *she was just showing off* corresponds to a case. In (31), *he typed her thesis* is a result, and *he loves her* corresponds to a case. In (32), *Mary is late* is a result, and *she went to the dentist* corresponds to a case. In (33), *they have to leave a message* is a result, and *he's gone already* corresponds to a case. In (34), *the ground is wet* is a result, and *it has rained* corresponds to a case. In (35), *Socrates is dead* and *he was a man* are a result and case, respectively.

In this way, in examples (29) – (35), a result and a case in a syllogism are contained in p and q, respectively. The application of abductive reasoning to GRP conditionals is motivated by the speaker's recognition that p and q correspond to a result and a case respectively.[35] Therefore, the distinction between the conditionals based on abduction and those not based on abduction is valid.

In abductive conditionals, a law is what the speaker can determine arbitrarily; the law here does not need to be natural laws. Actually, the laws which are applied to (29) – (33) are not natural laws.[36, 37] For example, the law which is applied to (29) is the following: all of the people who try to infuriate Miriam go to the party.

---

[35] In examples (29) – (34), q represents cause and p represents effect in terms of cause-effect chains. In these examples, the speaker infers the cause of the event in p via the knowledge of cause-effect chains. In example (35), on the other hand, there is no causal relation between p and q: example (35), unlike examples (29) – (34), does not have a causa-effect relation in the direction from q to p. More specifically, in example (35), p (= Socrates is dead) is not caused by q (= Socrates was a man).

[36] The laws which are applied to (34) and (35) are natural laws.

[37] The example (i) below (= (28)) is interpreted as an abductive conditional if it is based on the following law: all of the people who got married are wearing a wedding ring.

(i) If Ann is wearing a wedding ring, she and Bob finally got married. (= (28))

Next, let us pay attention to examples (36) - (39) below. Although conditionals like these have often been considered in previous studies, convincing explanations are not found. The present framework, however, can offer a convincing account. Examples like (36) - (39) show the phenomenon in which p in abductive conditionals has turned into a neutral condition. In my analysis, examples (36) - (39) are phenomena in which neutral conditions are used in p's in abductive conditionals. In short, they are variants of abductive conditionals; in a sense, they are combinations of p's in NCP conditionals (i.e. neutral conditions) with q's in abductive conditionals.

(36) If the leaves wither in a day or two, you added too much fertilizer.

(Dancygier (1993: 409))

(37) If this solution turns green when I add the reagent in a moment or two, the deceased died of hyoscine poisoning. (Dudman (1984a: 149))

(38) If John arrives tomorrow, he left yesterday.

(offered by an anonymous *Journal of Linguistics* reviewer)

(39) If it rains tomorrow, we worked in vain yesterday. (Comrie (1982: 149))

In this section, we have seen the validity of abductive conditionals and the explanatory power of abductive conditionals.

6.2.4. Non-DA Conditionals

Non-DA conditionals are GRP conditionals based on neither deductive nor abductive reasoning.[38] In the present study, non-DA conditional *if*-clauses are classified into three types:

[38] Declerck and Reed (2001: 320) call the non-DA *if*-clause in this study "utterance-licensing," and refer to the conditional as a whole as an "utterance conditional."

(a) dependence non-DA *if*-clauses, (b) relevance non-DA *if*-clauses, and (c) *frankly*-type non-DA *if*-clauses. These three types of *if*-clauses are different from one another in category status. This section deals with the three types of non-DA *if*-clauses. In this section, we will also see that some non-DA *if*-clauses can function as 'the motivation for uttering the main clause.'[39]

6.2.4.1. Dependence Non-DA *If*-Clauses

First, let us consider the examples in (40) - (48). They are non-DA conditionals because they are GRP conditionals based on neither deduction nor abduction. Some examples, as in (40) - (45), involve cause-effect chain relations between p and q in the real-world, and the others, as in (46) - (48), involve no cause-effect chain relation between p and q. As was already explained in sections 3.2 and 4.2, in the class of GRP conditionals the cause-effect relation between p and q is not ensured, due to the [－cause-effect] feature. Although examples (40) - (45) have the cause-effect relation between p and q, the "cause-effect relation" between p and q is not constructionally ensured (cf. section 6.3.5); examples (40) - (45) are attributed to not the [＋cause-effect] feature but the [－cause-effect] feature. Actually, there are some non-DA conditionals, as in examples (46) - (48), which do not show causality in a strict sense, i.e. the cause-effect chain; examples (46) - (48) as well are attributed to the [－cause-effect] feature.

(40) If she is giving the baby a bath, I'll call back later. (Dancygier (1998: 62))

(41) If it is raining heavily now, I will go to the station to meet them.

(42) If my son is alive, I'll be so happy. (Smith and Smith (1988: 348))

[39] It is Declerck (1984) and Haegeman (1984) that first showed that some *if*-clauses express the speaker's motivation for uttering the main clause.

(43) If you're going to Bath, I can give you a lift. (Declerck and Reed (2001: 321))

(44) If Mr. Armani is so desperate to be seen as an artist, he should have allowed himself to be treated as one. (= (20))

(45) If they left at nine, they will certainly be home by midnight. (Leech (2004: 119))

(46) If your mother has been here now, she will have been in tears.

(47) If he has finished reading the book by now, he will have returned it to you/the library.

(48) If he won't arrive before nine, there's no point in ordering for him. (= (21))

The present framework will refer to non-DA *if*-clauses like (40) - (48) as 'dependence non-DA *if*-clauses.' With respect to the connection of the utterance of q with p, dependence non-DA *if*-clauses are the strongest of the three types of non-DA ones, as shown by the following linguistic behaviors (i) and (ii):

(i) Dependence non-DA conditionals can undergo the subjunctive mood, as in (49) - (51):

(49) If my son *were* alive, I'*d be* so happy. (Smith and Smith (1988: 348))

(50) If you *were going* to Bath (now), I *could give* you a lift.

(51) If they *had left* at nine, they *would* certainly *be* home by midnight.

(Leech (2004: 119-120))

As will be shown in sections 6.2.4.2 and 6.2.4.3, relevance and *frankly*-type non-DA conditionals cannot be used in the subjunctive mood.

(ii) Dependence non-DA *if*-clauses can be interpreted as focused on with the focus marker *only*,

as in (52) – (54):[40]

(52) *Only if you are going to Bath*, can I give you a lift.

(53) They will get home by midnight *only if they left at nine*.

(54) *Only if you're planning to go to Africa* do you have to get a Malaria shot.

(von Fintel (1997: 45))

As we will see in the next section, relevance non-DA *if*-clauses cannot be focused with *only*.

Note, further, that with respect to the example in (55) below, both an NCP conditional and a dependence non-DA conditional interpretation are possible.

(55) If you don't want me here, (then) I'll leave. (Gomes (2008: 227))

Gomes (2008) states that example (55) may either mean something similar to (a) "In case you don't want me here, (then) I'll leave" or something similar to (b) "Since you don't want me here, (then) I'll leave." The former corresponds to an NCP conditional interpretation, and the latter corresponds to a dependence non-DA conditional interpretation. Thus, example (55) is ambiguous between an NCP conditional and a dependence non-DA conditional.[41]

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[40] *If*-clauses in NCP and generic conditionals too can be focused with *only*, as in (i) – (iv) below. This is attributed to the causality between p and q (see chapters 5 and 7).

(i) Tom will leave *only if John comes back by midnight*. (McCawley (1974: 633))
(ii) *Only if he pays back his dues* will his membership is reinstated. (Nickerson (2015: 13))
(iii) The flag flies *only if the Queen is home*. (von Fintel (1997: 1))
(iv) *Only if the Queen is home* do they always/invariably hoist the flag. (von Fintel (1997: 45))

[41] According to Leech (2004), in example (i), there is the ambiguity where both the present and future interpretations are possible:

As regards such examples as (40) - (48), it has often been observed that p is restricted to being contextually bound or contextually given (see Akatsuka (1986), Van der Auwera (1986), Sweetser (1990), Dancygier (1998), Heageman (2003)). However, dependence non-DA *if*-clauses are not subject to such a restriction on context, as illustrated in examples (56) - (58):

(56) If it'll be of any help, I'll come along. (Palmer (1974: 148), Declerck (1984: 289))

(57) I don't want to call on Mrs Fustle, but I'll see her if it will do any good.

(Allen (1966: 179), Declerck (1984: 289))

(58) If it will amuse you, I'll tell you a joke. (= (22))

In many cases, the contents of dependence non-DA *if*-clauses are merely expressed earlier in discourse.[42]

As will be shown in chapter 12, what is called meta-metaphorical conditionals is included in the category of dependence non-DA conditionals.

6.2.4.2. Relevance Non-DA *If*-Clauses

Next, we will consider the second type of non-DA *if*-clauses. Let us turn to the examples in (59) - (62) below. In conditionals like these, there is no causal relationship

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(i) If you already know the answers, you will pass the exam. (Leech (2004: 64))

He states that the *if*-clause in example (i) above can mean "know the answers now" or "know the answers when you take the exam." In the framework of this study, the former interpretation corresponds to a dependence non-DA conditional, and the latter interpretation corresponds to an NCP conditional.

[42] NCP conditional protases too can be expressed earlier in discourse. In fact, in example (i) below, *If it rains* is contextually bound or given.

(i) A: What will you do if it rains?
B: *If it rains*, we'll have the picnic anyway. (Smith and Smith (1988: 334))

between p and q (, due to the [－cause-effect] feature). Also, in these examples, q is true independently of whether p is true or not.

(59) If you are hungry, there are biscuits on the sideboard.

(Dancygier (1998: 90, 103, 124), Dancygier and Sweetser (2005: 40, 110, 113))

(60) There are biscuits on the sideboard if you want them.

(Austin (1961: 158), Sweetser (1990: 119), Declerck and Reed (2001: 320))

(61) There's some iced tea in the fridge if you'd care for a cold drink.

(Takami (1988: 264))

(62) If it is raining, there's an umbrella in my wardrobe. (Wakker (1996: 181))

Within the framework described in the present thesis, protases like those of (59) - (62) are termed 'relevance non-DA *if*-clauses.' As was stated in section 3.4, the term 'relevance' in relevance non-DA *if*-clauses comes from the "relevance conditional" by Declerck and Reed (2001) and Bhatt and Pancheva (2006).

Conditionals including a relevance non-DA *if*-clause (henceforth, relevance non-DA conditionals) cannot appear in the subjunctive mood, as in (63) below:

(63) # If you *were* hungry, there *would be* biscuits on the sideboard.

In addition, this type of *if*-clause cannot be interpreted as focused on with the focus marker *only*, as in sentence (64) below:

(64) # There are biscuits on the sideboard, *only if you are hungry*.

Furthermore, we should bear in mind that it is possible that an *if*-clause in the same form is used in both a relevance non-DA *if*-clause and a dependence non-DA *if*-clause:

(65) a. *If you're hungry*, there's pizza in the fridge. (Siegel (2006: 168))

b. *If you're hungry*, I say to you there's pizza in the fridge. (Siegel (2006: 169))

(66) a. *If you need some help*, Helen is willing to lend a hand.

(Huddleston and Pullum (2002: 740))

b. *If you need some help* you will be interested to know that Helen is willing to lend a hand. (Huddleston and Pullum (2002: 740))

Sentences (65a) and (66a) are relevance non-DA conditionals. Sentences (65b) and (66b), on the other hand, are dependence non-DA conditionals. In (65a) and (66a), q is true regardless of whether p is true or not. In (65b) and (66b), the truth status in q is influenced by the truth value of p.[43] In (65) and (66), thus, sentences (a) and (b) are conditionals of the type distinct from each other.

6.2.4.3. *Frankly*-Type Non-DA *If*-Clauses

Finally, let us consider the last type of non-DA *if*-clauses. Look at examples (67) - (72). The *if*-clauses of these examples serve as style disjuncts (Greenbaum (1969), Quirk et al. (1985)) or style adverbials (Biber et al. (1999)), as will be demonstrated in section 10.1. As was stated in section 3.4, the term '*frankly*-type non-DA *if*-clause' is named after a typical style

[43] Huddleston and Pullum (2002) note that sentence (66a) might be regarded as a shorthand way of saying something like (66b).

adverbial / style disjunct *frankly*.[44]

(67) If you don't mind my saying so, your slip is showing.

('If you don't mind my saying so, I'm telling you that your slip is showing.')

(Quirk et al. (1985: 1095))

(68) If you want to know, I haven't seen him.

('If you want to know, I (will) tell you that I haven't seen him.')

(Palmer (1988: 154, 1990: 176))

(69) If you're going out, it's raining.

('If you are going out, I (will) tell you that it's raining.') (Palmer (1990: 176))

(70) If you ask me, she is jealous of Janet's engagement.

('If you ask me, I'll answer you that she is jealous of Janet's engagement.')

(Takami (1988: 264))

(71) If I may say so, that's a crazy idea. (Sweetser (1990: 118))

(72) If you're not too busy, what's Sue's phone number? (Sweetser (1996b: 327))

As is shown in the underlines in the brackets in (67) - (70), a conditional with a *frankly*-type non-DA *if*-clause (henceforth, a *frankly*-type non-DA conditional) is relevant to the speaker's utterance of q. Also, as will be shown in chapter 11, the so-called metalinguistic conditional is included in the category of *frankly*-type non-DA conditionals.

Non-DA conditionals of this type cannot be used in the subjunctive mood, as is shown in the contrast between (a) and (b) in (73) - (75) below.[45]

[44] Although Haiman (1978) and Schiffrin (1992) claim conditional protases to be topics, this does not mean, as Dancygier and Sweetser (2005: 173) say, that all Ps are topics and all Qs are comments (cf. Akatsuka (1986)).

[45] According to Dancygier and Sweetser (2005: 114), sentences (73b), (74b), and (75b) can be

(73) a. If you need any help, my name is Ann.

b. # If you *needed* any help, my name *would be* Ann.

(74) a. "If you don't mind my asking," Hiro says, "what was your mission anyway?"

b. # If you *didn't mind* my asking, what *would* your mission *have been* anyway?

(75) a. If you've come to see Deirdre, she's dead.

b. # If you'*d come* to see Deirdre, she *would be* dead.

((73) - (75): Dancygier and Sweetser (2005: 114))

In addition, we should bear in mind that it is possible that an *if*-clause in the same form as a *frankly*-type non-DA *if*-clause is used as a dependence non-DA *if*-clause:

(76) a. *If you're interested*, Dick's coming to the party too.

b. *If you're interested*, it is worth telling you that Dick's coming to the party.

(Huddleston and Pullum (2002: 740))

As Huddleston and Pullum (2002) states, in example (76a) q is true independently of whether p is true or false: that is, the truth status of q in (76a) is not influenced by whether or not p is true. In example (76b), on the other hand, the truth status of q is influenced by the truth value of p. Therefore, (76a) is a *frankly*-type non-DA conditional, and (76b) is a dependence non-DA conditional. In (76), thus, examples (a) and (b) are a conditional of the type distinct from each other.

In the three types of non-DA *if*-clauses, we can find a difference in the strength of the

interpreted as "implausible content-level conditional readings."

connection of p with q: dependence non-DA *if*-clauses (the strongest), relevance non-DA *if*-clauses (intermediate), and *frankly*-type non-DA *if*-clauses (the weakest). The difference in the strength of the connection between p and q is attributed to the category status of each of the three types. The difference in the category status of an *if*-clause reflects the strength of the connection between p and q in non-DA conditionals.

6.3. Linguistic Implications of Deductive, Abductive, and Non-DA Conditionals

So far in this thesis, we have pointed out that in GRP conditionals, there are conditionals that are intuitively based on deductive reasoning, conditionals that are based on abductive reasoning, and conditionals that are not based on either type of reasoning. However, this is not enough to justify the new taxonomy as a scientifically sound one. In order to justify the new three-way classification in GRP conditionals, we need to show specific linguistic facts by which we can validate the distinction between the three subclasses, viz deductive, abductive, and non-DA conditionals. In this section I will show linguistic phenomena which correlate with deductive/abductive/non-DA conditionals. The purpose of this section is to present linguistic implications of the new three-way classification except cross-linguistic analyses and (inter)subjectification. Cross-linguistic analyses of deductive and abductive conditionals and (inter)subjectification of GRP conditionals will be explored in chapters 9 and 10, respectively.

6.3.1. Deletion of the Protasis

As we saw in sections 6.2.2 and 6.2.3, examples (24) - (28) and examples (29) - (35) are deductive and abductive conditionals, respectively.

(24) If Socrates is a man, Socrates is mortal.

(25) If he's Italian, he's European.

(26) If she's divorced, (then) she's been married.

(27) If someone is in Paris, then he is in France.

(28) If Ann is wearing a wedding ring, she and Bob finally got married.

(29) If John went to that party, (then) he was trying to infuriate Miriam.

(30) If Mary said she liked the movie, she was just showing off.

(31) If he typed her thesis, (then) he loves her.

(32) If Mary is late, she went to the dentist.

(33) If they have to leave a message, (then) he's gone already.

(34) If the ground is wet, then it has rained.

(35) If Socrates is dead, he was a man.

Examples (24') - (35') below, on the other hand, are examples in which an *if*-clause is deleted from (24) - (35).

(24') Socrates is mortal.

(25') He's European.

(26') She's been married.

(27') He is in France.

(28') Ann and Bob finally got married.

(29') John was trying to infuriate Miriam.

(30') Mary was just showing off.

(31') He loves her.

(32') Mary went to the dentist.

(33') He's gone already.

(34') It has rained.

(35') Socrates was a man.

From the contrast between (24) - (35) and (24') - (35'), we can see that if an *if*-clause is deleted in deductive and abductive conditionals, the information conveyed in an original conditional is significantly lost.

In the case of non-DA conditionals, by contrast, even if an *if*-clause is deleted, the information conveyed in the entire sentence can often be preserved. In short, in non-DA conditionals the *if*-clause can often be omitted without affecting the meaning of the sentence as a whole. Consider example (71), for instance. Example (71) is a non-DA conditional, and example (71') is the deletion of the *if*-clause from (71).

(71) If I may say so, that's a crazy idea.

(71') That's a crazy idea.

In (71') the information conveyed is not affected so much as in (24') - (35').[46]

In this way, when *if*-clauses are deleted, the amount of information which is lost will be very different between deductive and abductive conditionals on the one hand and non-DA conditionals on the other. While deductive and abductive conditionals with *if*-clauses deleted can affect the entire meaning of the original conditionals, non-DA conditionals with *if*-clauses deleted cannot so much.

[46] The *if*-clause in (71) corresponds to a pragmatic marker in Fraser (1996). Fraser states that "pragmatic markers are not part of the propositional content of the sentence. … When an expression functions as one type of pragmatic marker, it does not function as a part of the propositional content" (Fraser (1996: 169)).

6.3.2. Politeness Expressions

Some non-DA *if*-clauses function as politeness (in the sense of Leech (1983)). More specifically, some of the relevance non-DA *if*-clauses and all of the *frankly*-type non-DA *if*-clauses serve as politeness expressions. Deductive, abductive, and dependence non-DA *if*-clauses, on the other hand, do not seem to serve as politeness expressions.

Now, consider examples (59) - (61) (relevance non-DA conditionals) and examples (67) - (72) (*frankly*-type non-DA conditionals). The Tact Maxim of Leech's Politeness Principle operates on (59) - (61) and (67) - (72).[47] In these examples, the speaker is using *if*-clauses in order to decrease the cost to the hearer (cf. Aijmer (1997)).

(59) If you are hungry, there are biscuits on the sideboard.

(60) There are biscuits on the sideboard if you want them.

(61) There's some iced tea in the fridge if you'd care for a cold drink.

(67) If you don't mind my saying so, your slip is showing.

(68) If you want to know, I haven't seen him.

(69) If you're going out, it's raining.

(70) If you ask me, she is jealous of Janet's engagement.

(71) If I may say so, that's a crazy idea.

(72) If you're not too busy, what's Sue's phone number?

In this way, some non-DA conditional *if*-clauses function as politeness expressions. As

[47] According to Leech (1983: 109), there are two sides to Tact Maxim, a negative side "Minimize the cost to hearer," and a positive side "Maximize the benefit to hearer"; a negative side is more important than a positive side.

was already pointed out in the outset of this section, deductive and abductive conditional *if*-clauses are assumed to have no politeness function. Therefore, *if*-clauses having politeness functions is one of the linguistic phenomena which show a distinction between deductive and abductive conditionals on the one hand and non-DA conditionals on the other.

6.3.3. The Order in Which the *If*-Clause and the Main Clause Are Arranged

In deductive and non-DA conditionals, the *if*-clause can precede or follow the main clause. In the case of abductive conditionals, however, the main clause followed by the *if*-clause is difficult to accept, as shown below:

(77) If she is in the lobby, the plane arrived early. (Dancygier (1998: 62))

(78) ?? The plane arrived early if she is in the lobby. (Dancygier (1998: 149))

Thus, in abductive conditionals, unlike in deductive and non-DA ones, the *if*-clause cannot follow the main clause. This is a linguistic behavior which shows the distinction between abductive conditionals on the one hand and deductive and non-DA conditionals on the other.

6.3.4. The Order in Which Deductive, Abductive, and Non-DA Conditional Clauses Are Arranged, and Their Hierarchical Structures

This study has proposed to subclassify GRP conditionals by the three criteria of whether they are deductive, abductive, or neither: each subclass of the GRP conditionals has been referred to as 'deductive conditionals,' 'abductive conditionals,' and 'non-DA conditionals.' In this section we consider the order in which *if*-clauses of two different subclasses appear, and

their hierarchical structures.

Look at the following examples. In the examples in (79) and (80), the underlined part (i) represents a deductive conditional clause, the underlined part (ii) represents an abductive conditional clause, and the underlined part (iii) represents a non-DA conditional clause.

(79) <u>If you ask me</u>, <u>if he's Italian</u>, he's European.

(iii) (i)

(79') * <u>If he's Italian</u>, <u>if you ask me</u>, he's European.

(i) (iii)

(80) <u>If you really want to know</u>, <u>if he acts like that</u>, he is a fool.

(iii) (ii) (Nakano (2003: 112))

(80') * <u>If he acts like that</u>, <u>if you really want to know</u>, he is a fool.

(ii) (iii) (Nakano (2003: 112))

The contrast between (79) and (79') reveals that the deductive conditional clause (i) appears closer to the main clause than the non-DA conditional clause (iii). This means that (i) is more closely linked to the main clause than (iii), and moreover, that in a hierarchical structure, (iii) belongs to a higher layer than (i) (cf. Bhatt and Pancheva (2006)). Thus, we can say:

(81) (a) The order in which a deductive and a non-DA conditional clause appear:

In a sentence with a deductive conditional clause and a non-DA conditional clause, the former appears closer to the main clause than the latter.

(b) The hierarchy of deductive and non-DA conditional clauses:

A deductive conditional clause and a non-DA *if*-clause each belong to a different layer in terms of a hierarchical structure: non-DA *if*-clauses belong to a higher

layer than deductive conditional clauses.

Similarly, the contrast between (80) and (80') reflects that the abductive conditional clause (ii) appears closer to the main clause than the non-DA conditional clause (iii), and moreover, that (iii) belongs to a higher layer than (ii). Thus, we can say:

(82) (a) The order in which an abductive and a non-DA conditional clause appear:

In a sentence with an abductive conditional clause and a non-DA conditional clause, the former appears closer to the main clause than the latter.

(b) The hierarchy of abductive and non-DA conditional clauses:

An abductive conditional clause and a non-DA *if*-clause each belong to a different layer in terms of a hierarchical structure: non-DA *if*-clauses belong to a higher layer than abductive conditional clauses.

In this way, we have seen that there is regularity, as in (81) and (82), in the order wherein a deductive, abductive, and non-DA conditional clause appear. At this point, I must mention that a deductive conditional clause does not co-occur with an abductive one. As was argued in section 6.2, deduction is a way to reason from a case to a result, whereas abduction is a way to infer a case from a result (cf. Reilly (1970: 33)). Performing both deductive and abductive reasoning at the same time is in contradiction, so that a deductive conditional clause and an abductive conditional clause do not co-occur.

The present section has thus seen that there is regularity in the order in which *if*-clauses of two subclasses in GRP conditionals are arranged. This phenomenon is attributed to the hierarchical structure in which non-DA *if*-clauses belong to a higher layer than deductive and abductive conditional clauses.

In this way, the distinction between deductive, abductive, and non-DA conditionals shows linguistic behaviors enough to be validated as a criterion of a subclassification of GRP conditionals.

6.3.5. The Hierarchy of NCP and Non-DA Conditional *if*-Clauses

As we discussed in chapter 5, an NCP conditional inherently has a cause-effect chain between p and q. On the other hand, as we saw in sections 4.2 and 6.2.4.1, some dependence non-DA conditionals have a cause-effect chain between p and q (see examples (40) - (45)). This section considers a further difference between NCP conditionals and dependence non-DA conditionals. More specifically, in this section we focus on the hierarchical structure in NCP and non-DA conditionals

Consider the examples in (83) - (85). Examples (83) - (85) are conditionals in which an NCP and a non-DA *if*-clause co-occur: in examples (83) and (84), an NCP *if*-clause and a dependence non-DA *if*-clause co-occur; in example (85), an NCP *if*-clause and a *frankly*-type non-DA *if*-clause co-occur.

(83) a. You should invite her to tea *if you see her again if you like her so much*.

b. * You should invite her to tea *if you like her so much if you see her again*.

(Bhatt and Pancheva (2006: 674))

(84) a. You should meet her *if she comes tomorrow, if you love her so much*.

b. * You should meet her, *if you love her so much if she comes tomorrow*.

(Takami (1988: 267))

(85) a. You should invite her to tea *if you see her again if I may say so*.

b. * You should invite her to tea *if I may say so if you see her again*.

The contrast between (a) and (b) in the examples above shows that NCP conditional *if*-clauses appear closer to the main clause than non-DA *if*-clauses, which means that in terms of a hierarchical structure, non-DA *if*-clauses belong to a higher layer than NCP conditional clauses; in other words, a non-DA *if*-clause is structurally external to an NCP conditional *if*-clause.

In the present framework, this can be explained as follows. In examples called NCP conditionals in this study, p is linked to q by the [＋cause-effect] feature. In non-DA conditionals, on the other hand, p is less closely linked to q than in NCP conditionals, because they are in the category of the conditional construction structured by the [－cause-effect] feature. Therefore, a non-DA *if*-clause is structurally external to an NCP one (see Haegeman (2003: 318-324, 336)).

6.3.6. The Scope of Interrogation

In non-DA conditionals, a question can occur in the main clause freely, as in (72) and (74a).

(72) If you're not too busy, what's Sue's phone number?

(74a) "If you don't mind my asking," Hiro says, "what was your mission anyway?"

In the deductive and abductive ones wherein a question appears in the main clause, by contrast, we can find a restriction on the scope of interrogation. Look at the examples below:

(24) If Socrates is a man, Socrates is mortal.

(24") If Socrates is a man, is Socrates mortal?

(35) If Socrates is dead, he was a man.

(35") If Socrates is dead, was he a man?

Examples (24") and (35") are interrogatives of deductive and abductive conditionals, respectively. In these examples, where a question is used in the main clause, the interrogative has scope over the entire sentence; in other words, the *if*-clause is within the scope of main-clause interrogation. Indeed, as we have seen in section 6.3.1, when an *if*-clause in deductive and abductive conditionals is deleted, the information conveyed in an original conditional is significantly lost.

In non-DA conditionals, on the other hand, the interrogative has scope over only the main clause. That is, a non-DA *if*-clause is outside the scope of main-clause interrogation:

(86) If it was raining heavily, why didn't you take a taxi?

(87) If you will be going to Paris, why did you buy a ticket to Tokyo?

(Dancygier and Sweetser (2005: 123))

(88) If he's so smart then why isn't he rich? (Bhatt and Pancheva (2006: 673))

(89) If James has resigned, did he do so voluntarily? (Woods (1997: 4))

(90) If I may ask, where were you last night? (Dancygier (1998: 89))

(91) If you're not too busy, what's Sue's phone number? (= (72))

(92) "If you don't mind my asking," Hiro says, "what was your mission anyway?"

(= (74a))

As we have seen in section 6.3.1, in non-DA conditionals, the deletion of an *if*-clause often does not affect the information conveyed in the entire sentence.

We should also note that NCP conditional clauses, as in the case of deductive and

abductive conditional clauses, are within the scope of main-clause interrogation. For instance, with respect to the NCP conditionals in (93) and (94) below, Haegeman (2003: 322) and Dancygier (1998: 89) say "the yes/no question bears on the causal relation between John's exercise and his fitness" and "[(94)] asks a question which concerns … there being a conditional relation between buying a house and redecorating it oneself," respectively.

(93) Will John get any fitter if he takes more exercise? (Haegeman (2003: 322))

(94) If you buy a house, will you redecorate it yourself? (Dancygier (1998: 89))

Thus, in this section, we have seen that deductive and abductive (and NCP) conditional clauses are within the scope of main-clause interrogation, while non-DA conditional clauses are not.

6.3.7. The Scope of Negation

When a negative is used in the main clause of deductive, abductive, and non-DA conditionals (i.e. GRP conditionals), the negative has scope over the main clause, not the entire sentence; that is, deductive, abductive, and non-DA *if*-clauses are outside the scope of main-clause negation, as is illustrated in:

(95) If John died in his sleep last night, he did not awaken this morning.

(Davis (1979: 559))

(96) If John awakened this morning, he did not die in his sleep last night.

(Davis (1979: 559))

(97) If John did not wake up this morning, he may not have been alive at midnight.

(98) John won't finish on time, if there's (already) such a lot of pressure on him now.

(Haegeman (2003: 322))

(99) If it's raining (now), I won't go out.

Examples (95) and (96) are deductive conditionals; example (97) is an abductive conditional; examples (98) and (99) are non-DA conditionals.

NCP conditional clauses, by contrast, are within the scope of main-clause negation:

(100) John won't finish on time if there's a lot of pressure on him.

(101) If it rains tomorrow, I won't go out.

Examples (100) and (101) are NCP conditionals. Recall that in an NCP conditional the cause-effect relation between p and q is ensured, due to the [＋cause-effect] feature. In examples (95) - (99), on the other hand, the cause-effect relation is not ensured, attributed to the [－cause-effect] feature. As was argued in section 6.3.5, a non-DA *if*-clause, such as (98) and (99), is structurally external to an NCP one; in other words, an NCP *if*-clause is structurally internal to a non-DA one. This reflects whether or not *if*-clauses are within the scope of main-clause negation.

6.3.8. The Insertion of *Then*

In deductive and abductive conditionals, as in the case of NCP conditionals, it is possible to insert *then* before the main clause, as exemplified below:

(102) If she's divorced, (*then*) she's been married. (= (26))

(103) If someone is in Paris, *then* he is in France. (= (27))

(104) If John went to that party, (*then*) he was trying to infuriate Miriam. (= (29))

(105) If he typed her thesis, (*then*) he loves her. (= (31))

(106) If they have to leave a message, (*then*) he's gone already. (= (33))

(107) If the ground is wet, *then* it has rained. (= (34))

Examples (102) and (103) are deductive conditionals, and examples (104) - (107) are abductive conditionals. We can also insert *then* before the main clause of dependence non-DA conditionals, as illustrated in:

(108) If she is giving the baby a bath, *then* I'll call back later.

(109) If Mr. Armani is so desperate to be seen as an artist, *then* he should have allowed himself to be treated as one.

(110) If he won't arrive before nine, *then* there's no point in ordering dinner for him.

(Takami (1994: 80))

Examples (108) - (110) are dependence non-DA conditionals.

As illustrated in (102) - (110), deductive, abductive, and dependence non-DA conditionals allow *then* to be inserted before the main clause. On the other hand, some relevance non-DA conditionals allow *then* to be inserted, and the others do not, as exemplified below:

(111) If you need any more paper, *then* there's some in the drawer.

(112) * If you're hungry, *then* there's some food in the fridge.

(Declerck and Reed (2001: 364))

In the case of *frankly*-type non-DA conditionals, *then* cannot be inserted before the main clause, as in:

(113) * If you don't mind my saying so, *then* your slip is showing.

(114) * If you want to know, *then* I haven't seen him.

(115) * If you ask me, *then* she is jealous of Janet's engagement.

(116) * If you really want to know, *then* 4 isn't a prime number. (Iatridou (1994: 182))

(117) * If I may be frank, *then* she isn't very stupid. (Greenbaum (1969: 84))

(118) * If I may change the subject, *then* I visited Sue yesterday. (Takami (1994: 80))

(119) * If she was surprised by my statement, *then* she gave no indication of it.

(Declerck and Reed (2001: 364))

(120) * If you want the truth, *then* it was Bill who broke into your house.

(Declerck and Reed (2001: 364))

(121) * If you need any help, *then* my name is Ann. (Dancygier and Sweetser (2005: 149))

Dancygier and Sweetser (1997) state that in *if-then* conditionals, *then* can mark sequentiality, and that the sequentiality can be further interpreted as causality. This statement can account for the distribution of *then* before the main clause. That is, relevance non-DA conditionals cannot be more interpreted as sequentiality or causality than deductive, abductive, and dependence non-DA ones; *frankly*-type non-DA conditionals cannot be interpreted as sequentiality or causality.

In this way, the dependence, relevance, and *frankly*-type non-DA conditionals form a continuum in terms of sequentiality or causality.

6.3.9. The Behavior of *Because*-Clauses and *Since*-Clauses

In this section, we would like to consider whether or not the three subclasses of GRP conditionals (viz, deductive, abductive, and non-DA conditionals) are ad hoc categories. For this purpose, we need to look into other clauses than *if*-clauses.

In the present framework, roughly speaking, conditional constructions can be classified into four categories: causal (NCP and generic conditionals), deductive, abductive, and non-causal and non-DA categories. These categories can be observed in *because*-clauses and *since*-clauses, too:

(122) a. John came back *because* he loved her. (Sweetser (1990: 77))

b. *Because* Socrates was a man, he was mortal.

c. John loved her, *because* he came back. (Sweetser (1990: 77))

d. "Is he going to run in the next election?" — "No, I don't think so *because* he doesn't like politics."

(123) a. *Since* I was in the same class as Mike, I know him very well.

b. *Since* da Vinci is Italian, he is European.

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

d. I'll be thirty next month, *since* you ask.

Examples (122a) and (123a) both are based on the knowledge of cause-effect chains: the *because*-clause and *since*-clause represent cause or reason, and the main clause represents effect. Examples (122b) and (123b) are based on deductive reasoning. Examples (122c) and (123c) are based on abductive reasoning. Examples (122d) and (123d), on the other hand, are neither causal, deductive, nor abductive. The *because*-clause and *since*-clause in examples (122d)

and (123d) serve as the motivation for uttering the main clause.[48]

Given that *because*-clauses and *since*-clauses behave like this, we can see that it is not ad hoc to classify conditionals into causal, deductive, abductive, and non-causal and non-DA categories. These four categories apply to clause constructions other than conditional constructions.

In this section we have argued that in the constructions *If*/*Because*/*Since* p, q there are four cases: (a) the case where cause-effect relations are indicated, (b) the case where deductive reasoning is performed, (c) the case where abductive reasoning is performed, and (d) the case where cause-effect relations are not indicated, and neither deductive nor abductive reasoning is performed (in this case, some *if*-clauses function as the motivation for uttering the main clause).

(124) If/Because/Since p, q

a. Causal category:

The relationship between p and q refers to cause-effect chains.

b. Deductive category:

Deductive reasoning is performed (p corresponds to a case, and q to a result).

c. Abductive category:

Abductive reasoning is performed (p corresponds to a result, and q to a case).

d. Non-causal and non-DA category:

The relationship between p and q is one based on neither cause-effect chains, deduction nor abduction.

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[48] Couper-Kuhlen (1996) states that a *because*-clause, like (122d) and (i) - (ii) below, may mark an indirect cause or reason. However, we had better say that the *because*-clauses in (i) - (ii), as well as (122d), function as the motivation for uttering the main clause.

(i) She parked the car, *because* I was watching her. (Stenström (1998: 128))
(ii) Jenny isn't here, *because* I don't see her. (Kac (1972: 626))

(124) encompasses five (sub)classes of conditionals presented in this study: NCP-generic, deductive, abductive, and non-DA conditionals are encompassed in (124a), (124b), (124c), and (124d), respectively.[49, 50] My position with regard to the semantics of *if* is: the meaning of *if* per se in the five (sub)classes may be the same, but the type of the connection between p and q differs in the four categories in (124).

Sweetser's (1990) claim is that conjunctions like *if*, *because*, and *since* can be interpreted as applying in one of the three domains: the content, epistemic, and speech-act domains (cf. Schwenter (1999: 13-14), Traugott and Trousdale (2013: 200)). Although her claim does not necessarily exclude the discussion on the type of link between p and q, the present thesis argues that the constructions *If/Because/Since* p, q have the four types of connection described in (124a-d) between p and q. This view more accurately captures phenomena which occur in the constructions *If/Because/Since* p, q, and enables us to do more fine-grained analyses of the constructions.

6.3.10. Rhetorical Conditionals: An Analysis in Terms of Deductive Reasoning

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[49] The four cases in (124a – d) are applicable to *so*- and *for*-clauses too, as in examples (i) and (ii) below:

(i) a. The sun was shining. *So* the temperature rose. (Sanders et al. (2009: 19))
b. He's Italian, *so* he's European.
c. The neighbors' lights are out. *So* they are not at home. (Sanders et al. (2009: 19))
d. Here we are in Paris, so what would you like to do on our first evening here? (Sweetser (1990: 79))

(ii) a. He found it increasingly difficult to read, *for* his eyesight was beginning to fail. (*LDCE*[6])
b. Socrates was mortal, *for* he was a man.
c. It was just twelve o'clock, *for* the church bell was ringing. (Konishi and Minamide (2001: 849))
d. Jenny isn't here, *for* I don't see her. (Ando and Sawada (2001: 187))

[50] According to Dancygier (2009), it will follow that (124a) and (124c) are true for the Polish common causal conjunction *bo*.

Look at examples (125) and (126) below. Examples like these are named "rhetorical conditional clauses" (Quirk et al. (1985)) or "ad absurdam conditionals" (Declerck and Reed (2001)). In this section, we will consider this type of conditional.

(125) If they're Irish, I'm the Pope.

('Since I'm obviously not the Pope, they're certainly not Irish.')

(Quirk et al. (1985: 1094))

(126) If he is the general manager, I am Shakespeare! (Declerck and Reed (2001: 44))

Conditionals like (125) and (126) sound rhetorical. To put this in Ippolito's (2013: 2) terms, uttering (125) and (126) has a "rhetorical effect." More specifically, the rhetorical effect is inherent in the conditional construction itself in (125) and (126). How and why is the rhetorical effect brought about? So far, no previous studies have explained why conditionals like (125) and (126) inherently have rhetorical effects. For example, according to Declerck and Reed (2001: 44), the speaker expects the hearer to draw an inference from the pragmatically obvious nontruth of q to the speaker's rejection of the truth of p. Similarly, Huddleston and Pullum (2002: 749) note that since q is patently false, p must be false too. Thus, Declerck and Reed and Huddleston and Pullum do not explain why rhetorical effects are inherent in conditionals as in (125) and (126) in themselves: what Declerck and Reed and Huddleston and Pullum have explained is relevant conditionals' irony.[51, 52]

In this way, there are no previous analyses which have accounted for why conditionals

[51] Example (ii) below will be more ironical than example (i) is.

(i) If you're a genius, I'm the Pope.
(ii) If you're a genius, I'm God.

[52] According to Schwenter (1999: 51, 55), in rhetorical conditionals the protasis is echoic.

like (125) and (126) have rhetorical effects inherently. However, assuming deductive conditionals as a subclass of conditional constructions, this puzzle can be resolved. Certainly, conditionals such as (125) and (126) are a kind of deductive conditional.

As already mentioned, deduction is a reasoning process which proceeds from a case to a result by applying a law (see sections 6.2.1 – 6.2.2). At this point, we can say that the reason why conditionals like (125) and (126) sound rhetorical is that a law which is applied in deductive reasoning is patently absurd. For instance, the law which is applied to deductive reasoning in (125) is such that the proposition that they're Irish is part of the proposition that I'm the Pope; the law which is applied to (126) is such that the proposition that he is the general manager is part of the proposition that I am Shakespeare. These laws, obviously, are absurd. In short, because examples (125) and (126) are based on the patently absurd law that p entails q, they inherently have rhetorical effects.[53] Here, we should bear in mind that laws at issue are in nature what the speaker can determine arbitrarily, and do not have to be natural laws.

Thus, if conditionals based on deduction are a subclass of conditional constructions, we can give a satisfactory explanation for why conditionals like (125) and (126) inherently have rhetorical effects. This is one of the advantages in assuming deductive conditionals as a subclass of GRP conditionals.[54]

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[53] In each of the examples in (i) – (iii) below, (a) entails (b).

(i) a. The anarchist assassinated the emperor.
b. The emperor died. (Saeed (1997: 90))
(ii) a. John threw the ball to Mary.
b. John threw the ball. (Hornstein et al. (2005: 102))
(iii) a. Will is a dog.
b. Will is an animal.

[54] According to Ippolito (2013), rhetorical conditionals can undergo the subjunctive mood, as illustrated in:

(i) a. If you are Santa Claus, I am the Easter Bunny.
b. If you *were* Santa Claus, I *would be* the Easter Bunny. (Ippolito (2013: 2))

Example (ib) is a subjunctive version of the rhetorical conditional in (ia).

6.3.11. A Characteristic of Non-DA *if*-Clauses: Missing Objects

Look at examples (127) – (129) below. They are non-DA conditionals.

(127) Who was the first German to visit Pantagonia, *if you know*? (Sadock (1974: 39))

(128) There's a new tennis club which opened last week, *if you'd like to join*.

(Takami (1988: 273))

(129) *If you want to know*, I haven't seen him. (= (68))

In these examples, the verbs (*know*, *join*) in the *if*-clause have missing objects despite the fact that they are transitive verbs. The phenomenon in which *if*-clauses include missing objects, as in (127) – (129), is characteristic of non-DA *if*-clauses; this is not observed in *if*-clauses of NCP, generic, deductive, and abductive conditionals. The reason why objects are missing, as in (127) – (129), will be that the speaker realizes that the corresponding objects are part of the propositional content of the main clause.[55]

In this section we have seen that some non-DA *if*-clauses have missing objects despite the use of a transitive verb. A phenomenon like this is characteristic of only non-DA *if*-clauses. In other types of *if*-clauses, the phenomenon we call missing objects is not observed characteristically.

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[55] The phenomenon of a clause having a missing object in spite of the use of a transitive verb can be observed in *because*-clauses too. Look at example (i) below. The *because*-clause in example (i) has a missing direct object.

(i) He is not coming to class, *because* his brother told me.

The *because*-clause of example (i) above corresponds to (124d).

6.3.12. Backshifted Relevance Non-DA *if*-Clauses: Politeness

Look at examples (130) and (131). These are relevance non-DA conditionals. With regard to these examples, we should note that p refers to the present time, despite the use of the past tense. Leech (1987, 2004) refers to this usage of the past tense as the "indirect and polite connotation" or "overtone of indirectness or politeness."[56]

(130) If you *needed* some help, Helen is willing to lend a hand.

(Huddleston and Pullum (2002: 755))

(131) (A parent leaving a babysitter in charge of children might say:)

If you *needed* any help, the emergency number would be 911.[57]

(Dancygier and Sweetser (2005: 114))

In this way, in relevance non-DA *if*-clauses, backshifted forms can be made more polite. The phenomenon in which backshifted *if*-clauses serve more polite expressions can be observed

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[56] According to Leech (1987, 2004), example (ia) below, which refers to the present time, is more polite than example (ib).

(i) a. I *hoped* you would give me a hand with the painting.
b. I hope you will give me a hand with the painting.

((ia, b): Leech (1987: 15, 2004: 15))

Palmer (1988) too states that the past tense can be used to "express a tentative or polite attitude" in questions and requests. For example, (iia) and (iiia) below are "a little more tentative or polite" than (iib) and (iiib).

(ii) a. I *wanted* to ask you about that.
b. I want to ask you about that.
(iii) a. *Did* you want to speak to me?
b. Do you want to speak to me?

((iia, b) and (iiia, b): Palmer (1988: 44))

[57] According to Dancygier and Sweetser (2005: 114), a parent leaving a babysitter in charge of children might say *If you needed any help, the emergency number would be 911* (= (131)), as well as *If you need any help, the emergency number is 911*.

only in relevance non-DA *if*-clauses. A phenomenon like this cannot be observed in the other two types of non-DA *if*-clauses (i.e. dependence and *frankly*-type non-DA *if*-clauses).

6.4. Summary

Section 6.1 has validated GRP conditionals as a class of conditional constructions. In section 6.2, we have subclassified GRP conditionals into deductive, abductive, and non-DA ones by reasoning approach, and further subclassified non-DA *if*-clauses into dependence, relevance, and *frankly*-type non-DA *if*-clauses. Three types of non-DA *if*-clauses are distinguished by the difference of its category status.

Section 6.3 has shown linguistic implications of the deductive/abductive/non-DA classifications. From these we can see that the new three-fold taxonomy (deductive/ abductive/non-DA conditionals) enables more fine-grained linguistic analyses and has more linguistic merits than the epistemic/speech-act distinction.

In some previous studies (Tedeschi (1977b), Dancygier (1998: 89), Dancygier and Sweetser (2005)), it was noted that *if*-clauses can bear a relationship to the speech act performed in the main clause rather than to its propositional content. This issue was made clearer in sections 6.3.1, 6.3.2, and 6.3.4 – 6.3.7.

In section 6.3.9, we have seen that deductive, abductive, and non-DA conditionals are not ad hoc categories. Section 6.3.10 has shown why the so-called rhetorical conditionals sound rhetorical. The reason why they have the rhetorical effect is, in our approach, that a law which is applied in deductive reasoning is patently absurd. Section 6.3.12 has shown that backshifted relevance non-DA *if*-clauses serve as more polite expressions.

This chapter has thus shown that deductive, abductive, and non-DA conditionals can be validated as subclasses of GRP conditionals, and further, that the three-way division into

dependence/relevance/*frankly*-type non-DA *if*-clauses in terms of the difference in the category status of the *if*-clause is felicitous as classification of non-DA *if*-clauses.

Chapter 7

Generic Conditionals

As was shown in chapters 3 and 4, in the present framework, conditional constructions (*If p, (then) q*), based on the combination of the [±general-rule, ±cause-effect] features, is classified into three major classes: NCP, GRP, and generic conditionals. In this chapter we explore generic conditionals.

7.1. Introduction: Generic Meaning

Within the framework of the present study, the feature representation of generic conditionals is [＋general-rule, ＋cause-effect]. In this section, first of all, we consider generic meaning.

Look at examples (1) and (2) below. Dancygier (1998) states that the use of the present tense found in (1) "is characteristic of many types of general statements, and is often called generic," and she refers to conditionals like (1) as "generic conditionals."[58] The present study, borrowing her terminology, calls conditionals like (1) and (2) 'generic conditionals.'

(1) If I drink too much milk, I get a rash. (Dancygier (1998: 63))

[58] Although generic statements are often distinguished from habitual statements, Leech (2004: 6-11), Dancygier (1998), Dancygier and Sweetser (2005), and De Wit (2017) regard generic and habitual contexts as similar enough to treat them together, as in:

(i) Donna sleeps less than 6 hours per night.
(ii) The earth resolves around the sun.

((i) and (ii): De Wit (2017: 58))

According to De Wit (2017), habitual and generic expressions involve "a generalization of a set of individual situations that can, but need not, be taking place at the time of speaking."

(2) If John comes, Mary leaves. (Palmer (1988: 153))

Palmer (1988, 1990) notes that conditional sentences like example (2) refer to habitual actions. In practice, q (i.e. the apodosis) in generic conditionals can co-occur with *usually/always*, as illustrated in examples (3) - (6) below:

(3) If John comes, he *usually* works in the garden. (Palmer (1974: 140))

(4) If John came, he *usually* worked in the garden. (Palmer (1974: 140))

(5) If John comes, Mary *always* leaves. (Palmer (1990: 174))

(6) If John came, Mary *always* left. (Palmer (1990: 174))

In the q's of examples (3) - (6), *usually* and *always*, which suggest habitual actions, are used.

Although generic conditionals typically refer to habitual actions of human beings, as in examples (1) - (6), they can also refer to properties of materials, as is illustrated in (7) - (9) below:

(7) If you heat water to 100 degrees, it boils. (Dancygier and Sweetser (2005: 96))

(8) If metal gets hot, it expands. (Nakano (2003: 102))

(9) Oil floats if you pour it on water. (Takami (1994: 77))

According to Dancygier and Sweetser (2005: 96), example (7) is interpreted as meaning that boiling of water is conditioned by heating to 100 degrees. Examples (8) and (9), similarly, should be interpreted as meaning: metal's expansion is conditioned by metal's getting hot, and oil's floating on water is conditioned by pouring oil on water.

In addition, in some generic conditionals, *if* can be replaced with *whenever* (cf. Fillmore

(1990)):

(10) *If/Whenever* it rained, I went by car. (Palmer (1988: 153))

(11) *If/Whenever* you press its tummy, it squeaks. (Dancygier (1998: 64))

(12) *If/Whenever* you pressed its tummy, it squeaked. (Dancygier (1998: 64))

Clauses introduced by *whenever* denote "a repeated occurrence of an event" (Dancygier (1998: 64)). This suggests that generic conditionals can express a repeated occurrence of an event.

Generic conditionals, furthermore, can have in the main clause *will* indicating "habit" or "typical or characteristic behavior" (Quirk et al. (1985), Leech (1987, 2004), Palmer (1988, 1990)):

(13) If you heat water to 100 degrees, it *will* boil. (Dancygier and Sweetser (2005: 100))

(14) "If you say something's too expensive, they*'ll* bring the price down till it's cheap enough…" [general description of Paris flea-market routine]

(Dancygier and Sweetser (2005: 101))

According to Dancygier and Sweetser (2005), example (13) is acceptable with a generic reading, and example (14) is interpreted as depicting the generic regularity.

This section has shown that generic conditionals refer to general statements, habitual actions, properties of materials, a repeated occurrence of an event, typical or characteristic behavior, and so forth.

This chapter is organized as follows. Section 7.2 shows that in generic conditionals p and q have restrictions in terms of aspect. Section 7.3 considers the causal relationship between p and q in generic conditionals. Section 7.4 sums up.

7.2. Aspectual Restrictions on Generic Conditionals

Since generic conditionals carry the [＋general-rule] feature, p's in generic conditionals are formed by general rules. In generic conditionals as well as NCP and GRP conditionals, q is formed by general rules. As was stated in sections 3.2.1, 5.1, and 6.2.1, the [±general-rule] features apply only to p, which implies that the non-subjunctive q is formed by general rules regardless of conditional constructional features. In this section, we consider aspectual restrictions on verb phrases in p and q in generic conditionals. Look at examples below:

(15) * If he *has finished* his work, he usually/always smokes.

(16) * If she *is cooking*, she *is usually humming* happily.

As is seen in (15), in generic conditionals, the use of the perfect form in p is not acceptable. Moreover, in generic conditionals, as we can see from (16), the use of the progressive form in both p and q is impossible.[59]

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[59] Example (i) below, where the progressive form is used in p, is acceptable.

(i) If it is raining, then she never takes the dog to the park. (Hegarty (1996: 115))

Examples (ii) - (v) below, where the verb phrase in p does not refer to habitual actions or a repeated occurrence of an event, are also acceptable.

(ii) If it *is sunny* (then) Michael usually goes into town. (Iatridou (1994: 196))
(iii) If it *is sunny*, then Maria sometimes takes the dog to the park. (Hegarty (1996: 115))
(iv) If it *is sunny*, we never play soccer. (von Fintel (2012: 471))
(v) If I *lived in a suburb*, I paid taxes there.
(→ "[This] sentence makes sense only in the situation where the speaker moved from one place to another several times, and happened to live in a suburb more than once…")
(Dancygier (1998: 64-65))

However, as we can see from examples (i) - (v), the verb phrase in p and/or q in generic conditionals is constrained in terms of aspect.

In this way, in generic conditionals p and q have restrictions on aspect. Although in both generic and GRP conditionals, p and q are formed by general rules, in generic conditionals they are constrained more strongly in terms of aspect than in GRP ones.

7.3. Cause-Effect Chain Relations between P and Q

The present section considers the causal relation between p and q in generic conditionals. Since a generic conditional carries the [＋cause-effect] feature, in a generic conditional the cause-effect relation between p and q is ensured; in other words, generic conditionals are structured by cause-effect chain relations. This can be confirmed by the syntactic tests below:

(ｉ) In generic conditionals, *then* can be inserted before the main clause:

(17) If Mary bakes a cake, (*then*) she gives a party. (Dancygier and Sweetser (2005: 151))

(18) If he was already gone, (*then*) they had to leave a message. (Sweetser (1990: 123))

(19) If Jane goes, *then* Dick goes. (Nickerson (2015: 85))

Examples (17) - (19) are generic conditionals. As shown in section 5.2, we can insert *then* before the main clause of an NCP conditional:

(20) If Pete runs for President, *then* the republicans will lose. (Iatridou (1994: 199))

By contrast, in some non-DA conditionals, *then* cannot be inserted before the main clause, as in examples (21) and (22) (see section 6.3.8):

(21) * If you're hungry, *then* there's some food in the fridge.

(Declerck and Reed (2001: 364))

(22) * If you want to know, *then* I haven't seen him.

Examples (21) and (22) above are relevance and *frankly*-type non-DA conditionals, respectively.

In this way, conditionals which have causal relations between p and q allow *then* to be inserted before the main clause.

(ii) Generic conditionals can undergo the subjunctive mood:

As will be discussed in chapter 8 in detail, generic conditionals can be transformed into subjunctive mood forms. Look at examples (23) - (25) below:

(23) If John comes, Mary always leaves.

(24) If John *came*, Mary *would* always *leave*.

(25) If John *had come*, Mary *would* always *have left*.

((23) - (25): Palmer (1990: 174-175))

Example (23) above is a non-subjunctive generic conditional. Examples (24) and (25) are both what is called subjunctive versions of example (23); Example (24) is the so-called subjunctive past version; Example (25) is the so-called subjunctive past perfect version.[60]

[60] Look at example (i) below. Dancygier states that sentence (i) could describe Tom's habitual behavior as in *Tom wouldn't be so hungry by noon every day if he had eaten a proper breakfast*.

(i) Tom *wouldn't* be so hungry if he had eaten a proper breakfast. (Dancygier (1998:33))

The p in (i) is the so-called subjunctive past perfect version of a generic conditional, and the q in (i) is the so-called subjunctive past version of generic one.

In addition, it is possible to interpret the p in (i) as the so-called subjunctive past perfect version of an NCP conditional, and the q in (i) as the so-called subjunctive past version of an NCP one (cf.

By contrast, some non-DA conditionals cannot be used in the subjunctive mood, as is illustrated in:

(26) a. If you are hungry, there are biscuits on the sideboard.

b. # If you *were* hungry, there *would be* biscuits on the sideboard.

(27) a. If you need any help, my name is Ann.

b. # If you *needed* any help, my name *would be* Ann.

((27a, b): Dancygier and Sweetser (2005: 114))

Examples (26a) and (27a) are a relevance non-DA conditional and *frankly*-type non-DA conditional, respectively. The details of the theories of the subjunctive mood will be shown in next chapter.

(ⅲ) Generic *if*-clauses can be moved into the focus-position of the cleft construction:

(28) It is *if I drink too much wine* that I get dizzy. (Haegeman and Wekker (1984: 48))

(29) It is *if John is here* that Mary is happy.

(offered by an anonymous *Journal of Linguistics* reviewer.)

As we saw in section 6.1, while NCP *if*-clauses can be moved into the focus-position (see examples (30) and (31) below), GRP *if*-clauses cannot (see examples (32) and (33) below).

(30) It is *if it rains tomorrow* that the match will be cancelled.

Dancygier (1998)).

(Haegeman and Wekker (1984: 48))

(31) It is *if Bill comes home* that Mary will leave. (Bhatt and Pancheva (2006: 667))

(32) * It is *if you like her so much* that you should invite her.

(Bhatt and Pancheva (2006: 673))

(33) * It is *if she is giving the baby a bath* that I'll call her back.

This syntactic test suggests that the category status of a generic *if*-clause is identical to that of an NCP *if*-clause.

(ⅳ) Generic *if*-clauses can be focused with the focus marker *only*:

(34) The flag flies *only if the Queen is home*. (von Fintel (1997: 1))

(35) *Only if the Queen is home* do they sometimes hoist the flag. (von Fintel (1997: 45))

(36) *Only if the Queen is home* do they always/invariably hoist the flag.

(von Fintel (1997: 45))

(37) They *only* always/invariably hoist the flag *if the Queen is home*.

(von Fintel (1997: 45))

In examples (34) - (37), which are generic conditionals, *only* focuses an *if*-clause. In examples (35) and (36) the main clauses are inverted. In the example in (37), the *only* in the main clause focuses the *if*-clause.

As we saw in section 5.2, NCP *if*-clauses, in which the cause-effect relation between p and q is ensured, can be focused with the focus marker *only*:

(38) Tom will leave *only if John comes back by midnight*. (McCawley (1974: 633))

(39) *Only if it rains* may we cancel the game. (von Fintel (1997: 45))

In conditionals where the cause-effect relation between p and q is not ensured (namely, GRP conditionals), by contrast, there are *if*-clauses of the type which cannot be focused with *only*, as illustrated in (40) below:

(40) # There are biscuits on the sideboard, *only if you are hungry*.

Example (40) above is a relevance non-DA conditional (see section 6.2.4.2).

In this way, in conditionals which have causal relations between p and q like NCP and generic conditionals, the *if*-clause can be focused with *only*.

The syntactic tests (ⅰ)-(ⅳ) above reflect that generic conditionals inherently have cause-effect chain relations between p and q. This section, thus, showed that a generic conditional is structured by the cause-effect chain relation between p and q.

7.4. Summary

In the class of generic conditionals, p is formed by general rules. Also, a generic conditional is structured by the cause-effect relation between p and q. Hence, our claim that a generic conditional is constituted by the [＋general-rule, ＋cause-effect] features is validated.

In addition, in generic conditionals p and q undergo restrictions on aspect: while in both generic and GRP conditionals p and q are formed according to general rules, in the class of generic conditionals p and q are more strongly constrained in terms of aspect than in that of GRP ones.

Chapter 8

Subjunctive Conditionals

8.1. Introduction

This chapter explores the subjunctive mood conditionals. Declerck and Reed (2001) refer to tense patterns in p and q like (1a-c) below as "canonical patterns" of conditionals (cf. Declerck (1991a: 217)).

(1) a. If she *comes* I *will tell* her everything.

b. If she *came* I *would tell* her everything.

c. If she *had come* I *would have told* her everything.

((1a-c): Declerck and Reed (2001: 231))

In the p and q of (1a), the simple present tense form and a present modal＋bare infinitive are used, respectively. In the p and q of (1b), the past tense form and a past modal＋bare infinitive are used, respectively. In the p and q of (1c), the past perfect form and a past modal＋perfect infinitive are used, respectively. To repeat again, these tense patterns of conditionals are referred to as "canonical patterns" by Declerck and Reed (2001). Dancygier (1998: 25) claims that sentences like (1a-c) form a uniform class: in her terms, the p and q like those in (1a-c) are "backshifted."[61]

However, outside of the tense patterns in (1a-c), we can find tense patterns like (2a-c)

[61] In Palmer's (1990: 171) words, "[(1b)] can be derived from [(1a)], its real counterpart, by converting present tense forms into past — *comes* to *came* and *will* to *would*. [(1c)], the unreal past, can be derived from [(1b)] by doubling the past tense markers — *came* to *had come* and *would* to *would have*."

and (3a-c):

(2) a. If he *has finished* reading the book by tomorrow, he *will return* it to the library.

b. Tom is dead. If he *had finished* reading the book by tomorrow, he *would have returned* it to the library.

c. If he *had finished* reading the book by last night, he *would have returned* it to the library this morning.

(3) a. If you *are driving* to the city tonight, you *will see* road repair crews.

b. If you *were driving* to the city tonight, you *would avoid* the weekend traffic.

c. If you *had been driving* to the city at that time, you *would have avoided* the weekend traffic.

In (2a), the present perfect form is used in p, and (2b, c) are backshifted versions of (2a). In (3a), the present progressive form is used in p, and (3b, c) are backshifted versions of (3a).

In this way, verbs or predicates in p and q form at least three patterns. The present framework will call the patterns of predicates like (1a-c), (2a-c), and (3a-c) 'canonical patterns A, B, and C,' respectively.

This chapter is organized as follows. Section 8.2 presents templates of canonical patterns of conditionals and explains each canonical pattern in more detail than this section. Section 8.3 defines the subjunctive mood, specifies the classes or types of conditionals which can undergo the subjunctive mood, and considers the motivation of the use of the past form in the subjunctive mood. Section 8.4 shows a theoretical system of subjunctive mood conditionals. Section 8.5 summarizes this chapter.

8.2. Templates of Canonical Patterns

As we saw in the last section, p and q form at least three tense patterns. This is because in the non-subjunctive conditional protasis, the simple present tense form, present perfect form, or present progressive form can be used. The present study terms each tense pattern 'canonical patterns A, B, and C.' The purpose of this section is to introduce templates of 'canonical pattern A, B, and C conditionals,' which are basic frames of subjunctive conditionals.

We will refer to the pattern of verb forms or predicate forms in (4a-c) as 'canonical pattern A.' The templates of canonical pattern A conditionals can be represented as in (5).

(4) a. If she *comes*, I *will be* happy.

b. If she *came*, I *would be* happy.

c. If she *had come*, I *would have been* happy.

((4a-c): Declerck (1991a: 217))

(5) The templates of canonical pattern A conditionals：

Form I: If **p** , **q**

Simple Present Tense **Present Modal + Bare Infinitive**

Form II: If **p** , **q**

Simple Past Tense **Past Modal + Bare Infinitive**

Form III: If **p** , **q**

Past Perfect **Past Modal + Perfect Infinitive**

In Form I in canonical pattern A (henceforth, canonical pattern AI), p refers to the future time (cf. NCP conditionals) or present time (cf. GRP and generic conditionals). As will be discussed in detail in section 8.4, in Form II in canonical pattern A (henceforth, canonical pattern AII), p and q refer to the same time as those in canonical pattern AI do; for example, the p and q of (4b) refer to the same time (i.e. the future time) as those of (4a) do. In Form III in canonical pattern A (henceforth, canonical pattern AIII), p and q refer to the past time; in fact, the p and q of (4c) refer to the past time. Furthermore, canonical pattern AII and AIII conditionals, such as (4b) and (4c), are often called the subjunctive mood.[62]

Next, let us turn to examples (6a-c). We will refer to tense patterns like these predicate forms as 'canonical pattern B.' The templates of canonical pattern B conditionals can be represented as in (7).

(6) a. If he *has come* by tonight, I *will tell* him everything.

b. John is dead. If *he had come* by tonight, I *would have told* him everything.

c. If he *had come* by last night, I *would have told* him everything this morning.

(7) The templates of canonical pattern B conditionals：

Form I: If **p** , **q**

Present Perfect **Present Modal**

+ Bare Infinitive/Perfect Infinitive

[62] Conditionals such as examples (4b) and (4c) are also termed "hypothetical conditions" (Quirk et al. (1985), Declerck (1991a, b)), "unreal conditions" (Leech (1987, 2004), Palmer (1988, 1990)), "counterfactual conditions" (Declerck (1991a, b)), "tentative-P conditionals" (Declerck and Reed (2001)), "counterfactual-P conditionals" (Declerck and Reed (2001)), or "remote conditionals" (Huddleston and Pullum (2002)).

Form II: If ____**p**_____ , _____**q**_____

Past Perfect **Past Modal**

+ Bare Infinitive/Perfect Infinitive

Form III: If ____**p**_____ , _____**q**_____

Past Perfect **Past Modal + Perfect Infinitive**

In canonical pattern BI, BII, and BIII conditionals, p denotes the perfect aspect. In addition, as will be defined later, canonical pattern BII and BIII conditionals are the subjunctive mood; in short, they are subjunctive mood conditionals which denote the perfect aspect.

In canonical pattern BI conditionals, p refers to the future time (cf. NCP conditionals) or present time (cf. GRP conditionals). As will be discussed in detail in section 8.4, in canonical pattern BII, p and q refer to the same time as those in canonical pattern BI do; for example, the p and q of (6b) refer to the same time (i.e. the future time) as those of (6a) do. In canonical pattern BIII, p and q refer to the past time; in practice, the p and q of (6c) refer to the past time.

Last, look at examples (8a-c). We will refer to tense patterns like these predicate forms or verb (phrase) forms as 'canonical pattern C.' The templates of canonical pattern C conditionals can be represented as in (9).

(8) a. If he *is standing* there at about 6 o'clock this evening, he *will see* a very beautiful sunset.

b. If he *were standing* there at about 6 o'clock this evening, he *would see* a very beautiful sunset.

c. If he *had been standing* there at that time, he *would have been* a very beautiful sunset.

(9) The templates of canonical pattern C conditionals：

Form I: If ____**p**____ , ____**q**____

Present Progressive **Present Modal + Bare Infinitive**

Form II: If ____**p**____ , ____**q**____

Past Progressive **Past Modal + Bare Infinitive**

Form III: If ____**p**____ , ____**q**____

Past Perfect Progressive **Past Modal + Perfect Infinitive**

In canonical pattern CI, CII, and CIII conditionals, p denotes the progressive aspect. In addition, as will be argued later, canonical pattern CII and CIII conditionals are in the subjunctive mood: that is, they are subjunctive mood conditionals which denote the progressive aspect.

In canonical pattern CI conditionals, p refers to the future time (cf. NCP conditionals) or present time (cf. GRP conditionals), as in the cases of canonical pattern AI and BI conditionals. Also, the protasis and apodosis of canonical pattern CII conditionals, as in the cases of canonical pattern AII and BII conditionals, refer to the same time as those of canonical pattern CI do; for example, the p and q of (8b) refer to the same time (i.e. the future time) as those of (8a) do (see section 8.4 in detail). In canonical pattern CIII, p and q refer to the past time, as in the cases of canonical patterns AIII and BIII; in fact, the p and q of (8c) refer to the past time.

In q's in canonical patterns AI, BI, and CI, the use of a present modal is a default. This suggests that in the apodosis of canonical pattern AI, BI, and CI conditionals, the present modal is typically used, but expressions other than the present modal can also be used, as in:

(10) Don't do anything if I don't tell you to. (Declerck (1991b: 423))

(11) If Socrates is a man, Socrates is mortal.

In the apodoses of examples (10) and (11), the present modal is not used: the imperative and a non-modal declarative sentence are used. The apodosis of canonical pattern AII, AIII, BII, BIII, CII, and CIII conditionals, on the other hand, must contain a past modal.

In the following sections, I will develop a new theory on subjunctive conditionals in more detail, using 'canonical patterns A, B, and C.' At this point, we should bear in mind the following: templates of canonical patterns A, B, and C are basic frames for transforming into subjunctive mood conditionals, and prototypical forms of Neutral-Condition-P-clause (NCP), deductive, abductive, dependence non-deductive and non-abductive (non-DA), and generic conditionals, which suggests that there are some conditionals which templates of canonical patterns do not apply to in the complete form, e.g. abductive canonical pattern AI and AII conditionals and generic canonical pattern AI conditionals (see section 8.4 in detail).

8.3. The Definition, Range, and Motivation of the Subjunctive Mood

So far in linguistics and philosophy, various studies on the subjunctive mood have been done. The purpose of this section is to present more accurate definitions of the subjunctive mood, and to specify which types of conditionals can undergo the subjunctive mood.

The present framework defines the subjunctive mood as:

(12) Twofold definition of the subjunctive mood

(a) A descriptive definition of the subjunctive mood:

We refer to as the subjunctive mood a conditional which implicates that p is false (in

the present time sphere), p was false (in the past time sphere), or p will be false (in the future time sphere).

(b) A systematic definition of the subjunctive mood:

We refer to Form II and Form III in the canonical-pattern templates as 'subjunctive (mood) conditionals.'

For example, as Quirk et el. (1985) state, (13a, b, c) below convey implications illustrated in (14a, b, c), respectively.

(13) a. If he changed his opinions, he'd be a more likable person.

b. They would be here with us if they had the time.

c. If you had listened to me, you wouldn't have made so many mistakes.

(14) a. He very probably won't change his opinions.

b. They presumably don't have the time.

c. You certainly didn't listen to me.

((13) - (14): Quirk et al. (1985: 1091))

More specifically, the examples in (13a-c) implicate that p will be false ((13a)), p is false ((13b)), and p was false ((13c)).

Next, look at examples (15a, b) below. While example (15a) is not the subjunctive, example (15b) is the subjunctive.[63] Example (15a) does not implicate that p is false (see

[63] Examples (15a, b) are deductive conditionals. The three propositions (i.e. law, case, result) applied to (15a) are below:

(i) The law: Oswald or someone else killed Kennedy.
The case: Oswald didn't kill Kennedy.
The result: Someone other than Oswald killed Kennedy.

Jeffrey (1967)). Example (15b), on the other hand, implicates that p was false. Indeed, Gomes (2008: 235) states that the person asserting (15b) is certain about Oswald having killed Kennedy.[64]

(15) a. If Oswald did not kill Kennedy, then someone else did.

b. If Oswald had not killed Kennedy, then someone else would have.

((15a, b): Dancygier (1998: 16), Gomes (2008: 235), Ippolito (2013: 2))

As we have seen, the present study classifies non-subjunctive conditionals into NCP, deductive, abductive, dependence non-DA, relevance non-DA, *frankly*-type non-DA, and generic conditionals. Also, as we saw in sections 3.4 and 6.2.4, relevance and *frankly*-type non-DA conditionals cannot undergo the subjunctive mood (cf. section 6.3.12). This relates to the following charactteristic: in relevance and *frankly*-type non-DA conditionals, the truth status of q is not influenced by the truth value of p; the truth value of q is true regardless of whether the truth value of p is true or false. Thus, conditionals wherein the truth status of q is influenced by the truth value of p (i.e. NCP, deductive, abductive, dependence non-DA, and generic conditionals) can be used in the subjunctive mood. Indeed, NCP, deductive, abductive, dependence non-DA, and generic conditionals can undergo the subjunctive mood, as will be discussed in sections 8.4.1-3. Therefore, we can claim:

(16) The range of conditionals used in the subjunctive mood:

NCP conditionals, deductive conditionals, abductive conditionals, dependence non-

Indeed, besed on the law in (i), the p in (15a) (= Oswald didn't kill Kennedy) entails the q in (15a) (= Someone other than Oswald killed Kennedy).

[64] According to Ippolito (2013: 2), the intuition on (15a, b) is that, given what we know (i.e., that Kennedy was assassinated), (15a) is true but (15b) is false.

DA conditionals, and generic conditionals

Canonical-pattern templates are formal frames for determining which type of conditionals can undergo the subjunctive mood. It should be borne in mind that in Form II in canonical patterns, p and q refer to the same time as those in Form I do, and that p and q in Form III in canonical patterns refer to the past time.

With regard to canonical-pattern Form II and Form III, it does not seem controversial to say that subjunctive conditionals are iconic. More specifically, I claim that the past (tense/perfect/progressive) form expressing the subjunctive mood is motivated by iconicity. Let us discuss this issue in more detail.[65] As is often pointed out, the past form designates remoteness from the present time, and the past perfect form designates further remoteness from the present (see James (1982), Fleischman (1989)). Temporal remoteness like this iconically reflects the implication inherent in the subjunctive mood: the subjunctive conditional implicates that p is/was/will be false (see (12a)). In short, the linguistic aspect of p's falsity in the subjunctive mood can be regarded as manifestations of iconicity (cf. Haiman (1983b, 1985), Givón (1991), Ungerer and Schmid (1996, 2006), Taylor (2002)). Palmer (1988: 45) too states that the past tense is remote not only in time but also in reality. Also, as pointed out by Iatridou (2000), crosslinguistic investigation reveals that the unreal interpretation actually depends on past-marking forms in the *if*-clause (see Portner (2018: 112)).

8.4. A Theoretical System of Subjunctive Conditionals: NCP, Deductive, Abductive, Dependence Non-DA, and Generic Conditionals in the Subjunctive Mood

[65] Taylor (2002: 45) defines iconicity as: "A sign is iconic if there is a resemblance between the signified and the signifier." Ungerer and Schmid (2006: 301) too, similarly, use the term iconicity for "signs that convey a certain similarity with an object."

The last two sections (sections 8.2. and 8.3) have introduced canonical patterns A, B, and C of conditionals (see (4) - (9)), and have shown the definition and range of the subjunctive mood (see (12) and (16)). In this section, we will explore subjunctive NCP, deductive, abductive, dependence non-DA, and generic conditionals, using canonical patterns.

8.4.1. Subjunctive NCP Conditionals

As was shown in chapters 3 - 5, in NCP conditionals, p is not formed by general rules (due to the [－general-rule] feature), and the cause-effect relation between p and q is ensured (due to the [＋cause-effect] feature).

This section, considering canonical patterns A, B, and C, explores subjunctive NCP conditionals. Examples (17) - (19) below exempliy canonical patterns A, B, and C in NCP conditionals, respectively. Here, verb forms or predicate forms in p and q are marked by single underline, and words or phrases marked by double underline correspond to the time sphere which they refer to. Furthermore, the tense-aspect form and the reference time in the verbs or predicates in examples (17) - (19) are specified in (17') - (19').

(17) Canonical pattern A in NCP conditionals:

a. If it <u>rains</u> <u>tomorrow</u>, the game <u>will be</u> canceled.

b. If it <u>rained</u> <u>tomorrow</u>, the game <u>would be</u> canceled.

c. If it <u>had rained</u> <u>yesterday</u>, the game <u>would have been</u> canceled.

(17') Canonical pattern A in NCP conditionals

(tense-aspect form and reference time descriptions):

Form I: If it **rains** tomorrow, the game **will be** canceled.

Simple Present Tense	**Present Modal + Bare Infinitive**
→ future time reference	→ future time reference
(neutral conditions)	

Form II: If it **rained** tomorrow, the game **would be** canceled.

Simple Past Tense	**Past Modal + Bare Infinitive**
→ future time reference	→ future time reference

Form III: If it **had rained** yesterday, the game **would have been** canceled.

Past Perfect	**Past Modal + Perfect Infinitive**
→ past time reference	→ past time reference

(18) Canonical pattern B in NCP conditionals:

a. If he has finished reading the book by tomorrow, he will return it to the library. (= (2a))

b. Tom is dead. If he had finished reading the book by tomorrow, he would have returned it to the library. (= (2b))

c. If he had finished reading the book by last night, he would have returned it to the library this morning. (= (2c))

(18') Canonical pattern B in NCP conditionals

(tense-aspect form and reference time descriptions):

Form I: If he **has finished** reading the book by tomorrow,

Present Perfect

→ future time reference (neutral conditions)

he **will return** it to the library.

Present Modal + Bare Infinitive

→ future time reference

Form II: If he **had finished** reading the book by tomorrow,

Past Perfect

→ future time reference

he **would have returned** it to the library.

Past Modal + Perfect Infinitive

→ future time reference

Form III: If he **had finished** reading the book by last night,

Past Perfect

→ past time reference

he **would have returned** it to the library this morning.

Past Modal + Perfect Infinitive

→ past time reference

(19) Canonical pattern C in NCP conditionals:

a. If you are driving to the city tonight, you will see road repair crews. (= (3a))

b. If you were driving to the city tonight, you would avoid the weekend traffic. (= (3b))

c. If you had been driving to the city at that time, you would have avoided the weekend traffic. (= (3c))

(19') Canonical pattern C in NCP conditionals

(tense-aspect form and reference time descriptions):

Form I: If you **are driving** to the city tonight, you **will see** road repair crews.

Present Progressive	**Present Modal + Bare Infinitive**
→ future time reference	→ future time reference
(neutral conditions)	

Form II: If you **were driving** to the city tonight, you **would avoid** the weekend traffic

Past Progressive	**Past Modal + Bare Infinitive**
→ future time reference	→ future time reference

Form III: If you **had been driving** to the city at that time,

Past Perfect Progressive

→ past time reference

you **would have avoided** the weekend traffic.

Past Modal + Perfect Infinitive

→ past time reference

In canonical pattern A of NCP conditionals, p indicates single actions, as illustrated in (4a-c) and (17a-c). As was explained in section 5.1, p's in canonical-pattern Form I of NCP conditionals denote neutral conditions, as in (4a) and (17a). In canonical pattern AI of NCP conditionals, p, which marks the simple present tense, refers to the future time. In the apodosis (q) of canonical pattern AI, present modals accompanied by a bare infinitive are typically used.

Canonical patterns AII and AIII are subjunctive conditionals, as illustrated in (4b, c) and (17b, c) (see (12b)). In canonical pattern AII of NCP conditionals, p, which marks the simple

past tense, refers to the future time, as in (4b) and (17b). Canonical pattern AII of NCP conditionals implicates that p will be false in the future time sphere, as in (4b) and (17b). In the apodosis (q) of canonical pattern AII, the use of past modals accompanied by a bare infinitive is obligatory.

In canonical pattern AIII of NCP conditionals, p, which marks the past perfect form, refers to the past time, as illustrated in (4c) and (17c). Canonical pattern AIII of NCP conditionals, as in (4c) and (17c), implicates that p was false in the past time sphere. In the apodosis (q) of canonical pattern AIII, past modals accompanied by a perfect infinitive must be used.

In canonical pattern B of NCP conditionals, p denotes the perfect aspect, as illustrated in (6a-c) and (18a-c). To repeat, p's in canonical-pattern Form I of NCP conditionals denote neutral conditions. In canonical pattern BI of NCP conditionals, p, which marks the present perfect form, refers to the future time, as in (6a) and (18a). In the apodosis (q) of canonical pattern BI, present modals accompanied by a bare infinitive are typically used.

Canonical patterns BII and BIII, as in (6b, c) and (18b, c), are subjunctive conditionals, as was defined in (12b). In canonical pattern BII of NCP conditionals, p, which marks the past perfect form, refers to the future time, as in (6b) and (18b). Canonical pattern BII of NCP conditionals, as in (6b) and (18b), implicates that p will be false in the future time sphere. In the apodosis (q) of canonical pattern BII, past modals accompanied by a perfect infinitive are used.

In canonical pattern BIII of NCP conditionals, p, which marks the past perfect form, refers to the past time, as exemplified in (6c) and (18c). Canonical pattern BIII of NCP conditionals, as in (6c) and (18c), implicates that p was false in the past time sphere. In the apodosis (q) of canonical pattern BIII, past modals accompanied by a perfect infinitive are used.

In canonical pattern C of NCP conditionals, p denotes the progressive aspect, as is

illustrated in (8a-c) and (19a-c). In canonical pattern CI, as well as in AI and BI, p denotes neutral conditions. In canonical pattern CI of NCP conditionals, p, which marks the present progressive form, refers to the future time, as in (8a) and (19a). In the apodosis (q) of canonical pattern CI, present modals accompanied by a bare infinitive are typically used.

As was defined in (12b), canonical patterns CII and CIII are subjunctive conditionals. In canonical pattern CII of NCP conditionals, p, which marks the past progressive form, refers to the future time, as is illustrated in (8b) and (19b). Canonical pattern CII of NCP conditionals, such as (8b) and (19b), implicates that p will be false in the future time sphere, as in the cases of canonical patterns AII and BII of NCP conditionals. In the apodosis (q) of canonical pattern CII, past modals accompanied by a bare infinitive are used.

In canonical pattern CIII of NCP conditionals, p, which marks the past perfect progressive form, refers to the past time, as is illustrated in (8c) and (19c). Canonical pattern CIII of NCP conditionals, as well as canonical patterns AIII and BIII of NCP ones, implicates that p was false in the past time sphere. In the apodosis (q) of canonical pattern CIII, past modals accompanied by a perfect infinitive are used.

At this point, we should note the following: while in the p's of canonical pattern AIII, BII, and BIII conditionals, the past perfect form is used, each p refers to a different time sphere and denotes different aspect. In fact, the protasis (p) of canonical pattern AIII refers to the past time, that of canonical pattern BII refers to the future time and denotes the perfect aspect, and that of canonical pattern BIII refers to the past time and denotes the perfect aspect.[66]

[66] Furthermore, we can in theory predict the fourth canonical pattern of NCP conditionals; in this type of canonical-pattern Form I, p is a present perfect progressive form version. We can call this type of canonical pattern 'canonical pattern D.' In canonical pattern DI, p marks a present perfect progressive form, refers to the future time, and denotes neutral conditions. In canonical pattern DII, p marks the past perfect progressive form, and refers to the future time. In canonical pattern DII and DIII conditionals are used for the subjunctive mood. Although they are possible in theory, canonical pattern DI conditionals do not seem to be used in practice. What we can call canonical pattern DII and DIII conditionals, on the other hand, can be observed in practice:

A canonical pattern of conditionals with the auxiliary *can* in *if*-clauses is below:

(20) a. If John *can come*, the party *will be* a success.

b. If John *could come*, the party *would be* a success.

c. If John *could have come*, the party *would have been* a success.

(Smith and Smith (1988: 349) with a slight modification)

The p of (20a) denotes a neutral condition. Within the p of (20a), the auxiliary *can* is used. As Quirk et al. (1985) say, the p's in (20b) and (20c) indicate the hypothetical sense (i.e. the subjunctive mood).[67] In the p of (20b), the past form *could* is used. In the p of (20c), *could* accompanied by a perfect infinitive is used. In this way, canonical patterns of conditionals with *can* in the protasis are slightly anomalous.

8.4.2. Subjunctive GRP Conditionals

As was shown in chapters 3, 4, and 6, in GRP conditionals except the subjunctive mood,

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(i) If I *hadn't been seeing* my doctor tomorrow, we *could have had* lunch together.
(Dancygier (1998: 33))

(ii) I was wearing a seat belt. If I *hadn't been wearing* one I*'d have been* seriously injured.
(Thomson and Martinet (1986: 200))

Example (i) illustrates a canonical pattern DII conditional: p marks the past perfect progressive form, and refers to the future. Example (ii) illustrates a canonical pattern DIII conditional: p marks the past perfect progressive form, and refers to the past.

[67] Quirk et al. (1985: 232) give examples in (ia-c) below:

(i) a. If United can win this game, they may become league champions.
b. If United could win this game, they might become league champions.
c. If United could have won that game, they might have become league champions.

According to Quirk et al. (1985), sentence (ib) conveys the speaker's expectation that United will not win the game, and therefore will not become league champions, and the usual implication of sentence (ic) is that United did not win the game.

p is formed by general rules (due to the [＋general-rule] feature), and the cause-effect relation between p and q is not ensured (due to the [－cause-effect] feature). In addition, as was already shown, relevance and *frankly*-type non-DA conditionals cannot undergo the subjunctive mood. In this section, it is shown that deductive, abductive, and dependence non-DA conditionals can undergo the subjunctive mood, and this section explores the subjunctive deductive, abductive, and dependence non-DA conditionals.

8.4.2.1. Subjunctive Deductive Conditionals

Deductive conditionals can undergo the subjunctive mood, that is, deductive conditionals can be transformed into subjunctive conditionals. Examples (21), (22), and (23) below form canonical patterns A, B, and C in deductive conditionals. The tense-aspect form and the reference time in the verbs or predicates in (21), (22), and (23) are specified in (21'), (22'), and (23'). As is defined in (12b), canonical-pattern Form II and Form III in (21'), (22'), and (23') are subjunctive deductive conditionals. Here too, verbs or predicates in p and q are marked by single underline, and words or phrases marked by double underline correspond to the time sphere which they refer to.

(21) Canonical pattern A in deductive conditionals:

a. If that bird <u>is</u> a raven, it <u>will be</u> black. (Rescher (2007: 120))

b. If that bird <u>were</u> a raven, it <u>would be</u> black. (Rescher (2007: 120))

c. If that bird <u>had been</u> a raven, it <u>would have been</u> black.

(21') Canonical pattern A in deductive conditionals

(tense-aspect form and reference time descriptions):

Form I: If that bird **is** a raven, it **will be** black.

Simple Present Tense **Present Modal + Bare Infinitive**

→ present time reference → present time reference

Form II: If that bird **were** a raven, it **would be** black.

Simple Past Tense **Past Modal + Bare Infinitive**

→ present time reference → present time reference

Form III: If that bird **had been** a raven, it **would have been** black.

Past Perfect **Past Modal + Perfect Infinitive**

→ past time reference → past time reference

(22) Canonical pattern B in deductive conditionals:

a. If he has lived in London since last May, he will be in England.

b. John has been dead for a year. If he had lived in London since last May, he would have been in England.

c. If he had lived in London for five years when he was a child, he would have been in England.

(22') Canonical pattern B in deductive conditionals

(tense-aspect form and reference time descriptions):

Form I: If he **has lived** in London since last May, he **will be** in England.

Present Perfect **Present Modal + Bare Infinitive**

→ present time reference → present time reference

Form II: If he **had lived** in London since last May, he **would have been** in England.

Past Perfect **Past Modal + Perfect Infinitive**

→ present time reference → present time reference

Form III: If he **had lived** in London for five years when he was a child,

Past Perfect

→ past time reference

he **would have been** in England.

Past Modal + Perfect Infinitive

→ past time reference

(23) Canonical pattern C in deductive conditionals:

a. If he is living in London now, he is in England.

b. If he was living in London now, he would be in England.

c. If he had been living in London last year, he would have been in England.

(23') Canonical pattern C in deductive conditionals

(tense-aspect form and reference time descriptions):

Form I: If he **is living** in London now, he is in England.

Present Progressive Simple Present Tense

→ present time reference → present time reference

Form II: If he **was living** in London now, he **would be** in England.

Past Progressive **Past Modal + Bare Infinitive**

→ present time reference → present time reference

Form III: If he **had been living** in London last year, he **would have been** in England.

Past Perfect Progressive **Past Modal + Perfect Infinitive**

→ past time reference → past time reference

In canonical pattern A of deductive conditionals, p indicates single actions, as illustrated in (21a-c). In canonical pattern AI of deductive conditionals, p, which marks the simple present tense, refers to the present time. In canonical pattern AI of deductive conditionals, q is formed by general rules regardless of the [±general-rule] features, and does not need to contain present modals. As mentioned in section 8.2, the use of present modals in the apodosis (q) of canonical pattern AI is a default, and therefore, is not obligatory, as in (24) below:

(24) If Socrates is a man, Socrates is mortal. (= (11))

The q in example (24) does not contain a present modal.

To repeat, canonical patterns AII and AIII, such as examples (21b, c), are subjunctive conditionals (see (12b)). In canonical pattern AII of deductive conditionals, p marks the simple past tense, and q marks a past modal accompanied by a bare infinitive, as in (21b). In canonical pattern AII of deductive conditionals, p and q both refer to the future time. As is shown in (12a), canonical pattern AII of deductive conditionals implicates that p is false in the present time sphere.

In canonical pattern AIII of deductive conditionals, p, which marks the past perfect form, refers to the past time, and q, which marks a past modal accompanied by a perfect infinitive, refers to the past time, as in (21c). As is shown in (12a), canonical pattern AIII of deductive conditionals implicates that p was false in the past time sphere.

In canonical pattern B of deductive conditionals, p denotes the perfect aspect, as

exemplified in (22a-c). In canonical pattern BI of deductive conditionals, p marks the present perfect form, and q marks a present modal accompanied by a bare infinitive or perfect infinitive, as in (22a). The p and q of canonical pattern BI in deductive conditionals, formed according to general rules, both refer to the present time.

Canonical patterns BII and BIII, as in (22b, c), are subjunctive conditionals (see (12b)). In canonical pattern BII of deductive conditionals, p marks the past perfect form, and q marks a past modal accompanied by a bare infinitive or perfect infinitive, as in (22b). In canonical pattern BII of deductive conditionals, p and q both refer to the present time. As is shown in (12a), canonical pattern BII of deductive conditionals implicates that p is false in the present time sphere.

In canonical pattern BIII of deductive conditionals, p marks the past perfect form, and q marks a past modal accompanied by a perfect infinitive, as illustrated in (22c). In canonical pattern BIII in deductive conditionals, p and q both refer to the past time. Canonical pattern BIII of deductive conditionals, as is shown in (12a), implicates that p was false in the past time sphere.

In canonical pattern C conditionals, p denotes the progressive aspect. In canonical pattern CI of deductive conditionals, p marks the present progressive form, referring to the present time, as in (23a). In the q of canonical pattern CI, the simple present tense can be typically used, as in (23a).

Canonical patterns CII and CIII are subjunctive conditionals (see (12b)). In canonical pattern CII of deductive conditionals, p marks the past progressive form, and q marks a past modal accompanied by a bare infinitive, as is illustrated in (23b). In canonical pattern CII of deductive conditionals, p and q both refer to the past time. Canonical pattern CII of deductive conditionals implicates that p is false in the present time sphere, as is shown in (12a).

In canonical pattern CIII of deductive conditionals, p marks the past perfect progressive

form, and q marks a past modal accompanied by a perfect infinitive, as is illustrated in (23c). In canonical pattern III conditionals, p and q refers to the past time. Canonical pattern CIII of deductive conditionals implicates that p was false in the past time sphere (see (12a)).

As was argued in section 6.3.10, rhetorical conditionals, such as examples (25a) and (26a) below, are included in the category of deductive conditionals. Rhetorical conditionals too, as in the case of orthodox deductive conditionals, can undergo the subjunctive mood. Look at examples (25b) and (26b) below.

(25) a. If you are Santa Claus, I am the Easter Bunny.

b. If you were Santa Claus, I would be the Easter Bunny. (Ippolito (2013: 2))

(26) a. If our house was spacious, the place next door was immense.

b. If our house had been spacious, the place next door would have been immense.

(Huddleston and Pullum (2002: 750))

Examples (25b) and (26b) are subjunctive versions of (25a) and (26a) — subjunctive rhetorical conditionals.

8.4.2.2. Subjunctive Abductive Conditionals

Abductive conditionals can undergo the subjunctive mood, that is, abductive conditionals can be transformed into subjunctive conditionals. Look at examples (27a-c) below. Examples (27a-c) form canonical pattern A in abductive conditionals. The tense-aspect form and the reference time in the verbs or predicates in (27a-c) are specified in (27'a-c). Here, the Forms II and III, i.e. (27b, c) are subjunctive abductive conditionals (see (12b)).

(27) Canonical pattern A in abductive conditionals:

a. If she is in the lobby now, the plane arrived early.

(Dacygier (1998: 34, 68) with a slight modification)

b. If she was/were home by now, the train must have arrived in time.

(offered by an anonymous *Studies in Language* reviewer)

c. If she really had been in the lobby yesterday afternoon at three, the plane would/must have landed early.

(27') Canonical pattern A in abductive conditionals

(tense-aspect form and reference time descriptions):

Form I: If she **is** in the lobby now, the plane arrived early.

Simple Present Tense Simple Past Tense

→ present time reference → past time reference

Form II: If she **was/were** home by now, the train must have arrived in time.

Simple Past Tense Past Modal + Perfect Infinitive

→ present time reference → past time reference

Form III: If she really **had been** in the lobby yesterday afternoon at three,

Past Perfect

→ past time reference

the plane **would/must have landed** early.

Past Modal + Perfect Infinitive

→ past time reference

In canonical pattern AI of abductive conditionals, p marks the simple present tense, referring to the present time, as in (27a). In canonical pattern AI of abductive conditionals, q is formed by general rules regardless of conditional constructional features. The q of (27a), in which the simple past tense is used, does not accord with that of the canonical-pattern-AI template (i.e. Present Modal＋Bare Infinitive) (see (5)). However, as mentioned in section 8.2, the use of present modals in the apodosis (q) of canonical pattern AI is not obligatory. In the q of canonical pattern AI, the use of present modals is a default, which suggests that other forms can be used in q.

In canonical pattern AII of abductive conditionals, p marks the simple past tense, and refers to the present time, as in (27b). As is shown in (12a), canonical pattern AII of abductive conditionals implicates that p is false in the present time sphere. In q's of canonical pattern AII of abductive conditionals, on the other hand, past modals accompanied by a perfect infinitive are used. This does not correspond with the canonical-pattern-AII template (i.e. Past Modal＋Bare Infinitive) (see (5)). However, q's of abductive conditionals typically refer to the past time. So in the q of canonical pattern AII of abductive conditionals, a past modal accompanied by a perfect infinitive is used, as in (27b). This is from the q of canonical-pattern-AIII template.

In canonical pattern AIII of abductive conditionals, p marks the past perfect form, and q marks a past modal accompanied by a perfect infinitive, as in (27c). In canonical-pattern Form III, p and q both refer to the past time. Canonical pattern AIII of abductive conditionals implicates that p was false in the past time sphere (see (12a)).[68]

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[68] I will give further canonical pattern A examples in abductive conditionals:

(i) a. If Socrates <u>is</u> dead, he <u>was</u> a man.
b. If he <u>were</u> dead, he <u>would have been</u> a man.
c. If Adlai Stevenson <u>had been</u> the undisputed President of the USA <u>in February 1953</u>, he <u>would have been</u> elected <u>in November 1952</u>. (Bennet (2003: 275))

Canonical patterns B and C of abductive conditionals are theoretically possible, but they are unlikely to be used in practice.[69]

As was argued in section 6.2.3, some abductive conditionals can show the phenomenon in which p has turned into a neutral condition. Look at examples (28) and (29). Recall that examples like these are variants of an abductive conditional: these are examples in which a neutral condition is used in p's of abductive conditionals.

(28) If the leaves wither in a day or two, you added too much fertilizer.

(Dancygier (1993: 409))

(29) If this solution turns green when I add the regent in a moment or two, the deceased died of hyoscine poisoning. (Dudman (1984a: 149))

Abductive conditionals' variants in which p has turned into a neutral condition, such as (28) and (29), can also undergo the subjunctive mood, as in (30):

(30) If tomorrow's experiment <u>didn't work</u>, the Russian's original prediction <u>would have been</u> wholly accurate. (Huddleston and Pullum (2002: 751))

In example (30), p, which marks the simple past tense, refers to the future time, and q, which marks a past modal accompanied by a perfect infinitive, refers to the past.

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[69] Example (i) below can be interpreted as a canonical pattern CI in abductive conditional (see footnote37). As illuatrated in (ii) and (iii) below, canonical pattern CII and CIII in abductive conditionals are basically not acceptable.

(i) If Ann is wearing a wedding ring, she will already be married.
(ii) # / ? If Ann were wearing a wedding ring, she would be married to Bob.
(iii) # If Ann had been wearing a wedding ring then, she would have finally gotten married to Bob.

8.4.2.3. Subjunctive Dependence Non-DA Conditionals

As was shown in section 6.2.4.1, dependence non-DA conditionals can undergo the subjunctive mood, that is, dependence non-DA conditionals can be transformed into subjunctive conditionals. Look at examples (31) - (33) below. Examples (31) - (33) are illustrations of canonical patterns A, B, and C in dependence non-DA conditionals, respectively. The tense-aspect form and the reference time in the verbs or predicates in (31) - (33) are specified in (31') - (33'), respectively. In canonical patterns AI, BI, and CI of dependence non-DA conditionals, p, attributed to the [＋general-rule] feature, is formed by general rules, as illustrated in (31a), (32a), and (33a) (see section 6.2). As is defined in (12b), the Forms II and III, i.e. (31b, c), (32b, c) and (33b, c) are subjunctive dependence non-DA conditionals.

(31) Canonical pattern A in dependence non-DA conditionals:

a. If you really <u>love</u> me, you <u>will</u> not <u>talk</u> that way.

b. If you really <u>loved</u> me (<u>now</u>), you <u>would</u> not <u>talk</u> that way.

c. If you <u>had</u> really <u>loved</u> me <u>at that time</u>, you <u>would</u> not <u>have talked</u> that way.

((31a, b): Funk (1985: 380))

(31') Canonical pattern A in dependence non-DA conditionals

(tense-aspect form and reference time descriptions):

Form I:	If you really **<u>love</u>** me,	you **<u>will</u>** not **<u>talk</u>** that way.
	Simple Present Tense	**Present Modal + Bare Infinitive**
	→ present time reference	→ present time reference

Form II: If you really **loved** me (now), you **would** not **talk** that way.

Simple Past Tense **Past Modal + Bare Infinitive**

→ present time reference → present time reference

Form III: If you **had** really **loved** me at that time, you **would** not **have talked** that way.

Past Perfect **Past Modal + Perfect Infinitive**

→ past time reference → past time reference

(32) Canonical pattern B in dependence non-DA conditionals:

a. If he has finished reading the book by now, he will have returned it to you.

b. If he had finished reading the book by now, he would have returned it to you.

c. If he had finished reading the book by last night, he would have returned it to you this morning.

(32') Canonical pattern B in dependence non-DA conditionals

(tense-aspect form and reference time descriptions):

Form I: If he **has finished** reading the book by now, he **will have returned** it to you.

Present Perfect **Present Modal + Perfect Infinitive**

→ present time reference → present time reference

Form II: If he **had finished** reading the book by now, he **would have returned** it to you.

Past Perfect **Past Modal + Perfect Infinitive**

→ present time reference → present time reference

Form III: If he **had finished** reading the book by last night,

Past Perfect

→ past time reference

he **would have returned** it to you this morning.

Past Modal + Perfect Infinitive

→ past time reference

(33) Canonical pattern C in dependence non-DA conditionals:

a. If it's raining now, they probably won't be in the park.

b. If it were raining now, then the park benches would be wet for several hours, so they wouldn't want to go.

c. If it had been raining at that time, they wouldn't have gone to the park.

(33') Canonical pattern C in dependence non-DA conditionals

(tense-aspect form and reference time descriptions):

Form I: If it**'s raining** now, they probably **won't be** in the park.

Present Progressive **Present Modal + Bare Infinitive**

→ present time reference → present time reference

Form II: If it **were raining** now, then the park benches **would be** wet for several hours.

Past Progressive **Past Modal + Bare Infinitive**

→ present time reference → present time reference

Form III: If it **had been raining** at that time, they **wouldn't have gone** to the park.

Past Perfect Progressive	**Past Modal + Perfect Infinitive**
→ past time reference	→ past time reference

In canonical pattern A of dependence non-DA conditionals, p indicates single actions, as in (31a-c). In canonical pattern AI of dependence non-DA conditionals, the predicate of p marks the simple present tense, referring to the present time, as in (31a). In the q of canonical pattern AI, present modals accompanied by a bare infinitive can be typically used, as in (31a).

Canonical patterns AII and AIII are subjunctive conditionals, as illustrated in (31b, c) (see (12b)). In canonical pattern AII of dependence non-DA conditionals, the predicate of p marks the simple past tense, and that of q marks a past modal accompanied by a bare infinitive, as in (31b). As we saw in (12a), canonical pattern AII of dependence non-DA conditionals implicates that p is false in the preset time sphere.

In canonical pattern AIII of dependence non-DA conditionals, the predicate of p, which refers to the past time, marks the past perfect form, and that of q, which refers to the past time, marks a past modal accompanied by a perfect infinitive, as illustrated in (31c). Canonical pattern AIII of dependence non-DA conditionals, as shown in (12a), implicates that p was false in the past time sphere.

In canonical pattern B of dependence non-DA conditionals, p denotes the perfect aspect, as illustrated in (32a-c). To repeat, in canonical-pattern Form I of GRP conditionals, p is formed by general rules, attributed to the [＋general-rule] feature. In canonical pattern BI of dependence non-DA conditionals, the predicate of p marks the present perfect form, referring to the present time, as in (32a). In q's of canonical pattern BI, present modals accompanied by a bare infinitive or perfect infinitive are typically used.

As mentioned already, canonical patterns BII and BIII, such as (32b, c), are subjunctive

conditionals. In canonical pattern BII of dependence non-DA conditionals, the predicate of p marks the past perfect form, and that of q marks a past modal accompanied by a bare infinitive or perfect infinitive, as in (32b). In canonical pattern BII of dependence non-DA conditionals, p and q both refer to the present time. As shown in (12a), canonical pattern BII of dependence non-DA conditionals implicates that p is false in the present time sphere.

In canonical pattern BIII of dependence non-DA conditionals, the predicate of p, which refers to the past time, marks the past perfect form, and that of q, which refers to the past time, marks a past modal accompanied by a perfect infinitive, as illustrated in (32c). Canonical pattern BIII of dependence non-DA conditionals, as is defined in (12a), implicates that p was false in the past time sphere.

In canonical pattern C of dependence non-DA conditionals, p denotes the progressive aspect, as is exemplified in (33a-c). In canonical pattern CI of dependence non-DA conditionals, the predicate of p, which refers to the present time, marks the present progressive form, and that of q, which refers to the present time, marks a present modal accompanied by a bare infinitve, as in (33a).

As mentioned already, canonical patterns CII and CIII are subjunctive conditionals (see (12b)). In canonical pattern CII of dependence non-DA conditionals, the predicate of p marks the past progressive form, and that of q marks a past modal accompanied by a bare infinitive, as is illustrated in (33b). In canonical pattern CII of dependence non-DA conditionals, p and q both refers to the past time. Canonical pattern CII of dependence non-DA conditionals, as we saw in (12a), implicates that p is false in the present time sphere.

In canonical pattern CIII of dependence non-DA conditionals, the predicate of p marks the past perfect progressive form, and that of q marks a past modal accompanied by a perfect infinitive, as is illustrated in (33c). In canonical pattern Form III of conditionals, p and q refer to the past time. As we saw in (12a), canonical pattern CIII of dependence non-DA

conditionals implicates that p was false in the past time sphere.

Furthermore, with regard to dependence non-DA conditionals, we should note that they can be divided according to the presence or absence of a cause-effect chain between p and q. As we argued in sections 3.1, 3.2, 4.2, and 6.2, in GRP conditionals the cause-effect relation between p and q is not ensured, due to the [－cause-effect] feature. In short, in dependence non-DA conditionals the cause-effect relation is not ensured. However, this does not mean that dependence non-DA conditionals have no cause-effect relation. That is, there are some dependence non-DA conditionals which have a cause-effect chain between p and q. The cause-effect chain relation in this case does not involve conditional constructional features. First, we will consider dependence non-DA conditionals of the presence of a cause-effect chain between p and q. Look at examples (34a－f) below:

(34) a. If it's raining, we won't go to the park.

(→ 'Since it's raining, we won't go to the park.') (Comrie (1986: 89))

b. If they caught the noon train, they will arrive at two. (Edgington (2003: 395))

c. If Josie (your newborn daughter) is smart, she'll get rich.

(Dancygier and Sweetser (2005: 149))

d. If you really love me, you will not talk that way. (= (31a))

e. John won't finish on time, if there's (already) such a lot of pressure on him now.

(Haegeman (2003: 322))

f. If you are very busy now, I can come back later.

As was argued in section 4.2, in examples (34a－f), there is a cause-effect chain between p and q (in fact, Comrie (1986) paraphrases the *if*-clause of (34a) with a *since*-clause, and Edgington (2003) states that example (34b) is causal), but as was discussed in sections 6.2.4.1 and 6.3.5,

in dependence non-DA conditionals the cause-effect relation is not ensured.

Next, we will turn to dependence non-DA conditionals in which there are no cause-effect chains between p and q. Look at examples (35a, b) below:

(35) a. If your mother has been here now, she will have been in tears.

b. If he has finished reading the book by now, he will have returned it to the library.

Examples (35a, b), indeed, have no cause-effect chains between p and q. At this point, if dependence non-DA conditionals can be divided by the criterion of the presence or absence of a cause-effect chain between p and q, dependence non-DA conditionals where the subjunctive mood (i.e. canonical-pattern Form II and Form III) is possible, but non-subjunctive forms (i.e. canonical-pattern Form I) are semantically or pragmatically anomalous, can be classified into the case where there is no cause-effect chains between p and q. Consider examples (36) - (37) below:

(36) a. If I *were* you I *would accept* the offer.

b. # If I am you I will accept the offer. (Huddleston and Pullum (2002: 742))

(37) a. If I *were* a dog, I *would do* something like this.

b. # If I am a dog, I will do something like this. (Wierzbicka (1997: 32))

Examples (36a) and (37a) are subjunctive conditionals: canonical pattern AII dependence non-DA conditionals. Examples (36b) and (37b), on the other hand, are canonical pattern AI dependence non-DA conditionals.[70] In this way, dependence non-DA conditionals like

[70] While in the so-called past-perfect subjunctive conditionals (i.e. canonical pattern AIII, BIII, and CIII conditionals in this framework) p refers to the past time, in the so-called past subjunctive conditionals (i.e. canonical pattern AII, BII, and CII conditionals in this framework) p refers to the future

examples (36) and (37), in which non-subjunctive forms are semantically or pragmatically anomalous, can clearly fall into the case where there are no cause-effect chains between p and q.

8.4.3. Subjunctive Generic Conditionals

As we saw in the last chapter, in generic conditionals, p is formed by general rules

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time or present time. Look at examples (ia - c) and (iia - c):

(i) a. If it rained tomorrow, the game would be canceled. (= (17b))
b. Tom is dead. If he had finished reading the book by tomorrow, he would have returned it to the library. (= (18b))
c. If he was wearing his safety belt tomorrow, he would survive an accident.
(ii) a. John wouldn't finish on time, if there were such a lot of pressure on him now.
b. If, at the present moment, he had finished it, I would have told him everything.
c. If it were raining now, then the park benches would be wet for several hours, so they wouldn't want to go. (= (33b))

The examples (a - c) in (i) and (ii) above are canonical pattern AII, BII, and CII conditionals, namely subjunctive conditionals. More specifically, in examples (ia - c), p refers to the future time, and in examples (iia - c) p refers to the present time.

In this way, in canonical pattern AII, BII, and CII conditionals (the so-called past subjunctive conditionals), p refers to the future time (e.g. (ia - c)) or present time (e.g. (iia - c)). At this point, let us remove backshift from examples (ia - c) and (iia - c). Transformed into canonical patterns AI, BI, and CI, examples (ia - c) and (iia - c) can turn into examples (iiia - c) and (iva - c), respectively:

(iii) a. If it rains tomorrow, the game will be canceled. (= (17a))
(NCP canonical pattern AI conditional)
b. If he has finished reading the book by tomorrow, he will return it to the library.
(= (18a)) (NCP canonical pattern BI conditional)
c. If he is wearing his safety belt tomorrow, he is more likely to survive an accident.
(NCP canonical pattern CI conditional)
(iv) a. John won't finish on time, if there's such a lot of pressure on him now. (= (34d))
(dependence non-DA canonical pattern AI conditional)
b. If, at the present moment, he has finished it, I will have told him everything.
(dependence non-DA canonical pattern BI conditional)
c. If it's raining now, they probably won't be in the park. (= (33a))
(dependence non-DA canonical pattern CI conditional)

Examples (iiia - c) are NCP conditionals, and examples (iva - c) are dependence non-DA conditionals.

We thus have seen that the reason why p's in canonical-pattern Form II can refer to the two times (i.e. the future and present times) is that the corresponding canonical-pattern Form I conditionals are ones of two different types: NCP and dependence non-DA conditionals.

(attributed to the [＋general-rule] feature), and the cause-effect relation between p and q is ensured (attributed to the [＋cause-effect] feature).

Generic conditionals can undergo the subjunctive mood. That is, generic conditionals can be transformed into subjunctive conditionals. Look at examples (38a - c) below. Examples (38a - c) illustrate canonical pattern A in generic conditionals. The tense-aspect form and the reference time in the verbs or predicates in (38a - c) are shown in (38'a - c). Canonical-pattern Form II and Form III in (38'), i.e. examples (38b, c) are subjunctive generic conditionals.

(38) Canonical pattern A in generic conditionals:

a. If John <u>comes</u>, Mary always <u>leaves</u>.

b. If John <u>came</u>, Mary <u>would</u> always <u>leave</u>.

c. If John <u>had come</u>, Mary <u>would</u> always <u>have left</u>.

((38a-c): Palmer (1990: 174-175))

(38') Canonical pattern A in generic conditionals

(tense-aspect form and reference time descriptions):

Form I:	If John **<u>comes</u>**,	Mary always <u>leaves</u>.
	Simple Present Tense	Simple Present Tense
	→ present time reference	→ present time reference
Form II:	If John **<u>came</u>**,	Mary **<u>would</u>** always **<u>leave</u>**.
	Simple Past Tense	**Past Modal + Bare Infinitive**
	→ present time reference	→ present time reference

Form Ⅲ:	If John **had come**,	Mary **would** always **have left**.
	Past Perfect	**Past Modal + Perfect Infinitive**
	→ past time reference	→ past time reference

In canonical pattern AI of generic conditionals, the predicate of p marks the simple present tense, referring to the present time, as in (38a). In canonical pattern AI of generic conditionals, q does not need to contain a present modal, as in (38a); it does not need to accord with the q of the canonical-pattern AI template (i.e. Present Modal + Bare Infinitive) (see (5)). Although the present modal *will* indicating "habit" or "typical or characteristic behavior" can be used in the apodosis of generic conditionals (see section 7.1 in detail), in the apodosis of generic ones the simple present tense is used as a default.

In canonical pattern AII of generic conditionals, the predicate of p marks the simple past tense, and that of q marks a past modal accompanied by a bare infinitive, as illustrated in (38b). As was shown in (12a), canonical pattern AII of generic conditionals implicates that p is false in the present time sphere.

In canonical pattern AIII of generic conditionals, the predicate of p, which refers to the past time, marks the past perfect form, and that of q, which refers to the past time, marks a past modal accompanied by a perfect infinitive, as exemplified in (38c). In addition, canonical pattern AIII of generic conditionals implicates that p was false in the past time sphere (see (12a)).

I will give further examples of subjunctive generic conditionals:

(39) If water boiled at 200℃, making tea would take twice as long.

(→ "[T]he speaker is imagining water to have different properties, regardless of time.") (Dancygier (1998: 32))

(40) Tom wouldn't be so hungry if he had eaten a proper breakfast.

(→ "[Sentence (40)] could describe Tom's habitual behavior (as in *Tom wouldn't be so hungry by noon every day if he had eaten a proper breakfast*).")

(Dancygier (1998: 33))

(41) If I lived in Italy, I would eat pasta every day.

(→ "[T]he speaker is imagining Italy to be her (presently construed) country of permanent residence. But she is not specifically considering living there at the moment of speech or moving there in the future.") (Dancygier (1998: 32))

Example (39), a subjunctive generic conditional, suggests characteristic behaviors or properties of water. Example (40) is a combination of the protasis (p) of canonical pattern AIII with the apodosis (q) of canonical pattern AII.[71] Example (41), in my approach, is a combination of the protasis (p) of a canonical-pattern-AII dependence non-DA conditional with the apodosis (q) of a canonical-pattern-AII generic conditional.

As was shown in section 7.2, generic conditionals have aspectual restrictions on verb phrases in p. For example, in p's of generic conditionals, the use of the perfect form or progressive form is generally not acceptable. Therefore, canonical patterns B and C of generic conditionals are theoretically not possible. In practice, they are not observed.

8.5. Summary

In tense patterns of conditionals, there are at least three patterns: canonical patterns A, B, and C. In p's of canonical patterns AI, BI, and CI, the use of the simple present tense form,

[71] It will be possible to interpret sentence (40) as a combination of the protasis (p) of a canonical-pattern-AIII NCP conditional with the apodisis (q) of a canonical-pattern-AII NCP conditional.

present perfect form, and present progressive form is obligatory. Form II and Form III in each canonical pattern are subjunctive conditionals. In conditional constructions, NCP, deductive, abductive, dependence non-DA, and generic conditionals can be transformed into the subjunctive mood.

Chapter 9

Cross-Linguistic Analyses of Deductive and Abductive Conditionals

This chapter shows cross-linguistic data on deductive and abductive conditionals, and presents cross-linguistic analyses of conditionals based on deduction and abduction. In this chapter we consider deductive and abductive conditionals in terms of cross-linguisticity.

9.1. Introduction

The framework of the present study classifies GRP conditionals on the criterion of whether they are constructed based on deduction, abduction, or neither of the two (see chapters 3 and 6). This chapter explores conditionals based on deduction and abduction, especially from a cross-linguistic perspective. This chapter is organized as follows. Section 9.2 points out that propositions in a case and a result, which constitute a syllogism, are constituted by sentences formed by general rules, and furthermore, suggests that not only in English but in other languages, conditionals based on deduction and abduction can be formed according to each language's general rules. Section 9.3 provides data on conditionals based on deduction and abduction in French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean. Section 9.4 considers the cross-linguistic validity of deductive and abductive conditionals, and presents a cross-linguistic hypothesis on conditionals based on deduction and abduction. Section 9.5 summarizes this chapter.

9.2. Deduction and Abduction

As we saw in section 6.2, deduction and abduction are types of reasoning which are

exemplified by three propositions that constitute a syllogism:

(1) The Law (e.g., All men are mortal)

The Case (e.g., Socrates is a man)

The Result (e.g., Socrates is mortal)

Deductive reasoning applies a law to a case and predicts a result; for instance, *All men are mortal, Socrates is a man, therefore Socrates is mortal*. Abductive reasoning, on the other hand, proceeds from a result, invokes a law, and infers that something may be the case; for example, given the fact that Socrates is dead, we may relate this fact to the general law that all men are mortal, and guess that Socrates was a man.

Within the framework described in this study, conditionals based on deduction and abduction (viz. 'deductive conditionals' and 'abductive conditionals') are subclasses of the conditional construction. As was argued in section 6.2, in a deductive conditional in English, as in (2) below, p and q correspond to a case and a result in a syllogism, respectively, as shown in (3) below.

(2) If Socrates is a man, Socrates is mortal.

(Chisholm (1946: 305), Dudman (1984a: 146, 1988: 115), Dancygier (1998: 40))

(3) The Law (e.g., All men are mortal)

The Case (e.g., Socrates is a man)

The Result (e.g., Socrates is mortal)

Deductive conditionals: If p, (then) q

On the other hand, in an abductive conditional in English, as in (4), p and q correspond to a result and a case in a syllogism, respectively, as shown in (5).

(4) If Socrates is dead, he was a man.

(5) The Law (e.g., All men are mortal)

The Case (e.g., Socrates is a man)

The Result (e.g., Socrates is mortal)

Abductive conditionals: If p, (then) q

At this point, notice that in each of the three propositions which constitute a syllogism, an independent sentence (e.g. *All men are mortal*. / *Socrates is a man*. / *Soctates is mortal*.) is used. That is, propositions corresponding to a case and a result are formed by general rules. The "general rules" here, as was stated in sections 3.2, 6.1, and 6.2, refer to the rules which govern the tense-aspect interpretation of independent sentences. Since propositions corresponding to a case and a result in a syllogism are formed by general rules, p and q in conditionals based on deduction and abduction, which are reasoning processes based on a syllogism, are formed by general rules. Therefore, English conditionals based on deduction and abduction except subjunctive ones (what is called 'deductive and abductive conditionals' in our framework) necessarily fall into the class of GRP conditionals.

In this way, in deductive and abductive conditionals in English p and q are formed by general rules. The present chapter considers verb (phrase) forms in the protasis and the apodosis of conditionals based on deduction and abduction in languages other than English.

That is, in this chapter, we will consider whether or not in languages other than English, conditionals based on deduction and abduction are formed according to each language's general rules.

In the next section, we will see cross-linguistic data on deductive and abductive conditionals; more specifically, we will observe non-subjunctive conditionals based on deduction and abduction in French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean.

9.3. Cross-Linguistic Data on Conditionals Based on Deduction and Abduction

9.3.1. Data on Conditionals Based on Deduction in French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean

This section deals with cross-linguistic data on non-subjunctive conditionals constructed based on deduction. Look at the conditional sentences in (6) - (14) below. They are conditionals based on deduction in French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean, respectively.

(6) French:

a. Si elle est italienne, elle est européenne.

If she is Italian she is European

'If she's Italian, she's European.'

b. Si elle est à Paris maintenant, elle est en France.

If she is in Paris now she is in France'

'If she is in Paris now, she is in France.'

c. Si elle est divorcée, elle était mariée.

If she is divorced she was married

'If she's divorced, she was married.'

(7) Spanish:

a. Si él es un ser humano, (él) es mortal.

If he is a being human he is mortal

'If he is a human being, he is mortal.'

b. Si él es español, (él) es europeo.

If he is Spanish he is European

'If he is Spanish, he is European.'

(8) Russian:

a. Если он живет в Москве, он живет в России.

If he lives in Moscow he lives in Russia

'If he lives in Moscow, he lives in Russia.'

b. Если она разведена, она была замужем.

If she divorced she was married

'If she is divorced, she was married.'

(9) Italian:

a. Se lui è un essere umano, lui è mortale.

If he is a being human he is mortal

'If he is a human being, he is mortal.'

b. Se lei è italiana, (lei) è europea.

If she is Italian she is European

'If she is Italian, she is European.'

c. Se lui vive a Roma ora, lui è in Italia.

If he lives in Rome now, he is in Italy

'If he lives in Rome now, he is in Italy.'

(10) Portuguese:

a. Se ele é um ser humano, ele é mortal.

If he is a being human he is mortal

'If he is a human being, he is mortal.'

b. Se ele é português, ele é europeu.

If he is Portuguese he is European

'If he is Portuguese, he is European.'

(11) German:

a. Wenn er ein Mensch ist, ist er sterblich.

If he a man is is he mortal

'If he is a man, he is mortal.'

b. Wenn er Italiener ist, ist er Europäer.

If he Italian is is he European

'If he is Italian, he is European.'

c. Wenn er jetzt in Paris ist, ist er in Frankreich.

If he now in Paris is, is he in France

'If he is in Paris now, he is in France.'

(12) Japanese:

a. Moshi Sokuratesu-ga ningen-dearu nara, Sokuratesu-wa shinu-unme-ni-aru.

If Socrates-NOM man is Socrates-NOM is mortal

'If Socrates is a man, Socrates is mortal.'

b. Moshi kare-ga itariajin-dearu nara, kare-wa yoroppajin-dearu.

If he Italian is he European is

'If he's Italian, he's European.'

c. Moshi kare-ga 18saiijo-dearu nara, kare-wa tohyo-dekiru.

If he 18 or older is he can vote

'If he is 18 or older, he can vote.'

(13) Mandarin Chinese:

a. 如果 他 是 人, 那 他 终 有 一死。

If he COP human being he eventually have death

'If he is a human being, he is mortal.'

b. 如果 他 現在 住在 北京 的话, 那 他 在 中国。

If he now live Beijing he be in China

'If he lives in Beijing now, he is in China.'

c. 如果 他 是 法国人 的话, 那 他 是 欧洲人。

If he COP French he COP European

'If he is French, he is European.'

(14) Korean:

a. 만약 그가 지금 베이징 에 살고있다 면, 그는 중국 에 있다.

If he now Beijing in live he China in exist

'If he lives in Beijing now, he is in China.'

b. 만약 그녀가 이혼한경험이 있다 면, 그녀는 결혼했었다.

If she experience of divorce exist she marry Past-Past

'If she is divorced, she was married.'

The data in (6) - (14) above show that in French, Spanish, Russian, Italian, Portuguese,

German, Japanese, Mandarin Chinese, and Korean, as well as in English, the tense-aspect forms in the protasis and apodosis of conditionals based on deduction accord with those in each language's independent clauses.

Let us look at (6a) and (7a), for example. The tense-aspect forms in the protases and apodoses of (6a) and (7a) accord with those in French and Spanish independent sentences (*Elle est italienne. / Elle est européenne.* / *Él es un ser humano*. / *Él es mortal*.) In Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean too, the tense-aspect forms in the protasis and apodosis of conditionals based on deduction accord with those in each language's independent sentences. At this point, with regard to deductive conditionals in German, we should bear in mind that German grammatical rules, further, operate on the protasis and apodosis: verbs must be moved to the final position of the protasis, as in *Wenn er ein Mensch* <u>*ist*</u> (see (11a)), and be moved to the initial position of the apodosis, as in <u>*ist*</u> *er sterblich* (see (11a)).

In this way, in some languages other than English as well (here, French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean), the tense-aspect forms in the protasis and apodosis of conditionals based on deduction accord with those in each language's independent sentences.[72] This is no coincidence, as will be argued in section 9.4.

9.3.2. Data on Conditionals Based on Abduction in French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean

[72] Example (i) below is a rhetorical conditional in Spanish. As was argued in section 6.3.10, in our framework, a rhetorical conditional is contained in the category of conditionals based on deduction.

(i) Si Juan es listo, yo soy Einstein.
If Juan is smart I am Einstein
'If J. is smart, I'm Einstein.' (Schwenter (1999: 19))

Indeed, the protasis and apodosis in example (i) are formed according to general rules in Spanish.

In this section, I will offer cross-linguistic data on non-subjunctive abductive conditionals. Look at examples in (15) - (23) below. They are conditional sentences based on abduction in French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean, respectively.

(15) French:

a. Si elle est morte, elle était humaine.

If she is dead she was human

'If she is dead, she was a human being.'

b. Si elle est en retard, elle est allée chez le dentiste.

If she is late she is go-PP at the house of the dentist

'If she is late, she went to the dentist.'

c. Si elle est là maintenant, l'avion est arrivé tôt.

If she is there now the plane is arrive-PP early

'If she is there now, the plane arrived early.'

(16) Spanish:

a. Si él está muerto, (él) era un ser humano.

If he state verb dead he was a being human

'If he is dead, he was a man.'

b. Si la luz está encendida, los Pérez están en casa.

If the light state verb on the Pérez state verb at home

'If the light is on, the Pérez are at home.' (Vesterinen (2016: 189))

c. Si el suelo está mojado, ha llovido.

If the ground state verb wet has-AUX rain-PP

'If the ground is wet, it has rained.' (Schwenter (1999: 206))

(17) Russian:

a. Если он мертв, он был человеком.

If he dead he was human being

'If he is dead, he was a human being.'

b. Если свет горит, он дома.

If light on he at home

'If the light is on, he is at home.'

c. Если он написал ей диссертацию, он её любит.

If he write-PST her-DAT thesis-ACC he her-ACC loves

'If he wrote a thesis for her, he loves her.'

(18) Italian:

a. Se lui è morto, (lui) era un essere umano.

If he is dead he was a being human

'If he is dead, he was a human being.'

b. Se lui ha scritto la tesi di Maria, lui la ama.

If he has-AUX write-PP a thesis of Maria he her-ACC loves

'If he wrote Maria's thesis, he loves her.'

c. Se il terreno è bagnato, ha piovuto.

If the ground is wet has rain-PP

'If the ground is wet, it has rained.'

(19) Portuguese:

a. Se ele está morto, ele era um ser humano.

If he is dead he was a being human

'If he is dead, he was a human being.

b. Se ele escreveu sua tese, ele a ama.

'If he write-PST her-GEN thesis he her-ACC love

'If he wrote her thesis, he loves her.'

(20) German:

a. Wenn sie verspätet ist, ging sie zum Zahnarzt.

If she late is go-PST she to the dentist

'If she is late, she went to the dentist.'

b. Wenn sie jetzt dort ist, kam das Flugzeug früh an.

If she now there is arrive-PST the plane early a particle of a separable verb

'If she is there now, the plane arrived early.'

c. Wenn er ihre Dissertation schrieb, liebt er sie.

If he her-GEN thesis write-PST loves he her-ACC

'If he wrote her thesis, he loves her.'

(21) Japanese:

a. Moshi kare-ga nakunatteiru nara, kare-wa ningendeatta.

If he is dead he human being was

'If he is dead, he was a human being.'

b. Moshi jimen-ga nureteiru nara, ame-ga hutta-noda.

If ground is wet rain-NOM fall-PRF

'If the ground is wet, it has rained.'

(22) Mandarin Chinese:

a. 如果 他 死 了, 那 他 (就) 是 人。

If he die perfect aspect he COP human being

'If he is dead, he was a human being.'

b. 如果 他 写 了 她的论文 的活, 他 就 爱着 她。

If he write perfect aspect her thesis he love her

'If he wrote her thesis, he loves her.'

c. 如果 地面 很 湿 的活, 那 就 下 过 雨 了。

If ground wet perfect aspect rain

'If the ground is wet, it has rained.'

(23) Korean:

a. 만약 그가 죽었다 면, 그는 사람 이었다

If he died he man was

'If he was dead, he was a human being.'

b. 만약 그가 그녀의 논문을 썼다 면, 그는 그녀를

If he her-GEN thesis write-PST he her-ACC

사랑하고있다.

love-PROG

'If he wrote her thesis, he loves her.'

The data in (15) - (23) above show that in French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean as well as in English, the tense-aspect forms used in the protasis and apodosis of conditionals based on abduction accord with those used in each language's independent clauses.

For example, let us look at (15a) and (16a). In (15a) and (16a), the tense-aspect forms

used in their protases and apodoses accord with those used in independent clauses in French and Spanish (*Elle est morte.* / *Elle était humaine.* / *Él está muerto*. / *Él era un ser humano*.). In Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean too, the tense-aspect forms in the protasis and apodosis of conditionals based on abduction accord with those in each language's independent sentences. At this point, with respect to abductive conditionals in German, we should note that grammatical rules proper to German, further, operate on the protasis and apodosis: verbs must be moved to the final position of the protasis, as in *Wenn sie verspätet ist* (see (20a)), and be moved to the initial position of the apodosis, as in *ging sie zum Zahnarzt* (see (20a)).

In this way, not only in English but also in other languages (e.g. French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean), the tense-aspect forms in the protasis and apodosis of conditionals based on abduction accord with those in each language's independent clauses. As will be shown in the next section, this is no coincidence.

9.4. A Cross-Linguistic Account of Conditionals Based on Deduction and Abduction

In the last section, we saw that in French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean, as well as in English, the tense-aspect forms in the protasis and apodosis of conditionals constructed based on deduction and abduction accord with those in each language's independent clauses. The present section, considering deduction and abduction in terms of universal principles and a syllogism in terms of a container, argues that this is no coincidence, and furthermore, puts forward a new cross-linguistic hypothesis.

As we have seen in the present study, in conditionals based on deduction and abduction in English, p and q are formed by general rules in English; in fact, within the present framework,

these conditionals are subclasses of GRP conditionals. To repeat, propositions (i.e. a law, a case, and a result) which constitute a syllogism are formed by general rules. This motivates the protasis and apodosis in conditionals based on deduction and abduction in languages other than English to be formed by each language's general rules. In practice, this is the case in French, Spanish, Russian, Italian, Portuguese, Japanese, Mandarin Chinese, and Korean, as we saw in previous sections.

As we saw in section 9.2, deduction and abduction are based on knowledge about the syllogism. In addition, as Hopper and Traugott (2003: 42-43) say, deduction and abduction are universal principles. This means that they are not merely principles in logic but cross-linguistically valid reasoning processes. In fact, syllogisms, which deductive and abductive reasonings are based on, are motivated by a container image-schema, as shown in Figure 1 below:

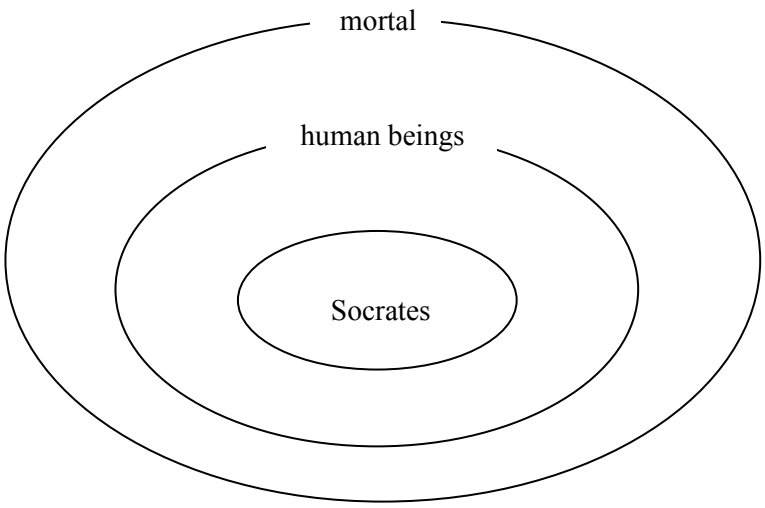

Figure 1: The structure of a syllogism (ex *All human beings are mortal, Socrates is a human being, therefore Socrates is mortal.*)

In Lakoff (1987), the structure of the syllogism is explained by container structure. According

to him, we "understand categories as metaphorical containers" (Lakoff (1987: 353)). Lakoff and Johnson (1999), furthermore, show *categories are containers* as a kind of primary metaphor, giving example (24) below.[73]

(24) Are tomatoes in the fruit or vegetable category? (Lakoff and Johnson (1999: 51))

Example (24) above is made up of a container schema. In my view, a container schema is "embodied" in Lakoff and Johnson's sense. This is motivated by the following bodily experiences: the heart is surrounded in the ribs; the brain is within the skull, the skull is covered with the scalp, and the scalp is covered with the hair; the bone of a human is covered with the muscle, and the muscle is covered with the skin (see Lakoff and Johnson (1999), Johnson and Lakoff (2002), and Lakoff (2012)). As Johnson (1987) also says, we see our own body as a container which food, water, and air come in. In this way, construing something as a container is motivated by embodied experiences, which suggests that a container schema is cross-linguistically valid.

Given that deduction and abduction are universal principles and cross-linguistically valid reasoning processes, that the structure of the syllogism is captured by container schema, that a container schema is embodied, and that propositions which constitute a syllogism (viz, a law, a case, and a result) are formed by particular language's general rules, we can put forward the following hypothesis in a provisional form:

[73] Primary metaphor, which is originated by Grady (1997), "arises naturally, automatically, and unconsciously through everyday experience" (Lakoff and Johnson (1999:46)). What is more, primary metaphors are "part of the cognitive unconscious": "we may be unaware that we have [primary metaphors]" (Lakoff and Johnson (1999: 56)). Primary metaphors, according to Lakoff (2012: 777), are "motivated by embodied experiences." With regard to embodied experiences motivating primary metaphors, Lakoff (2012: 777) states that when children are held affectionately by their parents, the experiences of affection and warmth correlate, yielding the metaphor AFFECTION IS WARMTH (cf. Lakoff and Johnson (1980, 1999)).

(25) A cross-linguistic hypothesis on conditionals based on deduction and abduction (provisional form):

In particular languages in the world, both protasis and apodosis in conditionals constructed based on deduction and abduction are formed by the general rules. The "general rules" here refer to the rules which govern the tense-aspect interpretation of independent sentences in each particular language.

However, as we saw in the last section, in the conditionals based on deduction and abduction in German, the protasis and apodosis are not formed by the rules governing independent sentences in German. The protasis and apodosis in German undergo grammatical rules proper to German: verbs must be moved to the final position of the protasis, and be moved to the initial position of the apodosis. For this reason, we, revising (25), can put forward the hypothesis (26) below:

(26) A cross-linguistic hypothesis on conditionals based on deduction and abduction:

In particular languages in the world, the tense-aspect forms in the protasis and apodosis of conditionals constructed based on deduction and abduction accord with those in each language's independent sentences.

The cross-linguistic hypothesis (26) does not necessarily suggest that the tense-aspect forms in the protasis and apodosis of conditionals based on neither deduction nor abduction do not accord with those in each particular language's independent sentences. In short, in some particular languages, the protasis and apodosis in conditionals based on neither deduction nor abduction, such as English non-DA conditionals in the present framework, are formed by each

language's general rules. In addition, it may not be necessarily the case that the hypothesis (26) is true for all particular languages around the world; this is just a hypothesis. However, this is true for at least, English, French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean.

9.5. Summary

In English, French, Spanish, Russian, Italian, Portuguese, German, Japanese, Mandarin Chinese, and Korean, the tense-aspect forms in the protasis and apodosis of non-subjunctive conditionals based on deduction and abduction accord with those in each language's independent sentences. This is no coincidence but is motivated and necessary: for example, propositions in a law, a case, and a result, which constitute a syllogism, are formed by each language's general rules; deduction and abduction are universal principles and cross-linguistically valid reasonings; the structure of the syllogism is understood as metaphorical containers, which is a primary metaphor.

Therefore, we can propose the cross-linguistic hypothesis that in particular languages in the world, the tense-aspect forms in the protasis and apodosis of conditionals based on deduction and abduction accord with those in each language's independent sentences.

Appendix

Further Cross-Linguistic Data

Here, I would like to show further cross-linguistic data of conditionals besed on deduction and abduction. I will show further cross-linguistic data of deductive and abductive conditionals in French, Russian, Italian, Portuguese, German, and Japanese. First, cross-linguistic data of deductive conditionals will be shown in (1) - (6) below:

(1) French:

a. Si elle est un être humain, elle est mortelle.

'If she is a human being, she is mortal.'

b. Si elle a plus de 18 ans, elle peut voter.

'If she is 18 or older, she can vote.'

(2) Russian:

a. Если он человек, он смертен.

'If he is a human being, he is mortal.'

b. Если он француз, он европеец.

'If he is French, he is European.'

(3) Italian:

a. Se lei è divorziata, (lei) era sposata.

'If she's divorced, she was married.'

(4) Portuguese:

a. Se ele está em Paris agora, ele está na França.

'If he is in Paris now, he is in France.'

b. Se ela é divorciada, ela era casada.

'If she's divorced, she was married.'

(5) German:

a. Wenn sie geschieden ist, (dann) war sie verheiratet.

'If she's divorced, (then) she was married.'

(6) Japanese:

a. Moshi ima kare-ga Tokyo-ni-iru nara, kare-wa nihon-ni-iru.

'If he is in Tokyo now, he is in Japan.'

b. Moshi kanojo-wa rikon-siteiru nara, kanojo-wa izen kekkon-siteita.

'If she is divorced, she was married.'

Next, further cross-linguistic data of abductive conditionals in French, Russian, Italian, Portuguese, German, and Japanese will be shown in (7) - (11) below:

(7) French:

a. Si elle a écrit la thèse de Paul, elle l'aime.

'If she wrote Paul's thesis, she loves him.'

b. Si le sol est mouillé, il a plu.

'If the ground is wet, it has rained.'

c. Si la lumière est allumée, il est chez lui.

'If the light is on, he is at home.'

d. Si elle doit laisser un message, il est déjà parti.

'If she has to leave a message, he's gone already.'

(8) Russian:

a. Если она опаздывает, она пошла к стоматологу.

'If she is late, she went to the dentist.'

b. Если сейчас она находится в аэропорту, самолет прибыл рано.

'If she is in the airport now, the plane arrived early.'

(9) Italian:

a. Se lei è in aeroporto ora, l'aereo è arrivato presto.

'If she is in the airport now, the plane arrived early.'

b. Se loro devono lasciare il messaggio, lui è già partito.

'If they have to leave a message, he's gone already.'

(10) Portuguese:

a. Se o chão está molhado, choveu.

'If the ground is wet, it has rained.'

b. Se a luz está acesa, ele está em casa.

'If the light is on, he is at home.'

c. Se ela tem que deixar uma mensagem, ele já foi.

'If she has to leave a message, he's gone already.'

d. Se ela está lá agora, o avião chegou cedo.

'If she is there now, the plane arrived early.'

e. Se ela está atrasada, ela foi ao dentista.

'If she is late, she went to the dentist.'

(11) German:

a. Wenn er tot ist, war er ein Mensch.

'If he is dead, he was a human being.'

b. Wenn der Erdboden nass ist, dann hat es geregnet.

‘If the ground is wet, then it has rained.’

c. Wenn das Licht an ist, ist er zu Hause.

‘If the light is on, he is at home.’

d. Wenn sie eine Nachricht hinterlassen müssen, ist er schon gegangen.

‘If they have to leave a message, he’s gone already.’

(12) Japanese:

a. Moshi akari-ga tsuiteiru nara, kare-wa ieni-iru.

‘If the light is on, he is at home.’

b. Moshi kare-wa kanojono ronbun-o kaita nara, kare-wa kanojo-o aishiteiru.

‘If he wrote her thesis, he loves her.’

Chapter 10

Decategorialization and (Inter)subjectification of *if*-Clauses

This chapter argues that what the present study calls the '*frankly*-type non-DA *if*-clause' acts as style adverbials / style disjuncts, and in addition, examines how GRP *if*-clauses relate to (inter)subjectification. The purpose of this chapter is to show that (inter)subjectification in non-DA *if*-clauses is gradual, and furthermore, that the classifications of GRP conditionals are compatible with the directionality of semantic change. This chapter is organized as follows. Section 10.1 considers decategorialization of *if*-clauses into style adverbials / style disjuncts. Section 10.2 discusses (inter)subjectification of subtypes of GRP conditionals: deductive, abductive, dependence non-DA, relevance non-DA, and *frankly*-type non-DA conditionals. Section 10.3 sums up this chapter.

10.1. Decategorialization into Style Adverbials / Style Disjuncts

This section deals with *frankly*-type non-DA *if*-clauses and their decategorialization into style adverbials / style disjuncts (henceforth, style adverbials/disjuncts).

10.1.1. *If*-Clauses Which Function as Style Adverbials / Style Disjuncts

Consider examples (1) – (6) below. The *if*-clauses of (1) – (6) are referred to as '*frankly*-type non-DA *if*-clauses' in the present study.

(1) *If you don't mind my saying so*, your slip is showing. (Quirk et al. (1985: 1095))

(2) *If you want to know*, I haven't seen him. (Palmer (1988: 154, 1990: 176))

(3) *If you're going out*, it's raining. (Palmer (1990: 176))

(4) *If you ask me*, she is jealous of Janet's engagement. (Takami (1988: 264))

(5) *If I may say so*, that's a crazy idea. (Sweetser (1990: 118))

(6) *If you're not too busy*, what's Sue's phone number? (Sweetser (1996b: 327))

These *if*-clauses, which are non-DA *if*-clauses (not, NCP *if*-clauses), serve as style adverbials/disjuncts. This suggests that relevant *if*-clauses are different from the other types of non-DA *if*-clauses (i.e. dependence and relevance non-DA *if*-clauses) in category status, and that the distinction between *frankly*-type non-DA *if*-clauses and the other types of non-DA *if*-clauses is definitely discrete categorization.

The "style adverbials/disjuncts," which are offered by Greenbaum (1969), Quirk et al. (1985), and Biber et al. (1999), describe style and comment on the manner of conveying the message (cf. Lenker (2010: 36-37)):

(7) a. *Frankly*, she isn't very stupid. (Greenbaum (1969: 83))

b. Well *honestly* I, I don't know. (Biber et al. (1999: 857))

c. *Putting it bluntly*, he has little market value. (Quirk et al. (1985: 616))

d. Is it a fact that you have refused to take any fee for the work you are doing, *if you don't mind my asking*? (Biber et al. (1999: 857))

Style adverbials/disjuncts include adverbs, such as: *frankly, honestly, bluntly, briefly, broadly, candidly, confidentially, generally, seriously, strictly, truthfully,* etc.[74] They also include non-

[74] In Heine's (2013) and Heine et al.'s (2013) framework, *flankly* in (7a) is a "conceptual thetical." They have proposed Discourse Grammar, based on the assumption that there are two domains of discourse organization that need to be distinguished, referred to respectively as *Sentence Grammar* and *Thetical Grammar*. Theticals are defined as "a word, a phrase, a clause, or even a chunk that does not form any syntactic constituent" (Kaltenböck et al. (2011: 857); cf. Brinton (2017: 36)). Conceptual

finite clauses, as in (7c), and finite clauses, as in (7d) (see Greenbaum (1969), Quirk et al. (1985), Biber et al. (1999)).[75, 76]

According to Greenbaum (1969), a possible correspondence for *frankly* in (7a) is (8) below (cf. Brinton and Traugott (2005: 134)). This suggests that the *if*-clause of (8) fulfills the same function as the style adverbial/disjunct *frankly* does.

(8) *If I may be frank*, she isn't very stupid. (Greenbaum (1969: 83))

For this reason, we can claim that the *if*-clauses in (1) - (6) function as style adverbials/disjuncts. Linguistic evidence in support of this claim is (a) - (c) below:

(a) In examples like (1) - (6) we cannot insert *then* before the main clause:

(9) * If you don't mind my saying so, *then* your slip is showing.

(10) * If you want to know, *then* I haven't seen him.

(11) * If you're going out, *then* it's raining.

---

theticals are one of the categories in the domain they refer to as *Thetical Grammar*. According to Heine (2013: 1214), conceptual theticals relate primarily to what in the Hallidayan tradition is called the ideational function of language (Halliday (1985)).

[75] Style adverbials/disjuncts are dubbed "manner-of-speaking markers" in Fraser (1996), and are also called "speech act adverbs" in Swan (1988a, b).

[76] In the framework of Cinque (1999), style adverbials/disjuncts correspond to the outermost adverb class:

(i) [*Frankly* $\text{Mood}_{\text{speech act}}$ [*surprisingly* $\text{Mood}_{\text{evaluative}}$ [*allegedly* $\text{Mood}_{\text{evidential}}$
[*probably* $\text{Mood}_{\text{epistemic}}$ [*once* T(PAST) [*then* T(Future) [*perhaps* $\text{Mood}_{\text{irrealis}}$
[*cleverly* ? [*usually* $\text{Asp}_{\text{habitual}}$ [*already* T(Anterior) [*no longer* $\text{Asp}_{\text{perfect}}$?
[*always* ? [? $\text{Asp}_{\text{retrospective}}$ [? $\text{Asp}_{\text{durative}}$ [? $\text{Asp}_{\text{progressive}}$ [*completely* $\text{Asp}_{\text{completive}}$
[tutto ? [*well* ? [? Voice [? $\text{Asp}_{\text{celerative}}$ [? $\text{Asp}_{\text{semelrepetitive}}$ [? $\text{Asp}_{\text{iterative}}$
(Cinque (1999: 77))

The study of Cinque (1999) is sometimes referred as the cartographic approach (cf. Rizzi (1997, 2004)).

(12) * If you ask me, *then* she is jealous of Janet's engagement.

(13) * If I may change the subject, *then* I visited Sue yesterday. (Takami (1994: 80))

(14) * If you really want to know, *then* 4 isn't a prime number. (Iatridou (1994: 182))

(15) * If I may be frank, *then* she isn't very stupid. (Greenbaum (1969: 84))

By contrast, in dependence non-DA conditionals, as well as in NCP, generic, deductive, and abductive conditionals, it is possible to insert *then* before the main clause (see sections 5.2, 6.3.8, and 7.3):

(16) If you go, *then* John will go.

(17) If Mary bakes a cake, (*then*) she gives a party.

(Dancygier and Sweetser (2005: 151))

(18) If someone is in Paris, *then* he is France. (Rescher (2007: 27))

(19) If the ground is wet, *then* it has rained. (Rescher (2007: 26))

(20) If she is giving the baby a bath, *then* I'll call back later.

The examples in (16), (17), (18), (19), and (20) are NCP, generic, deductive, abductive, and dependence non-DA conditionals, respectively. On the other hand, as was shown in section 6.3.8, there are some relevance non-DA conditionals in which we can insert *then* before the main clause, as in (21) below:

(21) If you need any more paper, *then* there's some in the drawer.

Dancygier and Sweetser (1997) state that in *if-then* conditionals, *then* can mark sequentiality, and that the sequentiality can be further interpreted as causality. This statement

suggests that in examples like (1) - (6), there is no causality between p and q.

(b) Such non-DA *if*-clauses as those in (1) - (6) cannot be referred to with *in this/that case* or *in a case like this/that*.

In dependence non-DA conditionals, it is possible to refer to an *if*-clause with *in this/that case* or *in a case like this/that*, as illustrated in:

(22) *If she is giving the baby a bath and very busy now*, I'll come back later. But *in a case like this*, I want her to call in advance.

In (22) above, *in a case like this* refers to *if she is giving the baby a bath and very busy now*, which is a dependence non-DA *if*-clause. The *if*-clauses of (1) - (6), by contrast, cannot be referred to with *in this/that case* or *in a case like this/that*, as follows:

(23) *If you want to know*, I haven't seen him. * But *in that case*, I know a lot about him.

In this way, we can see that the *if*-clauses in examples (1) - (6) do not represent contingency, compared with dependence non-DA *if*-clauses, which shows that the *if*-clauses are different from dependence non-DA *if*-clauses in category status.[77]

(c) A style adverbial/disjunct can co-occur with a non-DA conditional except examples like

[77] The "contingency" is a notion expressed by subordinators which is paraphrased by such prepositional phrases as "in cases when" or "in circumstances where":

(i) *Whenever there's smoke*, there's fire.
(ii) *When children are involved,* divorces are particularly unpleasant.
(iii) *If necessary,* send up a flare.

((i) - (iii): Quirk et al. (1985: 1086))

(1) - (6), as illustrated in (24) - (26) below:

(24) *Seriously*, if they haven't seen the museum we'd better go there today.

(25) *Frankly*, if he can't be bothered to arrive before nine, I just don't see the main point of ordering for him.

(26) *Confidentially*/*Seriously*, if Mr. Armani is so desperate to be seen as an artist, he should have allowed himself to be treated as one.

The *if*-clauses of (1) - (6) too can co-occur with other non-DA *if*-clauses, as is exemplified in (27) - (31) below (cf. Bhatt and Pancheva (2006)):

(27) *If you don't mind my saying so*, if they haven't seen the museum we'd better go there today.

(28) *If I may say so*, if he won't arrive before nine, there's no point in ordering for him.

(29) *If you don't mind my saying so*, if you love her that much, you should meet her.

(30) *If I may say so*, if you love her that much, you should meet her.

(31) There are biscuits on the sideboard if you want them — *if you're interested*.

As is illustrated in (27) - (31), *if*-clauses like those of examples (1) - (6) can co-occur with dependence non-DA *if*-clauses ((27) - (30)) and relevance non-DA *if*-clauses ((31)). Thus, we can say: the *if*-clause in question here has the same function as style adverbials/disjuncts fulfill.

From the linguistic evidence (a) - (c) above, we can demonstrate that the *if*-clauses in (1) - (6) function as style adverbials/disjuncts. The present section, thus, has verified that *if*-clauses like those in (1) - (6) serve as style adverbials/disjuncts.

10.1.2. Decategorialization of *if*-Clauses

In the last section, we have confirmed that in the category of non-DA conditionals, some *if*-clauses serve as style adverbials/disjuncts, as in (1) - (6). At this point, we will assume that the *if*-clauses in (1) - (6) have undergone decategorialization into style adverbials/disjuncts.[78] As regards decategorialization, Brinton and Traugott (2005) describe as follows:

(32) "[Decategorialization] refers to the shift from one category status to another, correlated with a shift from prototypical membership of a category to less prototypical membership, and maybe eventually to prototypical membership of a new category."

(Brinton and Traugott (2005: 25))

According to Brinton and Traugott (2005: 107), decategorialization is a particular subtype of the much larger mechanism of change known as "reanalysis" (cf. Aarts (2007), Bybee (2010, 2015)). For example, in a composite predicate such as *lose sight of*, the NP *sight* is decategorialized in that it loses many of its nominal properties: there is now no *lose the sight of*, or *lose exceptional sights of* (Brinton and Traugott (2005: 131)). Furthermore, Brinton and Traugott (2005: 22) and Brinton (2008: 58), based on Thompson and Mulac (1991), state that *I think* or *I guess*, as in (33b, c), has undergone decategorialization from a complement-taking noun＋verb sequence into a kind of unitary particle with different distributional properties (cf. Hopper (1991), Heine (1992), Aijmer (1997), Heine and Narrog (2010), Degand and Simon-Vandenbergen (2011)).

[78] Although Ross (1970) analyzes such an adverbial clause as modifying the performative clause not appearing in the surface structure, we do not adopt this idea.

(33) a. I think that exercise is really beneficial.

b. *I think* exercise is really beneficial.

c. Exercise is really beneficial, *I think*.

(Brinton and Traugott (2005: 22), based on Thompson and Mulac (1991))

It may be that we should consider that the *if*-clauses of (1) - (6) are grammaticalized, not decategorialized.[79] However, to draw such a conclusion is too early, because in the *if*-clauses of (1) - (6), fusion and coalescence as defined by Brinton and Traugott (2005) and Brinton (2008) are not found. Fusion, according to Brinton and Traugott (2005: 105), involves a freezing and fixing of collocations, e.g., *take a* {*walk, bath, bite, fall, look, nap*}. Coalescence, on the other hand, is the loss of phonological segments (Brinton (2008: 50)).[80] In fact, Brinton (2008) treats *I suppose, you know, I mean*, etc. as examples of grammaticalization (into "comment clauses") (cf. for discussion of the development of discourse markers, see Brinton (1996, 2017), Traugott (1999), Schwenter and Traugott (2000), and Aijmer (2002)). The *if*-clauses in (1) - (6) have obviously undergone neither fusion nor coalescence. Therefore, they

[79] According to Hopper and Traugott (2003) and Traugott (2010), grammaticalization is one of the diachronic phenomena, and is defined as (i) below:

(i) "the change whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions, and once grammaticalized, continue to develop new grammatical functions" (Hopper and Traugott (2003: 18), Traugott (2010: 39))

Briefly speaking, grammaticalization refers to the step whereby particular items become more grammatical through time.

It is well-known that as an example of grammaticalization, the development of *be going to* into an auxiliary is discussed in a number of studies (see Bybee et al. (1994), Hopper and Traugott (2003), Bybee (2010, 2015), Traugott and Trousdale (2013)).

[80] According to Brinton and Traugott (2005: 27-28, 105), coalescence is defined as "the reduction of phonological segments subsequent to fusion," and it "may lead to reduced forms (e.g. *want to* > *wanna, be going to* > *be gonna*)" (cf. Lehmann (1995), Bybee (2003, 2015), Heine (2003), Traugott and Trousdale (2013)).

In addition, coalescence is also referred to as "erosion" (Croft (2000), Heine (2003, 2013), Narrog and Heine (2018)).

have not undergone grammaticalizaton. In addition, Brinton (2008: 51) says: "[d]ecategorialization typically involves shift from a more major to a more minor grammatical class.[81, 82] This statement can validate the idea that the *if*-clauses of (1) - (6) have undergone decategorilaization into style adverbials/disjuncts: in the *if*-clauses of (1) - (6), the reanalysis has occurred in which the category status changes from an adjunct of condition to a style adverbial/disjunct.

For this reason, we argue that a *frankly*-type non-DA *if*-clause is decategorialization of a relevance non-DA *if*-clause into a style adverbial/disjunct (cf. Traugott (1985)). Similar kinds of deacategorialization can be observed in the adverbs *frankly* and *honestly*. Look at the following examples:

(34) a. She spoke *frankly* about herself now and then.

b. *Frankly*, Kris didn't want to know.

((34a, b): Heine (2013: 1216), Heine et al. (2013: 183))

(35) a. John talked to the police *honestly*.

b. *Honestly*, John talked to the police.

((35a, b): Verstraete (2004: 849))

In accordance with the taxonomy by Dixon (2005), *frankly* in (34a) and *honestly* in (35a) are adverbs with manner function, and *frankly* in (34b) and *honestly* in (35b) are adverbs with

[81] Decategorialization encompasses reanalysis of the three types: "change in constituency," "change in hierarchical structure," and "change in category labels" (Brinton and Traugott (2005: 107)).

[82] A clear case of decategorialization is seen in the conjunction *while*, as in *while we were sleeping* (see Bybee (2015)). In Hopper and Traugott's (2003) words: "[H]istorically, *while* was a noun (OE *hwil*) meaning a length of time; this meaning is still preserved in PDE (*we stayed there for a while*). As a conjunction, however, *while* has diverged from this original lexical function as a noun …" (Hopper and Traugott (2003: 107)).

sentential function. As was illustrated in (7a, b), *frankly* in (34b) and *honestly* in (35b) are style adverbials/disjuncts.[83] We can, thus, see that *frankly* in (34b) and *honestly* in (35b) are decategorialized into style adverbials/disjuncts (cf. Swan (1988a, b, 1997), Powell (1992), Hoye (1997: 145), Traugott (1999), Fischer (2013)).[84]

Next, look at example (36) below. The *since*-clause in this example serves a style adverbial/disjunct.

(36) Feta is made from goat's milk, *since you wanted to know*. (Saito et al. (1995: 92))

The *since*-clause in (36) is an example of the change from an adjunct of reason to a style adverbial/disjunct. That is, this *since*-clause is decategorialized into a style adverbial/disjunct.

In this way, the phenomenon of decategorialization into style adverbials/disjuncts is not confined to only *if*-clauses. It is observed in adverbs such as *frankly* and *honestly*, and *since*-clauses as well.

Thus, in this section, we have shown that a *frankly*-type non-DA *if*-clause is the phenomenon of clause-level decategorialization into a style adverbial/disjunct.

10.2. An Analysis of GRP Conditionals in Terms of Subjectivity and (Inter)subjectification

In the last section we have argued that in GRP conditionals some *if*-clauses (what this study calls *frankly*-type non-DA *if*-clauses) are decategorialized into style adverbials/disjuncts.

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[83] Lenker (2010) paraphrases example (i) by example (ii):

(i) *Frankly*, I am tired.
(ii) *Frankly speaking*, I am tired. ((i) and (ii): Lenker (2010: 37))

[84] According to Swan (1997), the manner adverb category is central, and other related adverb types, such as sentence adverbs, have developed as extensions of this type.

Decategorialization is one of the diachronic phenomena. Diachronic phenomena are bound up with the concept of (inter)subjectification. As numerous researchers have so far pointed out, language change and semantic change of language are inseparable from (inter)subjectivity and (inter)subjectification. The aim of this section is to explore how each of the three subclasses of GRP conditionals relates or does not relate to (inter)subjectification. As will be argued later, whereas (inter)subjectification cannot occur in deductive and abductive conditionals, it can in non-DA ones.

10.2.1. (Inter)subjectivity and (Inter)subjectification

Since Bréal (1964 [1900]) the topic of subjectivity has been discussed in numerous ways, and subjectification has been defined in various ways (cf. Traugott (1989, 1995, 2003, 2010), Traugott and König (1991), Fitzmaurice (1998), Schwenter and Traugott (2000), Traugott and Dasher (2002), Hopper and Traugott (2003), Brinton and Traugott (2005), Brinton (2008, 2017)).[85] Traugott (2010), for example, states that subjectivity is understood as a synchronic state, and subjectification is a diachronic process (cf. De Smet and Verstraete (2006)).[86] Also, according to Traugott (2010), expressions of subjectivity are "expressions the semantic or pragmatic meaning of which is to index speaker attitude or viewpoint." Furthermore, according to Traugott and Dasher (2002: 225) and Traugott (2010), expressions can be organized along a cline of (inter)subjectivity as in (37) below:[87]

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[85] As Traugott (2010) states, Benveniste's (1971[1958]) paper "distinguished subjectivity and intersubjectivity. These are synchronic notions, and can be theorized in many ways…."

[86] Traugott (2014: 9) states that subjectification needs to be distinguished from subjectivity.

[87] Traugott (1982) states that a tendency in language changes is a shift from the propositional through the textual to the expressive component (cf. Halliday and Hasan (1976)). This statement is less general than (37).

(37) non-/less subjective ＞ subjective ＞ intersubjective

In addition, Traugott (2010) states that subjectification and intersubjectification are the mechanisms by which:

(38) a. meanings are recruited by the speaker to encode and regulate attitudes and beliefs (subjectification), and,

b. once subjectified, may be recruited to encode meanings centered on the addressee (intersubjectification).

As is described in Traugott (2003, 2007, 2010) and other diachronic studies, for some lexical item or construction X, subjectified polysemies of that item or construction arise later than ideational ones (subjectification), and for some lexical item or construction X, intersubjectified polysemies of that item or construction arise later than subjectified ones (intersubjectification).[88, 89]

As examples of subjectification, Traugott (2010) adduces the development of *be going to* from expressions of motion with intent to act to those of speaker's assessment of the future, and epistemic *will* derived from a main verb of desire or volition (cf. Aijmer (1985), Bybee and Pagliuca (1985), Bybee et al. (1994: 16), Harris and Campbell (1995: 92), Lehmann (1995: 28) and Campbell (2001) too state that English *will* originally meant "want"). Also, Traugott

[88] In Traugott (2014), subjectification is defined as "a process of change giving rise to expressions of the Speaker's beliefs, and stance toward what is said" (Traugott (2014: 9)).

[89] In the work of Traugott (2006), intersubjectification is described as "paying attention to the hearer." In Traugott (2014), it is defined as "the development of markers that encode the Speaker's (or Writer's) attention to the cognitive stances and social identities of the Addressee" (Traugott (2014: 9)).

(1989) adduces as an example of subjectification the semantic change of *while* from "during" (Early Middle English) to "although" (Early Modern English) (see Traugott and Dasher (2002: 95-96), Hopper and Traugott (2003: 107)).

As an example of intersubjectification, on the other hand, Traugott (2010) adduces Old Japanese *saburahu*, summarizing the changes as follows:

(39) Old Japanese *saburahu* 'wait (for an occasion or order) in a specific location' (non-honorific) ＞ Late Old Japanese 'Humble Subject be in the vicinity of Respected Referent' (referent honorific; subjectified) ＞ Early Middle Japanese *-saburau*/*-soorau* 'be-Polite' (addressee-honorific style; intersubjectified).

(Traugott and Dasher (2002: 263-276), Traugott (2010: 38))

As is shown in (39), Old Japanese *saburahu* was subjectified, and subsequently developed intersubjective meaning.

So far in this section, work on (inter)subjectification by Traugott (2010) has been outlined. In the following sections, we focus primarily on how (inter)subjectification is / is not related to each of the three subclasses of GRP conditionals, viz deductive, abductive, and non-DA conditionals.

10.2.2. Deductive and Abductive Conditionals and Subjectification

Consider examples (40) - (44) below, which are deductive conditionals (see section 6.2.2).

(40) If Socrates is a man, Socrates is mortal.

(Chisholm (1946: 305), Dudman (1984a: 146, 1988: 115), Dancygier (1998: 40))

(41) If he's Italian, he's European. (offered by an anonymous *Ampersand* reviewer)

(42) If she's divorced, (then) she's been married. (Sweetser (1990: 116))

(43) If someone is in Paris, then he is in France. (Rescher (2007: 27))

(44) If Ann is wearing a wedding ring, she and Bob finally got married.

(Dancygier (1998: 86))

We can say that the deductive ones, as in examples (40)–(44), do not undergo subjectification. As was argued in sections 9.2–9.4, deduction is a universal principle and a cross-linguistically valid reasoning process. Such a "universal" and "cross-linguistic" nature is non-subjective, and will not involve speaker's attitudes and beliefs. Therefore, we should assume that deduction does not relate to the diachronic process of subjectification (see (38a)).

Next, turn to examples (45)–(51) below, which are abductive conditionals (see section 6.2.3).

(45) If John went to that party, (then) he was trying to infuriate Miriam.

(Sweetser (1990: 116))

(46) If Mary said she liked the movie, she was just showing off. (Dancygier (1998: 62))

(47) If he typed her thesis, (then) he loves her.

(Dancygier and Sweetser (1997: 125, 2005: 117))

(48) If Mary is late, she went to the dentist. (Dancygier (1998: 86))

(49) If they have to leave a message, (then) he's gone already. (Sweetser (1990: 123))

(50) If the ground is wet, then it has rained. (Rescher (2007: 26))

(51) If Socrates is dead, he was a man.

As was stated in sections 6.2 and 9.2, the abductive ones are based on speaker's abductive reasoning. So, apparently, the abductive ones are subjectified. However, since abduction as well as deduction is a universal principle and a cross-linguistically valid reasoning process (sections 9.3 and 9.4), we should consider that abduction as well will not involve speaker's attitudes and beliefs (see (38a)). For this reason, I argue that for abductive ones, subjectification has not arisen. To repeat, abductive ones are not a sort of subjectification. However, abductive ones may involve speaker's subjectivity (, not subjectification).

10.2.3. (Inter)subjectified Non-DA Conditionals

In this section we consider how three subtypes of non-DA conditionals (i.e. dependence, relevance, and *frankly*-type non-DA conditionals) relate to (inter)subjectification. First, we will consider how dependence non-DA conditionals relate to (inter)subjectification. Look at sentences (52) - (60), which are dependence non-DA conditionals (see section 6.2.4.1).

(52) If she is giving the baby a bath, I'll call back later. (Dancygier (1998: 62))

(53) If it is raining heavily now, I will go to the station to meet them.

(54) If my son is alive, I'll be so happy. (Smith and Smith (1988: 348))

(55) If you're going to Bath, I can give you a lift. (Declerck and Reed (2001: 321))

(56) If Mr. Armani is so desperate to be seen as an artist, he should have allowed himself to be treated as one. (Dancygier and Sweetser (2005: 122))

(57) If they left at nine, they will certainly be home by midnight. (Leech (2004: 119))

(58) If your mother has been here now, she will have been in tears.

(59) If he has finished reading the book by now, he will have returned it to you/the library.

(60) If he won't arrive before nine, there's no point in ordering for him.

(Comrie (1982: 148), Dancygier (1998: 62, 118))

As we discussed in section 8.4.2.3, dependence non-DA conditionals can be divided according to the presence or absence of a cause-effect chain between p and q. Examples (52) - (57) are dependence non-DA conditionals with cause-effect chains between p and q. The cause-effect chains in this case are not attributed to conditional constructional features, as was explained in sections 4.2 and 6.2.4.1. Examples (58) - (60), on the other hand, are dependence non-DA conditionals without cause-effect chains between p and q.

With regard to dependence non-DA conditionals, we can claim that this type of conditionals can undergo subjectification. Actually, examples (58) - (60) are subjectified, in that p and q are not connected via the knowledge of cause-effect chains.

Next, we will move on to relevance non-DA conditionals. Look at examples (61) - (64), which are relevance non-DA ones (see section 6.2.4.2).

(61) If it is raining, there's an umbrella in my wardrobe. (Wakker (1996: 181))

(62) If you are hungry, there are biscuits on the sideboard.

(Dancygier (1998: 90, 103, 124), Dancygier and Sweetser (2005: 40, 110, 113))

(63) There are biscuits on the sideboard if you want them.

(Austin (1961: 158), Sweetser (1990: 119), Declerck and Reed (2001: 320))

(64) There's some iced tea in the fridge if you'd care for a cold drink.

(Takami (1988: 264))

Relevance non-DA conditionals undergo (inter)subjectification. For example, example (61) is subjectified, in that p and q are not connected via the knowledge of cause-effect chains. The subjectification of (61) will also have to do with the use of the p and q truth values of which

have already proved to be true.

On the other hand, examples (62) - (64) are intersubjectified. As was discussed in section 6.3.2, the *if*-clauses of (62) - (64) function as politeness. This suggests that the relevance non-DA conditionals in (62) - (64) have undergone intersubjectification (cf. Traugott (2014: 10-12)). As we already saw in (39), intersubjectified expressions can serve politeness functions.

In this way, some relevance non-DA conditionals are subjectified, and the others are intersubjectified.

Last, we will turn to *frankly*-type non-DA conditionals. Look at examples (65) - (70) below, which are *frankly*-type non-DA conditionals.

(65) If you don't mind my saying so, your slip is showing. (= (1))

(66) If you want to know, I haven't seen him. (= (2))

(67) If you're going out, it's raining. (= (3))

(68) If you ask me, she is jealous of Janet's engagement. (= (4))

(69) If I may say so, that's a crazy idea. (= (5))

(70) If you're not too busy, what's Sue's phone number? (= (6))

My argument is that the *frankly*-type non-DA *if*-clauses are all intersubjectified. As was argued in sections 10.1.1 and 10.1.2, the *frankly*-type non-DA *if*-clauses in examples (65) - (70) have undergone decategorialization. Since decategorialization is a diachronic phenomenon, *frankly*-type non-DA *if*-clauses should be relevant to (inter)subjectification. Moreover, as was discussed in section 6.3.2, the *if*-clauses in (65) - (70) act as politeness

expressions.[90]

For this reason, it is valid to assume that the *frankly*-type non-DA *if*-clauses are all intersubjectified. If *frankly*-type non-DA *if*-clauses have undergone intersubjectification, we can claim that *if*-clauses like those of (71) - (73) below come from *frankly*-type non-DA *if*-clauses.

(71) I'll come along *if you don't mind*. (*LDCE*[3])

(72) There is a dessert menu, *if you like*.

(73) This is similar, *if you will*, to the accounting and engineering professions, which have peer review processes. (Brinton (2008: 166))

Expressions like *if you don't mind*, *if you like*, *if you will*, and *if I may*, which show fusion, routinization, and idiomaticization, have undergone intersubjectification and serve as politeness markers (cf. Haiman (1994), Brinton and Traugott (2005), Claridge (2013), and Brinton (2017)).[91] Phenomena known as fusion, routinization, idiomaticization, intersubjectification, and the development into politeness markers can be observed in only *frankly*-type non-DA *if*-clauses; these phenomena are not observed in NCP, generic, deductive, abductive, dependence non-DA, and relevance non-DA *if*-clauses. Hence, we can assume that expressions as in *if you don't mind*, *if you like*, *if you will*, and *if I may* come from *frankly*-type non-DA *if*-clauses.

In addition, with respect to *if*-clauses such as those of (71) - (73), we can postulate: the ellipsis of an object or a verb phrase arose. In *if*-clauses like (74) and (75) below, for example,

[90] According to Brinton (2017: 235), *if I may say so* as in (69) has a politeness function (cf. Aijmer (2013)).

[91] Aijmer (1996) and Brinton (2008) call *if*-clauses as in (71) - (73) "conversational routines" and "comment clause," respectively. Kaltenböck et al. (2011), Heine et al. (2013), and Kaltenböck and Heine (2014), on the other hand, terms *if*-clauses as in (71) - (73) "conceptual theticals."

there remain some factors illustrating *if you don't mind*, in which the ellipsis of an object of the verb *mind* occurred.

(74) *If you don't mind my saying so*, your slip is showing. (= (65))

(75) Very short skirt on *if you don't mind me saying*. (Kaltenböck et al. (2011: 866))

The expressions *if you like*, *if you will*, and *if I may*, too, would have been formed in the same way as we saw above.

In this way, we can see (inter)subjectification in non-DA *if*-clauses and the change in the category status of the non-DA *if*-clause as gradual (cf. Bybee (2010)).

10.3. Summary

In this chapter, we have argued that while deductive/abductive conditionals cannot undergo (inter)subjectification, non-DA conditionals can. Within the framework adopted in the present study, deductive and abductive conditionals, which are both based on a universal principle and are a cross-linguistically valid reasoning, are non-subjective, and therefore do not undergo diachronic change, while non-DA ones can undergo diachronic processes, such as decategorialization and (inter)subjectification.

The main points made in this chapter can be summed up as in (76) below:

(76) GRP conditionals

(a) Deductive conditionals:

Conditionals of this type do not undergo subjectification.

(b) Abductive conditionals:

Conditionals of this type do not undergo subjectification.

(c) Non-DA conditionals

(i) Dependence non-DA *if*-clauses:

If-clauses of this type can undergo subjectification.

(ii) Relevance non-DA *if*-clauses:

If-clauses of this type undergo (inter)subjectification.

(iii) *Frankly*-type non-DA *if*-clauses:

If-clauses of this type are decategorialized into style adverbials/disjuncts, and are intersubjectified.

Traugott and Dasher (2002: 40) specify that truth conditional ＞ non-truth-conditional is a path of directionality in semantic change. Brinton (2008: 48) shows a unidirectionality of diachronic change: scope within the proposition ＞ scope over the proposition ＞ scope over discourse. Also, recall the directionality described in (37): non-/less subjective ＞ subjective ＞ intersubjective. The arguments made in the present chapter about (inter)subjectivity and (inter)subjectification of GRP conditionals are compatible with these paths of directionality in semantic-pragmatic change (cf. Traugott and Trousdale (2013: 107)). We can, thus, see that analyses of *if*-clauses in this chapter are on the right track.

In this way, through the analysis of GRP conditionals by our approach, we see (inter)subjective meanings becoming the coded meanings.

Chapter 11

Metalinguistic Conditionals

11.1. Introduction

Conditionals like examples (1) – (13) below are often termed "metalinguistic conditionals" (see Quirk et al (1985), Sweetser (1990), Declerck and Reed (2001), Dancygier and Sweetser (2005)). Although Dancygier (1998) calls examples like (1) – (13) "metatextual conditionals," the present study by tradition uses the term "metalinguistic conditionals" (see Horn (1985, 1989)).[92, 93]

(1) His style is florid, *if that's the right word*. ['I'm not sure that *florid* is the right word.']

(Quirk et al. (1985: 1096))

(2) I've come to offer my congratulations, *if that's the right word*.

(Athanasiadou and Dirven (2000: 4))

(3) He trapped two mongeese, *if "mongeese" is the right word*. (Dancygier (1998: 104))

(4) He trapped two mongeese, *if that's how you make a plural of "mongoose."*

(Dancygier (1998: 104))

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[92] In Horn's definition, metalinguistic negation is "a device for objecting to a previous utterance on any grounds whatever, including conventional or conversational implicata it potentially induces, its morphology, its style or register, or its phonetic realization" (Horn (1989: 363)). He gives as examples of metalinguistic negation:

(i) He didn't call the [pólis], he called the [polís].
(ii) He didn't manage to trap two mongeese — I managed to trap two mongooses.

(Horn (1989: 371))

Examples (i) and (ii) above are cases in metalinguistic negation of phonetic representation and inflectional morphology, respectively.

[93] According to Dancygier (1998), the term *metatextual* "seems to appropriately reflect the 'text selecting' function of formal devices the construction employs" (Dancygier (1989: 100)).

(5) Grandma is feeling lousy, *if I may put it that way*. (Dancygier (1998: 104))

(6) Grandma is feeling lousy, *if that's an appropriate expression*.

(Dancygier (1998: 104, 105))

(7) Grandma is "feeling lousy," *if you'll allow me to put it that way*.

(Sweetser (1990: 140))

(8) The Big Bang Theory of the origin of the universe bears startling resemblance to the description of creation in Genesis, *if one may put it so*. ['I'm not sure that one may phrase the resemblance in that way.'] (Quirk et al. (1985: 1096))

(9) He is a true yuppie, *if that word is still being used*. (Declerck and Reed (2001: 353))

(10) My husband, *if I can still call him that*, hates onion soup. (Dancygier (1998: 106))

(11) The story, *if so it may be termed*, is weak and loose.

(Declerck and Reed (2001: 354))

(12) She values her "pivesi," *if that's the correct way of pronouncing the word*.

(Declerck and Reed (2001: 353))

(13) OK, I'll have a *tomahto*, *if that's how you pronounce it*. (Sweetser (1990: 140))

As Declerck and Reed (2001: 353) say, a metalinguistic conditional clause comments on the choice of words or the pronunciation of a word in q. In fact, the *if*-clauses in examples (1) - (11) have to do with the choice of words in q, and the *if*-clauses in examples (12) and (13) comment on the pronunciation of a word in q.[94]

This chapter considers metalinguistic conditionals. In particular, we focus on the function of *if*-clauses of metalinguistic conditionals.

[94] With respect to metalinguistic conditionals' clause order, Dancygier (1998: 106) states that metalinguistic *if*-clauses are typically sentence-final. They, however, can occur in a sentence-medial position too, as in examples (10) and (11).

11.2. The Function of Metalinguistic Conditional *If*-Clauses

Metalinguistic conditionals are in the category of non-DA conditionals, because they are GRP conditionals, and are neither deductive nor abductive conditionals. In the framework of the present study, non-DA *if*-clauses fall into three types: dependence, relevance, and *frankly*-type non-DA *if*-clauses. This section, focusing on the function of metalinguistic conditional clauses, considers which type of the three non-DA *if*-clauses metalinguistic *if*-clauses should be classified into.

First of all, look at examples with double *if*-clauses, as is illustrated in (14) - (16). The second *if*-clauses of these examples are each a metalinguistic conditional clause.

(14) I'd love to go *if I didn't feel so lousy*, *if that's an appropriate expression*.

(Dancygier (1998: 105))

(15) *If I haven't already asked*, when did you last see my husband — *if I can still call him that*? (Dancygier (1998: 106))

(16) (In a context where a person who does not know the right plural form of the word *codex* has just spoken to a historian:)

If you are very busy and not available, I'll show you these codexes later on — *if "codexes" is the right way to say it*.

In examples (14) - (16) above, the second *if*-clauses comment on the choice of words.[95] Also, in examples (14) - (16), the metalinguistic *if*-clauses are each structurally external to the first *if*-clause. At this point, let us look at example (17) below, in which a metalinguistic *if*-clause

[95] The second *if*-clauses of examples (15) and (16) have to do with the choice of words in q. The second *if*-clause of example (14), on the other hand, has to do with the choice of words in not q but the first *if*-clause; in the second *if*-clause, *that* refers to *so lousy* in the first *if*-clause.

is used with a *since*-clause. The metalinguistic conditional clause in (17) as well is external to the *since*-clause.

(17) *Since you are very busy*, I'll show you these codexes later on — *if "codexes" is the right way to say it*.

From the examples in (14) - (17), we can claim that metalinguistic conditional clauses function as style adverbials/disjuncts, which means that they are in the category of *frankly*-type non-DA *if*-clauses.

Furthermore, as Dancygier (1998) states, metalinguistic conditionals are not used in the subjunctive mood (see the contrast between example (6) and (18)):

(18) ? Grandma would be feeling lousy if that were an appropriate expression.

(Dancygier (1998: 105))

As we have already argued, within the framework of the present study, *frankly*-type non-DA conditionals do not undergo the subjunctive mood (see section 6.2.4.3 and chapter 8 in broader detail).

We can, thus, conclude that metalinguistic conditional clauses belong under the category of *frankly*-type non-DA *if*-clauses in our framework. For this reason, we can see that metalinguistic conditional clauses serve as style adverbials/disjuncts.

11.3. Summary

A metalinguistic conditional *if*-clause comments on the choice of words or how words

used are pronounced. Within the present framework, metalinguistic *if*-clauses belong under the category of *frankly*-type non-DA *if*-clauses, which function as style adverbials/disjuncts.

Chapter 12

Meta-Metaphorical Conditionals

12.1. Introduction

The last chapter discussed metalinguistic conditionals. This chapter deals with what Sweetser (1996a) and Dancygier and Sweetser (2005) refer to as "meta-metaphorical conditionals." Look at the examples in (1) - (4) below. Some previous studies classify conditional constructions like these into the same group as metalinguistic conditionals (see the last chapter).[96] However, Sweetser (1996a) and Dancygier and Sweetser (2005) term them "meta-metaphorical conditionals," making a clear distinction between metalinguistic and meta-metaphorical conditionals.

(1) If the Île de la Cité is the heart of Paris, the Seine is the aorta.

(Sweetser (1996a: 221))

(2) If Moriarty is the Napoleon of crime, then Holmes is a civilian Wellington.

(Sweetser (1996a: 221))

(3) If the beautiful Golden Gate is the thoroughbred of bridges, the Bay Bridge is the workhorse. (Dancygier and Sweetser (2005: 132))

(4) If public transit is the lifeblood of a dynamic city, Vancouver's in a coma.

(Dancygier and Sweetser (2005: 134))

According to Sweetser (1996a: 223), example (1) says that if we are metaphorically seeing the

[96] Dancygier (1998: 108) states that examples as in (1) - (4) are conditionals which are "metatextual" in character.

Île de la Cité as the heart of Paris, we should call the Seine the aorta of Paris. Here, Paris is viewed as a human body; in Sweetser's (1996a: 228) words, "PARIS IS A HUMAN BODY." With respect to example (2), Sweetser (1996a: 223) states that "if we map Moriarty onto Napoleon (here taken to be a prototype of the powerful, brilliant, and evil empire-building military leader), then we should also map Holmes, Moriarty's lifelong opponent, onto Wellington (another great military leader who devoted much of his life to the frustration and eventual defeat of Napoleon's imperialistic expansion)." Example (3), as Dancygier and Sweetser (2005: 132) note, establishes and develops a metaphorical relationship between two different domains: bridges and horses. In example (4), Vancouver is seen as a human body metaphorically.

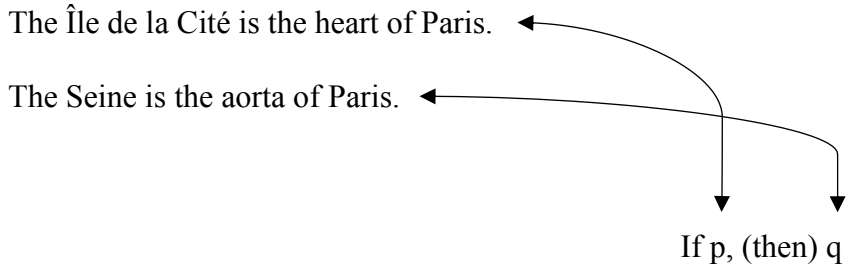
This chapter considers meta-metaphorical conditionals (*If p, (then) q*). This chapter is organized as follows. Section 12.2 explores how in meta-metaphorical conditionals p and q are related to metaphor. Section 12.3 shows which type of conditionals in the present framework meta-metaphorical conditionals are classified into. Finally, section 12.4 summarizes the chapter.

12.2. Metaphor and Conditionals

In the present study, meta-metaphorical conditionals are defined as conditionals where metaphorical expressions are used in p and q. In addition, in meta-metaphorical conditionals, p and q involve the same kind of a conceptual metaphor, and q is asserted against the background of p. For example, let us consider example (1), repeated below as example (5a). The sentence *The Île de la Cité is the heart of Paris* and the sentence *The Seine is the aorta of Paris* are both metaphorical expressions. These are based on the metaphor: PARIS IS A HUMAN BODY (cf. Lakoff and Johnson (1980, 1999), Lakoff (1987, 1990, 1993)).

(5) a. If the Île de la Cité is the heart of Paris, the Seine is the aorta. (= (1))

b. PARIS IS A HUMAN BODY



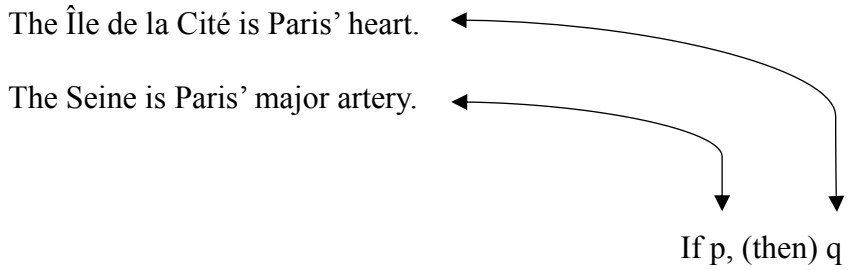
As is illustrated in (5b), both p and q are characterized as the PARIS IS A HUMAN BODY metaphor. The lines with arrows here index metaphorical expressions used in p and q.

In some meta-metaphorical conditionals, the pairings of p and q can be reversible (see Sweetser (1996a)). In fact, the pairing of p and q in example (5a) (= (1)) can be reversed, as is shown in below:

(6) a. If the Seine is Paris' major artery, the Île de la Cité is its heart.

(Sweetser (1996a: 224))

b. PARIS IS A HUMAN BODY



In example (6a), the positions of p and q in example (5a) are exchanged, as we see from the

contrast between (5b) and (6b).[97] This phenomenon can be explained by the fact that the p's and q's in examples (5a) and (6a) are based on the same kind of a conceptual metaphor. That is, in examples (5a) and (6a), both p and q are understood against the background of the same metaphor PARIS IS A HUMAN BODY. In this way, examples (5a) and (6a) are coherent with the PARIS IS A HUMAN BODY metaphor (see Lakoff and Johnson (1980: 22, 105), Lakoff (1987: 383-389, 409-411), Gibbs (1994: 149-161, 248-260)).

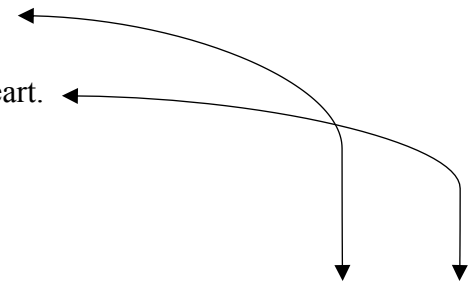
In other meta-metaphorical conditionals, p's describe a kind of a conceptual metaphor itself; sentences which describe the kind of a conceptual metaphor can be used in p, as in (7a) and (8a) below:

(7) a. If Paris is a person, the Île de la Cité is its heart. (Sweetser (1996a: 224))

b. PARIS IS A HUMAN BODY

The Île de la Cité is Paris' heart.

The Seine is Paris' aorta.



If p, (then) q

[97] Dancygier (1998) gives examples (i) and (ii) as representing the possibility of reversing the order of p and q:

(i) If the Cité is the heart of Paris, the Latin Quarter is its soul.
(ii) If the Latin Quarter is the soul of Paris, the Cité is its heart.

(Dancygier (1998: 108))

Examples (i) and (ii) above, very similar to examples (5a) and (6a), are based on the PARIS IS A HUMAN BEING metaphor.

(8) a. ? If Paris is a person, the Seine is its aorta.

b. PARIS IS A HUMAN BODY

The Île de la Cité is Paris' heart.

The Seine is Paris' aorta.

If p, (then) q

In (7a), p contains an independent clause which describes the kind of a conceptual metaphor (PARIS IS A HUMAN BODY)－in a slight different form－, and q is characterized by that conceptual metaphor, as illustrated in (7b). Likewise, in (8a), p and q contain a clause which describes the kind of a conceptual metaphor, and one of its metaphorical expressions, respectively (see (8b)), although the acceptability of example (8a) is lower than that of example (7a).[98]

In this way, in examples (5a) - (8a), p and q are metaphorical statements which are based on the same kind of a conceptual metaphor. Meta-metaphorical conditionals, thus, differ from metalinguistic conditionals in that metaphor operates in p and q.

12.3. Meta-Metaphorical Conditionals and Dependence Non-DA Conditionals

In meta-metaphorical conditionals, p is formed by general rules, attributed to the [＋general-rule] feature (GRP conditionals), and there is no deduction-abduction relationship

[98] In cases where clauses describing the kind of a conceptual metaphor are maintained in q, and moreover, instances of that metaphor are contained in p, such conditionals are not likely to be accepted:

(i) ? If the Île de la Cité is the heart of Paris, then Paris is a person. (Sweetser (1996a: 224))
(ii) ?? If the Seine is an artery, then Paris/France/Europe is a person. (Sweetser (1996a: 224))

between p and q, which implies that a meta-metaphorical conditional is a non-DA conditional. Therefore, meta-metaphorical conditionals are either dependence, relevance, or *frankly*-type non-DA conditionals. In the present study, meta-metaphorical conditionals can be classified into the category of dependence non-DA conditionals. The linguistic evidence in support of this claim is below:

(ⅰ) Meta-metaphorical conditionals can appear in the subjunctive mood:

(9) If Paris *were* a person, the Seine *would be* its aorta.

(10) If the Golden Gate Bridge *were* a thoroughbred, the Bay Bridge *would be* a workhorse.

(Dancygier and Sweetser (2005: 134))

(11) "If the car *was/were* a horse, he'*d be* a centaur," she thought.

(Dancygier and Sweetser (2005: 134))

Sentences (9)–(11) above are subjunctive meta-metaphorical conditionals; indeed, in p *were* is used, and in q a past modal is used. As argued in section 6.2.4, relevance and *frankly*-type non-DA conditionals cannot be used in the subjunctive mood, but dependence non-DA conditionals can be used in the subjunctive mood. Look at the examples below:

(12) a. If you are hungry, there are biscuits on the sideboard.

(Dancygier (1998: 90, 103, 124), Dancygier and Sweetser (2005: 40, 110, 113))

b. # If you *were* hungry, there *would be* biscuits on the sideboard.

(13) a. If you've come to see Deirdre, she's dead.

b. # If you'*d come* to see Deirdre, she *would be* dead.

(Dancygier and Sweetser (2005: 114))

(14) a. If my son is alive, I'll be so happy.

b. If my son *were* alive, I'*d be* so happy. (Smith and Smith (1988: 348))

Examples (12a, b) and (13a, b) are relevance non-DA and *frankly*-type non-DA conditionals, respectively.[99] Example (14a, b), on the other hand, are dependence non-DA conditionals. In this way, of the three types of non-DA conditionals, only dependence non-DA conditionals can appear in the subjunctive mood.

(ii) Meta-metaphorical conditionals can co-occur with *frankly*-type non-DA *if*-clauses:

(15) *If I may say so, if the Île de la Cité is the heart of Paris*, the Seine is the aorta.

(16) *If I may say so, if Moriarty is the Napoleon of crime*, then Holmes is a civilian Wellington.

(17) *If you don't mind my saying so, if public transit is the lifeblood of a dynamic city*, Vancouver's in coma.

Examples (15) - (17) are meta-metaphorical conditionals which are used with *frankly*-type non-DA *if*-clauses. As we saw in section 6.2.4, *If I may say so* and *If you don't mind my saying so* are *frankly*-type non-DA *if*-clauses. Also, as was shown in section 10.1, dependence non-DA conditionals too can co-occur with *frankly*-type non-DA *if*-clauses, as in:

(18) *If you don't mind my saying so*, *if they haven't seen the museum* we'd better go there

[99] As was shown in section 6.3.12, backshifted relevance non-DA *if*-clauses can be made more polite expressions, not the subjunctive mood.

(i) If you needed some help, Helen is willing to lend a hand.
(Huddleston and Pullum (2002: 755))

today.

(19) *If I may say so*, *if you love her that much*, you should meet her.

In this way, dependence non-DA conditionals can be used with *frankly*-type non-DA *if*-clauses.

(iii) It is possible to insert *then* before the main clause in meta-metaphorical conditionals:

(20) If Moriarty is the Napoleon of crime, *then* Holmes is a civilian Wellington. (= (2))

(21) If Scarlett O'Hara is a red rose, *then* Melanie Wilkes is a violet.

(Sweetser (1996a: 221))

In examples (20) and (21), which are meta-metaphorical conditionals, *then* is inserted before the main clause. As shown in section 6.3.8, *then* can be inserted before the main clause of dependence non-DA conditionals, as in:

(22) If she is giving the baby a bath, *then* I'll call back later.

(23) If Mr. Armani is so desperate to be seen as an artist, *then* he should have allowed himself to be treated as one.

(24) If he won't arrive before nine, *then* there's no point in ordering dinner for him.

(Takami (1994: 80))

As already mentioned in section 6.3.8, examples (22) - (24) are dependence non-DA conditionals.

In *frankly*-type non-DA conditionals, by contrast, it is impossible to insert *then* before the main clause, as in examples (25) - (29) below, to name but a few (see section 6.3.8 in detail):

(25) * If you don't mind my saying so, *then* your slip is showing.

(26) * If you want to know, *then* I haven't seen him.

(27) * If I may be frank, *then* she isn't very stupid. (Greenbaum (1969: 84))

(28) * If I may change the subject, *then* I visited Sue yesterday. (Takami (1994: 80))

(29) * If you need any help, *then* my name is Ann. (Dancygier and Sweetser (2005: 149))

In addition, as shown in section 6.3.8, there are some relevance non-DA conditionals where *then* cannot be inserted before the main clause, as in:

(30) * If you're hungry, *then* there's some food in the fridge.

(Declerck and Reed (2001: 364))

In (30), *then* is inserted before the main clause of a relevance non-DA conditional.

In this way, *then* can be inserted before the main clause of dependence non-DA condtionals.

12.4. Summary

This chapter has dealt with meta-metaphorical conditionals. They are conditionals where p and q are metaphorical statements; moreover, in meta-metaphorical conditionals, q is asserted against the background of p. Our argument is that in the taxonomy in this framework, meta-metaphorical conditionals are in the category of dependence non-DA conditionals. The present chapter has verified this.

We can thus see that the distinction between dependence non-DA *if*-clauses and the other

non-DA *if*-clauses (viz. relevance, and *frankly*-type non-DA *if*-clauses) is valid and appropriate for the classification of non-DA *if*-clauses.

Chapter 13

Conditional Clauses with *Be Going to*

13.1. Introduction

Traditionally *be going to* has been classified into the category of auxiliaries. So far, there have been numerous studies on conditionals (*If p, (then) q*) with *will* in the *if*-clause (e.g. Poutsma (1926), Jespersen (1931), Allen (1966), Palmer (1974, 1979, 1983, 1988, 1990), Close (1980), Comrie (1982, 1985), Declerck (1984, 1991a, b), Haegeman and Wekker (1984), Jacobsson (1984), Quirk et al. (1985), Nieuwint (1986), Leech (1987, 2004), Dancygier (1998), Declerck and Reed (2001), Dancygier and Sweetser (2005); cf. footnote 16). By contrast, there are not so many studies on conditionals with *be going to* in the *if*-clause. The purpose of this chapter is to consider *be going to* used in *if*-clauses within the framework of the present study.

As is illustrated in (1) and (2) below, *be going to* can occur in *if*-clauses. As Brisard (2001: 267) notes, the use of *be going to* in the protasis is not a performance error but a fact of English. As will be shown later, *be going to* in (1) and (2) indicates the "future of present cause" meaning in the sense of Leech (2004).

(1) If interest rates *are going to* climb, we'll have to change our plans.

(Hopper and Traugott (2003: 3))

(2) I'll ring you up if I*'m going to* be late for dinner.

(Jacobsson (1984: 132), Declerk and Reed (2001: 157))

In this chapter, it is shown that our framework enables fine-grained analyses of *if*-clauses

in which *be going to* is used. This chapter is organized as follows. In section 13.2, we discuss the basic meanings of *be going to* in itself. Section 13.3 presents analyses of conditionals which have *be going to* in the *if*-clause. Finally, section 13.4 summarizes this chapter.

13.2. The Meanings of *Be Going to*

Before we turn to examples where *be going to* occurs in the *if*-clause, in this section we consider *be going to*＋infinitive used in independent clauses. According to Leech (2004), *be going to* has two meanings. One is called the "future of present intention," and the other is called the "future of present cause."

(3) Future of present intention:

a. I *am going to leave* tomorrow. (Leech (2004: 59))

b. She says she*'s going to be* a doctor when she grows up.

(Leech and Svartvik (2002: 78))

(4) Future of present cause:

a. She*'s going to have* twins. ('She's already pregnant.')

b. Just look! She*'s* definitely *going to win* the race! ('She's starting to overtake the other runners.') ((4a, b): Leech (2004: 59))

c. It*'s going to rain*. ('I can already see black clouds gathering.')

(Leech and Svartvik (2002: 78))

Example (3a), as Leech (2004) notes, expresses a strong expectation that the intention will be carried out. As Leech and Svartvik (2002) state, *be going to* in example (3b) refers to a future

resulting from a present intention. Thus, *be going to* can express the subject's intention at the moment of speech, i.e. the present moment. The present study terms this sense of *be going to* the 'intention' sense.[100] The 'intention' sense of *be going to* can be defined as (5) below:

(5) Intention sense:

Be going to in its 'intention' sense is used for displaying the subject's intention at the moment of speech (i.e. the present moment).

Note that (5) above is restricted to *be going to* in independent clauses/sentences.

In each of the examples in (4a – c), on the other hand, "there is the feeling that factors giving rise to the future event are already present; or (to be more exact) it is as if THE TRAIN OF EVENTS LEADING TO THE FUTURE HAPPENING IS ALREADY UNDER WAY" (Leech (2004: 59)). With respect to examples like (4a – c), Leech et al. (2001: 181) state that *be going to* is used for a future event or state for which there are signs already in the present.[101] This study refers to the sense of *be going to* in (4a – c) as the 'sign' sense. The 'sign' sense can be defined as (6) below:

(6) Sign sense:

Be going to in its 'sign' sense is used when there exist signs for a future event or state

[100] According to Leech (2004), the "intention," "willingness," and "insistence" senses in *will* are all concerned with "volition," which often combines with *will*'s future implication of "prediction." Also, as he says, there is a semantic difference between *will* and *be going to* in their expression of a future intention: "*I'll give you a hand* expresses the speaker's present resolve to do something in the (near) future; *I'm going to give you a hand* reports what the speaker may have already decided to do. In this sense, *will* is more 'performative' " (Leech (2004: 87)).

[101] In Coates' (1983: 201) words, "when a speaker makes a prediction, or statement about the future, using BE GOING TO, then some indication of future event (or state) referred to is present at the moment of speaking."

of affairs at the moment of speech (i.e. the present moment).

Note that (6) above, as in the case of (5), is restricted to *be going to* in independent clauses/sentences.

In this section, we have shown that *be going to* + infinitive has two meanings: the 'intention' sense and the 'sign' sense. The former expresses the subject's intention at the moment of speech, and the latter is used in the situation where there are signs for future events or states of affairs at the moment of speech.

13.3. An Analysis of *If*-Clauses with *Be Going to*

The last section has shown that *be going to* indicates the 'intention' and 'sign' senses. In each of the two senses, *be going to* can occur in *if*-clauses. This section considers conditionals where *be going to* in the two senses occur in the protasis.

As was argued in chapters 3 and 6, the protasis in GRP conditionals is formed by general rules. Hence, *be going to* can be used in GRP *if*-clauses. In addition, it may seem that *be going to*, a sort of auxiliary expressing future, cannot occur in the protasis of NCP conditionals, but it can occur in NCP *if*-clauses, as will be shown later. In this section, we will first show that *be going to* can occur in GRP *if*-clauses (section 13.3.1), and then that *be going to* can occur in NCP *if*-clauses too (section 13.3.2).

13.3.1. *Be Going to* in GRP *If*-Clauses

To repeat, in GRP conditionals, p is formed by general rules, due to the [+general-rule] feature. To put it another way, an independent clause is embedded in GRP *if*-clauses without

undergoing such tense-aspect restrictions as in NCP *if*-clauses (see sections 3.2.1, 4.1, 5.1 and 6.1). In fact, *be going to* can occur in GRP *if*-clauses. Look at examples (7) - (9) below:

(7) If you *'re going to convict* him, you will need hard evidence that there's anything illegal in what he said. (Linebarger (1987: 374))

(8) If Millie *is not going to work* harder, she will not pass her exam. (Douven (2016: 150))

(9) [Mrs. Thatcher at her first press conference after being elected leader of the Conservative Party]: 'One will obviously consult with those in the Shadow Cabinet who will be responsible for economic policy. And, if you *'re going to ask* me who those will be, I don't know.' (Westminster, 15/2/75), (Wekker (1976: 131))

The p's of examples (7) - (9) above are formed by general rules. Therefore, examples (7) - (9) are GRP conditionals. Moreover, *be going to* in these p's indicates the 'intention' sense in (5): the p's in (7) - (9) refer to the subjects' (*you*, *Millie*) intentions.

Be going to in the 'sign' sense in (6) can also appear in GRP *if*-clauses, as illustrated in examples like the following:

(10) If interest rates *are going to climb*, we'll have to change our plans. (= (1))
(Hopper and Traugott (2003: 3))

(11) If you *'re going to lose* your temper, I won't play.
(Huddleston and Pullum (2002: 211))

(12) If all the letters *are going to be* finished by 4 o'clock, why don't you ask Gordon to post them on his way home? (Declerck and Reed (2001: 150))

According to Hopper and Traugott (2003), *be going to* in (10) is aspectual. In (11), according

to Huddleston and Pullum (2002), "you have already shown signs of, or started, losing your temper." According to Declerck and Reed (2001), the *if*-clause of (12) "echoes either a statement which has just been made or a thought which the speaker has just had"; in Declerck and Reed's (2001) terms, the *if*-clause of (12) is a "closed P-clause" (Declerck and Reed (2001: 148, 150)).

In this way, we have seen that *be going to*, both in the 'intention' sense and in the 'sign' sense, can occur in GRP *if*-clauses.

13.3.2. *Be Going to* in NCP *If*-Clauses

As was stated in the outset of this chapter, generally *be going to* is regarded as an auxiliary expressing future, which means that *be going to* falls into the category of future auxiliaries (see Coates (1983), Quirk et al. (1985), Leech (1987, 2004), Palmer (1988, 1990), Hopper and Traugott (2003), etc.). What is more, in the protasis of NCP conditionals, the simple present tense form, present perfect form, or present progressive form must be used although it refers to the future time (see chapters 3 - 5). For this reason, it may seem that *be going to* cannot occur in NCP *if*-clauses. However, in fact, *be going to* can occur in NCP *if*-clauses, as in (13) - (15). First, observe the example in (13) below:

(13) You were saying the other day, said the doctor, that you thought Alice might be negligent about her insulin. — No, I don't think so now. At least I'll see that she isn't. If she*'s going to take* too much of the stuff or too little she'll do it whether we go away or not. (Spark, 90) (Lansari (2009: 210))

In the *if*-clause of (13), *be going to* in the 'intention sense' is used; at least, *be going to* in this

case does not indicate the 'sign' sense.

I claim that the *if*-clause in (13) is an NCP *if*-clause. This is motivated by the fact that the *be*-verb in the *be going to* in question here is in the simple present tense form, i.e. *'s*. It is true that *be going to* in itself is classed as a future auxiliary, but the reason why in the *if*-clause of (13) *be going to* is used is that we focus on only the *be*-verb in *be going to*. To put it another way, in Dancygier's (1998) and Dancygier and Sweetser's (2005) terms, the p in (13) is backshifted. Indeed, in *be going to* in (13), the speaker's intention is not at the moment of speech but in the future time. This suggests that the p in (13) is backshifted.

In short, *be going to* in (5) indicates the intention at the present time, but *be going to* in the 'intention' sense used in NCP *if*-clauses indicates the intention in the future time.

Next, let us turn to examples (14) and (15) below, where *be going to* is used in the *if*-clause:

(14) I'll ring you up if I*'m going to be* late for dinner. (= (2))

(Jacobsson (1984: 132), Declerk and Reed (2001: 157))

(15) If there*'s going to be* a hard frost I'll put some protection over the camellia.

(Declerk and Reed (2001: 157))

According to Declerck and Reed (2001: 157-158), in examples (14) and (15), "open P-clauses" are used (cf. section 6.1), and the *be going to* in the *if*-clauses is interpreted as "nonvolitional." In my approach, the *be going to* in (14) and (15) indicates the 'sign' sense. However, as regards the p's of (14) and (15), unlike (4a - c), there exist signs for a future event or state of affairs not at the present moment but in the future time (see (6)). Assuming that the protases of (14) and (15) are NCP *if*-clauses, this issue can be resolved. More specifically, when we focus on only *be*-verbs in *be going to*, we can regard the p's in (14) and (15) as backshifted.

In practice, in the p's of (14) and (15), the simple present forms (i.e. *'m* and *'s*) are used.

In this way, examples (14) and (15) are NCP conditionals where *be going to* in the 'sign' sense occurs in the *if*-clause. In (14) and (15), p is backshfted, signs for a future event or state of affairs are assumed to exist in the future, and that future event is assumed to occur in farther future.

This section has thus seen that *be going to*, whether it indicates the 'intention' sense or the 'sign' sense, can be used in NCP *if*-clauses, in which case the speaker's intention or signs for a future event are assumed to occur in the future.

13.4. Summary

Be going to has two senses. In this chapter, one is referred to as the 'intention' sense, and the other is referred to as the 'sign' sense. Both *be going to* in the 'intention sense' and that in the 'sign sense' can be used in GRP and NCP *if*-clauses.

Since in GRP conditionals p is formed by general rules (cf. the [＋general-rule] feature), *be going to* can be used in GRP *if*-clauses. Also, it is possible to use *be going to* in NCP *if*-clauses as well. In this case, we focus on only *be* in *be going to*, and we regard *be*-verbs in the simple present tense form (i.e. *am/are/is*) as backshifted.

When *be going to* in the 'intention' sense is used in NCP *if*-clauses, the speaker's intention is assumed to exist in the future. When *be going to* in the 'sign' sense is used in NCP *if*-clauses, signs for a future event are assumed to occur in the future, and the future event is assumed to occur in farther future.

In this chapter, we have demonstrated that *be going to* can occur in *if*-clauses. The main contribution of this chapter is to present the phenomenon of *be going to* occurring in both NCP and GRP *if*-clauses. This also contributes to verifying NCP and GRP classes in the present

framework as a classification of conditionals.

Chapter 14

Concluding Remarks

This study has classified conditional constructions (*If p, (then) q*) into three major classes, by the combination of three constructional features [±general-rule, ±cause-effect]:

(1) [－general-rule, ＋cause-effect] : NCP conditionals

[＋general-rule, －cause-effect] : GRP conditionals

[＋general-rule, ＋cause-effect] : Generic conditionals

In conditionals constituted by [－general-rule, ＋cause-effect] features, p denotes neutral conditions. This class of conditionals is termed Neutral-Condition-P-clause conditionals ('NCP' is used as a shortened form of **N**eutral-**C**ondition-**P**-clause). A neutral condition refers to a condition wherein the speaker's mental attitude toward the fulfillment or nonfulfillment of p is seen as neutral.

In conditionals constituted by [＋general-rule, －cause-effect] features, p is formed by general rules. This class of conditionals is called General-Rule-P-clause conditionals ('GRP' is used as a shortened form of **G**eneral-**R**ule-**P**-clause). The general rules here refer to the rules governing the tense-aspect interpretation of independent sentences.

Conditionals constituted by [＋general-rule, ＋cause-effect] features are referred to as generic conditionals in this thesis. In generic conditionals, p and q have restrictions on aspect. Although in both generic and GRP conditionals p and q are formed by general rules, in generic conditionals they are more strongly constrained in terms of aspect than in GRP ones. More specifically, in generic conditionals, the use of the perfect/progressive form in p and q is not acceptable.

GRP conditionals are classified in terms of types of reasoning: whether a GRP conditional is constructed based on deduction, abduction, or neither of the two. That is, GRP conditionals can be divided according to the criteria of whether or not deductive/abductive reasoning is performed. GRP conditionals constructed by deduction, abduction, and neither deduction nor abduction are called deductive, abductive, and non-DA conditionals ('non-DA' is a reduced form of ***non-d****eductive and* ***non-a****bductive*), respectively.

If-clauses in non-DA conditionals can be classified into three types by the difference in the category status of the *if*-clause. Each of the three types is called dependence, relevance, and *frankly*-type non-DA *if*-clauses. *Frankly*-type non-DA *if*-clauses function as the so-called style adverbials or style disjuncts. Dependence non-DA conditionals can be used in the subjunctive mood. This type of *if*-clause can also be interpreted as focused on with the focus marker *only*. Relevance non-DA *if*-clauses, by contrast, neither can appear in the subjunctive mood, nor can be focused on with *only*. Moreover, in relevance non-DA conditionals, unlike in dependence non-DA ones, the truth status in q is not influenced by the truth value of p: q is true regardless of whether p is true or false. In the three types of non-DA conditionals, the strength of the connection between p and q is in the following order: dependence non-DA conditionals (the strongest), relevance non-DA conditionals (intermediate), *frankly*-type non-DA conditionals (the weakest).

In conditionals constructed based on deduction and abduction, p and q are formed by general rules. This can be predicted to be cross-linguistically valid. In fact, in English, French, Spanish, Russian, Italian, Portuguese, Japanese, Mandarin Chinese, and Korean, the protasis and apodosis in conditionals based on deduction and abduction are formed by each individual language's general rules. On the other hand, in German, the protasis and apodosis of conditionals, including those of conditionals constructed based on deduction and abduction, undergo the word-order rules particular to German: verbs must be moved to the final position

of the protasis, and be moved to the initial position of the apodosis. However, we can cross-linguistically hypothesize that the tense-aspect forms in the protasis and apodosis of conditionals based on deductive and abductive reasonings accord with those in each individual language's independent sentences.

From the perspective of (inter)subjectification, deductive and abductive conditionals do not undergo subjectification, dependence non-DA conditionals can undergo subjectification, relevance non-DA conditionals can undergo (inter)subjectification, and *frankly*-type non-DA *if*-clauses, which are decategorialized into style adverbials/disjuncts, are intersubjectified. Indeed, from the perspective of politeness, some of the relevance non-DA *if*-clauses and all of the *frankly*-type non-DA *if*-clauses serve as politeness functions.

Metalinguistic conditional clauses are classed as *frankly*-type non-DA *if*-clauses, which implies that they serve style adverbials/disjuncts. Meta-metaphorical conditionals are in the category of dependence non-DA conditionals. That metalinguistic conditionals and meta-metaphorical conditionals clearly fall into *frankly*-type non-DA conditionals and dependence non-DA conditionals, respectively, in this way, suggests that the tripartite classification of non-DA *if*-clauses (i.e. dependence, relevance, and *frankly*-type non-DA *if*-clauses) within the framework of this study is adequate as a taxonomy of non-DA *if*-clauses.

Be going to indicates the 'intention' sense and the 'sign' sense. *Be going to* can be used in both GRP and NCP *if*-clauses. Since a GRP *if*-clause is formed by general rules, the use of the future auxiliary *be going to* in GRP *if*-clauses has no problems. On the other hand, *be going to* in NCP *if*-clauses is backshifted in Dancygier's and Dancygier and Sweetser's terms. In this case, we are looking at only *be* in *be going to*. Although *be going to* expresses the future, the form of *be*-verbs in *be going to* is the simple present tense form (i.e. *am/are/is*). The motivation in which *be going to* is seen as backshifted is only the *be*-verbs in *be going to* being focused on. *Be going to* in the 'intention' sense in NCP *if*-clauses displays the intention

not at the moment of speech but in the future time. In NCP *if*-clauses where *be going to* in the 'sign' sense is used, signs for a future event or state of affairs are assumed to occur in the future time.

Thus, we have seen that the theoretical model of conditional constructions proposed by the present study can treat conditionals clearly and comprehensively.

References

Aarts, Bas (2007) *Syntactic Gradience: The Nature of Grammatical Indeterminacy*, Oxford University Press, Oxford.

Aarts, Bas (2012) "The Subjunctive Conundrum in English," *Folia Linguistica* 46(1), 1-20.

Adams, Ernst W. (1970) "Subjunctive and Indicative Conditionals," *Foundations of Language* 6, 89-94.

Adams, Ernst W. (1975) *The Logic of Conditionals*, Reidel Publishing Company, Dordrechit.

Adamson, Sylvia (2000) "A Lovely Little Example," *Pathways of Change: Grammaticalization in English*, ed. by Olga Fischer, Anette Rosenbach, and Dieter Stein, 39-66, John Benjamins, Amsterdam/Philadelphia.

Aijmer Karin (1985) "The Semantic Development of *Will*," *Historical Semantics and Historical Word Formation*, ed. by Jacek Fisiak, 11-21, Mouton, Berlin.

Aijmer, Karin (1996) *Conversational Routines in English: Conversation and Creativity*, Longman, London.

Aijmer, Karin (1997) "*I think* — an English Modal Particle," *Modality in Germanic Languages*, ed. by Toril Swan and Olaf Jansen, 1-47, Mouton de Gruyter, Berlin/New York.

Aijmer, Karin (2002) *English Discourse Particles: Evidence from a Corpus*, John Benjamins, Amsterdam.

Aijmer, Karin (2013) *Understanding Pragmatic Markers*, Edingburgh University Press, Edingburgh.

Akatsuka, Noriko (1985) "Conditionals and Epistemic Scale," *Language* 61, 625-639.

Akatsuka, Noriko (1986) "Conditionals and Discourse-Bound," *On Conditionals*, ed. by Elizabeth Closs Traugott, Alice ter Meulen, Judy Snitzer Reilly, and Charles A. Ferguson, 333-351, Cambridge University Press, Cambridge.

Akatsuka, Noriko McCawley and Susan Strauss (2000) "Counterfactual Reasoning and Desirability," *Cause, Condition, Concession, Contrast*, ed. by Elizabeth Couper-Kuhlen and Bernd Cortmann, 205-234, Mouton de Gruyter, Berlin/New York.

Allen, Robert L. (1966) *The Verb System of Present-Day American English*, Mouton, The Hague.

Andersen, Henning (1973) "Abductive and Deductive Change," *Language* 49, 765-93.

Anderson, Alan Ross (1951) "A Note on Subjunctive and Counterfactual Conditionals," *Analysis* 12, 35-38.

Ando, Sadao, and Harumi Sawada (2001) *Eigogaku Nyumon ("Introduction to English Linguistics")*, Kaitakusha, Tokyo.

Anttila, Raimo (1989) *Historical and Comparative Linguistics* (2nd edition), Benjamins, Amsterdam.

Appiah, Anthony (1985) *Assertion and Conditionals*, Cambridge University Press, Cambridge.

Athanasiadou, Angeliki and René Dirven (2000) "Pragmatic Conditionals," *Constructions in Cognitive Linguistics*, ed. by Ad Foolen and Frederike van der Leek, 1-26, John Benjamins, Amsterdam.

Austin, John L. (1961) "Ifs and Cans," *Philosophical Papers*, ed. by J. O. Urman and G. J. Warnock, 153-180, Oxford University Press, Oxford.

Austin, John L. (1962) *How to Do Things with Words*, Clarendon Press, Oxford.

Bennett, Jonathan (2003) *A Philosophical Guide to Conditional*, Oxford University Press, Oxford.

Benveniste, Emile (1971) "Subjectivity in Language," *Problems in General Linguistics*, Trans. by Mary Elizabeth Meek, 223-230, Coral Gables: FL: University of Miami Press. Original French publication, 1958.

Bhatt, Rajesh and Roumyana Pancheva (2006) Conditionals, *The Blackwell Companion to*

Syntax, vol. 1, ed. by Martin Everaert and Henk van Riemsdijk, 638-687, Blackwell, Oxford.

Biber, Douglas, Stig Johansson, Geoffrey Leech, Susan Conrad, and Edward Finegan (1999) *Longman Grammar of Spoken and Written English*, Longman, London.

Binnick, Robert I. (1991) *Time and the Verb*, Oxford University Press, Oxford.

Bladas, Òscar (2012) "Conversational Routines, Formulaic Language and Subjectification," *Journal of Pragmatics* 44, 929-957.

Blakemore, Diane (2006) "Divisions of Labour: The Analysis of Parentheticlas," *Lingua* 116, 1670-1687.

Bochénski, J. M. (1954) *Précis de logique mathématiqu*e, F. Schöningh, Panderborn.

Boye, Kasper and Peter Harder (2012) "A Usage-Based Theory of Grammatical Status and Grammaticalization," *Language* 88(1), 1-43.

Bréal, Michel (1964) *Semantics: Studies in the Science of Meaning*, Trans. by Mrs Henry Crust, Dover, New York, Original publication, 1900.

Brée, David S. (1982) "Counterfactuals and Causality," *Journal of Semantics* 1, 147-185.

Brinton, Laurel J. (1996) *Pragmatic Markers in English: Grammaticalization and Discourse Function*, Mouton de Gruyter, Berlin/New York.

Brinton, Laurel J. (2008) *The Comment Clause in English*, Cambridge University Press, Cambridge.

Brinton, Laurel J. (2017) *The Evolution of Pragmatic Markers in English*, Cambridge University Press, Cambridge.

Brinton, Laurel J. and Elizabeth Closs Traugott (2005) *Lexicalization and Language Change*, Cambridge University Press, Cambridge.

Brisard, Frank (2001) "Be Going to: An Exercise in Grounding," *Journal of Linguistics* 37, 251-285.

Bybee, Joan (2003) "Mechanisms of Change in Grammaticalization: The Role of Frequency," *The Handbook of Historical Linguistics*, ed. by Brian D. Joseph and Richard D. Janda, 602-623, Blckwell, Oxford.

Bybee, Joan (2010) *Language, Usage and Cognition*, Cambridge University Press, Cambridge.

Bybee, Joan (2015) *Language Change*, Cambridge University Press, Cambridge.

Bybee, Joan, Revere Perkins, and William Pagliuca (1994) *The Evolution of Grammar*, The University of Chicago Press, Chicago and London.

Bybee, Joan and William Pagliuca (1985) "Cross-Linguistic Comparison and the Development of Grammatical Meaning," *Historical Semantics and Historical Word Formation*, ed. by Jacek Fisiak, 59-83, Mouton, Berlin.

Campbell, Lyle (2001) "What's wrong with grammaticalization?" *Language Sciences* 23, 113-161.

Carter, Ronald and Michael McCarthy (2006) *Cambridge Grammar of English: A Comprehensive Guide*, Cambridge University Press, Cambridge.

Celce-Murcia, Marianne and Diane Larsen-Freeman (1999) *The Grammar Book: An ESL/EFL Teacher's Course* (2nd edition), Heinle & Heinle, Boston.

Chisholm, Roderick M. (1946) "The Contrary-to-Fact Conditional," *Mind* 55, 289-307.

Cinque, Guglielmo (1999) *Adverbs and Functional Heads*, Oxford University Press, New York.

Claridge, Claudia (2013) "The Evolution of Three Pragmatic Markers: *As It Were, So to Speak/Say* and *If You Like*," *Journal of Historical Pragmatics* 14(2), 161-184.

Close, Reiginald A. (1975) *A Reference Grammar for Students of English*, Longman, London.

Close, Reiginald A. (1980) "*Will* in *If*-Clause," *Studies in English Linguistics for Randolph Quirk*, ed by Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik, 100-109, Longman, London.

Coates, Jennifer (1983) *The Semantics of the Modal Auxiliaries*, Croom Helm, London.

Coates, Jennifer (1995) "The Expression of Root and Epistemic Possibility in English," *Modality in Grammar and Discourse*, ed. by Joan Bybee and S. Fleischman, 55-66, John Benjamins, Amsterdam.

Comrie, Bernard (1982) "Future Time Reference in the Conditional Protasis," *Australian Journal of Linguistics* 2, 143-152.

Comrie, Bernard (1985) *Tense*, Cambridge University Press, Cambridge.

Comrie, Bernard (1986) "Conditionals: A Typology," *On Conditionals*, Elizabeth Closs Trauott, Alice ter Meulen, Judy Snitzer Reilly, and Charles A. Ferguson, 77-99, Cambridge University Press, Cambridge.

Couper-Kuhlen, Elizabeth (1996) "Intonation and Clause Combining in Discourse: The Case of *Because*," *Pragmatics* 6(3), 389-426.

Cowie, Claire (1995) "Grammaticalization and the Snowball Effect," *Language and Communication* 15, 181-193.

Croft, William (2000) *Explaining Language Change: An Evolutionary Approach*, Longman, London.

Curme, George O. (1931) *Syntax*, Health, Boston.

Curme, George O. (1935) *Parts of Speech and Accidence*, Health, Boston.

Curme, George O. (1947) *The Principles and Practice of English Grammar*, Barnes, New York.

Dancygier, Barbara (1993) "Interpreting Conditionals: Time, Knowledge, and Causation," *Journal of Pragmatics* 19, 403-434.

Dancygier, Barbara (1998) *Conditionals and Prediction: Time, Knowledge, and Causation in Conditional Constructions*, Cambridge University Press, Cambridge.

Dancygier, Barbara (2003) "Classifying Conditionals: Form and Function," *English Language and Linguistics* 7(2), 309-323.

Dancygier, Barbara (2009) "Causes and Consequences: Evidence from Polish, English, and

Dutch," *Causal Categories in Discourse and Cognition*, ed. by Ted Sanders and Eve Sweetser, 91-118, Mouton de Gruyter, Berlin/New York.

Dancygier, Barbara and Eve Sweetser (1997) "*Then* in Conditional Constructions," *Cognitive Linguistics* 8, 109-136.

Dancygier, Barbara and Eve Sweetser (2000) "Constructions with *If*, *Since*, and *Because*: Causality, Epistemic Stance, and Clause Order," *Cause, Condition, Concession, Contrast*, ed. by Elizabeth Couper-Kuhlen and Bernd Kortmann, 111-142, Mouton de Gruyter, Berlin/New York.

Dancygier, Barbara and Eve Sweetser (2005) *Mental Spaces in Grammar: Conditional Constructions*, Cambridge University Press, Cambridge.

Davis, Wayne A. (1979) "Indicative and Subjunctive Conditionals," *The Philosophical Review* 88, 544-564.

Davis, Wayne A. (1983) "Weak and Strong Conditionals," *Pacific Philosophical Quarterly* 64, 57-71.

De Smet, Hendrik (2009) "Analysing Reanalysis," *Lingua* 119, 1728-1755.

De Smet, Hendrik and Jean-Christophe Verstraete (2006) "Coming to Terms with Subjectivity," *Cognitive Linguistics* 17(3), 365-392.

De Wit, Astrid (2017) *The Present Perfective Paradox across Languages*, Oxford University Press, Oxford.

Declerck, Renaat (1984) " 'Pure Future' *Will* in *If*-Clauses," *Lingua* 63, 279-321.

Declerck, Renaat (1991a) *Tense in English*: *Its Structure and Use in Discourse*, Routledge, London.

Declerck, Renaat (1991b) *A Comprehensive Descriptive Grammar of English*, Kaitakusha, Tokyo.

Declerck, Renaat and Susan Reed (2001) *Conditionals: A Comprehensive Empirical Analysis*,

Mouton de Gruyter, Berlin・New York.

Degand, Liesbeth and Anne-Marie Simon-Vandenbergen (2011) “Introduction: Grammaticalization and (Inter)subjectification of Discourse Markers,” *Linguistics* 49(2), 287-294.

Diewald, Gabriele (2011) “Pragmaticalization (Defined) as Grammaticalization of Discourse Functions,” *Linguistics* 49(2), 365-390.

Dik, Simon C. (1990) “On the Semantics of Conditionals,” *Layers and Levels of Representation of Language Theory*, ed by Jan Nuts, A. Machtelt Bolkestein, and Co Vet, 233-261, John Benjamins, Amsterdam/Philadelphia.

Dixon, Robert M. W. (2005) *A Semantic Approach to English Grammar* (2nd edition), Oxford University Press, Oxford.

Douven, Igor. (2016) *The Epistemology of Indicative Conditionals*, Cambridge University Press, Cambridge.

Douven, Igor and Sara Verbrugge (2010) “The Adams family,” *Cognition* 117, 302-318.

Dudman, V. H. (1983) “Tense and Time in English Verb Clusters of the Primary Pattern,” *Australian Journal of Linguistics* 3, 25-44.

Dudman, V. H. (1984a) “Conditional Interpretations of *If*-Sentences,” *Australian Journal of Linguistics* 4, 143-204.

Dudman, V. H. (1984b) “Parsing ‘If’-Sentences,” *Analysis* 44, 145-153.

Dudman, V. H. (1986) “Antecedents and Consequents,” *Theoria* 52, 168-199.

Dudman, V. H. (1988) “Indicative and Subjunctive,” *Analysis* 48, 113-122.

Dudman, V. H. (1991) “Interpretations of ‘If’-Sentences,” *Conditionals*, ed. by Frank Jackson, 202-232, Oxford University Press, Oxford.

Dudman, V. H. (1994) “On Conditionals,” *The Journal of Philosophy* 3, 113-28.

Edgington, Dorothy (1995) “On Conditionals,” *Mind* 104, 235-329.

Edgington, Dorothy (1997) Commentary, *Conditionals*, ed. by Michael Woods, 95-137, Clarendon Press, Oxford.

Edgington, Dorothy (2003) "Questions about Conditionals," *Mind and Language* 18, 380-401.

Eilfort, William H. (1987) "A Unified Analysis of Initial *If*-Clauses in English," *CLS* 23, 56-63.

Ellis, Brian (1984) "Two Theories of Indicative Conditionals," *Australasian Journal of Philosophy* 62(1), 50- 66.

Evans, Jonathan St. B. T. and David E. Over (2004) *If*. Oxford University Press, Oxford.

Fillmore, Charles J. (1990) "Epistemic Stance and Grammatical Form in English Conditional Sentences," *CLS* 26, 137-162.

von Fintel, Kai (1997) "Bare Plurals, Bare Conditionals, and Only," *Journal of Semantics* 14, 1-56.

von Fintel, Kai (2012) "Subjunctive Conditionals," *The Routledge Companion to Philosophy of Language*, ed. by Gillian Russell and Delia Graf Fara, 466-477, Routledge, New York.

Fischer, Olga (2008) "On Analogy as the Motivation for Grammaticalization," *Studies in Language* 32(2), 336-382.

Fischer, Olga (2013) "An Inquiry into Unidirectionality as a Foundational Element of Grammaticalization," *Studies in Language* 37(3), 515-533.

Fitzmaurice, Susan (1998) "Grammaticalization, Textuality and Subjectivity: The Progressive and the Anglo-Saxon Chronicle," *The Virtues of Language. History in Language, Linguistics and Texts*, ed. by Dieter Stein and Rosunna Sornicola, 21-49, John Benjamins, Amsterdam and Philadelphia.

Fitzmaurice, Susan (2000) "Coalitions and the Investigation of Social Influence in Linguistic History," *European Journal of English Studies* 4, 265-276.

Fleischman, Suzanne (1989) "Temporal Distance: A Basic Linguistic Metaphor," *Studies in Language* 13(1), 1-50.

Fowler, H. W. (1965) *A Dictionary of Modern English Usage* (2nd edition), revisited by Sir Ernest Gowers, Oxford, Oxford University Press.

Fraser, Bruce (1996) "Pragmatic Markers," *Pragmatics* 6, 167-190.

Fries, Charles C. (1940) *American English Grammar*, Appleton-Century-Crofts, New York.

Funk, Wolf-peter (1985) "On a Semantic Typology of Conditional Sentences," *Folia Linguistica* 19(3/4), 365-414.

Geis, Michael L. and Arnold M. Zwicky (1971) "On Invited Inferences," *Linguistic Inquiry* 2, 561-566.

Gibbs, Raymond W. (1994) *The Poetics of Mind: Figurative Thought, Language, and Understanding*, Cambridge University Press, Cambridge.

Givón, Talmy (1991) "Isomorphism in the Grammatical Code: Cognitive and Biological Considerations," *Studies in Language* 15(1), 85-114.

Givón, Talmy (1994) "Irrealis and the Subjunctive," *Studies in Language* 18(2), 265-337.

Gomes, Gilberto (2008) "Three Types of Conditionals and Their Verb Forms in English and Portuguese," *Cognitive Linguistics* 19(2), 219-240.

Greenbaum, Sidney (1969) *Studies in English Adverbial Usage*, Longman, Longman.

Haegeman, Liliane (1984) "Pragmatic conditionals in English," *Folia Linguistica* 18(3/4), 485-502.

Haegeman, Liliane (2003) "Conditional Clauses: External and Internal Syntax," *Mind & Language* 18(4), 317-339.

Haegeman, Liliane (2006) "Conditionals, Factives and the Left Periphery," *Lingua* 116, 1651-1669.

Haegeman, Liliane and Herman Wekker (1984) "The Syntax and Interpretation of Futurate Conditionals in English," *Journal of Linguistics* 20, 45-55.

Haiman, John (1978) "Conditionals are Topics," *Language* 54, 564-589.

Haiman, John (1983a) “Paratactic *If*-Clauses,” *Journal of Pragmatics* 7, 263-281.

Haiman, John (1983b) “Iconic and Economic Motivation,” *Language* 59, 781-819.

Haiman, John (1985) *Natural Syntax*, Cambridge University Press, Cambridge.

Haiman, John (1986) “Constraints on the Form and Meaning of the Protasis,” *On Conditionals*, ed. by Elizabeth Closs Traugott, Alice ter Meulen, Judy Snitzer Reilly, and Charles A. Ferguson, 215-227, Cambridge University Press, Cambridge.

Haiman, John (1994) “Ritualization and the Development of Language,” *Perspectives on Grammaticalization (Current Issues in Linguistic Theory, 109)*, ed. by William Pagliuca, 3-28, John Benjamins, Amsterdam and Philadelphia.

Halliday, M. A. K. and Ruqaiya Hasan (1976) *Cohesion in English*, Longman, London.

Halliday, Michael A. K. (1985) *An Introduction to Functional Grammar*, Arnold, London & New York.

Harder, Peter (1996) *Functional Semantics: A Theory of Meaning, Structure and Tense in English*, Mouton de Gruyter, Berlin.

Harris, Alice C. and Lyle Campbell (1995) *Historical Syntax in Cross-Linguistic Perspective*, Cambridge Universitry Press, Cambridge.

Haspelmath, Martin (1998) “Does Grammaticalization Need Reanalysis?” *Studies in Language* 22, 315-351.

Haspelmath, Martin (1999) “Why Is Grammaticalization Irreversible?” *Linguistics* 37(6), 1043-1068.

Hegarty, Michael (1996) “The Role of Categorization in the Contribution of Conditional *THEN*: Comments on Iatridou,” *Natural Language Semantics* 4, 111-119.

Heine, Bernd (1992) “Grammaticalization Chains,” *Studies in Language* 16(2), 335-368.

Heine, Bernd (2003) “Grammaticalization,” *The Handbook of Historical Linguistics*, ed. by Brian D. Joseph and Richard D. Janda, 575-601, Blackwell, Oxford.

Heine, Bernd (2013) “On Discourse Markers: Grammaicalization, Pragmaticalization, or Something Else?” *Linguistics* 51(6), 1205-1247.

Heine, Bernd and Heiko Narrog (2010) “Grammaticalization and Linguistic Analysis,” *The Oxford Handbook of Linguistic Analysis*, ed. by Bernd Heine and Heiko Narrog, 401-423, Oxford University Press, Oxford.

Heine, Bernd and Tania Kuteva (2002) *World Lexicon of Grammaticalization*, Cambridge University Press, Cambridge.

Heine, Bernd, Gunther Kaltenböck, Tania Kuteva, and Haiping Long (2013) “An Outline of Discourse Grammar,” *Functional Approaches to Language*, ed. by Shannon T. Bischoff and Carmen Jany, 155-206, Mouton de Gruyter, Berlin.

Heine, Bernd, Ulrike Claudi, and Friederike Hünnemeyer (1991) *Grammaticalization: A Conceptual Framework*, University of Chicago Press, Chicago.

Hewings, Martin (2013) *Advanced Grammar in Use* (3rd edition), Cambridge University Press, Cambridge.

Hobbs, Jerry, R. (2004) “Abduction in Natural Language Understanding,” *The Handbook of Pragmatics*, ed. by Laurence R. Horn and Gregory Ward, 724-741, Blackwell, Oxford.

Hopper, Paul J. (1991) “On Some Principles of Gramaticalization,” *Approaches to Grammaticalization*, Vol. I , ed. by Elizabeth Closs Traugott and Bernd Heine, 17-35, John Benjamins, Amsterdam.

Hopper, Paul J. and Elizabeth C. Traugott (2003) *Grammaticalization* (2nd edition), Cambridge University Press, Cambridge.

Horn, Laurence (1985) “Metalinguistic Negation and Pragmatic Ambiguity,” *Language* 61, 121-74.

Horn, Laurence (1989) *A Natural History of Negation*, University of Chicago Press, Chicago.

Hornstein, Norbert, Jairo Nunes, and Kleanthes K. Grohmann (2005) *Understanding*

Minimalism, Cambridge University Press, Cambridge.

Hoye, Leo (1997) *Adverbs and Modality*, Longman, London.

Huddleston, Rodney and Geoffrey K. Pullum (2002) *Cambridge Grammar of the English Language*, Cambridge University Press, Cambridge.

Iatridou, Sabine (1994) "On the Contribution of Conditional *Then*," *Natural Language Semantics* 2, 171-199.

Iatridou, Sabine (2000) "The Grammatical Ingredients of Counterfactuality," *Linguistic Inquiry* 31(2), 231-270.

Imai, Kunihiko, and Yuji Nishiyama (2012) *Kotoba-no imi toha nandaro* ("What is meaning of language?"), Iwanami, Tokyo.

Ippolito, Michera (2004) "Imperfect Modality," *The Syntax of Time*, ed. by Jacqueline Guéron and Jacqueline Lecarme, 359-387, MIT Press, Cambridge, MA.

Ippolito, Michera (2013) *Subjunctive Conditionals*, MIT Press, Cambridge.

Jacobsson, Bengt (1984) "Notes on Tense and Modality in Conditional *If*-Clauses," *Studia Linguistica* 38, 129-147.

James, Deborah (1982) "Past Tense and the Hypothetical: A Cross-Linguistic Study," *Studies in Language* 6, 375-403.

James, Francis (1986) "Semantics and Pragmatics of the Word *If*," *Journal of Pragmatics* 10, 453-480.

Jeffrey, Richard (1967) *Formal Logic: Its Scope and Limits*, McGraw-Hill, New York.

Jespersen, Otto (1924) *The Philosophy of Grammar*, Allen & Unwin, London.

Jespersen, Otto (1931) *A Modern English Grammar on Historical Principles*, PartⅣ, Allen & Unwin, London.

Jespersen, Otto (1949) *A Modern English Grammar on Historical Principles*, PartⅦ, Allen & Unwin, London.

Johnson-Laird, P. N. and Ruth M. J. Byrne (2002) "Conditionals: A Theory of Meaning, Pragmatics, and Inference," *Psychological Review* 109(4), 646-678.

Kac, Michael B. (1972) "Clauses of Saying and the Interpretation of *Because*," *Language* 48(3), 626-32.

Kaltenböck, Gunther, Bernd Heine, and Tania Kuteva (2011) "On Thetical Grammar," *Studies in Language* 35(4), 852-897.

Kaltenböck, Gunther and Bernd Heine (2014) "Sentence Grammar vs. Thetical Grammar: Two Competing Domains?" *Competing Motivations in Grammar and Usage*, ed. by Brian MacWhinney, Andrej Malchukov, and Edith Moravcsik, 348-363, Oxford University Press, Oxford.

Karttunen, Lauri (1971) "Counterfactual Conditionals," *Linguistic Inquiry* 2, 566-569.

Kaufmann, Stefan (2005) "Conditional Predictions," *Linguistics and Philosophy* 28, 181-231.

Kim, Hyeree (2001) "Remarks on the Unidirectionality Principle in Grammaticalization," *Folia Linguistica Historica* XXII, 49-65.

Kratzer, Angelika (1986) "Conditionals," *CLS* 22-2, 1-15.

Krzyzanowska, K., S. Wenmackers, and I. Douven (2013) "Inferential Conditionals and Evidentiality," *Journal of Logic, Language and Information* 22, 315-334.

Lakoff, George (1987) *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*, The University of Chicago Press, Chicago.

Lakoff, George (1990) "The Invariance Hypothesis: Is Abstract Reason Based on Image-Schema?" *Cognitive Linguistics* 1, 39-74.

Lakoff, George (1993) "The Contemporary Theory of Metaphor," *Metaphor and Thought* (2nd edition), ed. by Andrew Ortony, 202-251, Cambridge University Press, Cambridge.

Lakoff, George and Mark Johnson (1980) *Metaphors We Live By*, University of Chicago Press, Chicago.

Lakoff, George and Mark Johnson (1999) *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*, Basic Books, New York.

Lansari, Laure (2009) "The Be Going to Periphrasis in *If*-Clauses: A Comparison with the *aller* ＋Infinitive Periphrasis in French," *Languages in Contrast* 9, 202-224.

Leech, Geoffrey N. (1983) *Principles of Pragmatics*, Longman, London.

Leech, Geoffrey N. (1987) *Meaning and the English Verb* (2nd edition), Longman, London.

Leech, Geoffrey N. (2004) *Meaning and the English Verb* (3rd edition), Longman, London.

Leech, Geoffrey, Benita Cruickshank and Roz Ivanic (2001) *An A to Z of English Grammar & Usage* (2nd edition), Longman, London.

Leech, Geoffrey and Jan Svartvik (2002) *A Communicative Grammar of English* (3rd edition), Longman, London.

Lenker, Ursula (2010) *Argument and Rhetoric. Adverbial Connectors in the History of English*, Mouton de Gruyter, Berlin.

Lewis, David (1973) *Counterfactuals*, Blackwell, Oxford.

Lewis, David (1976) "Probabilities of Conditionals and Conditional Probabilities," *Philosophical Review* 85, 297-315.

Lehmann, Christian (1995) *Thoughts on Grammaticalization*, Lincom Europa, Munchen/Newcastle.

Linebarger, Marcia C. (1987) "Negative Polarity and Grammatical Representation," *Linguistics and Philosophy* 10, 325-387.

Lyons, John (1977) *Semantics* II, Cambridge University Press, Cambridge.

Lyons, John (1995) *Linguistic Semantics: An Introduction*, Cambridge University Press, Cambridge.

McCawley, James D. (1971) "Tense and Time Reference in English," *Studies in Linguistics in Semantics*, ed. by Charles J. Fillmore and D. Terence Langendoen, 96-113, Holt, Rinehart

and Winston, New York.

McCawley, James D. (1974) "If and Only If," *Linguistic Inquiry* 5, 632-635.

Morris, Charles (1946) *Signs, Language and Behavior*, Prentice-Hall, New York.

Nakano, Hirozou (2003) "Bun-no kaisokozo-ni-motoduku jokensetsu-no-bunseki (*An Analysis of conditional clauses based on a hierarchical structure of a sentence*)," Kyotogaikokugo University: *Studies in English Linguistics and Literature* 19, 97-115.

Narrog, Heiko and Bernd Heine (2018) "Introduction: Typology and Grammaticalization," *Grammaticalization from a Typological Perspective*, ed. by Heiko Narrog and B. Heine, 1-15, Oxford University Press, Oxford.

Nickerson, Raymond S. (2015) *Conditional Reasoning*, Oxford University Press, Oxford.

Nieuwint, Pieter (1986) "Present and Future in Conditional Protases," *Linguistics* 24, 371-392.

Onions, C. T. (1929) *Advanced English Syntax*, Kegan Paul, London.

Palmer, Frank R. (1974) *The English Verb*, Longman, London.

Palmer, Frank R. (1979) *Modality and the English Modals*, Longman, London.

Palmer, Frank R. (1983) "Future Time Reference in the Conditional Protasis: A Comment on Comrie," *Australian Journal of Linguistics* 3, 241-243.

Palmer, Frank R. (1988) *The English Verb* (2nd edition), Longman, London.

Palmer, Frank R. (1990) *Modality and the English Modals* (2nd edition), Longman, London.

Palmer, Frank R. (1995) "Negation and the Modals of Possibility and Necessity," *Modality in Grammar and Discourse*, ed. by Joan Bybee and S. Fleischman, 453-471, John Benjamins, Amsterdam.

Palmer, Frank R. (2001) *Mood and Modality* (2nd edition), Cambridge University Press, Cambridge.

Palmer, Frank R. (2003) "Modality in English: Theoretical, Descriptive and Typological Issues," *Modality in Contemporary English*, ed. by Roberta Facchinetti, Manfred G. Krug, and

Frank R. Palmer, 1-17, Mouton de Gruyter, Berlin.

Papafragou, Anna (2000). "On Speech-Act Modality," *Journal of Pragmatics* 32, 519-538.

Peirce, Charles Sanders (1955) "Abduction and Induction," *Philosophical Writings of Peirce*, ed. by Justus Buchler, 150-156, Dover Books, New York.

Plank, Frans (1984) "The Modals Story Retold," *Studies in Language* 8(3), 305-364.

Portner, Paul (2018) *Mood*, Oxford University Press, Oxford.

Poutsma, Hendrik (1926) *A Grammar of Late Modern English*, Part Ⅱ, Noordhoff, Groningen.

Powell, M. J. (1992) "The Systematic Development of Correlated Interpersonal and Metalinguistic Uses in Stance Adverbs," *Cognitive Linguistics* 3, 75-110.

Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik (1985) *A Comprehensive Grammar of the English Language*, Longman, London.

Radden, Günter and René Dirven (2007) *Cognitive English Grammar*, John Benjamins, Amsterdam/Philadelphia.

Radford, Andrew (2009) *Analysing English Sentences: A Minimalist Approach*, Cambridge University Press, Cambridge.

Reichenbach, Hans (1947) *Elements of Symbolic Logic*, the Free Press, New York.

Reilly, Francis E. (1970) *Charles Peirce's Theory of Scientific Method (Oxford Brownson series*, 7*)*, Fordham University Press, New York.

Rescher, Nicholas (2007) *Conditionals*, MIT Press, Cambridge.

Rieger, Adam (2006) "A Simple Theory of Conditionals," *Analysis* 66(3), 233-40.

Rizzi, Luigi (1997) "The Fine Structure of the Left Periphery," *Elements of Grammar*, ed. by Liliane Haegeman, 281-337, Kluwer, Dordrecht.

Rizzi, Luigi (2004) "Locality and Left Periphery," *Structures and Beyond: The Cartography of Syntactic Structures*, ed. by Adriana Belletti, 223-252, Oxford University Press, Oxford.

Ross, John R. (1970) "On Declarative Sentences," *Readings in English Transformational*

Grammar, ed. by Roderick A. Jacobs and Peter S. Rosenbaum, 222-272, Ginn, Waltham.

Sadock, J. M. (1974) *Toward a Linguistic Theory of Speech Acts*, Academic Press, New York.

Saeed, John I. (1997) *Semantics*, Blackwell, Oxford.

Saito, Takeo, Shosuke Haraguchi, and Hidekazu Suzuki (1995) *Eibunpo-e-no izanai (Inviting to the English Grammar)*, Kaitakusha, Tokyo.

Sanders, Ted, José Sanders, and Eve Sweetser (2009) "Causality, Cognition and Communication: A Mental Space Analysis of Subjectivity in Causal Connectives," *Causal Categories in Discourse and Cognition*, ed. by Ted Sanders and Eve Sweetser, 21-60, Mouton de Gruyter, Berlin.

Schiffrin, Deborah (1990) "The Principle of Intersubjectivity in Communication and Conversation," *Semiotica* 80, 121-151.

Schiffrin, Deborah (1992) "Conditionals as Topics in Discourse," *Linguistics* 30, 165-197.

Schwenter, Scott, A. (1999) *Pragmatics of Conditional Marking*, Routledge, London.

Schwenter, Scott, A. and Elizabeth C. Traugott (2000) "Invoking Scalarity: The Development of *In Fact*," *Journal of Historical Pragmatics*, Vol.1(1), 7-25.

Searle, John R. (1969) *Speech Acts: An Essay in the Philosophy of Language*, Cambridge University Press, Cambridge.

Searle, John R. (1979) *Expression and Meaning: Studies in the Theory of Speech Acts*, Cambridge University Press, Cambridge.

Shiratani, Atsuhiko (1994) "Three *Wills* in Futurate *If*-Clauses," *The Kassui Review: Studies in English literature and language* 37, 79-100, Kassui Women's Junior College.

Siegel, Muffy E. A. (2006) "Biscuit Conditionals: Quantification over Potential Literal Acts," *Linguistics and Philosophy* 29, 167-203.

Sinclair, John (1990) *Collins COBUILD English Grammar*, Collins Publishers, London.

Smith, Neil and Amahl Smith (1988) "A Relevance-Theoretic Account of Conditionals,"

Language, Speech and Mind: Studies in Honour of Victoria A. Fromkin, ed. by Larry M. Hyman and Charles N. Li, 322-352, Routledge, London and New York.

Sonnenschein, Edward Adolf (1916) *A New English Grammar*, Clarendon Press, Oxford.

Stalnaker, Robert (1991) "Indicative Conditionals," *Conditionals*, ed. by Frank Jackson, 136-154, Oxford University Press, Oxford.

Stenström, Anna-Brita (1998) "From Sentence to Discourse: *Cos* (*because*) in Teenage Talk," *Discourse Markers : Descriptions and Theory*, Jucker, Andreas H. and Yael Ziv, 127-146, John Benjamins, Amsterdam.

Swan, Toril (1988a) *Sentence Adverbials in English: A Synchronic and Diachronic Investigation*, Novus, Oslo.

Swan, Toril (1988b) "The Development of Sentence Adverbs in English," *Studia Linguistica* 42(1), 1-17.

Swan, Toril (1997) "From Manner to Subject Modification: Adverbialization in English," *Nordic Journal of Linguistics* 20(2), 179-195.

Sweet, Henry (1898) *A New English Grammar: Logical and Historical. Part II Syntax*, Oxford University Press, London.

Sweetser, Eve (1990) *From Etymology to Pragmatics*, Cambridge University Press, Cambridge.

Sweetser, Eve (1996a) "Reasoning, Mappings, and Meta-Metaphorical Conditionals," *Grammtical Costructions*, ed. by Masayoshi Shibatani and Sandra A. Thopson, 221-234, Oxford University Press, New York

Sweetser, Eve (1996b) "Mental Spaces and the Grammar of Conditional Constructions," *Spaces, Words and Grammar*, ed. by Gilles Fauconnier and Eve Sweetser, 318- 333, The University of Chicago Press, Chicago.

Takami, Ken-ichi (1988) "The Syntax of *if*-clauses: Three Types of *if*-clauses and X'-Theory," *Lingua* 74, 263-281.

Takami, Ken-ichi (1994) “Gengo-no kino-to kaisosei,” Gengo, March, Taishukan, Tokyo.

Taylor, John R (1997) “Conditionals and Polarity,” *On Conditionals Again*, ed. by Angeliki Athanasiadou and René Dirven, 289-306, John Benjamins, Amsterdam.

Taylor, John R. (2002) *Cognitive Grammar*, Oxford University Press, Oxford.

Tedeschi, Philip J. (1977a) “Complementizer and Conditionals,” *Chicago Linguistic Society* 13, 629-639.

Tedeschi, Philip J. (1977b) “Some Aspects of Conditional Sentence Pragmatics,” *Studies in Language Variation*, ed. by Ralph W. Fasold and Roger W. Shuy, 136-151, Georgetown University Press, Washington D.C.

Thompson, Sandra A. and Anthony Mulac. (1991) “A Quantitative Perspective on the Grammaticalization of Epistemic Parentheticals in English,” *Approaches to Grammaticalization*, Vol. 2, ed. by Elizabeth C. Traugott and Bernd Heine, 313-329, John Benjamins, Amsterdam/Philadelphia.

Thomson, Andrey J. and Anges V. Martinet (1986) *A Practical English Grammar* (4th edition), Oxford University Press, Oxford.

Traugott, Elizabeth Closs (1982) “From Propositional to Textual and Expressive Meanings,” *Perspectives on Historical Linguistics*, ed. by Winfred Lehmann and Yakov Malkiel, 245-271, Benjamins, Amsterdam.

Traugott, Elizabeth Closs (1985) “Conditional Markers,” *Iconicity in Syntax*, ed. by John Haiman, 289-307, John Benjamins, Amsterdam/Philadelphia.

Traugott, Elizabeth Closs (1989) “On the Rise of Epistemic Meaning in English: An Example of Subjectification in Semantic Change,” *Language* 65, 31-55.

Traugott, Elizabeth Closs (1995) “Subjectification in Grammaticalization,” *Subjectivity and Subjectification. Linguistic Perspectives*, ed. by Dieter Stein and Susan Wright, 31-54, Cambridge University Press, Cambridge.

Traugott, Elizabeth Closs (1999) “The Rhetoric of Counter-Expectation in Semantic Change: A Study in Subjectification,” *Historical Semantics and Cognition*, ed. by Andreas Blank and Peter Koch, 177-196, Mouton de Gruyter, Berlin・New York.

Traugott, Elizabeth Closs (2003) “From Subjectification to Intersubjectification,” *Motives for Language Change*, ed. by Raymond Hickey, 124-139, Cambridge University Press, Cambridge.

Traugott, Elizabeth Closs (2006) “Historical Aspects of Modality,” *The Expression of Modality*, ed. by William Frawley, 107-139, Mouton de Gruyter, Berlin.

Traugott, Elizabeth Closs (2007) “(Inter)subjectification and Unidirectionality,” *Journal of Historical Pragmatics* 8, 295-309.

Traugott, Elizabeth Closs (2010) “(Inter)subjectivity and (Inter)subjectification: A Reassessment,” *Subjectification, Intersubjectification, and Grammaticalization*, ed. by Kristin Davidse, Lieven Vandelanotte, and Hubert Cuyckens, 29-71, Mouton De Gruyter, Berlin/New York.

Traugott, Elizabeth Closs (2014) “Intersubjectification and Clause Periphery,” *Intersubjectivity and Intersubjectification in Grammar and Discourse*, ed. by Lieselotte Brems, Lobke Ghesquière, and Freek Van de Velde, 7-27, John Benjamins, Amsterdam/Philadelphia.

Traugott, Elizabeth Closs and Richard B. Dasher (1987) “On the Historical Relation between Mental and Speech Act Verbs in English and Japanese,” *Papers from the 7th International Conference on Historical Linguistics*, ed. by Anna Giacalone Ramat, Onofrio Carruba and Giuliano Bernini, 561-573, Benjamins, Amsterdam.

Traugott, Elizabeth Closs and Richard B. Dasher (2002) *Regularity in Semantic Change*, Cambridge University Press, Cambridge.

Traugott, Elizabeth Closs and Ekkehard König (1991) “The Semantics-Pragmatics of Grammaticalization Revisited,” *Approaches to Grammaticalization*, Vol.1, ed. by

Elizabeth Closs Traugott and Bernd Heine, 189-218, John Benjamins, Amsterdam/Philadelphia.

Traugott, Elizabeth Closs and Graeme Trousdale (2010) "Gradience, Gradualness and Grammaticalization," *Gradience, Gradualness and Grammaticalization*, ed. by Elizabeth Closs Traugott and Graeme Trousdale, 19-44, John Benjamins, Amsterdam/Philadelphia.

Traugott, Elizabeth Closs and Graeme Trousdale (2013) *Constructionalization and Constructional Changes*, Oxford University Press, Oxford.

Tregidgo, P. S. (1979) "Tense-Subordination," *English Language Teaching Journal* 33, 191-197.

Tregidgo, P. S. (1980) "Tense-Patterns in Conditional Sentences," *English Language Teaching Journal* 34, 186-191.

Ungerer, Friedrich and Hans-Jörg Schmid (1996) *Introduction to Cognitive Linguistics*, Longman, London.

Ungerer, Friedrich and Hans-Jörg Schmid (2006) *Introduction to Cognitive Linguistics* (2nd edition), Longman, London.

Van Bogaert, Julie (2011) "*I think* and Other Complement-Taking Mental Predicates: A Case of and for Constructional Grammaticalization," *Linguistics* 49(2), 295-332.

Van der Auwera, Johan (1986) "Conditionals and Speech Acts," *On Conditionals*, ed. by Elizabeth Closs Traugott, Alice ter Meulen, Judy Snitzer Reilly, and Charles A. Ferguson, 197-214, Cambridge University Press, Cambridge.

Van der Auwera, Johan (1997) "Conditional Perfection," *On Conditionals Again*, ed. by Angeliki Athanasiadou and René Dirven, 169-190, John Benjamins, Amsterdam.

Van der Auwera, Johan and Vladmir A. Plugian (1998) "Modality's Semantic Map," *Linguistic Typology* 2, 79-124.

Verstraete, Jean-Christophe (2001) "Subjective and Objective Modality: Interpersonal and

Ideational Functions in the English Modal Auxiliary System," *Journal of Pragmatics* 33, 1505-1528.

Verstraete, Jean-Christophe (2004) "Initial and Final Position for Adverbial Clause in English: The Constructional Basis of the Discursive and Syntactic Differences," *Linguistics* 42(4), 819-853.

Vesterinen, Rainer (2016) "Mood Alternation in Spanish Conditional Clauses: Condition, Cause and the Domain Hypothesis," *Journal of Linguistics* 52, 175-193.

Wada, Naoaki (2011) "Nichieigo jisei gensho-no taishogengogakuteki-bunseki (A comparative linguistic analysis of tense phenomena in Japanese and English)," *Bungei-gengo-kenkyu-gengohen* 60, 69-120, University of Tsukuba.

Wakker, Gerry. (1996) "Conditionals at Different Levels of the Clause," *Complex Structures*, ed. by Betty Devriendt, Louis Goossens, and Johan van der Auwera, 177-199, Mouton de Gruyter, Berlin・New York.

Wekker, H. C. (1976) *The Expression of Future Time in Contemporary British English*. North Holland, Amsterdam.

Westney, Paul (1995) *Modals and Periphrastics in English*, Max Niemeyer Verlag, Tübingen.

Wierzbicka, Annna. (1997) "Condtionals and Counterfactuals: Conceptual Primitives and Linguistic Universals," *On Conditionals Again*, ed. by Angeliki Athanasiadou and René Dirven, 16-59, John Benjamins, Amsterdam.

Woods, Michael (1997) *Conditionals*, Clarendon Press, Oxford.

Ziegeler, Debra. (1996) "A Synchronic Perspective on the Grammaticalization of *Will* in Hypothetical Predicates," *Studies in Language* 20, 411-442.

Ziegeler, Debra (1997). "Retention in Ontogenetic and Diachronic Grammaticalization," *Cognitive Linguistics* 8(3), 207-241.

Ziegeler, Debra. 2003. (Redefining Unidirectionality: Insights from Demodalization) *Folia*

Linguistica Historica XXIV, 225-266.

Ziegeler, Debra (2006) "Omnitemporal *Will*," *Language Sciences* 28, 76-119.

Dictionaries

Konishi, Tomoshichi, and Yasuyo Minamide. 2001. *Unabridged Genius English-Japanese Dictionary*. Tokyo: Taishukan.

LDCE[3]: *Longman Dictionary of Contemporary English* (3rd edition), Longman, London.