Tense as Distance in *If*-conditionals

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Cho, E Jin. 2005. Tense as Distance in *If*-conditionals. *SNU Working Papers in English Linguistics and Language* 4, 193-215. Formal features in conditionals play a role in signaling meanings to interpret conditionals. The present study focuses on verb form use as tense markers in conditionals. Verb forms function as revealing the domain of conditionality as well as degree of hypotheticality in conditionals. Hypothetical meaning of conditionals comes from the metaphorically extended function of tense as distance. Domain of conditionality can be signaled with the relation between spaces for the protasis and the apodosis with respect to VIEWPOINT. (Seoul National University)

**Keywords:** Degree of hypotheticality, domain of conditionality, epistemic distance, *if*-conditionals, mental space, tense, VIEWPOINT

1. **Introduction**

In the present paper, I will give an account for the function of verb forms in interpretation of *if*-conditionals to examine how the meaning of conditionals can be indicated by the formal factors, especially by verb forms as tense markers in conditionals. Conditionals seem to be used for various discourse functions related with their interpretations more than its logical conditionality, so I’ll investigate the connection between interpretations and human reasoning process to relate the formal feature of tense with conditional meanings.

Mental Space theory (Fauconnier 1994, 1997) will be introduced as the theoretical framework. The benefit of Mental Space framework for the present study is no distinction of sentential meanings from meanings in the discourse. A conditional sentence can be regarded as a small discourse, since it links two situations or utterances in one sentential boundary in the unique ways.

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1) Henceforth, *conditionals, conditional sentences and conditional constructions* in the present thesis refer to conditionals with conjunction *if.*
2. Previous studies

To discuss the meaning of conditional constructions related with their verb forms, I begin with a definition of conditionality and hypotheticality, which are generally-used terms for characterizing the meaning of conditionals. We can simply define that conditionality is the meaning from the relation between the protasis and the apodosis of conditionals, and that hypotheticality is the meaning from the state of the protasis and the apodosis compared to the real world. Interpreting conditionals, however, doesn’t seem to be quite simple, since conditional constructions show a variety of interpretations in relation with diverse aspects of conditionality and hypotheticality.

2.1 Domain of conditionality (Sweetser 1990)

In natural language, the relation of the protasis and the apodosis is regarded more than logical one as the function of material implication.2) Quirk et al. (1985) define conditionality as contingency between the protasis and the apodosis, and Athanasiadou and Dirven (1997) regard conditionality as dependency between them. Comrie (1986) suggests that causality as well as material implication is the characteristic of conditional relation.

Sweetser (1990) proposes three domains of conditionality by accepting van der Auwera’s (1986) Sufficient Conditionality Hypothesis to explain conditional relations in conditional speech act. According to Sweetser, various functions of conditionals are obtained through this metaphoric extension of the conceptual domains in which conditionality as relation between the protasis and the apodosis operates. Three domains are suggested — the content domain as the primary conditionality between the real world event or state of affairs, and the epistemic domain and the speech-act domain as the metaphorical extension of content domain conditionality.

In the content domain, the conditional construction "indicates that the realization of the event or state of affairs described in the protasis is

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2) Material implication is the logical meaning of conditionals. According to material implication, the sentence is false only when the protasis is true and the apodosis is false.
a sufficient condition for the realization of the event or state of affairs described in the apodosis" (Sweetser 1990: 114). The real-world causality is the main function of content domain conditionality as in (1).

(1) a. If you get me some coffee, I'll give you a cookie.
    b. If you got me some coffee, I'd give you a cookie.

In the epistemic domain, the conditional construction "expresses the idea that knowledge 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).

(2) a. If she's divorced, (then) she's been married.
    b. If the streets are wet, it rained last night.

In the speech-act domain, the conditional construction has a speech act represented in the apodosis, and performing it "is conditional on the fulfillment of the state described in the protasis" (Sweetser 1990: 118).

(3) a. If I may say so, that's a crazy idea.
    b. If it'll amuse you, I'll tell you a joke.

Sweetser paraphrases the speech-act conditional if X, Y as "if X, then let us consider that I perform the speech act Y" (1990: 121).

Sweetser's three-domain approach covers all possible meanings of conditionality which are proposed by other previous approaches, since the domains reflect possible semantic and pragmatic relations between the protasis and the apodosis —whether it is based on the real-world causality, on epistemic causality between premise and conclusion, or on speech act and its felicity condition.

2.2 Hypotheticality and verb forms

Hypotheticality is not only the part of the meaning of conjunction if, but is also related in various ways with various verb forms. Fillmore (1990) proposes that the verb forms in conditionals are analyzed with the speaker's assumption about the actuality of the world in which the
event or state of affairs holds. He terms this epistemic relationship between the speaker and the condition *epistemic stance*. According to Fillmore, the speaker’s commitment to the world described in the protasis can exist in three ways as (4) (1990: 142).

(4) a. Actual/Assumed: the speaker may regard it as the actual world
b. Counterfactual/Contrary to expectation: the speaker may regard it as distinct from the actual world
c. Hypothetical: the speaker may not know whether it is the actual world or not

2.3 Can conditionality be signaled by verb forms?

Now I return to the question whether the domain of conditionality can be signaled by formal factors, especially by verb forms or not. It is related with the question how hypotheticality of the protasis and the apodosis is related with the whole conditional interpretation. Two scholars suggest different claims. Cutrer (1994) suggests that the verb form use in the protasis is not significant to signal the domain of conditionality, but the domain of conditionality depends on the type of apodosis as prediction (FUTURE tense) or fact (PAST and PRESENT tense) or speech act. On the other hand, Dancygier (1993, 1997) suggests that the domain of conditionality is signaled by verb form use in the protasis.

2.3.1 Cutrer (1994)

Cutrer (1994) gives account for various tense phenomena in conditional constructions by applying Fillmore’s notion of epistemic stance to the tense management in the conditional constructions within the Mental Space theoretic framework. She defines the characteristic of the mental space constructed by conjunction *if* and the protasis with the notion of epistemic stance. Cutrer’s account has the advantage to cover the various verb form patterns in conditionals, which the previous approaches, including Fillmore, do not or cannot deal with. The point is that Cutrer argues that the function of conditionals cannot be revealed by the mental space process: the mental space process is the same, regardless of the
domain of conditionality. It is argued that only the kind of the apodosis shows whether the function of the conditional is uttering prediction (content domain), fact (epistemic domain), or speech act (speech act domain). Along with Fillmore (1990), Cutrer understand the domain of conditionality based on the pragmatic (encyclopedic) knowledge of cause and effect relation.

Some problems, however, appear here, on the same line of Sweetser (1990).

(5) a. If she gets better tomorrow, we gave her the right medicine.
    b. If you studied hard, you will pass the exam.
    c. If it would bring you back to me, I would cross every river to be right where you are.

In Cutrer’s approach, Sentence (5a) is interpreted as epistemic domain conditionality, since the premise of her getting better tomorrow is a sufficient condition for the conclusion of our right medication in the past. Werth (1997) also claims that conditionals like (5a) take a communicative function of epistemic domain conditionality and refers to them as hypothetical deduction. That is, the conditional relation in (5a) is based on the real world hypothesis that the right medication causes her to get better. Still, the evaluation that our using the right medicine seems to be concluded from the event of her getting better, rather than the premise of her getting better at the time of speech.

Cutter, along with Sweetser (1990) and Fillmore (1990), gives sentence (5b) content-conditional reading, since the relation between two events (contents) is causal and prediction is presented in the apodosis. However, even if there seems to be causal relation between the contents in the protasis and the apodosis of sentence (5b), it is not the event of his studying hard in the past but the speaker’s premise of the previously occurring event, his studying hard, that is a sufficient condition for the conclusion at present that the state of his passing the exam. Those interpretations are both initiated from the epistemic domain. In consequence, the domain of conditionality should be reconsidered in

3) Hypothetical deduction is a way of inference that the relation of \( q \rightarrow p \) is inferred from the hypothesis of \( p \rightarrow q \).
relation with the formal function of the protasis.

The last example (5c) is a distanced form of *if it would bring you back to me, I would cross every river to be right where you are* which is very similar to Sweetser's speech act conditional in (3b). The sentence with no distanced form also conducts a speech act of offer in its apodosis. The distanced form, however, is interpreted as epistemic domain conditionality.

To sum up, the examples given above show that the domain of conditionality doesn't just depend on pragmatic knowledge or inference of the relations. In other words, it is possible that the domain of conditionality can be signaled by the speaker with formal factors such as verb forms.

2.3.2 Dancygier (1993, 1998)

Contrary to Cutrer, Dancygier (1993, 1998) proposes that all verb forms in conditionals — both in the protasis and in the apodosis — signal the domain of conditionality as well as the type of non-assertiveness of *if*, as hypothetical.

In the first case, future modal *will* in the protasis is deleted by non-predictability, the first type of non-assertiveness in the scope of *if*, since English future modal *will* is an expression of prediction, which means that the speaker has certain grounds for the proposition as factual. Thus, *will* is deleted and the remaining PRESENT tense is used to present uncontrollable future. In the second case, distance from the speaker to the content of the protasis, as well as non-predictability creates a distance in the verb forms as a PAST tense form. These two types are iconic of the content causality and sequentiality. In other words, these backshifted verb forms in the protasis signal content domain conditionality as in (6).

(6) a. If it rains tomorrow, the match will be cancelled.
   b. If it rained tomorrow, the match would be cancelled.
   c. If it had rained, the match would have been cancelled.

In the last case, verb forms are used in the same way as general tense marking, but the protases are not understood as the speaker's assertion. That is, the propositions in the protases are usually contextually given
or contextually bound, or assumed as the hearer’s knowledge. Dancygier uses the term epistemic distance as the hearer’s perspective to refer to that kind of non-assertiveness. Epistemic distance as the hearer’s perspective allows future will in the protasis, and the protasis with will is interpreted as the hearer’s prediction. According to Dancygier (1998), the contextualized function of the hearer’s perspective makes the speaker essentially assert the apodosis.

(7) a. If it will rain tomorrow, there’s no point in scheduling the match for tomorrow.
   b. If it’s raining now, let’s cancel the match
   c. If it rained yesterday, (I’m sure) the match was canceled.

Dancygier broadly divides conditionals into two classes, which are called predictive conditionals, as sentences in (6), and non-predictive conditionals, as sentences shown in (7), respectively.

To sum up, TABLE 1 shows the verb form use in the protasis according to the domain of conditionality, suggested by Dancygier (1998: 65-71):

TABLE 1. VERB FORMS in the CONDITIONAL PROTASIS

<table>
<thead>
<tr>
<th>conditionality</th>
<th>time reference</th>
<th>verb form in the protasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>predictive conditional</td>
<td>future</td>
<td>PRESENT</td>
</tr>
<tr>
<td>(content domain)</td>
<td>future/present</td>
<td>PAST</td>
</tr>
<tr>
<td></td>
<td>future/present/past</td>
<td>PAST PERFECT</td>
</tr>
<tr>
<td>non-predictive</td>
<td>future</td>
<td>FUTURE</td>
</tr>
<tr>
<td>conditional</td>
<td>present</td>
<td>PRESENT</td>
</tr>
<tr>
<td>(epistemic and</td>
<td>past</td>
<td>PAST</td>
</tr>
<tr>
<td>speech act domain)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dancygier’s account sheds light on the verb form function for the whole conditional relation as well as the speaker’s epistemic attitude to each clause. However, it still gives limited explanation of verb form use for signaling conditionality.

The first problem is the function of contextualization in non-predictive conditionals for assertion of the apodosis. We can see that the free verb form use for the apodosis of non-predictive conditional in (5b) doesn’t result from its assertive interpretation, but the hypothetical premise in

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4) I leave genetic conditionals beyond the scope of the present thesis.
its protasis.

The second problem is the application of "hypothetical" backshift. She restricts "hypothetical" backshift within predictive, that is, content domain conditionals. Dancygier and Sweetser (1996) give an example of epistemic "hypothetical" conditional, but they explain that it can be possible with a special scenario. It means that the presented interpretation as epistemic domain conditionality is due to the pragmatic knowledge, regardless of its verb form use. However, there are "hypothetical" verb form patterns allowing interpretation of epistemic domain conditionality as (5c).

Based on interpretation of conditional construction from three domains f conditionality of if, I'll examine, through previous researches of forms and meanings of conditionals, how the function of conditionality is related with the formal aspects of verb forms and what kind of interpretations can be concomitant with the function of conditionals due to verb forms in conditionals. In the next chapter, I'll introduce the theoretic framework of the present study first.

3. Theoretical framework: Mental Space Theory

Assuming verb forms in conditionals as linguistic expressions contribute to guiding the cognitive reasoning process in human mind, I will approach conditional verb forms in cognitive linguistic perspective, especially, within Mental Space Theory (Fauconnier 1994, 1997). Mental spaces are defined as "constructs distinct from linguistic structures but built up in any discourse according to guidelines provided by the linguistic expressions" (Fauconnier 1994: 16). In other words, they are independent of language structures, but closely related with interpretation of linguistic expressions.

3.1 Hypothetical Space

In the earlier Mental Space model of the conditional construction if p, (then) q (Fauconnier 1994), if p is considered as the space-builder for a Hypothetical Space in which q holds, as illustrated in FIGURE 1 (Fauconnier 1994: 115). This mental space building means that q holds in all p-situations.
Later, Fauconnier (1997) elaborates on Hypothetical Space building following Cutrer's (1994) model of the tense management in conditionals. According to Cutrer, if \( p \), (then) \( q \) opens at least two new spaces, the Foundation Space for the protasis and the Expansion Space for the apodosis as in FIGURE 2. The conjunction if is a space-builder for the Foundation Space, and \( p \) holds in it. The Expansion Space in which \( q \) holds is an expansion of the hypothetical Foundation Space, so it is subordinated to the Foundation Space and it is also a hypothetical space.

Cutrer (1994) argues that a hypothetical conditional construction sets up a domain of spaces which represents a hypothetical "reality", similar to, but separated from speaker reality by the space builder if. The later model is more useful to make the relation between the protasis and the apodosis clear by the relation between mental spaces.

3.2 Tense management in Mental Space Theory (Cutrer 1994)

Tense plays an important role in determining what kind of space is in focus, its connection to the parent space, its accessibility, and the location of counterparts used for identification (Fauconnier 1997). According to Cutrer (1994), tense isn't a space-builder itself, but has a space-builder-like
role in discourse.

3.2.1 Discourse primitives

Any space configuration includes four theoretical discourse primitives: BASE space, FOCUS space, EVENT space and VIEWPOINT space. In this section, I will introduce the concepts of the discourse primitives from Cutrer (1994) and Fauconnier (1997).

BASE space seems to be an anchor of the discourse as a whole. By default, it refers to the speaker's reality, so it is characterized as "here-and-now", that is, a temporally and spatially zero center of reference.

FOCUS space is the current, most active space where meaning is currently being constructed. It is the space which the utterance is "about"; in other words, the space where content is currently being added. Thus, FOCUS space can shift from space to space based on grammatical and pragmatic cues.

EVENT space is often, but not always, the same as FOCUS space. It is the space where the full structure of the event or state indicated by the verb is constructed.

VIEWPOINT space is the space from which other spaces are currently being built up or accessed. It is the center of conceptualization and consciousness of the SELF to whom an utterance is attributed, so in many default cases, VIEWPOINT space shows the point of view to the speaker in reality, i.e., the default BASE space. Yet, VIEWPOINT space can be a different space from BASE space.

3.2.2 The mental space characterization of tense

Here is the mental space characterization of three basic semantic tense categories PAST, PRESENT, and FUTURE, provided by Cutrer (1994).

The characterization of PAST is like the following in (8).

5) In the present thesis, BASE space is restricted within the notion of reality, i.e., the speaker's reality by default. No regard will be paid to various kinds of BASE space (e.g. the hearer's reality, "reality" within fiction, etc.: cf. Cutrer 1994: Chapter 7)
(8) PAST identifying construction of PAST space N indicates that:
   (i) N is in FOCUS
   (ii) N's parent is VIEWPOINT
   (iii) N's time is prior to VIEWPOINT (i.e., prior to N's parent)
   (iv) events or properties represented in N are FACT from VIEWPOINT

According to Fauconnier (1997), the dynamic process of PAST tense above is reflected by two kinds of codes in English language system: the simple past (verb + past) and have + past participle (verb + past participle) in the infinitival or non-verbal position (for example, will have forgotten, to have left, by having brought, etc.).

The PRESENT space is characterized as following in (9).

(9) PRESENT identifying construction of PRESENT space N indicates that:
   (i) N is in FOCUS
   (ii) N or N's parent is VIEWPOINT
   (iii) the time frame represented in N is not prior to VIEWPOINT/BASE
   (iv) events or properties represented in N are FACT from VIEWPOINT

The characterization of PRESENT tense allows for more elaborate combinations in which PRESENT is not the time of speech (Fauconnier 1997: 76).

The characteristics of FUTURE tense are given in (10).

(10) FUTURE identifying construction of FUTURE space N indicates that:
   (i) N is in FOCUS
   (ii) N's parent is VIEWPOINT
   (iii) the time frame represented in N is posterior to VIEWPOINT
   (iv) events or properties represented in N are PREDICTION from VIEWPOINT

6) Linguistic system coding PAST is the same as one coding PERFECT in English like the following:

PERFECT identifying construction of an EVENT space N indicates that:
   (i) N is not in FOCUS
   (ii) N's parent is VIEWPOINT
   (iii) N's time is prior to VIEWPOINT

Conditional pluperfect appearing in apodoses can be used to indicate both PAST tense and PERFECT aspect, but not at the same time.
FUTURE is coded by a linguistic expression will + verb in English. Strictly speaking, FUTURE tends to express a kind of modality, that is, epistemic modality, and to set up a PREDICTION space, rather than a FACT space.

3.2.3 Tense in conditionals

In order to describe the behavior of tense in conditionals, Cutrer brings the notion of epistemic stance in Fillmore (1990), as I introduced in Chapter 2. She grants a Foundation Space the characteristics of epistemic stance from the VIEWPOINT in BASE (reality). Thus, a PRESENT space for non-past time reference is a hypothetical space, while a PAST space for non-past time reference is a counterfactual space.

![Diagram]

Cutrer argues that VIEWPOINT is BASE for interpretation of the protasis and that VIEWPOINT shifts to hypothetical space F for interpretation of the apodosis. The interpretation of the protasis, therefore, comes from the speaker’s reality, while the apodosis can be interpreted in view of the hypothetical "reality."
In this model, the process for external epistemic stance is problematic. Both the earlier and the later models for conditional construction allow building space with relation to the propositional content of the protasis as the salient factor of its hypotheticality, and also counterfactuality, so it is inconsistent to build an "empty" hypothetical space with respect to reality.

Consequently, I'll suggest a new cognitive model of conditional constructions, and explain the formal attribution related with the function of the speaker's epistemic stance and cognitive domain of conditionality in conditional construction in the next chapter.

4. My proposal

4.1 VIEWPOINT shift by a space builder if

As the assumption for a new proposal of conditional constructions, conjunction if functions as signaling "the speaker's uncertainty and uncontrollability" (Akasuka 1986) of the situations in conditional constructions. The speaker's uncertainty and uncontrollability signaled by if is termed hypotheticality for the present account, rather than other terms such as non-factuality and non-assertiveness, which cause ambiguous definitions because of the existence of negation in the terms. Therefore, I assume that hypotheticality is the basic function of conjunction if in conditional constructions. All conditionals with conjunction if are basically hypothetical: in other words, conditional constructions present that the situations in conditionals are regarded as uncertain and uncontrollable by the speaker.

In mental space processing, hypotheticality, as a function of conjunction if is reflected in the space constructed by if. Conjunction if sets up the Hypothetical Space, which inherits all properties from BASE, but is characterized as uncertain and uncontrollable by its BASE/VIEWPOINT. The point is that a space-builder if conducts VIEWPOINT shift from BASE to the Hypothetical Space set up by if for interpretation of the protasis. I make a revision as follows: (i) a hypothetical space F is set up by the space builder if with respect to BASE, and then (ii) VIEWPOINT shifts to the hypothetical space F for interpretation of the protasis. While BASE is VIEWPOINT for interpretation of the protasis according to Cutrer (in
FIGURE 6), VIEWPOINT is moved to the hypothetical space set up by *if* for interpretation of the protasis as illustrated in FIGURE 4.

![Diagram](image)

Time reference in the protasis thus is marked with respect to VIEWPOINT in the hypothetical "reality". In other words, tense is marked in protases with respect to the hypothetical "reality", represented by the Foundation Space (F), in which most structures are inherited from reality, *i.e.*, its BASE space, by space optimization.

Now, we can separate a space newly set up by tense of the protasis from the space set up by *if*, because the hypothetical space set up by *if* is characterized as the time of speech, while the hypothetical space constructed by tense in the protasis shows the characteristics of PAST, PRESENT and FUTURE. For instance, a PRESENT space set up by PRESENT tense marked in the verb form in the protasis, presents the characteristic that the time frame in the space is not prior to VIEWPOINT and cannot be always the same as the time of speech. Therefore, we can elaborate the process (ii) in FIGURE 4 to FIGURE 5.
After building a space F, we have two options about managing VIEWPOINT: (a) VIEWPOINT can shift to the Foundation Space (F) to interpret the apodosis in the Expansion Space (E) which is a child space of the Foundation Space, or (b) VIEWPOINT can stay in the Hypothetical Space (H) to interpret the apodosis in the Expansion Space (E) which is a child space of the Hypothetical Space. The mental space configuration of those processes is presented in FIGURE 6.

Two kinds of mental space processes suggested in FIGURE 6 reveal the function of conditionals according to the cognitive domain.
First, concatenate access of spaces in (a) of FIGURE 6 shows content domain conditionality: the interpretation of the Expansion Space for the apodosis is with respect to VIEWPOINT on the Foundation Space, since the Expansion Space is embedded in the Foundation Space. That means, the realization of the apodosis (which can be a prediction, a fact, or a speech act) is possible in the "world" in which the content of the protasis is realized.

Next, non-concatenate access of spaces in (b) of FIGURE 6 shows epistemic and speech-act domain conditionality: the interpretation of both spaces depends on the hypothetical VIEWPOINT. VIEWPOINT functions as another SELF of the speaker for making connection between spaces which don’t have any direct access path each other.

This twofold distinction somewhat seems to be supported with categorization of conditionals according to their verb form use by Dancygier as predictive (content domain conditionality) and non-predictive (epistemic and speech act domain conditionality). However, since verb form use cannot present clear-cut distinction according to the domain of conditionality, the function of tense management by verb forms as tense markers should be considered for meanings of conditional constructions.

4.2 Function of verb forms: epistemic stance as distance

Verb forms usually present temporal distance to the situation from the speaker’s time of speech. It is used for metaphorically extended function to present epistemic distance as well (Fleischman 1989). Epistemic distance means distance to the situation from the speaker’s epistemic state or belief to reality. In the present section, I’ll explain how each tense signals epistemic distance on the scale of hypotheticality in conditionals and, in particular, how it can mark epistemic stance in the protasis.

4.2.1 Neutral hypotheticality

PRESENT (futurate) tense signals neutral epistemic stance in conditional protases. It is interpreted similarly to PRESENT futurate use for scheduled future like Tomorrow is Sunday or The movie begins at 7:00, since
it presents the situation as uncontrollable by the speaker. The difference is that uncontrollability signaled by PRESENT futurate use for scheduled future is based on reality, that is, certainty, while uncontrollability signaled by PRESENT futurate use in conditional protases is based on hypothesis.

In mental space configuration, the Hypothetical Space and the Foundation Space are constructed as if they are the same mental space. In other words, by VIEWPOINT shifted to the Hypothetical Space, the event and the properties of the protasis is put in the Hypothetical Space itself as a FACT non-prior to its time frame. The protasis with PRESENT futurate tense is regarded as a hypothetical FACT, since it's from hypothetical VIEWPOINT. Consequently, the speaker can present the situation as neutrally hypothetical, on the very middle of hypothetical scale: that means, the speaker doesn't know whether it is actual or not.

The point is that conditionals with neutral hypotheticality function as content domain conditionals. The situation of the apodosis is regarded as realized on the base of the realization of the situation of the protasis. Even if the fact in the protasis is regarded as hypothetical, the apodosis is regarded as positively asserted when the situation of the protasis holds. We can illustrate the sequence of mental space building of sentences in (5a) like the following as concatenate access path in FIGURE 7.

As illustrated in FIGURE 7, the content domain of conditionality isn't determined by the speaker’s real-world knowledge about causal sequence. Rather, the speaker presents two propositions sequentially through the embedding structure of content domain conditionality.
4.2.2 Weak hypotheticality with positive epistemic distancing

General tense use in conditionals signals positive epistemic distancing. Positive epistemic distancing can be explained along with the function of "actual/assumed epistemic stance" from the Hypothetical Space as VIEWPOINT. The speaker hypothesizes the situation marked in the protasis positively, in other words, with weak hypotheticality. Weak hypotheticality means less hypothetical state than neutral hypotheticality.

The protasis with general tense use signals that assertion of the protasis is based on the hypothetical reality. Thus, the speaker’s epistemic state to the epistemic stance marked in the protasis content, is determined by conjunction if, which means uncertainty and uncontrollability. However, epistemic stance marked in the protasis content is positive epistemic stance. In consequence, the speaker hypothesizes the situation in the protasis as a premise. The positive epistemic distancing from the hypothetical reality shows the speaker’s weak hypotheticality.

Weak hypotheticality seems to be closely connected with epistemic domain conditionality. The protasis as a hypothetical premise plays a role of the sufficient condition for asserting the apodosis. The speaker does not know the truth of the protasis, but its (hypothesized) truth guarantees the truth of the apodosis.

PAST tense for past time reference in the protases of the sentences in (11) shows positive epistemic distancing as in FIGURE 8.

(11) a. If John gave me the key yesterday, then it was in my pocket.
    b. If John gave me the key yesterday, then it is in my pocket.
    c. If John gave me the key yesterday, then it will be in my pocket.

![FIGURE 8]

In the apodosis, the situation in the past or at present, and the
prediction about future is possible to present. Sweetser (1990) and Cutrer (1994) interpret sentence (11c) as content domain conditionality reading, but it is more plausible interpretation that the hypothetical truth of the premise *John gave me the key yesterday* guarantees the truth of the prediction of the place of the key.

FUTURE tense for future time reference in sentences in (12) functions as hypothetical prediction at the time of speech as positive epistemic distancing in FIGURE 9.

(12) (Quotation from TV weather forecasting) If it'll rain tomorrow, I'll buy an umbrella tonight. (Fauconnier 1997)

Hypothetical prediction conducted by the speaker guarantees the utterance of the apodosis. From the examples, I find out that Dancygier's account that prediction in the *will*-protasis is "attributed not to the speaker, but to the hearer" (1998: 119) seems to be applicable only to the part of the whole *will*-protases. The hearer's prediction can be used in the protasis as hypothetical prediction by pragmatic factors such as quotation (echoic use), and sometimes deixis (use of pronoun you referring to the hearer).

The last case is PRESENT tense for present time reference as positive epistemic distancing. PRESENT tense has complicated interpretations such as futurate and habitual, but positive epistemic distancing is caused only in case PRESENT tense signals only the situation at the time of speech like the following in (13) with mental space configuration in FIGURE 10.

(13) If she is in the lobby, the plane arrived early.
As regards verb forms in apodosis, in the non-concatenate access path of epistemic domain conditionality as illustrated above, symmetric epistemic distance structure to the protasis and the apodosis is found. Therefore, assertion of the apodosis, functioning as conclusion of inference, is distanced positively, and consequently hypothetical as well. Epistemic symmetry is evident in (14):

(14) a. If she's divorced, she's been married (Sweetser 1990),
    b. If you're the pope, I'm the empress of China (Akatsuka 1986)
    c. If I did one thing in my life, (I hope) I did something for our earth.

So far I examine that neither of the clauses is asserted, in epistemic conditionals. Since hypotheticality is weak, however, both the protasis and the apodosis often sound asserted, regarded as near-factual in a certain contextual phenomena.

4.2.3 Strong hypotheticality with negative epistemic distancing

PAST tense can signal negative epistemic distancing in a metaphorically extended way. PAST usually indicates past time reference, which involves temporal distance from the time of speech to the event time. In some circumstances, however, PAST tense is taken to indicate epistemic distance, rather than temporal distance (with non-past time reference) (cf. Fleischman 1989, Fauconnier 1997).

In mental space configuration, PAST tense without any temporal distance functions as blocking optimization to its parent space, so the
speaker presents that she hypothesizes the situation negatively. Thus, the Foundation Space presented with negative epistemic stance with a PAST verb form is characterized as having properties and events incompatible to those in the Hypothetical Space. We can say it signals strong hypotheticality. Strong hypotheticality means more hypothetical (less probable) state than neutral hypotheticality.

PAST as negative epistemic stance is characterized as metaphorically extended in (15), differently from PAST as temporal distance:

(15) **PAST as negative epistemic stance** applied to F indicates that:
   
   (i) F is in FOCUS
   (ii) F’s parent is VIEWPOINT
   (iii) F’s time is not prior to VIEWPOINT
   (iv) events or properties represented in F are FACT incompatible with VIEWPOINT

Incompatibility by negative epistemic stance isn’t expressed as "counterfactual" meaning *per se*, or the speaker’s knowledge or belief as contrary to expectation or fact, since VIEWPOINT is on the Hypothetical Space, not on BASE (the speaker’s reality). Incompatibility between the Hypothetical Space and the Foundation Space reveals just the speaker’s epistemic state to the protasis as strongly hypothetical, or less probable for the conditional meaning.

The speaker can hypothesize the situation in the protasis less likely than other incompatible situation with negative epistemic distancing. Most negatively distanced protasis is related with content domain conditionality, while there are some epistemic domain conditionals with negative epistemic distancing. For example, the pattern of negatively distanced *will* protasis and *will* apodosis in (5c) shows interpretation on the epistemic domain. The prediction, not the future event, in the protasis functions as premise to hypothetical conclusion in the apodosis. Among the examples, the simplified mental space configuration of (5c) is illustrated in FIGURE 11.
They keep their epistemic domain conditionality, but the whole inference process is distanced with Space F. Both clauses with will show epistemic symmetry in their cognitive distance in the mental space linking as well as their formal symmetry. Speech act reading of (5c) is bleached by negative distancing, since the apodosis seems to lose its illocutionary force based on utterance at the time of speech.

5. Conclusion

In the present thesis, I have examined the function of verb forms for interpretation in conditionals. Verb forms in conditionals function as signaling the degree of hypotheticality, that is, the speaker’s uncertainty and uncontrollability. The degree of hypotheticality is closely related with conditionality as distancing mechanism, so it is difficult to claim that the degree of hypotheticality per se determines the domain of conditionality as Dancygier (1993, 1998), but verb forms provide the function of signaling the domain of conditionality for interpreting conditionals. Epistemic distancing can be possible on the same base of the function of if.

Interpretation of the conditional construction needs very consideration complicated with its formal, semantic and discourse and contextual aspects. I conclude that tense in conditionals plays an important role of signaling hypotheticality and conditionality in interpretation of conditionals, but other factors like sentence order have the possibility to affect the interpretation of conditional construction. Thus, the deeper and more diverse approaches are needed for form-function relation of conditionals.
References


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