# Adnominal Conditionals and Their Licensing Conditions[*]
## Takashi Shizawa

## 1. Introduction
### 1.1. Overview of Typical Conditionals

Conditional constructions are roughly defined as complex sentences composed of a main clause (sometimes called $q$, or the apodosis) and a subordinate clause ($p$, or the protasis) (cf. Dancygier (1998:1)). In addition, it is generally acknowledged that there is interdependency between the protasis and apodosis such as cause-effect relation or premise-conclusion relation. Typical conditional constructions are exemplified below:

(1) a. If Mary goes, John will go. (Sweetser (1990:115))
    b. If she's divorced, (then) she's been married. (Sweetser (1990:116))
    c. If you went to the party, did you see him? (Sweetser (1990:120))

The example in (1a) is referred to by Sweetser (1990) as a content-domain conditional. The relation linking $p$ and $q$ in content-domain conditionals is causality. In (1a), the event described in the protasis, i.e. *Mary goes*, causes the event in the apodosis, i.e. *John will go*. Sentence (1b) is an epistemic-domain conditional in Sweetser's terminology. In epistemic-domain conditionals, the relation linking $p$ and $q$ is that of premise-conclusion. Specifically, the speaker in (1b) has concluded that she has been married from the premise that she is divorced. Sentence (1c) is a speech-act domain conditional as Sweetser calls it. In speech-act domain conditionals, causality holds at the speech-act level: protases express conditions which render speech acts in apodoses felicitous. In (1c), the question *did you see him* would be a felicitous question under the condition that the hearer has been to the party.

In spite of the difference in their interpretations, all these conditionals have one feature in common: *if*-clauses usually serve as subordinate clauses adjoined to the main clauses, describing sufficient conditions for the fulfillment of surface apodoses or implicit ones.[1]

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[1] The term *implicit apodoses* refers to the unexpressed parts of main clauses in epistemic and speech-act conditionals such as *I conclude* and *I tell/ask you*.

*1.2.  If-Clauses Modifying Nominal Expressions*

So far we have observed some typical conditional constructions and seen that the *if*-clauses in those examples serve as subordinate clauses modifying their main clauses. However, we sometimes find *if*-clauses serving, like relative clauses, as modifiers to noun phrases (NPs).  Observe the following examples:

> (2)  a.  No one at school knew of her birthday.  Certainly, she trusted, none of the pupils did, although she sensed a slight reddening under her high cheekbones as just for a few seconds she contemplated *her embarrassment if one of her classes broke out into "Happy Birthday, Mrs Stevens!"*
>
> (Declerck and Reed (2001:269), with slight modifications)
>
>    b.  Harry saw, in his mind's eye, *the expression on Hermione's face if she ever heard about this abuse of house-elves*, and decided never to mention it to her.
>
> (J.K. Rowling. *Harry Potter and the Half-Blood Prince* [italics are mine])

In these examples, the *if*-clauses do not condition the realization of the events described in the main clauses.  In (2a), the condition described in the *if*-clause does not serve as a condition of her contemplation.  Rather, it conditions her embarrassment.  Likewise, the *if*-clause in (2b) does not describe a sufficient condition for the realization of the event of Harry's imagination; rather, it conditions the facial expression which Hermione would show.  That is, we should interpret sentence (2b) as "Harry imagined what expression Hermione would show if she ever heard about this abuse of house-elves."

The main concern of this article is with conditionals of this sort, which we call *adnominal conditionals* (hereafter, ACs) following Lasersohn (1996).  Specifically, I reveal the semantic and pragmatic properties of ACs and propose their licensing conditions.

The organization of this article is as follows.  Section 2 takes up Lasersohn (1996) as the only previous study that has seriously investigated ACs, at least to some extent.  Section 3 points out a number of problems with Lasersohn's formulation. Section 4 reveals the semantic and pragmatic properties of ACs that have been overlooked so far, and proposes two licensing conditions for ACs.  Section 5 makes some concluding remarks and mentions related issues.

## 2.  The Only Previous Study: Lasersohn (1996)

In this section, we review Lasersohn (1996).  As Athanasiadou (1997) states in the introductory chapter of the volume *On Conditionals Again*, conditionals and related

phenomena have been one of the most intriguing issues in the field of linguistics, as well as philosophy and psychology. However, little attention has been paid to adnominal conditionals. For example, standard reference books such as Quirk et al. (1985) and Huddleston and Pullum (2002) do not refer to ACs. Declerck and Reed (2001) deal with three examples of ACs including (2a), but they do not analyze them in detail.[2] Bhatt and Pancheva (2006) briefly refer to ACs, but they only review Lasersohn's analysis. It goes without saying that there is no mention of ACs in dictionaries such as *OED* or *Webster's*. Therefore, to the best of my knowledge, Lasersohn (1996) is the only study that deals with ACs seriously.[3]

### 2.1. Lasersohn's Analysis

Lasersohn (1996) presents three possible analyses of ACs as working drafts. Although I admit that his working drafts per se are not directly relevant to the analysis of mine to be presented below, they are worth reviewing for a better understanding of the semantics of ACs.

### 2.1.1. Possibility 1: Concealed Question Analysis

The first possible analysis Lasersohn (1996) offers treats nominal expressions modified by ACs as concealed questions. Observe the following examples:

(3)  a.  We all know the consequences if we fail.
　　 b.  We all know what the consequences will be if we fail.

(Lasersohn (1996:156))

In (3b), the *if*-clause is realized as an ordinary or sentence-modifying conditional. It serves as a subordinate clause modifying the antecedent clause *what the consequences will be*. Apparently, the logical meaning of sentence (3a) and that of sentence (3b) are almost equivalent. In addition, analyzing NPs containing ACs as concealed questions enables us to treat sentence-modifying conditionals and ACs in a unified manner. Thus it seems plausible and attractive to assume that NPs with ACs are rewritten at logical form as concealed questions.

However, Lasersohn rejects this analysis because not all nominal expressions modified by ACs appear as complements of verbs that take interrogative complements, as shown below:

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[2] They call ACs *Nominal-Q Conditionals* without referring to Lasersohn (1996).
[3] Fukuchi (1997) also deals with ACs and analyzes them in terms of selectional restriction without referring to Lasersohn (1996). I do not examine his analysis in this article, because he treats ACs as concealed questions, which, as will be seen below, is rejected by Lasersohn.

(4)     The outcome if John gets his way is sure to be unpleasant for the rest of us.

(Lasersohn (1996:155))

In (4), the NP *the outcome if John gets his way* occurs in the subject position of the sentence, but not as a complement clause to a verb such as *know*, which could take an interrogative complement.   Thus the concealed question analysis does not seem to be adequate.

*2.1.2.   Possibility 2: Analyzing ACs as Complements to Relational Nouns*

The second approach that Lasersohn proposes is to treat nominal expressions modified by ACs as relational nouns and ACs as their complements.   Observe the following examples:

(5)  a.   the consequences if we fail

     b.   the consequences of our failure

(Lasersohn (1996:157))

The *of*-phrase in (5b) is the complement to the relational noun *consequences*.   If we deal with ACs as complements to the NPs modified by them, we can easily grasp a synonymous relation between (5a) and (5b), while we can no longer treat ACs and sentence-modifying conditionals in a unified manner.

Unfortunately, although this idea has plausibility for some examples such as (5a), it is implausible for others.   Let us consider the following example:

(6)     The price if you pay now is predictable; the price if you wait a year is not.

(Lasersohn (1996:155))

According to Lasersohn (1996:157), the *if*-clause in (6) does not describe a service for which the price is imposed, or any other sort of event which might plausibly be a term of the *price* relation.   So unlike the pair in (5), the expressions in (7) are not semantically equivalent:

(7)  a.   the price if you pay now

     b.   the price for paying now

The meaning of (7a) can be represented roughly as "the price that will be determined or required if you pay now," while that of (7b) can be read as "the price imposed for your

immediate payment."

Furthermore, Lasersohn points out that relational nouns may appear with both overt complements and ACs, as shown below:

(8)    the consequences of our failure if John is in charge    (Lasersohn (1996:157))

This example indicates that ACs should be treated not as complements but as adjuncts.[4] Therefore, it is not plausible to regard ACs as clausal complements to relational nouns.

### 2.1.3.  Possibility 3: Analyzing ACs as Free Relatives

Lasersohn takes another approach wherein the nominal modified by ACs could be treated as concealed free relatives:

(9)  a.   the consequences if we fail
     b.   what(ever) the consequences would be if we fail

(Lasersohn (1996:159))

In this approach, we might analyze NPs containing ACs as being structured at the level of logical form.   Specifically, we would assign the NP in (9a) a logical-form representation essentially like the free relative in (9b).

As with the first approach (i.e. concealed question analysis), the advantage of the third approach is to be able to treat ACs and sentence-modifying conditionals in a unified manner.   However, it also has disadvantages like the following.   According to Lasersohn, for one thing, the main cost in giving such an analysis is syntactic, not semantic:   we must give superfluous rules for converting noun phrases containing ACs into free relative clauses in the mapping from surface syntactic representation to logical form – and we must try to justify such rules in the context of some well-developed syntactic theory (cf. Lasersohn (1996:159)).   In addition, note that the free relative, i.e. *whatever the consequences would be*, replaces the NP *the consequences*.   Lasersohn deems the structure of NP containing ACs as [Det [N *if*-clause]].   If the free-relative approach is valid, this means that the structure of NPs with ACs must be [[Det N] if-clause], and not [Det [N *if*-clause]] (cf. Bhatt and Pancheva (2006:676)).   In this way, the third approach is proved to be invalid.

### 2.2.  Lasersohn's Solution: The Semantics of Adnominal Conditionals

From the above observations, Lasersohn (1996) concludes that the three attempts to

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[4] However, note that the noun phrase in (8) is ambiguous in that the *if*-clause can possibly modify both *consequences* and *our failure*, which Lasersohn seems to overlook.

analyze ACs are problematic both empirically and theoretically. Instead, he provides a semantic formulation to interpret [X *if*-clause] structures directly, as is shown below:[5]

(10)　$[\![\text{X } \textit{if } \text{S}]\!]^{\,M,w} = \{x \in U \,|\,$ for all those worlds $w'$ closest to w such that there exists some $y \in [\![\text{S}]\!]^{\,M,w'},$ it holds that $x \in [\![\text{X}]\!]^{\,M,w}\}$

(Lasersohn (1996:162))

Roughly, the formulation in (10) can be interpreted as "the meaning of the structure [X *if* S] is that in all possible worlds closest to the actual world where S is true, X is also true." If value *S* is assigned to variable *X*, the semantic formulation is linguistically realized as a sentence-modifying conditional, while if value *N* is assigned to *X*, the formulation is realized as an AC. By virtue of the semantic formulation in (10), as Lasersohn claims, we can grasp the semantic parallelism between sentence-modifying conditionals and ACs, and handle them in a unified manner.

## 3. Problems with Lasersohn's Formulation

In this section, I point out a few problems with Lasersohn (1996). As he claims, the semantic formulation given in (10) seems to be plausible and desirable as an abstract schema in that it enables us to capture the parallelism between sentence-modifying conditionals and adnominal ones without any special theoretical apparatus. However, it is insufficient in that it overlooks some facets of ACs on usage level.

A few observations are in order. For one thing, his formulation focuses on the co-occurrence of *S* and *X* (*S* or *N*), so that it overlooks basic semantic relationships seen in ordinary conditionals such as interdependency and causality between *S* and *X*. According to the formulation in (10), it seems to be sufficient for the referents of *S* and *X* to co-occur or coexist in possible worlds. This means that any combination of *S* and *N* can be allowed in ACs, regardless of whether or not they can be related semantically in terms of interdependency and causality. This is not the case, however. Observe the following example:

(11)　\* The mammal if that's a mouse must be smaller than the mammal if that's a dog.

This example is composed of two ACs derived from epistemic-domain conditionals, i.e. *If that's a mouse, it's a mammal* and *If that's a dog, it's a mammal*. The relationship between a mouse/dog and a mammal is inclusion: being a mouse/dog entails being a

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mammal (not vice versa). So the situation of being a mouse/dog and that of being a mammal can co-occur in any possible worlds. Lasersohn's formulation cannot account for the anomalousness of sentence (11). This also means that Lasersohn takes no account of the ambiguity of conditional constructions pointed out by Sweetser (1990). If, as the example in (11) shows, protases of epistemic conditionals cannot be used as ACs, it means that of the three types of conditional constructions, i.e. content, epistemic and speech-act domain conditionals, content-domain conditionals alone can be adnominalized.[6] It seems that the adnominal use of *if*-clauses is possible if and only if causal relations are established between the *if*-clauses and nominal expressions modified by them.[7] That is, ACs are specialized for expressing causal relations between events.

Second, the example shown below is also problematic for Lasersohn's formulation:

(12)　*　Please let me know his arrival if he takes a taxi.

The intended meaning of sentence (12) is "Please let me know when he will arrive if he takes a taxi." Although we can imagine a situation wherein the events *his arrival* and *he takes a taxi* co-occur, sentence (12) is not acceptable. In other words, although sentence (12) seems to be quite compatible with Lasersohn's formulation, it is not acceptable. To make sentence (12) acceptable without changing the intended meaning in a significant way, the NP *the time* must be added:

(13)　　Please let me know *the time* of his arrival if he takes a taxi.

Note that what the contrast between (12) and (13) means is neither that the phrase *his arrival if he takes a taxi* is never acceptable nor that the noun phrase *his arrival* is never compatible with the modification by ACs. In fact, the phrase at issue is fully acceptable in certain contexts, as illustrated by the following example:

(14)　　His arrival if he takes a taxi may be later than (his arrival) if he takes a train.

The sentence in (14) can be interpreted as "The time of his arrival if he takes a taxi may be later than (the time of his arrival) if he takes a train." Although the NP *the time* is not explicitly stated, we can infer that the speaker of sentence (14) is interested in when *he* will arrive. The difference in acceptability between (12) and (14) cannot be fully accounted

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[6] The other type of conditionals, i.e. speech-act domain conditionals, cannot be used as ACs, either: the apodoses of speech-act conditionals have to express some speech acts such as an offer, promise or warning by definition, but nominal apodoses cannot express such speech acts.

[7] Declerck and Reed (2001:370) take a similar view.

for by Lasersohn's formulation. These examples show that we should take not only semantics but also pragmatics into consideration to treat ACs properly.

Furthermore, the following examples show that his attempt to treat ACs and standard conditionals in a unified manner ends up not being successful:

(15) a. * We {know/imagine} no consequence if we fail.

b. We {don't know/can't imagine} what consequences will follow if we fail.

c. We {know/imagine} there will be no consequence if we fail.

According to my informant, sentence (15a) seems to be very odd and cannot be interpreted properly. If we are to express the possible meaning of (15a), we have to express it either as (15b) or as (15c). Note here that the expressions corresponding to the NP *no consequence* in (15a) are expressed in clausal forms in (15b) and (15c). Contrary to Lasersohn's view or expectation, this contrast indicates that ACs are not identical with sentence-modifying conditionals: ACs inherit some semantic features of sentence-modifying conditionals (e.g. causal relation at the content domain level) and are licensed by certain semantic and pragmatic factors.

The above observations show that the formal treatment given by Lasersohn (1996) is inadequate. To treat ACs properly, we need not only semantic but also pragmatic viewpoints. In the next section, taking both semantic and pragmatic factors into account, I would like to present two licensing conditions for ACs and show their validity using both attested and constructed examples.

## 4. Licensing Conditions for Adnominal Conditionals

### 4.1. Licensing Condition 1: Meanings of NPs Modified by ACs

To propose proper licensing conditions for ACs, we have to take into account the relationship between ACs and NPs modified by them. To put it more correctly, we should consider what kind of NPs go well with ACs. As the examples in (11)-(14) show, this is one of the facets of ACs that Lasersohn (1996) seems to overlook or neglect. For this purpose, let us observe the semantic characteristics of NPs modified by ACs by using examples found in the British National Corpus (BNC). Note that in this research I restrict myself to the specific collocations, i.e. *imagine* X *if* Y and *think of* X *if* Y, and preclude examples containing NPs with prenominal modifiers (e.g. *think of the* usual *responses if someone says…*) and postnominal ones (e.g. *imagining the effects* on her life *if she had a daughter who was assaulted in this way*) for convenience. Let us observe two of the nineteen examples found in the BNC (the italics are all mine):

(16) a. Think of the *outcry* if that had been a nuclear accident.

    b.   Imagine the *reaction* if David Owen had appeared at Labour's 1989 conference.

It is worth noting that nouns such as *outcry* and *reaction* do not denote a spontaneous event: they need some causing events to occur. In fact, *Cambridge Advanced Learner's Dictionary* (*CALD*) defines the noun *outcry* as "a strong expression of anger and disapproval about something, made by a group of people or by the public," and gives the example *The release from prison of two of the terrorists has provoked a public outcry.* As can be inferred from the definition and example, the public outcry does not occur autonomously without a trigger. Likewise, *CALD* defines the noun *reaction* as "behaviour, a feeling or an action that is a direct result of something else," and gives the example *I love to watch people's reactions when I say who I am.* As the definition and example clearly show, a reaction is usually construed as a result of something else. Now, let us observe the nouns found in the BNC examples:[8]

    (17)    Nouns with ACs found in the BNC (19 examples in total)
               outcry (5), reaction (3), uproar (3), confusion (1), consequences (1), difficulties (1), furore (1), result (1), situation (1), scene (1), smile (1)

As the data in (17) shows, nouns compatible with ACs tend to be ones referring to events that are induced or brought about by something. In other words, most of the nouns in (17) can be construed as results or effects of something, i.e. resultant events. This fact is quite compatible with my view that ACs are specialized for expressing causal relations (i.e. cause-effect relations) between events/situations.

    However, a closer examination reveals that some of the nominal expressions modified by ACs are difficult to construe as resultant-event nouns. Let us observe the following examples:

    (18) a.    The price if you pay now is predictable; the price if you wait a year is not.

                                                          (= (6))

        b.    The location if it rains and the location if it doesn't rain are within five miles of each other.               (Lasersohn (1996:156))

In (18), the NPs *the price* and *the location* are difficult to interpret as events brought about by the fulfillment of the conditions in the *if*-clauses, because both the price and location exist in advance of the fulfillment of the conditions. Rather, sentence (18a) means that

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[8] The numbers in the parentheses represent the number of examples found in the BNC.

the price will be determined in accordance with the hearer's decision as to whether s/he pays now or not. Likewise, sentence (18b) implies that the location will be decided or chosen according to the weather. In other words, the NPs in these examples contain unspecified variables (e.g. specific price and location) whose values are to be determined by the fulfillment of the conditions in the *if*-clauses.

On the basis of this observation, we can classify nouns modified by ACs into two classes: *resultant-event type* (RE) and *resultant-value type* (RV) nouns, as in (19):

(19)    Two Classes of Nouns Compatible with ACs
    a.   RE nouns: outcry, response, reaction, etc.
    b.   RV nouns: location, price, time, etc.

As discussed above, RE nouns can be construed as resultant events brought about by the fulfillment of the conditions in ACs. RV nouns, on the other hand, have variables whose values are to be determined by the fulfillment of the conditions described in ACs.

So far, for convenience of discussion, we have recognized two types of nouns modified by ACs. However, a closer consideration reveals that RE nouns can be regarded as equivalent to RV nouns in a sense. To clarify this point, let us consider the example in (16a), repeated here as (20):

(20)    Think of the outcry if that had been a nuclear accident.

As stated above, the noun *outcry* is classified into RE nouns. Now consider the interpretation of sentence (20). The sentence can be interpreted as "Think of *what outcry* would have happened if that had been a nuclear accident." This interpretation suggests that the noun *outcry* in (20) implies some variable whose value is to be determined. Likewise, the expression *the responses if X* can be interpreted as *what responses will be given if X.* As clearly seen from these interpretations, RE nouns semantically contain variables represented by the word *what*.[9] So, it is reasonable to deal with RE nouns as equivalent to RV nouns in that both types contain variables represented by *wh*-words. Taking this into consideration, we can get the following generalization:

(21)    The referent of a noun modified by an AC must be one that can be construed semantically as having a resultant value to be determined by the fulfillment of the condition described in the AC.

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[9] This is not to say that nominal apodoses should be treated as concealed questions. As already seen, it is both theoretically and empirically problematic to treat them as concealed questions. Nevertheless, it is not deniable that ACs are related with *wh*-words. I leave this matter for future research.

Bearing the generalization in (21) in mind, let us return to the examples in (12)-(14), repeated here as (22a-c) respectively:

(22) a. * Please let me know his arrival if he takes a taxi.

  b. Please let me know *the time* of his arrival if he takes a taxi.

  c. His arrival if he takes a taxi may be later than (his arrival) if he takes a train.

The unacceptability of (22a) is attributed to the fact that the NP *his arrival* is difficult to construe as a resultant event brought about by the condition *if he takes a taxi*: it lacks some semantic information to satisfy the generalization. In (22b), on the other hand, the lacking information is supplied by the NP *the time*, because the noun *time* falls into RV nouns. So the NP *the time of his arrival if he takes a taxi* can be interpreted as "what time he will arrive if he takes a taxi." Sentence (22b) is *semantically* compatible with the generalization, and thus is impeccable.

Sentence (22c) is the most interesting of the three examples, because the expression *his arrival if he takes a taxi*, which is unacceptable in (22a), is fully acceptable. We should consider what element or factor renders sentence (22c) impeccable. Here let us focus on the adjective *late*. It goes without saying that the word *late* is closely related to the notion of time. To put it differently, the word *late* evokes time. That is, with the help of *late*, the expression *his arrival* can be construed as an RV noun, whose resultant value (i.e. time) is determined by the fulfillment of the condition in the *if*-clause: the adjective *late* plays the same role as *time* in (22b). In this case, the information to satisfy the licensing condition is *pragmatically* supplied by the predicative adjective *late*, and thus the sentence is fully acceptable.

From the above investigation, I revise the generalization in (21) and propose the following as a licensing condition for ACs:

(23)  The referent of a noun modified by an AC must be one that can be construed either semantically or pragmatically as having a resultant value to be determined by the fulfillment of the condition described in the AC.

Here I mention the distinction between the semantic licensing (as in (22b)) and pragmatic licensing (as in (22c)). As discussed above, sentence (22a) is unacceptable because it lacks some semantic information to satisfy the licensing condition: the nominal expression *his arrival* can be construed neither as an RE noun nor as an RV noun. On the other hand, sentences (22b) and (22c) are fully acceptable with the help of other words such as *time* and *late*. Thus one might argue that their licensing mechanisms are

identical in that the expression *his arrival if he takes a taxi* is licensed by the semantic information of other words, i.e. both of the sentences are *semantically* licensed. However, note the difference between (22b) and (22c) as to what element the *if*-clauses modify. In (22b), the element directly modified by the *if*-clause is *time*. That is, sentence (22b) is licensed because the noun *time* can be construed *semantically* as an RV noun whose resultant value is determined by the fulfillment of the condition described in the *if*-clause. In a word, it is the *semantics* of the modified noun *time* that influences the grammaticality. In (22c), on the other hand, the element modified by the *if*-clause is *his arrival*, which is judged unacceptable in (22a). From the word *late*, we can infer that the phrase *his arrival* metonymically refers to the time of his arrival. In this case, it is the *pragmatic* inference invited by the word *late* that licenses the expression *his arrival if he takes a taxi*. In other words, the word *late* pragmatically supplies the unacceptable expression *his arrival if he takes a taxi* with information needed to be licensed. In this way, the expression *his arrival* gains its status as an RV noun.

## 4.2.  Licensing Condition 2: The Desirability Principle

In the last subsection, I have proposed a first licensing condition for ACs on the basis of the observation using the BNC and examples of my own. However, a closer investigation reveals that the condition alone is not enough to guarantee the acceptability of ACs:

(24)    * Imagine the fuss if I have a sound sleep everyday.

This example seems to satisfy the licensing condition I have proposed:  the NP *the fuss* can be construed as a resultant event brought about by the fulfillment of the condition in the *if*-clause. We can easily imagine such a situation; nevertheless, sentence (24) is judged as unacceptable or semantically odd. Behind the unacceptability of (24) is another pragmatic condition to be satisfied. What is relevant here is the Desirability Principle, proposed by Akatsuka (1998).

## 4.2.1.   (UN)DESIRABLE-LEADS-TO-(UN)DESIRABLE

For a better understanding of the Desirability Principle, let us briefly review Akatsuka (1998).

In everyday life, we perform various speech acts such as orders, prohibitions, warnings, threats and promises by using conditional constructions. We need to consider what principle works behind performing such speech acts. Let us observe the following example:

(25)　　If you eat my cookies, I'll whip you.　　　　　　(Akatsuka (1998:13))

According to Akatsuka (1998:13), sentence (25) is ambiguous between a prohibition and a promise (or offer), as shown below:

(26) a.　Don't eat my cookies or I'll whip you.　(prohibition reading)
　　　b.　Eat my cookies and I'll whip you.　　　(promise/offer reading)

On the basis of our background knowledge, we usually interpret example (25) as a prohibition, as in (26a):　no ordinary person likes to be beaten with a whip as a punishment.　However, in a certain situation, sentence (25) can be interpreted as the speech act of promise or offer.　If the hearer is disposed to be whipped, and the speaker utters (25) with the full knowledge of the hearer's disposition, then such an interpretation as (26b) is quite natural.

　　　Akatsuka assumes that there is a pragmatic principle behind the ambiguity of the sentence in (25).　The pragmatic principle is what she calls the Desirability Principle:

(27)　　The Desirability Principle
　　　a.　DESIRABLE-LEADS-TO-DESIRABLE
　　　b.　UNDESIRABLE-LEADS-TO-UNDESIRABLE

(Akatsuka (1998:15))

As shown in (27), the Desirability Principle consists of two sub-principles.　Briefly, the sub-principle in (27a) means that if the realization of the proposition described in the protasis is desirable for the speaker, the realization of the proposition in the apodosis will also be desirable for him/her.　As a result, the speech act intended in the conditional construction will be interpreted as desirable, too.　The sub-principle in (27b), on the other hand, means that if the realization of the proposition described in the protasis is undesirable for the speaker, the realization of the proposition in the apodosis will also be undesirable for him/her.　As a result, the speech act intended in the conditional construction as a whole will be interpreted as undesirable, too.

　　　The relationship between the values of Desirability and the interpretation of conditional constructions can be diagrammatically represented as follows:

(28)　　Table of Desirability

| p | q | if p, then q |
|---|---|---|
| DESIRABLE | DESIRABLE | DESIRABLE |
| UNDESIRABLE | UNDESIRABLE | UNDESIRABLE |

(Akatsuka (1998:15), with slight modifications)

In table (28), $p$ represents the proposition in the protasis and $q$ the proposition in apodosis. Akatsuka considers that the principle is true of natural language in general. Note here that the principle lacks relationships such as DESIRABLE-LEADS-TO-UNDESIRABLE or UNDESIRABLE-LEADS-TO-DESIRABLE. In this connection, Akatsuka argues that there is a contingency/dependency relationship between the protasis and apodosis of a conditional construction, which blocks such combinations. In fact, neither of them can be described in the form of conditional constructions at least in English, as shown below:[10]

(29) a. * If you do what I want, I will do what you don't like.
        [DESIRABLE]        [UNDESIRABLE]
   b. * If you do what I don't like, I will do what you want.
        [UNDESIRABLE]       [DESIRABLE]
                               (Akatsuka (1998:14), with slight modifications)

With the Desirable Principle in mind, let us return to the example in (25), repeated here as (30) for convenience of reference:

(30)     If you eat my cookies, I'll whip you.

As seen above, sentence (30) is ambiguous between a prohibition and a promise (or offer). When this sentence is interpreted as the prohibition *Don't eat my cookies*, the values of Desirability are assigned as follows:

(31)     If you eat my cookies,  I'll whip you.
        [UNDESIRABLE]    [UNDESIRABLE]

               [UNDESIRABLE]

In (31), the proposition in the protasis *you eat my cookies* reflects the speaker's mental attitude UNDESIRABLE, and the proposition in the apodosis *I'll whip you* also reflects the his/her mental attitude UNDESIRABLE. Thus the speaker's mental attitude reflected on the whole sentence is UNDESIRABLE. The hearer reads the attitude and properly interprets the sentence as the prohibition *Don't eat my cookies*.

When this sentence is interpreted as the promise *I'll whip you*, the values of

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[10] In English, such combinations must be expressed in *even if* forms.

Desirability are assigned as follows:

(32)    If you eat my cookies,  I'll whip you.
        [DESIRABLE]         [DESIRABLE]

                  [DESIRABLE]

In contrast to (31), here the proposition in the protasis *you eat my cookies* reflects the speaker's mental attitude DESIRABLE, and the proposition in the apodosis *I'll whip you* also reflects his/her mental attitude DESIRABLE.   Thus the speaker's mental attitude reflected on the whole sentence is DESIRABLE.   The hearer reads the speaker's mental attitude and properly interprets the sentence as the promise *I'll whip you (if you do me a favor)*.

In this subsection, we have overviewed the Desirability Principle, which is pragmatically relevant to the interpretation of conditionals in general.   In what follows, I will show that the Desirability Principle serves as another licensing condition for ACs.

*4.2.2.   The Desirability Principle as a Licensing Condition for ACs*

As mentioned above, the Desirability Principle is a general principle in conditional constructions.   If this is the case, ACs must follow it.   Let us observe the example in (24), repeated here as (33), from the viewpoint of the Desirability Principle:

(33)   * Imagine the fuss if I have a sound sleep everyday.

In terms of lexical meanings, the noun *fuss* tends to be interpreted as UNDESIRABLE. In fact, *CALD* defines it as "a show of annoyance, anxiety, dissatisfaction or excitement, usually one which is greater than the situation deserves."   On the other hand, we usually interpret the proposition *I have a sound sleep everyday* as DESIRABLE.   That is, the combination of the values of Desirability in (33) is DESIRABLE-LEADS-TO-UNDESIRABLE.   As mentioned above, this combination is not allowed in conditional constructions.   To represent this combination, we have to use concessive constructions with *even if.*   However, the conjunction *even if* cannot be used as an ACs, as in (34):

(34)   * Imagine <u>the fuss</u> even if <u>I have a sound sleep everyday</u>.
                [UD]                     [D]

In (34), the capitals D and UD are the abbreviations of DESIRABLE and UN-DESIRABLE, respectively.   As shown in (34), *even if* cannot be used as an adnominal

concessive clause. Furthermore, this seems to indicate that the concessive reading, which is possible in sentence-modifying *if*-clauses in certain contexts, is barred. From this observation, I assume that the values of Desirability assigned in nominal apodoses and adnominal protases should be consistent with each other.

Note that the above observation and related discussion are concerned with lexical meanings, i.e. semantics. We have to take pragmatic factors into consideration. In fact, as Akatsuka (1998:19) states, the Desirability Principle per se is a pragmatic notion, although it is closely related with semantics and syntax. It reflects the speaker's mental attitude, rather than lexical meanings of items. For example, consider the statement *I will kill you*. The default or lexical meaning conveyed by this statement is UNDESIRABLE: no ordinary person wants or wishes to kill someone. However, in a situation where the speaker could get some benefit by killing the hearer, the statement can be or should be interpreted as DESIRABLE. This means that the values of Desirability are more sensitive to contexts than to lexical meanings. In fact, pragmatics is prior to semantics, at least as far as the Desirability Principle is concerned.

If so, it is expected that sentence (33) may be accepted in some contexts wherein the noun *fuss* can be interpreted as DESIRABLE or the event *I have a sound sleep everyday* as UNDESIRABLE. This expectation is borne out, as shown below:

(35)    Of course I know it's important for me to sleep well, but I have a lot of parts
        to play in this plan! Imagine the fuss if I have a sound sleep everyday.
                            [UD]                    [UD]

The sentence in (33) is fully acceptable in (35). As inferred from the first sentence, the speaker cannot sleep well now because of the business plan that he is engaged in. In this context, both *the fuss* and *I have a sound sleep everyday* should be interpreted as UNDESIRABLE events.

Let us observe another example for confirmation:

(36)    Imagine the awful consequences if we have a good time. I hope they will be
                            [D]                    [D]
        in trouble!

In terms of lexical meanings, the first sentence in (36) is expected to be unacceptable: the phrase *awful consequences* is UNDESIRABLE, while the statement *we have a good time* is DESIRABLE. However, as can be inferred from the second sentence, the speaker wants some awful consequences. In this context, the expression *awful consequences* can easily be interpreted as DESIRABLE.

On the basis of the above observation, I propose a second licensing condition for ACs:

(37)     The Pragmatic Licensing Condition for ACs
           ACs must strictly follow the Desirability Principle:   the values of
           Desirability in nominal apodoses and ACs must be consistent with each other.

Condition (37) also means that ACs never allow concessive readings (i.e. interpreting an *if*-clause as an *even if*-clause) in any contexts.   Again, this shows that we should not treat ACs and sentence-modifying *if*-clauses in a unified manner.

*4.2.3.   Possible Counterargument*
       One might argue that the Desirability Principle as a licensing condition for ACs is not reasonable in sentences describing objective events such as (38).[11, 12]   For example, lexical items such as *movie* seem to be neutral as to desirability:

(38)     John Travolta?   Good thing he turned down the role of Forrest Gump…Tom
           Hanks was perfect for it, he was the one!   I couldn't imagine the movie if it
           was John Travolta!

However, recall that the principle is pragmatic in nature:   it reflects the speaker's mental attitude, rather than lexical meanings of items, although there are cases where they accord with each other.   As discussed above, it is misunderstanding that lexical meanings directly reflect speakers' evaluations.   In this example, for instance, the statement *Tom Hanks was perfect for it, he was the one* clearly indicates that the speaker gives positive evaluation, i.e. DESIRABLE, to the movie *Forest Gump*.   Then, s/he thinks that if John Travolta had played the role given to Tom Hanks in the movie, it would have been undesirable.   That is, the combination of the values of Desirability given to the last sentence is UNDESIRABLE-UNDESIRABLE, as shown below:

(39)     I couldn't imagine the movie if it was John Travolta!
                                        [UD]            [UD]

In this way, the speakers' evaluation as to desirability is reflected on ACs.   It should be

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[11] By the word *objective*, I mean that the speaker is not involved with the event described in a sentence.

[12] Example (38) is taken from the following web site:
     http://www.glamorati.com/celebrity/2008/20-actors-and-actresses-who-turned-down-important-or-popular-roles/

noted that the Desirability Principle is a pragmatic principle, and thus is dependent on the context, i.e. in what situation an utterance is given.

### 4.3. Summary

In this section, I have proposed two licensing conditions for ACs, as shown below:

(40)      License Conditions for Adnominal Conditionals

     a.   The referent of a noun modified by an AC must be one that can be construed either semantically or pragmatically as having a resultant value to be determined by the fulfillment of the condition described in the AC.   (= (23))

     b.   ACs must strictly follow the Desirability Principle: the values of Desirability in nominal apodoses and ACs must be consistent with each other.

(= (37))

Condition (40a) is a special condition imposed on ACs, while condition (40b) is based on a general pragmatic condition for conditional constructions. As argued above, ACs are properly licensed by the interaction of the two conditions.

## 5. Concluding Remarks and Related Issues

### 5.1. Concluding Remarks

In this article, I have been concerned with adnominal conditionals (ACs) and proposed their licensing conditions. I have made the following points. First, ACs are extended from event level or content-domain level conditionals. That is, nominal expressions modified by ACs are construed as results brought about by the fulfillment of the conditions described in ACs. Second, if such a construal is impossible or difficult by semantic information alone, pragmatic information may fill in gaps. Furthermore, the Desirability Principle, which holds in conditional constructions in general, also affects the acceptability of ACs, which means that the objectivist view proposed by Lasersohn (1996) is inadequate.

### 5.2. Related Issues

Before concluding this article, I would like to mention some related issues. Although this article has proposed semantic/pragmatic licensing conditions for ACs from the viewpoint of causality ((40a), in particular), the conjunction *because* cannot be used adnominally:

(41) a.   We know the consequences *if* we fail.

    b. * We know the consequences *because* we fail.

As is widely acknowledged, *because* is a representative marker of causality in English. Although the notion of causality is common between *if* and *because*, the former alone can be used as a marker introducing adnominal clauses, as shown in (41). That is, the unacceptability of (41b) implies that the licensing condition in (40a), which is based on the notion of causality, is a special condition imposed on ACs, and not a general condition for adnominalization of adverbial clauses. In other words, the notion of causality is not relevant to adnominalization per se. Admittedly, we are not in a position to give a clear solution to the problem. However, the difference between *if* and *because* at issue can possibly be attributed to the difference of their basic semantic characteristics: hypothetical vs. factual. The conjunction *if* is hypothetical in that it evokes hypothetical situations. Behind the hypothetical situation that *if* evokes or builds is another situation evoked by *if-not*. This contrastive nature of *if* seems to be quite compatible with the function of adnominal clauses, i.e. restriction. This is what lacks in *because*, which is based on factual causality and does not evoke another hypothetical situation.

However, this does not mean that *if* is the only adverbial conjunction that can be used as a marker of adnominal clauses. Other factual conjunctions introducing adverbial clauses such as *when*, *before* and *after* may introduce adnominal clauses. Let us observe the following examples (the italics are all mine):

(42)    …he remembered Ron's expression *when* he had seen her kissing Dean, …
                        (J.K. Rowling, *Harry Potter and the Half-Blood Prince*)
(43)    Just take it as a challenge, because some of them are very hard to get, but the satisfaction *after* you complete the stage is a very valuable prize.
                        (http://www.gamefaqs.com/console/snes/file/563219/10476)
(44)    the interval *before* she spoke was appreciable, and that was against the rules of the game.                        (Haan (1989:106))

The adnominal use of *when*, *before* and *after* is not rare, although I cannot assert that it is established or conventionalized. Note that all these conjunctions introduce time adverbial clauses. It is often pointed out that the notion of time is contiguous with that of condition, and that they overlap each other and constitute a moderate continuum (cf. Tsubomoto (1998), Nishimitsu (2006), among others). In fact, Declerck and Reed (2001:28-35) discuss time adverbial clauses with conditional connotations introduced by *when*, *before* and *after*. A key concept shared by them is *case-specification*: all these conjunctions, including *if*, can specify cases where some events described in main clauses occur. Although it is expected that the adnominalization of adverbial clauses can be treated in a unified manner in terms of case-specification, it would be premature to go into

them in detail here.　　It suffices here to present a future direction.

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Doctoral Program in Literature and Linguistics

University of Tsukuba

e-mail: takashir999@orion.ocn.ne.jp