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The semantic variability of the emphatic construction *koso –e* in Old Japanese

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Abstract

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There is an interesting emphatic construction (called a *koso –e* construction) in Old Japanese, in which the focus particle *koso* concurs with the exclamatory (*–e*) sentence ending form. When *koso* focuses on an irrealis/subjunctive conditional clause, the overall sentence expresses a peculiar counterfactual-like conditional, which I call “rhetorical counterfactuals.” This interpretation is different from the standard counterfactual interpretation in that the speaker’s intention of stating a subjunctive conditional is a strong denial of the consequent. The strong denial of the consequent follows from the speaker’s belief that the proposition in the antecedent is inconceivable.

The thesis addresses the problems concerning the truth conditions of counterfactuals with inconceivable antecedents. The problem is whether the rhetorical reading of subjunctive conditionals can be assigned a non-vacuous truth by the truth conditions of counterfactuals. I argue that the rhetorical counterfactual expressed in *koso –e* has the truth conditions of *only if* counterfactuals; and the rhetorical/non-rhetorical readings are derived from the speaker's assumption as to whether the closest world(s) in which the antecedent holds is/are among what the speaker considers conceivable in the context.

The causal interpretation of *koso –e* is obtained when *koso* focuses on a realis conditional (i.e. –*ba* 'whenever/when') clause. Data suggest that conditional and causal interpretations of *koso –e* are morphologically distinct in the modal context. The thesis argues that the indicative subordinate clauses are semantically selected by epistemic/ evidential modals.

In the non-modal context, I claim that both causal and conditional interpretations are variants of temporal subordinating conjunctions. To show that this is the case, I presented that not only –*ba* clauses but also other antecedent forms such as temporal adverbial clauses and gerundive clauses in *koso –e* exhibit the semantic variability of conditional/causal interpretations. The causal/conditional/temporal interpretations are inferred from the context, depending on whether the antecedent is true or not true with respect to the context.

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ABBREVIATIONS

ABL	ablative
ACC	accusative
ACOP	adjectival copula
ADN	adnominal
AUX	auxiliary
COMP	complement
COND	conditional
CONCL	conclusive
CONJL	conjunctural
COP	copula
DAT	dative
EMPH	emphatic
ETOP	emphatic topic
EXCL	exclamatory
FOC	focus
GEN	genitive
GER	gerund
HON	honorific
HUM	humble
IMP	imperative
INF	infinitive
MPST	modal past
NEG	negative
NMLZ	nominalizer
PASS	passive
PERF	perfective
PROV	provisional
PST	past
PCONJL	present conjunctural
PSTCONJL	past conjunctural
Q	interrogative
RQ	rhetorical question
STAT	stative
SUBJ	subjunctive
TOP	topic
VOL	volitional

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Chapter 1. INTRODUCTION

1.1 PURPOSE AND METHODOLOGY OF THESIS

This thesis investigates the semantic nature of the emphatic so-called “*koso –e* construction” in Old Japanese, illustrated in the following examples:

(1.1) a. 今こそば我鳥にあらめ、後は汝鳥にあらむ...

Ima koso pa wa-dori ni ara-me,

Now KOSO TOP my-bird COP.INF. be-CONJL.EXCL

noti pa na-dori ni ara-mu

later TOP your-bird COP.INF be-CONJL. CONCL

(*Kojiki*¹ I: *Ohkuninushi no kami* 3²)

‘(It is) now (that) I am my own, (as opposed to later when I will be yours)’

(Frellesvig 2010: 250)

b. ...飾磨川 絶えむ日にこそ我が恋止まめ

...Sikama.gapa, taye-mu pi ni koso, a ga kwopwi yama-me

Shikama.River, end-CONJL.ADN day LOC KOSO, I GEN longing cease-CONJL.EXCL

(*MYS*³ 15: 3605)

¹ *Kojiki* is the oldest Japanese literature edited around 712. It consists of three volumes, I-III.

² All the citations from Pre-modern Japanese texts and the citation numbers follow the identification numbers used in *Shinpen Nihon Koten Bungaku Zenshu* (1994-1996).

³ *Man'yōshū* ‘Collection of myriad leaves’ (expressed as “MYS” for short; pronounced [man'jo:fu:]) is one of the major sources of written records of Old Japanese from around eighth century.

‘The Shikama River, it is on the day when it ceases its flow, that my love for you will end.’
 (Frellesvig 2010: 250)

Frellesvig (2010) translated “p **koso** q-**e**” as “It is p (and only p) that is q.” *Koso* is presumably a focus particle and co-occurs with an “exclamatory”⁴ conjugation *-e* on the verb in the main clause. In Old Japanese literature, there were a number of concord-like constructions called *kakari-musubi* (KM), which in the recent studies are considered a focus construction. The *koso -e* construction is one of KM, and the construction invokes a certain contrastive implication. There has been debate among linguists as to where this implication comes from. Of particular interest in this dissertation are the cases in which this contrastive implication is attached to the subjunctive conditional propositions.

The purpose of this thesis is twofold. The first objective of the thesis is to examine the meanings expressed by the *koso -e* construction and the second objective is to provide an account for the semantic variation observed in this construction by employing the notion of semantic variability between conditionals and causality. This thesis will touch upon some historical aspects of Old Japanese grammar, as they are an important source of information about the *koso -e* construction. However, the main focus of this thesis is the synchronic variation of meanings expressed by the *koso -e* construction in Early Japanese. I will rely on the previous

⁴ I follow Frellesvig's (2010: 249) term here. In this thesis, I used *-e* for a short representation of *Izenkei* (which is often abbreviated as IZ) ‘realis’ inflection on a verb; but note that IZ does not always have the form *-e*. The *Izenkei* functions as ‘exclamatory’ when it is used at the end of the sentence as in the *koso -e* construction, or as a stem when it is used for forming extended forms (Frellesvig 2010:115) such as *-eba* ‘as’ or *-edomo* ‘although.’ We will discuss the function of IZ in 4.1.1.

studies of the *koso –e* construction and Old Japanese grammar to illustrate the basic meanings of this construction, and its morphological meanings.

In this thesis I built on several basic semantic analyses: possible world semantics and counterfactuals as proposed by Goodman (1946), Stalnaker (1968) and Lewis (1973a, 1973b, 1981); the notion of semantic variability proposed by Stump (1977, 1979, 1985); the basic analysis of the semantics of modality by Kratzer (1977, 1979, 1981, 1991); and some basic analysis of *only if* by Horn (1969, 1996) and Iatridou (1991, 1994), and the theory of restriction proposed by von Stechow (1994, 1999). In the following I summarize the theoretical assumptions I made in the study of *koso –e*.

The first assumption concerns the theory of counterfactuals. Following the philosophical inquiries including the theory of counterfactuals proposed by Chisholm (1946), Goodman (1946), Pollock (1976), Tooley (1977), and Armstrong (1983), I assume that the nature of natural law is relevant to the felicitous utterance of the counterfactual conditionals. Philosophical and metaphysical inquiries into this area are concerned with the truth conditions of the counterfactual conditional, as well as its relation to the causal connection between the antecedent and the consequent that is implicitly expressed. These scholars claim that counterfactual conditionals present a unique problem to the truth-functional definition of conditionals and that the semantics of counterfactuals are different from the semantics of indicative/non-counterfactual statements. The challenge is, most simply put, that the counterfactual conditionals cannot be assigned a non-vacuous truth by the material conditional⁵. Stalnaker and Lewis's work on counterfactuals assumes a model of possible worlds so as to provide a non-vacuous truth to counterfactual conditionals. The present study of *koso –e* is inspired by this study of counterfactuals, as some instances of *koso –e* expressed a strong sense of counterfactuality, and yet have distinct

⁵ The material conditional means 'if *p*, then *q*' is true if and only if, for all cases either *p* is false or *q* is true.

semantics from the most basic definition of counterfactual conditionals concerned by Lewis's work. These concepts will be elaborated later in Chapter 2.

Secondly, the present study assumes the notion of “semantic variability” from Stump's (1985) study of English absolutes, which show variation between a conditional meaning and a causation meaning. The *-ba* clauses in Old Japanese are similar to English absolutes in this regard, showing the variation of subjunctive and indicative conditionals, which give rise to counterfactual conditionals in and reason clauses, respectively, in the *koso –e* construction.

(1.2) a. 散ればこそ いとどさくらはめでたけれ

Tireba koso, itodo sakura pa medeta-kyere

Fall.PROV KOSO, even.more cherry.blossom TOP. be.nice-ACOP.EXCL

(*Ise monogatari: Nagisa no In* 82)

‘It is precisely because⁶ they fall, cherry blossoms seem to us especially precious.’

(Adapted from Mostow and Tyler 2010: 176)

b. 薦枕あひまきし児もあらばこそ夜の更くらくも我が惜しみせめ

Komo makura api-maki-si kwo-mo araba koso, ...

woven.straw pillow recip.-share-SPAST.ADN. love-ETOP. exist.COND KOSO,

(*MYS* 7: 1414)

‘Only if my love who used to lie beside me were still alive (would I feel sad as the night advances.)’

(Adapted from Suga 1991 and Honda 1967)

⁶ This translation for *-eba koso* was provided by Paul Atkins through personal communication.

Stump's work motivates the present work on the idea that the counterfactual and causation in *koso –e* might be indeterminate at some level of semantic representation; therefore, counterfactuals and causation can be treated as semantic variability.

Thirdly, I assume with Kratzer (1979) that the counterfactual is one of the modal expressions and the meaning of a modal proposition is constrained by an accessibility relation and an ordering source. These concepts are discussed in more detail in the section 1.4.2. A modal verb such as *would* has the semantics that the event expressed by the main clause is restricted by the event expressed by the conditional clause.

- (1.3) a. If my wife had been alive, I would have been happy.
 b. \nRightarrow would [I was happy]
 c. \Rightarrow would [[my wife was alive] [I was happy]]

The *would*-conditional in (3a) cannot mean (3b), as the meaning of *would*-conditional cannot be expressed without the conditional clause. Kratzer (1979) argues that the conditional in (3a) is equivalent to (3c), in which the interpretation of the modal (i.e. the domain of quantification of the modal) is restricted to the cases where the antecedent is true.

Fourthly, I assume that the notion of restriction attached to the semantics of *only* plays an important role in the semantics of emphasis in the *koso –e* construction, as it is discovered (see Chapter 2 at 2.1.2 and 2.1.3) that the reasoning presented by *koso –e* is very similar to that of *only if* conditionals in English. The semantics of *only* presents a unique problem of its own, because of its irregular behavior in syntax and semantics. First, *only* does not behave like other

determiners; Barwise and Cooper (1981) noted that *only* does not share the conservativity property with all other determiners. Secondly, the context in which *only* occurs is similar to that of negation, but it does not behave exactly like negation. For instance, both preposed negation and preposed *only* trigger subject-auxiliary inversion. Also, von Stechow (1999) and Giannakidou (2006) both noted that *only* allows a Negative Polarity Item (NPI), but unlike negation, *only* does not behave like a Downward Entailing (DE) operator. The downward entailment is an inference that the truth of some proposition applies to all of the propositions that denote any subset of the original proposition. Downward entailing operators are those that support such a relation. For example, the negation is one of DE operator. Thus, the truth of NOT [I will apologize] causes us to infer that all the subsets will be also true: say, NOT [I will apologize when hell freezes over]. In the case of *only*, this inference does not hold. The truth of ONLY[until hell freezes over will I apologize] does not allow an inference that ONLY[when hell freezes over I will apologize] is true. Horn (1969) has noted that *only* sentences do not entail prejacent (or a subset of) propositions;

- (1.4) a. Only [until hell freezes over][will I apologize]
 b. \nRightarrow [I will apologize when hell freezes over].
 c. \Rightarrow [I will not apologize as long as hell does not freeze over].

(4a) entails (4c), but not (4b). Iatridou (1991, 1994) argued that in an *only* sentence such as (4a), the prejacent is “presupposed” and thus cannot be “asserted.” Iatridou demonstrated this by the incompatibility of “only” with the overt “then” as in “*Only if ..., then”. It is not the purpose of this thesis to compare English *only* and *koso –e*. In this thesis, I point out that the

koso –e construction shows a similar reasoning pattern to *only-if* shown as exemplified in (4). It turns out that the implication of *koso –e* corresponding to (4c) is more complex. I will simply show that the semantics of *koso –e* is very close to *only if*, but not quite the same.

The present study adopts descriptions of the *koso –e* construction, works on *kakari-musubi*, and translational works from, but not limited to, the following list of works of Old Japanese grammar:

1. Frellesvig (2010) for the study of history of Japanese language; and notation and terms employed to describe the gloss of original texts.
2. Ohno (1993) and Hando (2003a, b) for the major reference of the descriptive work on the *koso –e* construction.
3. Whitman (1997) for the new insight into the syntax and semantics of *kakari-musubi* (i.e. *koso –e* construction) from the perspective of Generative Grammar.
4. Tsuta (2011) and Quinn (2015) for the description of the history of works done on *–koso –e* construction.

As mentioned above, the original texts cited in this dissertation mostly adopted the glossing system of Frellesvig (2010). I relied on Ohno’s (1993)⁷ description of the history of *koso –e*. He followed the historical change of *koso –e* by the use of *–e*: i) *–ga* “but” type, ii) *–noni* “although” type, and iii) simple emphasis. Under this categorization, counterfactual-like *koso –e* is included under the category of *–ga* type, and *because*-like *koso –e* is under the *–noni* type, as intermediate examples in transition to the simple emphasis type. Hando’s (2003a, b) study of *koso –e* provided the various uses of *koso –e*, the comparison of *koso –e* between its pre-modern uses and

⁷ Ohno (1993) covered the whole phenomena of *kakari-musubi*, and *koso –e* constitutes one of them.

modern uses, and syntactic characters of contrast invoked by the emphatic *koso -e*. According to Hando's classification, the meaning types of *koso -e* are the followings: i) selection by comparison, ii) exclusive, and iii) non-restrictive (simple emphatic). These meaning types are illustrated in (5a-c), respectively.

(1.5) a. ... 露こそあはれなれ

...tuyu **koso** aware nare

dew KOSO interesting.ADN COP.EXCL

(*Tsurezuregusa* 21)

'The dew moves me even more. (=the dew is the most delightful)'

(Keene 1998: 22)

b. ...人こそ知らね、松は知るらむ

...pito **koso** sira-ne, matu pa siru ramu.

Person KOSO know-NEG.EXCL, pine TOP know PCONJL.CONCL

(*MYS* 2: 145)

'Men do not know it, but pine must know'

(Levy 1981, I: 105)

'No one knows (his spirit might come back) except the pines'

(Honda 1967: 17)

c. 月見ればちちに物こそ悲しけれ...

Tuki mireba, tidini mono koso kanasi-kere

Moon look.at.PROV. many.ways things KOSO sad-ACOP.EXCL

(*Kokin*⁸ 4: 193)

‘I am burdened with a thousand vague sorrows when I gaze upon the moon.’

(McCullough 1985: 255)

Hando also highlighted “idiomatic negation” as one of the characteristic uses of *koso -e*.⁹

According to Tsuta’s (2011) and Quinn’s (2015) surveys of the previous studies on *koso -e*, one of the recent works of *koso -e* which contributed to the unified semantic account for the *koso -e* construction is Whitman (1997): the idea that *kakari-musubi* is a focus construction. The emphasis conveyed by the *koso -e* construction is identified as the effect of focus, or focus

⁸ *Kokin wakashu* is one of the written collections of verses edited around the beginning of the 10th century, which belongs to the period of Early Middle Japanese. This is edited about one hundred and fifty years after *Man’yōshū* was edited.

⁹ Hando (1992, 2003: 110) provided the following example from the literature to show that there is an idiomatic negative use of *koso -e*, which simply means “no/never”:

A: “...kisyoomon-wo kaki -sinzu -beki.”

Pledge -Acc write-present-should

B: “totemokautemo kamakuradono-ni yosi to omow-are -tara -ba -koso.”

Either way General.Kamakura-Dat good Comp. be.thought.-perf.-Cond.-KOSO

(Heike monogatari)

Literal translation:

A: “Let us present (our) pledge to the general.”

B: “(no matter whether we thought of the general in good terms or not) Only if I was thought to be good by the general. (=I am not thought to be good by the general.)”

I will come back to this example in Chapter 4.

particle *koso*, from which a contrastive implication¹⁰ may be derived. In the example of (6), the focus is on the subject noun *tamamo* ‘sea plant’:

(1.6) 玉藻こそ引けば絶えすれ、何どか絶えせむ

Tamamo **koso** pikeba taye sure, adoka taye se-mu.

Jewel seaweed KOSO pull.COND break.INF do.EXCL.why (should we) break.INF do.CONCL

(MYS 14: 3397)

‘When one pulls a jewel seaweed..., they break, but why should we break up?’

(Vovin 2012: 87)

In (6), the focused phrase *tamamo* ‘a jewel seaweed’ is contrasted with the empty pronominal subject, ‘we’ in the main clause. The effect of focus gives a paraphrase using an it-cleft as in “It is [a jewel seaweed] that will break easily, but [we] will not break (easily).”

It has to be stressed that the present study selects a certain type of *koso -e* in the examples among all the occurrences of *koso -e*. The *koso -e* examples considered in this thesis are a relatively small group of all the occurrences of the *koso -e* sentences, involving the subordinate clauses. Namely, they are sentences containing *koso -e* in which the focus is placed on the subordinate adverbial clauses. The subordinate adverbial clauses in the *koso -e* construction receives either a conditional (counterfactual-like) interpretation or a causal (*because-like*) interpretation. The *koso -e* examples employed in this thesis elicit the semantic

¹⁰ The contrastive proposition can be fully expressed, but in some cases, where *koso -e* is used “stand-alone,” the contrastive proposition is left for inference. This contrastive meaning is expressed by Ishida (1939) Tsuta (2011) and others as follows:
A-koso B-e, (but non A is non-B).

variation of conditionality and causality, which would not be possible with the *koso -e* examples expressed in a single proposition without subordinate clauses. The thesis also highlights the counterfactual interpretation that is only observed in the *koso -e* sentences that involve subordinate adverbial clauses. The examples that I dealt with in this thesis seemed to me the best examples to study the semantics of “emphatic power” of this construction¹¹.

The present thesis attempts to answer the following questions:

- i) What is the semantics of counterfactuality and causality expressed by the *koso -e* construction?
- ii) What accounts for the semantic variability expressed in this construction?

The present thesis cites *kana* (Japanese writing alphabets) transcriptions of the original texts from *Shinpen Nihon Koten Bungaku Zenshu* (1994-1996) and their translations into Modern Japanese. I consulted with the following literature as sources for English translations of Old and Early Middle Japanese texts:

1. *The Oxford Corpus of Old Japanese (Kojiki)*
2. Vovin 2009, Horton 2012, Levy 1981, Keene 1965, Honda 1967, Suga 1991, *The Nippon Gakujutsu Shinkokai Translation 1965 (Man'yōshū)*
3. McCullough 1985, Honda 1970, *(Kokin Waka-Shū)*
4. Harris, H. J. 1972, Mostow, J. S. and Tyler R. 2010, *(The Tale of Ise)*

¹¹ Kyoogoku (1960) views exclamatory emphasis of *-e* as the primary function of *Izen* ‘realis.’ Sasaki (2001) observes that the bare use of *-e* (*Izen*) has to do with cause-and-effect and temporal sequencing.

The original texts are cited from the following literature,¹² with the linguistic era¹³ where the literature belongs:

Old Japanese ‘Ancient Period’ (700-800)

1. *Kojiki* ‘Record of Ancient Matters’ (712)
2. *Man’yōshū* ‘Collection of Myriad Leaves’ (759)

Early Middle Japanese ‘The Heian Period’ (800-1200)

3. *Taketori monogatari* ‘The Tale of the Bamboo Cutter’ (909)
4. *Kokin Waka-Shū* ‘Collection of Ancient and Modern Poems’ (905)
5. *Ise monogatari* ‘The Tale of Ise’ (947)
6. *Utsuho monogatari* ‘The Tale of the Hollow Tree’ (969-1011)
7. *Yoru no Nezame* ‘Wakefulness at Night’ (1059)
8. *Sagoromo monogatari* ‘The Tale of Sagoromo’ (1060)

Late Middle Japanese ‘Kamakura to Muromachi Period’ (1200-1600)

9. *Shasekishū* ‘Collection of Sand and Pebbles’ (1283)
10. *Heike monogatari* ‘The Tale of Heike’ (Mid 13th Century)
11. *Tsurezuregusa* ‘Essays in Idleness’ (1331)
12. *Taiheiki* ‘Chronicle of Great Peace’ (1371)

The present study of the *koso* –*e* construction adopts most of the examples from *Man’yōshū*, which is one of the oldest Japanese works of literature edited around the Eighth Century. It is a collection of short poems and verses written by a small percentage of people from the upper class

¹² See Shirane (2007) for details of the historical survey of these literature works.

¹³ The linguistic era was cited from Frellesvig (2010: 1).

of the society at the time. I extracted most of the data from Early Japanese (Old Japanese and Early Middle Japanese) because the counterfactual-like interpretation of the *koso -e* construction is found in the older uses of *koso -e*. Ohno (1993) described the change in use of *koso -e*, as originating as “concessive” and changing to “simple emphasis.” According to Tsuta (2011) and Quinn (2015), both of whom conducted surveys of studies on the *koso -e* constructions, there are opposing views on the original/derived functions of the *koso -e* construction. I will not discuss the process of semantic change or variation between “concessive” and “simple emphasis” observed in the use of *koso -e* in this dissertation.

In the first half of this chapter, I will motivate the research of the *koso -e* construction from an empirical point of view. First I will provide a range of the *koso -e* examples, with a brief description of the various interpretations attributed to this construction. Then, I will provide an overview of the previous studies relevant to the interpretations assigned to this construction, comparing these analyses with the semantics of English *only*, and motivate the present research on the *koso -e* construction. In the second half, I will describe the semantic preliminaries that are needed for the description of the interpretations of the *koso -e* construction. Those include possible world semantics, truth conditions of counterfactuals, the assumptions on the causal connection in the counterfactual conditional, and the notion of accessibility and ordering source that were assumed in the truth conditions of the counterfactuals and causation in *koso -e*.

1.2 THE EMPHATIC CONSTRUCTION *KOSO -E*

In the present section, I will provide an overview of the *koso -e* construction and their approximate meanings and give a brief survey of previous studies of the *koso -e* constructions.

1.2.1 *The historical overviews of examples*

In this section I provide original texts of the *koso* –*e* construction from historical sources of Old Japanese. I organize my presentation of data according to Ohno’s (1993) description of diachronic order of semantic/syntactic changes of the *koso* –*e* construction. Traditional Old Japanese grammar describes *koso* serving as a discourse marker to indicate the logical relation between the *koso* phrase (theme) and the rest of the sentence that ends with –*e* (rheme). Basically, the emphatic *koso* can attach to any phrase, and serves as a syntactic device to mark the phrase as emphasized. In the *koso* –*e* construction, the *e*-stem (a verbal conjugation) co-occurs with *koso*. When *koso* –*e* is in the concessive use, it means that the co-occurring –*e* at the end of the main clause functions similarly to the English sentential connective “but” to signal that the whole *koso* –*e* statement is something that is unexpected or the truth of the statement is not fully committed to by the speaker.

Let us focus on the *koso* –*e* construction that receives a conditional interpretation.

Conditional clause of this type are found in (7a-d):

(1.7) a. ひさかたの天つみ空に照る月の失せなむ日 こそ 吾が恋やまめ

Pisakata no ama no misora ni teru tukwi no

distant COP.ADN heaven GEN sky LOC shine.ADN moon GEN

use-na-mu pi **koso**, a ga kwopwi yama-me.

disappear-PERF.-CONJL.ADN day KOSO, I GEN longing stop-CONJL.EXCL

(MYS 12: 3004)

‘Only if (=On the very day when) the moon that shines in the distant heavens ceased to be, would my longing likewise come to an end.’

(Adapted from Suga 1991: Part II, 364)

b. 天地といふ名の絶えてあらばこそ汝と我と逢ふこと止まめ

Ametuti to ipu na no taye-te araba **koso**,
heaven.and.earth COMP called name GEN cease-GER. exist.COND. KOSO,

imasi-to are-to apu-koto yama-me.

you-and I-and meet-to stop-CONJL.EXCL.

(MYS 11: 2419)

‘Only if heaven and earth passed away would you and I stop meeting each other.’

c. 商返し許せとの御法あらばこそ我が下衣返し賜はめ

Akikapyesi yuruse to no minori araba **koso**,
Cancelation.of.business.transactions allow COMP COP.ADN law exist.COND KOSO,

a ga sitagoromo kapyesi tamapa-me.

I GEN undergarment return receive [hum]-CONJL.EXCL

(MYS 16: 3809)

‘Only if there was a law that forces the cancellation of the past transactions, would you return my undergarment.’

d. 薦枕あひまきし児もあらばこそ夜の更くらくも我が惜しみせめ

Komo makura api-maki-si kwo-mo araba koso,
woven.straw pillow recip.-share-PAST.ADN love-ETOP. exist.COND KOSO,

yo no pukuraku mo a ga wosimi se-me.

Night GEN advance.NMNL ETOP. I GEN feel.sad.INF. do-CONJL.EXCL

(MYS 7: 1414)

‘If I had my dear, who **could** lie together on our heads upon a straw pillow, I would feel sad as the night advances.’

(Adapted from Suga 1991)

The poems in (7) express conditionals; among them (7a) contains a temporal adverbial clause and (7b-d) irrealis *-ba* (“conditional”) clauses. The semantic function of the antecedent modified by *koso* seems to confine the truth of the consequents. For instance, the antecedents in (7) are propositions that are very unlikely to be true, and seem remote from what we would normally imagine for how things will be in the future or for how things could be under different circumstances. Thus, having such a proposition in the antecedent, the conditional functions to convey a strong sense of restriction, whereby the speaker expresses that the truth of the consequent is very hard to come by, or nearly impossible. Interestingly, however, they all seem

to exhibit contrary-to-fact interpretations¹⁴. In (7a), it seems not only that the truth is confined, but also that the conditional expresses something contrary-to-fact, as our assumption is that the moon always seems to exist and never disappears. First, the particle *koso* is attached to a conditional clause ending with *-ba* and/or a time adverbial clause, which has the semantics of a conditional. The sentences in (7a-b) are typical examples of counterfactuals, but they are different from standard counterfactuals in that the speaker assumes that there is no instance in which the stated antecedent would ever be true. According to the translations given to the *koso – e* sentences in (7c-d), they also express a sense of adversity/concessiveness, as what the proposition claims is contrary to what the speaker’s intention is. This gap between the meaning of the statement and the speaker’s intention seems to give rise to the implication that what the speaker intends to convey is contrastive to what is stated. In (7a-d), for example, the statements express the conditionality in which the consequent would be true if the antecedent was true; however, the speaker does not intend to convey is not the conditionality but rather the denial of the consequent. That is, the speaker’s intention is the strong denial of the truth of the consequent, opposite to what the conditionality is supposed to express, the truth of the consequent. If translated into English *if*-subjunctives, there wouldn’t be such implications. This type of *koso – e* construction is the topic of Chapter 2.

In Chapter 3, I will examine the non-conditional interpretations of the biclausal *koso – e* construction. Examples of non-conditional interpretations of *ba*-clauses are shown in (8a-b):

¹⁴ For the purpose of this thesis, I assume contrary-to-fact or counterfactual conditionals express a proposition that is not true in the context world, and speculates a realization or unrealized of the hypothetical event. The exact definition of counterfactuality is beyond the scope of this thesis.

(1.8) a. 後瀬山のちも逢わむと思へこそ死ぬべきものを今日までも生けれ

Notise-yama noti-mo awa-mu to omope-koso,

Nochise-Mountain later-ETOP meet-CONJ.CNCL COMP think.PROV KOSO,

sinu-beki monowo kepu made mo ik-yere.¹⁵

die-should.ADN though today until ETOP. live-STAT.EXCL

(MYS 4: 739)

Lit: ‘I thought that I would see you again; therefore, I have lived until today, though I shouldn’t.’

‘Only the hope that later we shall see again like Nochise Mountain has kept me alive until today, though the longing should have killed me.’

(Levy 1981: 326)

b. 夕さらば君に逢はむと思へこそ日の暮るらくもうれしかりけれ

Yupu saraba kimi ni apa-mu to omope koso,

Evening end.COND you DAT meet-CONJL.CONCL COMP think.EXCL KOSO,

pi no kururaku mo uresikari-kyere.

sun GEN settle.ADN ETOP be.glad-MPAST.EXCL

(MYS 12: 2922)

¹⁵ This sentence is an emphatic form of the causative conditional. This indicates that *-koso -e* itself is not a conditional but it makes the conditional into an emphatic form.

Lit: ‘I was glad to see the sun set only because I thought that I would see you when evening arrived.’

In these uses of *koso -e*, the subordinate clause is not a conditional; it has a different meaning. The subordinate clauses with *koso* in (8) are realis *-ba* (“provisional”) clauses, and introduce circumstantial information from the context, and provide a foundation/background to make assertion in the main clause. I call this type of meaning the “because”-like interpretations of *koso -e*. The speaker seems to affirm and emphasize the logical (causal) connection of the subordinate clause to the main clause. In Chapter 3, I will argue that the crucial difference between the interpretations of *koso -e* in (7) and (8) is that there is an actuality entailment in (8). Namely, the poems in (8) have implication that the proposition in the *ba*-clause is true in the context world.

Though not well represented in this thesis, there was a diachronic variation (or a shift) of contextual use in *koso -e*. For example, the earlier use of *koso -e* was felicitous in the “concessive” use, which can be paraphrased with a concessive conjunction “but” or “although.” The concessive *koso -e* expressed the speaker’s unwillingness to assert the proposition. Thus, the context in which the concessive use of *koso -e* is employed is characterized as “adversative.” Through time, the “concessive” uses of *koso -e* have acquired the function of “simple emphatic,” according to Ohno (1993). The examples of non-concessive use of *koso -e* can express an indicative conditional as in (9) and functions as a simple emphatic reason clause in (10). The ending in *-e* in these sentences is “exclamatory,” indicating that there is no concessive meaning.

- (1.9) a. 雪ふりて年のくれぬる時にこそ遂にもみぢぬ松も見えけれ

Yuki furite tosi no kure-nuru toki ni **koso**,
 snow fall.GER year-GEN end-PERF.ADN time DAT KOSO

tuini momidi-nu matu-mo miye-kere
 finally change.color-NEG.ADN pine-ETOP see.PASS-MPAST.EXCL

(*Kokin* 6: 340)

‘**When** snow has fallen and the year draws to a close, ah, **then** it is clear that the pine tree is a tree whose color never changes.’

(McCullough 1981: 442)

- b. 逢ふことのもはら絶えぬる時にこそ人の恋しきことも知りけれ

Au koto no mowara taye-nuru toki ni **koso**,
 Meet.ADN NML GEN completely stop-PERF.ADN time DAT KOSO

fito-no koisiki koto mo siri-kere
 person-GEN miss.ADN NML ETOP realize-MPAST.EXCL

(*Kokin* 15: 812)

‘It was not until I stopped meeting with (you) completely, I only realized how much I miss (you).’

(Translated from Modern Japanese)

(1.10) 秋の露色々ことに置けばこそ山の木の葉のちくさなるらめ

Aki no tuyu iroiro kotoni okeba koso,

Autumn GEN dew colors variegated scatter.PROV KOSO,

yama-no kwo-no fa-no tikusa naru-rame

mountain-GEN tree-GEN leaves-GEN various.colors become-PRES.CONJL.EXCL

(*Kokin* 5: 259)

‘Maybe the autumn dew is of variegated hue. **That is why** the tree is colored differently.’

(Honda 1970: 82)

Contrary to the examples in (7) and (8) in which *koso -e* does not represent the speaker’s intention, examples (9)-(10) are more straightforward and *koso -e* seems to exhibit the “predicative power.” The speaker seems to express his/her intention by the content of the proposition.

1.2.2 *The koso -e construction in Japanese grammar*

Having introduced the original texts of the *koso -e* construction, let us proceed to how the *koso -e* construction is described by the traditional Japanese grammarians. The *koso -e* construction was widely used from Old Japanese throughout the pre-modern linguistic era of Japanese.

However, it was lost by the time of Modern Japanese (NJ), except for the independent use of *koso* as a discourse marker and some dialectal use of *koso -e*¹⁶.

The *koso -e* construction is a type of *kakari-musubi*, a kind of agreement phenomenon between the *kakari* particle (“KP” hereafter), which is most often interpreted as a focus particle, and *musubi*, which is a verbal conjugation that has to match the KP. For example, *-ka*, *-so*, and *-koso* are all KPs. As shown in (11) below, there is a syntactic correlation between the choice of the K-particle and the sentence-ending form; *-ka* and *-so* end with an adnominal form of *-tu*, *-turu*; and *-koso* ends with an exclamatory form of the verb *hedatu*, *hedate*:

(1.11) a. ...いづくゆか妹が入り来て夢に見えつる

...iduku yu **ka** imwo ga iri-ki-te ime ni mi-ye-**туру**

where from Q love GEN enter-come-GER dream LOC see-PASS-PERF.ADN

(MYS 12: 3117)

‘Whence did you, dear one, enter to appear in my dream?’

(Nippon Gakujutsu Shinkokai translation: 284)

b. ...我が恋ふる君そ昨夜（きぞのよ）夢に見えつる

...a ga kwopuru kimi **so** kizo no ywo ime-ni mi-ye-**туру**

I GEN long.ADN you-SO last.night GEN night dream-DAT. see-PAST-PERF.ADN

(MYS 2: 150)

‘Lord whom I long for, I saw you in a dream.’

(Levy 1981: 108)

¹⁶ The *Kakarimusubi* construction (interaction of *-koso* with *-e*) is said to have gone extinct, but the meaning of “*-koso*” remains almost unchanged. (Hando 2003a: 115-131, 2003b: Ch. 8)

c. 昨日見て今日こそへだて、我妹子がここだく継ぎて見まく欲しきも

Kinopu mi-te kepu-**koso** hedate, wagimoko ga mi-maku posiki mo.

Yesterday see-GER today-KOSO pass.EXCL my.love GEN see-CONJ.NMNL want.INF EMPH

(MYS 11: 2559)

‘Though it was only today that passed since I saw you yesterday, I already miss my love.’

(Translated from Modern Japanese)

In the form of *p-koso q-e*, *koso* functions as a KP, and the clause has to end (*musubi* “tying”) with the verbal inflection $-e$ ¹⁷. The syntactic structure of *koso -e* is beyond the scope of this thesis¹⁸.

The previous studies show that the emphasis placed by *koso -e* construction invokes a contrastive implication. An example is provided in (12):

(1.12) 昔こそ難波田舎と言はわれけめ、今は都引き都びにけり

Mukasi **koso** nanipa winaka to ipa-re-kyeme,

In.the.past KOSO Nanipa country COMP say-PASS-PAST.CONJL.EXCL,

ima-pa miyakwo piki miyakwo bwi-ni-kyeri.

now-TOP. capital resemble.INF capital be.like-PERF.INF-MPAST.CONCL

(MYS 3: 312)

¹⁷ According to Whitman (1997), Aldridge (2015), Shinzato & Serafim (2013), Quinn (2015), $-e$ marks the focus closure of $-koso$ (focus) phrase.

¹⁸ Aldridge (2015) argues that there is a focus position to which *koso* phrases move between VP and T. Aldridge (2016) argues that a focus particle *koso* is in agreement with $-e$ (IZen) by head-specifier relation, in a parallel manner with other KM constructions such as $-ka$, $-so$, etc.

‘In the old days, they called it rustic Naniwa. But now we have moved our palace here,
how like a capital it’s become!’

(Levy 1981: 176)

In (12), *koso* attaches to the time adverbial *mukasi* “in the old days,” as underlined; it is contrasted with *ima* “now” in the main clause, also underlined. This kind of fully developed contrastive construction is seen when a particular lexical phrase is contrasted. On the other hand, there are “stand-alone” *koso –e* constructions in which no contrastive clause is expressed, as in (7) through (10) above. Thus, it has been claimed by Ishida (1939) and Ohno (1993) that there are some syntactic processes through which different types of *koso –e* constructions have evolved. According to Ishida and Ohno, the formations of the above mentioned *koso –e* constructions involve the following factors: i) attachment of the discourse particle *koso*, and formation of emphatic clauses as in (13a), ii) subordination by *–e*, as illustrated in (13b) below, which signals that the clause is subordinated to the following clause (to form a contrastive sentence¹⁹), and iii) formation of stand-alone *koso –e* clause as in (13c).

¹⁹ Tsuta (2011) surveys competing theories on the formation of independent *koso –e* construction from the historical studies of *koso –e*. Ishida (1939) argues that *koso* contributes the main role in the formation of *koso –e*: *koso* forms contrastive construction first, and then, *–e* (*Izen* ‘realis’ ending) comes to serve as a conjunction. On the other hand, Ohno (1993) and Kobayashi (2003) propose that the subordination function of *–e* precedes the formation of the contrastive construction by *koso*. There are other views such as Konoshima (1966) and Saeki (1966), both of whom argue that *–e* is originally sentence-final. Aldridge (2015) objects the idea that the formation of *koso –e* is due to Agree between the two morphemes, *koso* and *–e*. There seems to be no consensus on the formation of this construction.

(1.13) a. Contrastive Focus constructions formed with **koso**

$[[P\text{-koso } Q]_{YP\text{-e}}, [\text{non-P non-Q}]_{XP}]_{XP}$

“It is P (and only P) that is Q, but non-P is non-Q.”

b. Subordination of A to B by **-e**

$[A\text{-e}, [B]_{XP}]_{XP}$

“**Although** A, B” or “**Because** A, B”

c. Stand-alone *-koso -e* constructions

$[[P\text{-koso } Q]_{YP\text{-e}} [\quad \emptyset \quad]_{XP}]_{XP}$

“It is P (and only P) that is Q, but non-P is non-Q.”

For Ohno, *-e* had the concessive meaning in the earliest Japanese texts; thus, a stand-alone *koso -e* construction in (13c) can be viewed as a derived form of the fully extended form in (13b).

Ohno also considered that the stand-alone *koso -e* carries a contrastive meaning parallel to (13b) as an implicature. In (13c) there is no overt expression corresponding to “non-P” or “non-Q,” but such an implication often shows up in the translation in Modern Japanese (NJ²⁰).

1.2.3 *Additional implication²¹ of koso -e*

Let us see how the stand-alone *koso -e* in (13c) gives rise to an implication of “non-P is non-Q,” exemplified in the example (14). This implication in the stand-alone *koso -e* is sometimes not an

²⁰ Frellesvig (2010:1) states that Modern Japanese is abbreviated as NJ ‘new Japanese’ to avoid confusion with Middle Japanese.

²¹ I could not find a good term that corresponds to this particular implication. The implication is not always present in all the occurrences of the *koso -e* construction and comes with a certain context, resulting in a strong denial of the consequent.

entailment. The translation in NJ is often supplemented with the additional proposition in the contrastive meaning, shown in the bold in (15):

(1.14) 人を思ふ心の木の葉にあらばこそ風のまにまに散りも乱れめ

Fito wo omou kokoro no konofa ni araba-**koso**

You ACC think.ADN mind GEN leaves COP.INF be.COND-KOSO

kaze no manimani tiri mo midare-me

wind GEN by.whim scatter.INF ETOP stirred-CONJL.EXCL

(*Kokin* 15: 783)

Lit: ‘Only if my mind that thinks of you were like a leaf, would it be blown away and stirred by wind.’

‘Were my love for you indeed the same as foliage growing on a tree, then perhaps it might fly off wherever the wind sent it.’

(McCullough 1985; 219)

(1.15) The translation of (14) in NJ

あなたを思っている私の心が仮に木の葉であったなら

Anata-wo omotte iru watasi-no kokoro-ga karini konoha-de atta-nara

You-ACC think.of STAT I-GEN mind-NOM provisionally leaf-COP.INF. was-COND.

風に吹かれてあちこちに散り乱れもしましょうが、

kaze-ni fukare-te achikochi-ni chiri-midare mo simasyoo **ga**,
 wind-by be.blown.GER here.and.there-LOC fall-stir ETOP do.VOL **but**,

木の葉ではあるまいし、散りも乱れもしていませんよ。

konoha-de wa aru-mai-si, chiri-mo midare-mo si-te-imasen yo.

Leaf-COP.INF TOP be-VOL.not-and, fall-ADD stir-ADD do-GER-STAT.not AFFIRM.

(*Shinpen Nihon Koten Bungaku Zenshu* Vol. 11, 298)

‘Only if my mind (that thinks of you) were fallen leaves, would it have been scattered and stirred by the wind, **but since it will not possibly like a leaf, it would neither be scattered nor stirred away.**’

The example in (14), literally translated, has the meaning of a conditional. However, the translation in NJ is supplemented by the contrastive implication that corresponds to “but non-A, thus, non-B.”

1.2.4 *Theory of focus:koso as kakari “focus/contrastive” particle*

Whitman (1997) proposed that *koso* forms a focus phrase and *-e* marks the domain of the focus closure (represented by A). When *koso* is attached to P, P receives focus, and the rest of the closure, Q, represents “given” information. The closest translation for *koso -e* is *it-cleft*. Thus, it follows that the function of the focus particle *koso* is to elicit a lexical contrast by the effect of focus. As shown in the following schema, a lexical contrast is elicited and shown by the additional implication of “non-P is non-Q.” In (16a), the *koso -e* sentence in A forms a

subordinate clause; the contrastive sentence in B is the main clause. A variation of (16a) is a “stand-alone” *koso -e* as shown in (16b), in which the *koso -e* sentence in the subordinate clause becomes a main clause²². In (16b), the contrastive sentence “non-P is non-Q” is elided and only implicated. Tsuta (2011), following Ishida (1937), argued that the additional implication of *koso -e* (i.e. “non-P is non-Q” in (16)) follows from the theory of focus.

(1.16) a. $[[P\text{-}ba]_{\text{antecedent}}\text{-}koso\ Q]_{A\text{-}e}, [[\text{non-P}\text{-}ba]_{\text{alt. antecedent}}\ \text{non-Q}]_B$

b. $[[P\text{-}ba]_{\text{antecedent}}\text{-}koso\ Q]_{A\text{-}e}.$

“It is P that Q, (but non-P is non-Q.)”

I will argue below that a semantic variation exists in the irrealis propositions that cannot be simply accounted for by the theory of focus.

Aoyagi (1998, 2006) makes a clear distinction between *kakari-joshi* “K-particle” and *fuku-joshi* “F-particle.”²³ I adopt the analysis that the K-particles are vP-focus particles.

(1.17) a. $[X]_{XP}\text{-}dake$

b. $[[X]_{\text{Focus}}\]_{vP}\ koso_{FP}\]_{vP}$

Kotani (2012), in a study of modern Japanese, claims that the vP-focus particle can suffix to the root verb and trigger *su/suru* ‘do’ insertion. According to this categorization, *koso* adjoins to vP,

²² The significance of this variation is beyond the scope of this thesis, and is left for further research.

²³ According to this categorization, K-particles attach to any phrase up to vP (the sentence containing the subject) and make contributions to the semantics of the whole sentence depending on which constituent it focuses on. On the other hand, F-particles have a feature [+N] or [+Lexical], and its semantic contribution is supposed to be limited to add the extent or degree of the nominative phrase XP that the particle is attached to. Hando (1998) claims that K-particles including *koso*, *wa* and *mo*, have distinct syntactic and semantic features from F-particles such as *dake* and *bakari*. He argued that F-particles function to limit the meaning of the attached phrase; whereas K-particles function to divide the sentence into two parts and strengthen the semantic connection between these two parts of the sentence.

and it triggers the v head *su/suru* to be inserted and move to Tense in order to realize the tense morpheme. I adopt the view that the focus particle originates just outside vP, and can be associated with any phrase lower than vP such as the object, VP or vP by lowering of *koso*. As Kotani (2012: 200) notes, F-particles neither suffix to the verb stem nor allow *su/suru* ‘do’ insertion. The lowering operation of focus particle can be observed in a part of a *koso* phrase in Old Japanese:

(1.18) 我が名はも千名の五百名に立ちぬとも君が名立たば惜しみこそ泣け

Wa ga na-pamo tina-no ipana-ni tati-nu tomo,

I GEN name-ETOP thousand.rumors-GEN five.hundred-DAT. appear-PERF though

Kimi ga na tataba woshimi KOSO, nakE

You GEN name appear.COND feel.bad.INF KOSO, cry.EXCL

(MYS 4: 731)

‘Let my name be stained five hundred times, a thousand times. But if your name, my Lord, be bandied in their gossip, I would weep with regret!’

(Levy 1981: v. 1, 323)

What is contrasted in (18) is smaller than the phrase that *koso* attaches to: the *wa ga* “my” and *kimi ga* “your”, which are the values of focus phrase in the focus closure, “x’s name appears (on rumors).”

Hasegawa (2010) categorized the particle *koso* (in Modern Japanese) as a “contrastive” particle. He claims that the function of *koso* is to introduce contextually available alternatives to the focused phrase, and to specify the relation between the focused proposition and the contrastive proposition containing alternatives. Hasegawa observes that *koso* elicits different interpretations in the adversative²⁴ context (from *koso* in the non-adversative context); and argue that it is not the meaning of the sentence, but what is contrasted, that is different. Hasegawa proposed that the interpretation is contextually determined, as *koso* always picks up the interpretation that is more relevant to the context. Hasegawa’s claim about the semantic function of *koso* as bringing alternatives, and the determination of pragmatic implication on the “most important” and “least important” of the text proposition by relevance to the context can be derived from the theory of focus as established by Rooth (1982, 1985) and the notion of relevance²⁵.

1.3 WHY *KOSO* –*E* CONSTRUCTION?

The purpose of this section is to motivate my research of the semantic variability of the *koso* –*e* construction by highlighting the interesting semantic properties of *koso* –*e* and the specific problems that semantics of *koso* –*e* seem to address. First, I show how I approached the truth conditions of *koso* –*e* by comparing its meaning with the closest semantic translation in English, and the problems. Second, I highlight the additional implication of *koso* –*e*, and address the

²⁴ Hasegawa defined adversative context of *koso* as the context in which *koso* occurs in the first conjunct, or the context in which the adversative connective ‘but/although’ is required for spelling out the contrastive propositions containing the alternatives to the focus proposition.

²⁵ What Hasegawa’s analysis doesn’t explain, however, is the reason why the Modern use of *koso* is incompatible with “semantic opposition” *but*, and only compatible with a “denial of expectation” *but*, as most of the contrastive use of *koso* –*e* in Old Japanese had the latter function. My interpretation of the compatibility with the adversative connective *ga/noni* ‘but’ in Old Japanese is that –*e* of *koso* –*e* had the function of ‘but,’ and that there was a certain historical change in the use of –*e*, as Ohno (1993) describes. Ohno claims that the meaning of –*e* can be categorized into *ga*-type and *noni*-type. The former preceded the latter. I observe that *ga*-type of –*e* were used with the proposition of the hypothetical content, while *noni*-type were used with the content expressing facts.

problems of the source of the implication. Third, I present a brief summary of the meaning variation in *koso -e*, and how I approached the two types of meanings as “semantic variability of counterfactuals and causation” observed in this construction.

1.3.1 *Emphasis expressed by counterfactual koso -e*

The most curious and mysterious emphatic interpretation of the *koso -e* construction seems to be the counterfactual interpretation expressed by the *koso -e* construction. The *koso -e* proposition of this type is emphatic, but there is no predicative power. Also, this type of *koso -e* is used in an adversative context where *-e* functions as a concessive subordinating conjunction. The emphasis posed by counterfactual *koso -e* in *p koso q-e* is often translated into Modern Japanese with the implication following ‘but.’ The Modern Japanese translation of *koso -e* can be translated into English as follows:

(1.19) [*p-koso q-e*] translates

“p is q; but non-p is non-q.”

But what is meant by “non-p is non-q”? And where does this implication come from?

Dekker (2001) argues that English *only if* has a similar implication. Following Geis (1973), McCawley (1981), Horn (1996), Dekker argued that the meaning of English “only if A, B” is equivalent to its contraposition: “if not A, not B.” Let us suppose that *A-koso B-e* expresses the logical function of *only-if* holding between A and B; then it can be paraphrased by “non-A is non-B,” as shown in (19). This similarity of *koso -e* to *only-if* can be viewed as “A-koso B-e” being logically equivalent to “only if A, B.”

However, the analysis of *koso –e* as *only-if* faces a problem: the natural language expression of conditionals that express dependence of A on B as in the *koso –e* construction (or English *only-if* for that matter) cannot be a faithful representation of material implication. In the material implication, the meanings of truth-functional connectives such as conditional are defined by the exhaustive sets of truth-values of all the sub-formulae that comprise the well-formed formula containing the truth-functional connective. According to this definition, “only if” is the converse of “if,” and all the same, “only if A, B” is equivalent to “A, if B.” For example, suppose “only if A, B” is true; then the occurrences of B may completely depend on the occurrence of A. From this it follows that the truth of A is implied by the truth of B. This is material implication. However, the natural occurrence of “only if A, B” in the natural language does not represent this logical relation. To show that *only-if* does not represent a logical converse of *if*, we only have to test whether such a paraphrase is possible in the natural language. The example in (20a-b) clearly shows that the paraphrase is impossible, as noted by Dekker (2001: 116). The paraphrase in (20b) only means that melting the butter is the cause of the heating, and does not mean that in all the cases in which the butter melts, the butter has been heated.

(1.20) a. Only if butter is heated would it melt.

b. ≠Butter is heated, if it melts.

So, it seems reasonable to assume that the use of a conditional in natural languages seems to represent the causal dependence of B on A. That is, the logical role of A in relation to B is ordered by causal dependence, and not by the logical dependence (for all the cases in which A is true, B will be true, etc.). This semantics of *only if* can be summarized as follows:

(1.21) “Only if A, will/would B”

- i) The truth of B implicates the truth of A. (according to the quantificational dependence between A and B)
- ii) A is a condition/prerequisite for B.

“Only if A, B” represents a causal sequence that A is the cause of B or A is followed by B, and not vice versa. I will show that the counterfactual expressed in *koso –e* consists of these semantic/pragmatic elements.

The semantics of counterfactual-like interpretations in the *koso –e* construction is even more complex. The complexity comes from the fact that the counterfactual expressed by *koso –e* implies the denial of the consequent, unlike the standard interpretation of counterfactuals. This complexity can be glanced at by its failure to support Strawson validity. Von Fintel (1999) argued that the scope of *only* is Strawson downward entailing (DE). Let us see how Strawson DE works:

(1.22) Strawson validity (Fintel 1999: (19))

An inference $p_1 \dots p_n \therefore q$ is Strawson-valid iff the inference $p_1 \dots p_n \text{ S } \therefore q$ is classically valid; where S is a premise stating that the presuppositions of all the statements involved are satisfied.

This inference works for the restrictor of the DE operators such as *every* or *only if*.

(1.23) a. Every student took the exam

⇒ Every student who is graduating took the exam.

b. Only if the match had been scratched, it would have lighted.

⇒ Only if the match that is dry had been scratched, it would have lighted.

Let us examine how DE works (from the general to the specific) based on Strawson validity. In (23a), when the concept of “student” and all the premises for being a student, such as ‘x has not graduated yet’ are satisfied, it entails that “x took the exam.” In (23b), the inference from the general to specific works when all the premises such that ‘x is dry’ is ‘x is in good condition’ are satisfied in addition to the proposition in the antecedent ‘x was scratched.’ The Strawson validity works in such scenarios. In the next section, we will examine whether Strawson DE works in the counterfactuals in the *koso –e* construction.

1.3.2 *Interpretations of additional implication of koso –e*

Let us apply the Strawson DE to the semantics of *koso –e*. How can Strawson DE account for the negative implication of *koso –e*? The translation of the *koso –e* construction with a negative implication, given above in (19), can be repeated here as (24).

(1.24) [p-*koso* q-*e*] translates

‘p is q; but non-p is non-q.’

In the following I show that there are two possible interpretations of the implication [non-p is non-q]. According to the two patterns of contexts observed in the *koso –e* construction, the two possible interpretations of [p-*koso* q-*e*] are summarized in (25a) and (25b):

- (1.25) a. for any x , if x is p , x is q ; but if x is $\sim p$, then x is $\sim q$.
 b. for any x , if x is p , x is q ; but there is no x such that $x \in p$, therefore no x such that $x \in q$.

The reasoning in (25a) shows that if x is $[p]$, x is $[q]$, it presupposes that if x is $[\text{non-}p]$, x is $[\text{non-}q]$. Therefore, $[p \text{ is } q]$ naturally implies $[\text{non-}p \text{ is } \text{non-}q]$. The latter reasoning in (25b) shows that $[\text{non-}p]$ is exclusive to $[p]$. And therefore, $[p \text{ is } q]$ cannot imply $[\text{non-}p \text{ is } \text{non-}q]$. Let us see these cases in the examples in *koso -e*.

The former reasoning can be observed in some cases of *koso -e*. For example, the use of *koso -e* under the ‘selection by comparison’²⁶ falls under this pattern, as exemplified in (26):

(1.26) 花よりも人こそあだになり^にけれ

Fana yorimo fito **koso** ada-ni nari-ni-kere
 flower than person KOSO short.lived-COP.INF become-PERF-MPAST.EXCL

(*Kokin* 16: 850)

Lit: ‘A person became more short-lived than a flower (cherry blossoms).’

‘Human life, alas, has proved more transitory than cherry blossoms’²⁷.

(McCullough 1985: 469)

²⁶ This classification of meaning of *koso -e* comes from Hando (1993). In these works, the meanings of *koso -e* are classified into “selection by comparison” “exclusive” and “non-restrictive (simple emphatic).” The *koso -e* in (27) is one of the examples of “selection by comparison.”

²⁷ The annotation for this poem as follows: “Someone who had planted a cherry tree had died just as the time was about to bloom.”

The focus closure is “x is most short-lived”; and the speaker claims that “person” is most short-lived. This implies/presupposes that “non-person” or “flower” is not the most short-lived. This interpretation of (26) supports Strawson DE. We can infer that if x is a person, and x is not a flower, x is most short-lived. This leads to the implication that a non-person, a flower, is not the most short-lived: [non-p is non-q].

The other pattern exhibited by (25b) is exemplified in the rhetorical counterfactuals in (27):

(1.27) ひさかたの天のみ空に照る月の失せなむ日こそ我が恋止まめ

Pisakata no ama no misora ni teru tukwi no
distant COP.ADN heaven GEN sky LOC shine.ADN moon GEN

use-na-mu pi **koso**, a ga kwopwi yama-me.
disappear-PERF-CONJL.ADN day KOSO, I GEN longing stop-CONJL.EXCL

(MYS 12: 3004)

‘Only if (On the very day when) the moon that shines in the distant heavens ceased to be, would my longing likewise come to an end.’

(Adapted from Suga 1991: Part II, 364)

This *koso* –*e* should be of the type “exclusive” uses, under the classification given by Hando (1993). Though there is no overt expression (alternatives) to be contrasted with the *koso*-phrase, *koso* invokes a sense of exclusion. Let us spell out the propositions that correspond to [p is q] and [non-p is non-q] in (28):

(1.28) [p is q]: if [the moon disappears]_p, [I stop longing for you]_q.

[non-p is non-q]: as long as [the moon exists]_{NON-p}, [I wouldn't stop longing]_{NON-q}.

The implication expressed by [non-p is non-q] is equivalent to “as long as the moon exists, I would not stop longing for you.” This proposition cannot be implied from “p is q.” Therefore, the Strawson DE fails here, as illustrated in (29):

(1.29) [the moon disappeared]-KOSO, [would I stop longing for you]-E

⇒ If the moon disappeared, and you aged and died, I would stop longing for you.

The subjunctive sentence in *koso -e* does not implicate that there is a world in which *p* (= “the moon disappears”) is satisfied; even less a world in which *p* and all the premises are satisfied. Here Strawson DE does not hold just because the speaker does not assume that there is a world where the antecedent holds. This lack of existential presupposition of *p* further implies that there is no existence of a possible world in which *q* (= “I stop longing for you”) holds. This suggests that the semantics of *koso -e* is not identical to English *only*. The semantics of the exclusive use of *koso -e* is examined in Chapter 2.

1.3.3 *Semantic variability*²⁸ of embedded subordinate clauses of *koso -e*

Some examples of *koso -e* constructions are non-veridical propositions, and other examples of *koso -e* constructions are veridical propositions. This is observable from the semantic variation

²⁸ The term “semantic variability” is adopted from Stump (1985). In this thesis, “semantic variability” describes the situation where two or more truth-functionally distinct meanings take the same form. Conditional and causative meanings are truth-functionally distinct, and they are the two primary meanings in the biclausal *koso -e*. The two meanings are distinct, either by the (pragmatic) context in which they are used or the (linguistic) context in which they are expressed.

in the *koso –e* construction, resulting in counterfactual-like or *because*-like interpretations. The realis/irrealis distinction in the subordinate clause indicates the clauses ending with *–ba* is the indicative or subjunctive conditional form when expressed in the *koso –e* construction. I will argue that conditional and *because* interpretations originate in the subordinating conjunction in the *koso –e* construction.

Stump (1977, 1979, 1985) studied a similar phenomenon: semantic variation between conditional and causative interpretations observed in English absolute adjuncts. He claims that only certain sorts of adjuncts can serve as *if*-clauses, and that the semantic variability of *if*-clauses and *because*-clauses in English absolute adjuncts is predicted by Greg Carlson’s distinction between stage-level and individual-level predicates. For example, a main clause uses the identical sentence in (30) and (31), but their logical roles of the absolutes are quite different. The adjunct clause in (30) contains an individual-level predicate “be a master of disguise”; therefore, the adjunct clause is interpreted as a strong adjunct (*because*-clause), as in (30b). On the other hand, the adjunct clause in (31) contains a stage-level predicate “wear a new outfit”; thus it is predicted that the adjunct clause is interpreted as an *if*-clause as in (31a).

(1.30) Being a master of disguise, Bill would fool everyone.

- a. ≠If he were a master of disguise, Bill would fool everyone.
- b. =Because he was a master of disguise, Bill would fool everyone.

(1.31) Wearing that new outfit, Bill would fool everyone.

- a. =If he wore that new outfit, Bill would fool everyone.
- b. ≠Because he wore that new outfit, Bill would fool everyone.

The major difference of the weak adjunct (conditional clause) as opposed to the strong adjunct (reason clause), Stump argues, is that the conditional clause functions as an argument of the modals. The proposition in the conditional clause restricts the meaning of the modal: in (31), Bill's fooling of everyone is restricted to the cases in which he wears the new outfit. However, his being a master of disguise doesn't restrict the meaning of modal *would* in the same way as the conditional clause does. In fact, it might be felt that Bill's fooling of everyone is not conditioned by his being a master of disguise at all. Therefore, Stump concludes that the conditional clauses are an argument of a modal, while *because* clauses are adjuncts.

Assuming Stump's study of the semantic variability of English absolutes, I propose that the alternation of veridical and non-veridical propositions embedded under [koso -e] is the realis/irrealis forms of *-ba* ('when/whenever') in the *koso -e* construction. The semantic variability exhibited by the overall meanings of *-ba koso -e* can be summarized as follows:

(1.32) Conditional

If p, would q; (but there is no p, and neither would q.)

(1.33) Cause/Reason clause

p, therefore q; (but non-p necessitates non-q.)

In Chapter 3, I examine the source of this semantic variability in the modal context. There are two key elements that mark this variability: difference of the irrealis/realis form of *-ba* clause, and the type of modal verb (conjectural vs. epistemic/evidential) in the main clause. The striking

discovery was that there seems to be a sense of modality expressed by the sentence with reason clauses, even if the sentences with reason clauses express a factitive proposition. The existence of modality becomes evident when we see how similar the factitive proposition is to the proposition with evidential/epistemic modals with a reason clause:

- (1.34) a. Jane came to the office because she had to see her student.
 b. Jane must have come to the office because she had to see her student.
 c. Jane appears to have come to the office because she had to see her student.

In (34b) and (34c) the sentences with reason clauses do not entail the sentence without the reason clauses like those in (35):

- (1.35) a. Jane must have come to the office.
 b. Jane appears to have come to the office.

Instead, both (34b) and (34c) entail the simple factitive proposition in (36):

- (1.36) Jane came to the office.

Therefore, what is asserted in (34b) and (34c) are the speaker's level of confidence in the proposition in (34a). With this, I argue that the modality is taking scope over the reason clause, and suggest that the reason clause functions to restrict the epistemic/evidential modality that expresses the speaker's level of confidence or certainty of a proposition.

In Chapter 4, I pursue the source of conditional/causative variability in the broader (i.e. non-modal as well as modal) context and argue that a pragmatic inference might be involved in determining the conditional/causative meanings of some subordinating conjunctions. For example, the conditional meaning of the *koso –e* construction is not just expressed by *–ba* clauses, but also by the temporal conjunction, *when*-clauses. The above examples of *koso –e* construction in (7a-b) are repeated here in (37a-b) respectively:

(1.37) a. ...tukwi no use-na-mu pi koso, a ga kwopwi yama-me. (=7a)
 moon GEN. disappear-PERF.-CONJL.ADN day KOSO I GEN longing stop-CONJL.EXCL
 ‘Only if (on the day when) moon disappeared (from the everlasting nightly sky), would my feeling for you stop.’

b. ...taye-te araba koso, imasi-to are-to apu-koto yama-me. (=7b)
 cease-GER. exist.COND KOSO, you-and I-and meet-to stop-CONJL.EXCL.
 ‘Only if heaven and earth passed away, would you and I stop meeting each other.’

In both (37a) and (37b), the counterfactual-like conditional meanings are expressed, and yet, the subordinate clauses have different forms: the temporal when clause in (37a) and *–ba* clause in (37b). This means that the same meaning (i.e. conditional meaning) can be expressed by different forms of subordinate conjunction (i.e. *pi ni* ‘on the day when’ and *–ba* ‘whenever/if’). This indicates that conditional/causal meanings of a subordinate conjunction can involve a pragmatic factor or be morphosyntactically derived, based on our understanding of the semantic dependency between the antecedent and the consequent. I have examined other forms of

subordinating conjunctions: *-ba* clauses, temporal conjunctions (*when*-clauses), and gerundive (*-te*) clauses in the *koso -e* construction. These subordinate conjunctions all show a similar pattern of semantic variability. There are non-accidental recurrent meanings in the subordinating conjunctions: temporal, conditional, and causal. Stump (1985) argued that English absolutes are indeterminate as to the interpretations of weak or strong adjuncts. Adopting Stump's studies of semantic variability of English absolutes, I argue that the conditional and causal interpretations of subordinate adjunct clauses are underspecified in the subordinating conjunction of a temporal sequence.

1.4 SEMANTIC PRELIMINARIES

In this section, I review some semantic preliminaries about counterfactuals and causation that I employ for the description of the semantic variability of the *koso -e* construction.

1.4.1 *Counterfactual conditionals*

Counterfactuals pose serious problems to the material conditionals²⁹; subsequently the strict conditional which is the translation of the form “if it were the case that p, then it would be the case that q.” For instance, the truth conditions for the strict conditionals can be given as follows:

$$(1.38) \llbracket p \rightarrow q \rrbracket^w = 1 \text{ iff for any world, } \llbracket p \rrbracket^w = 0 \text{ or } \llbracket q \rrbracket^w = 1.$$

This truth condition cannot work for examples of counterfactual conditionals. For example, consider the truth value of a counterfactual conditional such as the following:

²⁹ A conditional is translated to a material conditional with the symbol \rightarrow , the logical predicate of two propositions, the antecedent and the consequent. Take the two propositions, F and G. The material conditional $F \rightarrow G$ is true at the world depending on the truth values of F and G: either F is false or G is true.

(1.39) If that piece of butter had been heated up to 150° F, it would have melted.

The conditional in (39) is usually rendered true under a situation where the speaker had failed to melt the butter, and there is a necessity relation between heating the butter up to 150° F and melting the butter. Under the truth condition in (38), (39) will come out true vacuously, as the antecedent is false at w .

As mentioned in Section 1.1, Stalnaker (1968) and Lewis (1973) formulated the semantics of possible worlds, which can provide truth conditions for the counterfactuals. According to their system, when a counterfactual is uttered felicitously, the speaker is thinking of the actual world as indexical. The indexical or actual world assigned an index determines the accessible worlds, which are just like the indexed world with respect to natural laws, but are not identical to the indexical world. Given this semantics, we can say that a counterfactual proposition is rendered true at the actual world (w_0) if the counterfactual proposition holds at the set of non-actual worlds where the proposition was hypothetically true. Lewis stated truth conditions for the counterfactuals as follows:

(1.40) $\llbracket p \square \rightarrow q \rrbracket^{w_0}=1$ iff for all the worlds closest to w_0 in which $\llbracket p \rrbracket^w=1$ among the accessible worlds, $\llbracket q \rrbracket^w=1$.³⁰

³⁰ Lewis (1973a: 16) formalized the truth conditions for counterfactual conditionals of the form “if..., would...” as follows:

- $\phi \square \rightarrow \psi$ is true at i (according to a system of spheres \mathbb{S}_i) if and only if either
- i. No ϕ -world belongs to the any sphere S in \mathbb{S}_i , or
 - ii. Some sphere S in \mathbb{S}_i does contain at least one ϕ -world, and $\phi \rightarrow \psi$ holds at every world in S .

According to Lewis’s system of spheres, any world can be assigned an index i , and all the other worlds are centered on i . Suppose we are to evaluate a counterfactual proposition “if p , would q ” uttered at the actual world. According

Under (40), a counterfactual conditional is rendered true at the context world if and only if for all the worlds in which the antecedent holds, among those most similar to the actual world, the consequent holds.

1.4.2 *Counterfactuals and causation*

So far we have stated Lewis's and Stalnaker's framework on the truth conditions of counterfactuals: counterfactuals are a kind of conditional that states that the consequent is possibly/necessarily true for all the cases in which the antecedent is true among the worlds closest to the context world.

However, the above stated truth conditions given in (40) do not require that there be a causal connection between the antecedent and the consequent. One of the objections to Lewis's truth conditions of counterfactuals is that his truth conditions for the counterfactuals is quantificational and thus supervene on the actual cases or possibilities etc., whereas such connection between the antecedent and the consequent is in many cases pragmatic rather than semantic. That is, the objection to Lewis's type of semantics of counterfactual conditionals claims that the semantics of counterfactual should be stated in terms of pragmatic relation between the two states of affairs, and not in terms of truth-values. As we have seen in (40), the truth conditions of the counterfactuals are formulated in terms of the positive instances (i.e. possible worlds) in which the proposition is true.

to Lewis's truth conditions, the counterfactual conditional is true if and only if it satisfies one of the following: (1) for all the closest worlds in which p holds q also holds, or (2) p does not hold for any world.

Armstrong³¹ (1983) argued that two additional factors are necessary for the felicitous utterance of counterfactuals. First, in order for the counterfactual to be uttered felicitously, the causal relation (he called the relation “necessitation”) between the antecedent and the consequent must be more than an accidental regularity of connected occurrences of the two states of affairs. For example, consider a clock that strikes at 12 noon; the events of the clock’s striking and the time being 12 noon are bound by regularity. However, it is still odd to say, “If the clock had been struck, it would have been 12 at noon.” The oddity occurs because the regularity is merely a coincidence of human engineering, not determined by a universal physical law. Another example of accidental regularity might be the co-occurrence of r-lessness in someone’s speech and the Northeast regional dialect in the U.S. The co-occurrence between someone’s r-lessness in his/her speech and the regional dialect the person speaks does not grant us felicitousness of the counterfactual statement, “If x hadn’t pronounced [r] in the word “car,” x would/might have been from the Northeast.” Based on these kinds of examples, Armstrong argues, a set of known instances that are bound by accidental regularity does not support the felicitous utterance of a counterfactual statement³².

The second factor Armstrong raises is that counterfactuals can be perfectly felicitous even if there are no actual instances that would verify the truth of such an utterance. A counterfactual of

³¹ Armstrong (1983, 1989) advocated for Non-Humean theories of natural laws, and argues that the counterfactual conditionals cannot be uttered felicitously if they describe a uniformity that is accidental; counterfactual conditionals only be uttered felicitously if the causal connection between the antecedent and the consequent holds between two higher-order universals.

³² Goodman gave the following example to show that the accidental uniformity between two events cannot support a counterfactual statement.

- i) All the coins in my pocket on VE day were silver.
- ii) #If I had had a coin in my pocket on VE day, it would have been silver.

In the above example, a material conditional holds between the classes, [x is in my pocket on VE day] and [x is silver]; nonetheless, the counterfactual cannot be uttered felicitously in this scenario due to the lack of the cross-world identity of the connection between the two propositions. The utterance of counterfactual conditionals has to be supported by the natural law in the sense that the causal connection between the two propositions withstands across the possible worlds under consideration.

this sort can be observed in a warning sign that states, “Trespassers will be shot.”³³ Presumably, the statement presupposes that there will be nobody who would trespass. Armstrong (1979) coined the term “uninstantiated law” to represent such propositions that have no corresponding instances. There are counterfactual expressions that state an uninstantiated law, which can be uttered in a felicitous manner.

In summary, according to Armstrong, counterfactual conditionals are legitimized only if some physical/natural laws (and the presence of the other conditions that are met) are assumed and the internal connection between the two states of affairs is presupposed by the counterfactuals. Based on these arguments, I assume that the counterfactual conditionals presuppose that there is a pragmatic (causal) connection between the antecedent and the consequent.

1.4.3 *Accessibility and similarity*

According to Lewis’s truth conditions of counterfactuals, counterfactual conditionals are variably strict conditionals (Lewis 1973a: 13). In this section, I will explain what “variably strict” means. The possible worlds counted for the truth conditions for counterfactual conditionals are constrained by accessibility relation such as physical necessity or logical necessity etc. and the ordering of the worlds by similarity (to the indexed world). The accessible worlds are the possible worlds constrained by the kinds of modality against which we evaluate the (counterfactual) expressions. The similar worlds are the possible worlds constrained by the relative similarity to the world in which the counterfactual is uttered.

³³ This statement is not in the subjunctive mood, and yet expresses a counterfactual or ‘contrary-to-fact’ conditional in that it express the knowledge of what *would* happen if trespassing were realized. I assume with Chisholm (1946: 289) that the form and the meaning (i.e. a counterfactual conditional) do not have direct correlation.

Kratzer (1977, 1981) included the notion of accessibility under the notion of “modal base³⁴.”

The speaker in the context specifies an accessibility relation as a conversational background of the particular (modal) expression³⁵ used in the utterance. For example, the epistemic conversational background, expressed by “in view of what I know,” is a function f from worlds to sets of propositions, represented in Portner (2009: 51) as follows:

(1.41) Used in context c , *what I know* expresses the function f such that:

- i) The domain of f is that subset of W in which the speaker defined in c exists, and
- ii) For any w in the domain of f , $f(w) = \{p: \text{the speaker of } c \text{ knows } p \text{ in } w\}$

The notation f can be parameterized by the flavor of modality, such as epistemic, deontic, bouletic, ability, historical, etc. Under (41ii), $f(w)$ is a set of propositions that the speaker knows in the context world. Following Kratzer’s (1977) notation, $\cap f(w)$ expresses the set of worlds in which all of the propositions in $f(w)$ hold. Let us take R as an accessibility relation.

(1.42) $R_f(w)(w')$ iff $w' \in \cap f(w)$

Now we can specify the accessible worlds as those in which all the propositions that are compatible with the modal base hold.

³⁴ Kratzer considers that the modal base for the counterfactual is empty, to avoid contradiction that arises from the addition of the counterfactual proposition into our common ground where we store the realistic propositions that we regard true/factual from the properties of the context world. I will talk about ‘conceivability,’ which can be used as a kind of accessibility that does not cause contradiction, and can be applied optionally in stating counterfactuals.

³⁵ For example, an English modal *must* can be used as an epistemic or deontic modal. Epistemic modals quantify over worlds compatible with the available evidence. Deontic modals quantify over worlds compatible with the rules and regulations. Such notion is expressed in the covert restrictor f .

$$(1.43) \text{ ACC}_w = \{w' : w' \in \Omega f(w) : p(w')=1\}$$

Let us include this definition of accessibility in the truth conditions of counterfactual conditionals as a restriction of the possible worlds as in (44).

(1.44) Truth conditions of counterfactuals

$\llbracket \text{if } p, \text{ would } q \rrbracket^{w_0}=1$, iff for every world in the closest sphere S in \mathbb{S}_i which contains at least one world in which p is true, the truth of p implies the truth of q among those that are accessible from w_0 .

Lewis divides the spheres of possible worlds by their “similarity” to the actual world. Lewis states, “Counterfactuals are like strict conditionals based on the similarity of worlds, but there is no saying how strict they are.” (Lewis 1973a: 15) A counterfactual is evaluated among the closest possible worlds in which the antecedent holds. Lewis uses the notion of sphere to express the uniquely determined closest worlds. For each counterfactual, there is a uniquely determined sphere S around i (assigned to any world of context), which contains the worlds in which the antecedent is minimally satisfied. Figure 1 shows the system of sphere \mathbb{S}_i centered on i (which corresponds to the actual world.)

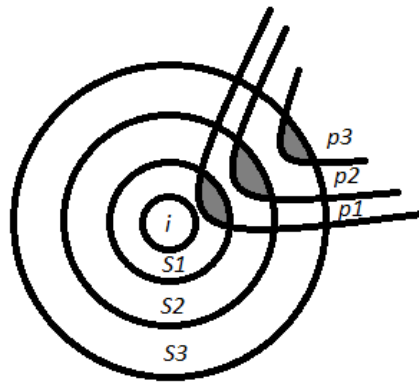


Figure 1.1. The system of sphere of possible worlds

In Figure 1.1, there are three spheres, S_1 , S_2 , and S_3 , around i . The sphere S_1 is the closest sphere where the proposition p_1 is true. The shaded area indicates the closest possible world(s) in which the antecedent p_1 is true, but there are other equally possible worlds in S_1 , in which p_1 is not true. This picture also shows the sequence of true counterfactual. The shaded area in S_2 contains the closest worlds where the conjunction of p_1 and p_2 is true; the shaded area in S_3 contains the closest worlds where the conjunction of p_1 , p_2 and p_3 is true. The closest worlds where p_1 and p_2 are conjointly true would be different from the closest worlds where only p_1 is true. Thus, each time a new proposition is added to the antecedent, the closest sphere in which the antecedent holds moves away from the actual world. The further the closest world is, the stricter the conditional is. For example, “If a drop of rain touched the paper, it wouldn’t break.” might be true but “If multiple drops of rain touched the paper, it wouldn’t break” might not hold. Contextual information has to be taken into account when we choose an appropriate sphere of accessibility by stages. Let us define “the worlds closest to w_0 in which $\llbracket p \rrbracket^w = 1$ ” as a restriction of the possible worlds to the closest ones as follows:

(1.45) $\text{Closest}_{w_0} \llbracket p \rrbracket = \{w : w \text{ is closest to } w_0 \text{ in which } \llbracket p \rrbracket^w = 1.\}$

The set of worlds specified by (45) corresponds to “the closest sphere S in the system of sphere S_i which contains at least one p -world.” The closest worlds in which the antecedent holds vary depending on how strict the antecedent is. The strictness of the antecedent, however, is not easily determined due to the contextual elements.

1.5 THESIS PREVIEW

This dissertation consists of five chapters. The present chapter explains the scope, objectives and methodology of the dissertation, followed by the background and summary of the whole dissertation. The background of the study includes data from original texts, previous studies in Japanese grammar and semantic assumptions I made throughout this dissertation. Chapter 2 is a study of rhetorical and non-rhetorical readings of counterfactuals expressed with the *koso -e* construction in Old Japanese. The semantics of rhetorical and non-rhetorical counterfactuals is explored and explained in terms of Lewis’s possible world semantics with some additional assumptions. The challenge is two-fold: *koso -e* seems to reverse the logical relation of the antecedent and the consequent compared to the normal reasoning of *if*-conditionals, instead resembling *only-if* conditionals. *Koso -e* does not assume that there is at least one possible world in which the antecedent holds. This makes it difficult to apply Lewis’s truth conditions of counterfactuals to the *koso -e* construction in a straightforward manner. Chapter 3 examines the range of data of the *because*-like *koso -e* construction that expresses causation. I examine the morphological cues to see what distinguishes the *because*-like *koso -e* from counterfactual-like *koso -e* and argue that the realis/irrealis morphology in the subordinate clause, the presence of tense, and the kinds of modality in the main clause are relevant factors for the distinction. In

Chapter 4, following Stump’s study of English absolutes being realized either in the reason clause or the conditional clause, I treat counterfactual and causal interpretations of subordinating conjunctions as semantic variability. The semantic variability between counterfactual conditional and causation is also supported by Lewis’s theory of causation, which states the semantic connection between the counterfactual and causal dependencies. I discuss what determines the semantic variability in the *koso –e* construction, and argue that my analysis is compatible with Stump’s analysis of conditional and causal interpretations of English absolutes as weak/strong adjuncts. Chapter 5 concludes the dissertation.

Chapter 2. COUNTERFACTUAL INTERPRETATIONS OF *KOSO –E*

In this chapter, I will examine the semantics of the counterfactual/subjunctive³⁶ interpretations of the *koso –e* construction. As we have seen in the introduction, the emphatic effect of the *koso –e* construction is observed in the additional (negative) implication to the counterfactual interpretation, giving rise to what we will call the “rhetorical” reading. I will discuss what distinguishes the “rhetorical” reading from the “non-rhetorical” reading of counterfactual conditionals, and address a problem of assigning a truth-value to the “rhetorical” reading.

2.1 RHETORICAL COUNTERFACTUALS

In this section, I provide examples of “rhetorical” counterfactuals found in Old Japanese and characterize the meaning of the rhetorical counterfactuals.

³⁶ Note that not all the *koso –e* occurrences have this meaning. Counterfactual meaning is obtained through a combination of morphological and pragmatic effects expressed by the *koso –e* construction.

2.1.1 Counterfactual interpretations expressed in *koso* –*e*

In Old Japanese, rhetorical counterfactuals are expressed in a *kakari-musubi* (KM)³⁷ construction: the focus (or contrastive) particle *koso* is attached to a subjunctive clause or a temporal adverbial clause, which co-occurs with a main predicate ending in the *e*-stem.³⁸

Consider (1a)-(1c), below:

(2.1) a. 人を思ふ心の木の葉にあらばこそ風のまにまに散りも乱れめ

Fito wo omou kokoro no konofa ni araba **koso**

Person ACC think.of.ADN mind GEN leaves COP.INF be.COND KOSO

kaze no manima ni tiri mo midare-me

wind-GEN arbitrary.manner COP.INF scatter.INF ETOP stir-CONJL.EXCL

(*Kokin* 15: 783)

‘Only if my yearning heart were (like) a leaf, would it go astray with the wind. (but my heart will not possibly like a leaf, and so it would never go astray)’

(Adapted from Honda 1970: 204)

³⁷ *Kakari-musubi* construction is considered to correspond to a focus construction. See 1.2.2.

³⁸ The conjugation –*e* is called “exclamatory” when used in the *koso* –*e* construction. The original morphological function of –*e* is to mark “realis” on the verb and form a subordinating conjunction, giving a meaning of ‘and’ or ‘but’; it signals that it is to be followed by a main clause (or a contrastive clause). In the rhetorical counterfactuals, –*e* is translated to ‘but’ or ‘although’ and the main (contrastive) clause is often omitted and left for inference, as in all the examples shown in this paper.

b. 天地といふ名の絶えてあらばこそ汝と我と逢ふこと止まめ

Ametuti to ipu na no taye-te araba **koso**,
 heaven.and.earth COMP called name GEN cease-GER. exist.COND KOSO,

imasi-to are-to apu-koto yama-me.

you-and I-and meet-to stop-CONJL.EXCL

(MYS 11: 2419)

‘Only if heaven and earth passed away would you and I stop meeting each other.’

(Adapted from Suga 1991: Part II 259)

c. ひさかたの天のみ空に照る月の失せなむ日こそ吾が恋やまめ

Pisakata no ama no misora ni teru tukwi no
 distant COP.ADN heaven GEN sky LOC shine.ADN moon GEN

use-na-mu pi **koso**, a ga kwopwi yama-me.

disappear-PERF-CONJL.ADN day KOSO, I GEN longing stop-CONJL.EXCL.

(MYS 12: 3004)

‘Only if (On the very day when) the moon that shines in the distant heavens ceased to be,
 would my longing likewise come to an end.’

(Adapted from Suga 1991: Part II, 364)

a ga sitagoromo kapyesi tamapa-me.

I GEN undergarment return receive[hum]-CONJL.EXCL

(MYS 16: 3809)

Lit: ‘Only if there was a law that allowed the cancellation of the past transactions, would you return my undergarment.’

‘If there be a law that allows the tradesman to break a contract, return to me, then, my under-robe!’

(Nippon Gakujutsu Shinkokai translation: 273)

b. 薦枕あひまきし児もあらばこそ夜の更くらくも我が惜しみせめ

Komo makura api-maki-si kwo mo araba **koso**,
woven.straw pillow recip.-share-SPAST.ADN. love ETOP. exist.COND KOSO,

yo no pukuraku mo a ga wosimi se-me.

night GEN advance.NMNL ETOP. I GEN feel.sad.INF. do-CONJL.EXCL

(MYS 7: 1414)

‘Only if my love who used to lie beside me was still alive, would I feel sad as the night advances.’

(Adapted from Suga 1991 and Honda 1967)

The sentences in (2) facilitate a rhetorical reading as a primary reading, but these two examples may also allow a non-rhetorical reading under a different context. For example, the antecedent in (2a) describes a law that allows cancellation of past (business) transactions, which did not exist at the time when the poem was written, and at the time of writing it was thought that such a law would never come into existence. According to the translation, the poem was written by the ex-lover of the emperor, who resented the fact that her old gift to the emperor was returned to her as a result of the waning of her relationship with the emperor. Here the speaker (the ex-lover of the emperor) expressed her reasoning that since there will be no such a law that allows cancellation of a past transaction, the emperor is likewise not allowed to return the gift he had once accepted, just because he changed his mind. Understood in this context, the “rhetorical” construal whereby the consequent is denied seems to be forced solely by the speaker’s intention. However, the same poem could receive a non-rhetorical construal if the law is felt to be changeable. Assuming that the law was in fact changeable, then the speaker expresses that if the law were to change, the undergarment would be returned. The poem in (2b) is supposed to express the speaker’s lament of not having his wife back to life in any conceivable future, and thus it no longer matters whether night is longer. This interpretation does not exclude the standard counterfactual construal, since it is possible to imagine the counterfactual situation in which the speaker’s wife was alive. However, the speaker’s intention of the poem is to deny that he would be sad, now that there will be no chance of the speaker’s wife coming back to life.

If true, the intention of the rhetorical reading of counterfactuals is contradictory⁴¹ to the intention of the standard reading. The distinct characteristic of the rhetorical reading of counterfactuals is that the overall truth of the counterfactual entails the denial of the consequent.

⁴¹ It is contradictory in the sense that the rhetorical counterfactual cannot be felicitously uttered in the context where the non-rhetorical (or the standard) counterfactual is intended. It is contradictory to mean both that it is possible that the proposition *p* would true under some alternative situation and the proposition *p* would never be true.

Namely, if the uttered counterfactual is taken to be true under the rhetorical reading, it follows that the speaker asserts the denial of the consequent, as (3a-b) represents the intention of the poems (1c) and (2b) respectively:

- (2.3) a. My affection will not (never) come to an end.
 b. You and I will not (never) stop meeting each other.

The standard reading of counterfactuals does not have this characteristic; the standard reading of counterfactuals entertains the possibility of the consequent occurring. The rhetorical and non-rhetorical readings do not result from “ambiguity,” which means that the two meanings are both possible in the same context.

2.1.2 “*Rhetorical*” reading

Let me characterize more formally the “rhetorical” reading of counterfactuals to distinguish from the non-rhetorical or “standard” reading. Let us assume that a subjunctive conditional of the form “if it were the case that p, it would be the case that q” is uttered. The counterfactual interpretation in the *koso –e* construction seems to allow the following two possible interpretations:

- (2.4) a. p is NOT possibly true; q would be false.
 b. (Assume that) p were the case; q could be true.

The interpretation in (4a) yields the rhetorical reading; and (4b) yields the standard counterfactual reading. Certain circumstances or contexts make the rhetorical reading more salient as in (5), or the standard reading more felicitous as in (6).

- (2.5) a. Only if I had nine lives would I dive into the air without fear.
 b. Only if you were a perfect person in every sense would you never have to repent.
- (2.6) a. Only if I had nine lives would I jump into the air in my second life.
 b. Only if I were perfect would this be easy.

In (5a), the speaker reasons that s/he will never dive into the air, as s/he has only one life. The context requires that the antecedent is “impossible” or “inconceivable,” and as a result, the speaker concludes that diving into the air is inconceivable. Likewise in (5b), the context creates an unachievable situation, thus implying that the consequent would likewise be unachievable. If the context allows the possibility of the event, then the counterfactual has a different reading, as in (6). In (6a), the sentence would be true in a world where the speaker turns into a cat (which is supposed to have nine lives) and lives nine lives; in (6b) the sentence would be true in the world where one becomes a perfect person and does things easily. Thus, the context of utterance takes a major role in deciding which reading (i.e. either a rhetorical or non-rhetorical reading) the speaker intends to convey by uttering the counterfactual conditional.

Let us discuss in what way the rhetorical reading is context-dependent. In the rhetorical reading, we are not adding any new information to common ground. Consider the example (6) again, repeated below (slightly modified) as (7a). Although we do not add new information, we

seem to add what we know as given in (7b) to the subjunctive conditional in (7a) and conclude (7c):

(2.7) a. Only if I had nine lives I would jump into the air.

b. I would not possibly have nine lives.

c. \Rightarrow I will never jump into the air.

On the other hand, (8a-c) shows how the same sentence yields a standard counterfactual reading. In this case, the speaker seems to suppose counterfactually that the antecedent would be true in the hypothetical world described in (8a). The assumption in (8b), therefore, should constitute *modus ponens* with the premise in (8a) and lead to (8c), the truth of the consequent in the situation. Thus, we obtain the standard reading of the counterfactual.

(2.8) a. Only if I had nine lives would I jump into the air for the second life.

b. I would have nine lives.

c. \Rightarrow I would jump into the air for the second life.

To summarize, I have discussed the differences between the rhetorical reading and the standard (non-rhetorical) reading in counterfactuals. The rhetorical reading is elicited by a certain context, which is different from the context in which the non-rhetorical reading is salient. The rhetorical reading has an additional implication: the antecedent would not possibly be the case. The non-rhetorical reading does not have this implication.

2.1.3 *Translations of rhetorical counterfactuals*

The rhetorical conditionals in the *koso –e* construction are translated variously in the literature, but the translations of the counterfactuals in the form of *p koso q–e* correspond to one of those listed in (9), in which *p* is the antecedent and *q* is the consequent:

(2.9) Translations of *p koso q–e*

- a. Only if/when *p*, would *q*.
- b. As long as (as sure as) not-*p*, not-*q*.
- c. If *p*, could *q*.

Among the translations given in (9), (9b) corresponds to the rhetorical reading, as it is the translation of the additional implication that concludes the denial of the consequent (non-*q*). The translation in (9c) corresponds to the non-rhetorical reading, concluding the affirmation of the consequent (*q*). Let us see some examples of *koso –e* construction and their English translations from a few authors. First, let us look at (10).

(2.10) わたつみの海に出でたる飾磨川絶えむ日にこそ我が恋止まめ

Wata tu mi no umi ni ide-taru Sikama-gapa
 Sea GEN dragon GEN sea LOC exit-PERF/PROG.ADN Shikama-River
 taye-mu pi ni **koso**, a-ga kwopwi yama-me
 end-CONJ.ADN day LOC KOSO, I GEN longing cease-CONJL.EXCL

(MYS 15: 3605)

‘**Only** on the day Shikama River forebears to flow into the sea of the sea God’s realm,
will my longing for you likewise end.’ (Horton 2012: 15)

‘My love (for you) will stop **only** on the day when Shikama river that flows into the sea
of the sea dragon will dry up.’ (Vovin 2009: 62)

‘Oh, shall I ever cease to love you? Such a day **may** come to me **when** our Shikama
flows **no** more into the unbounded sea.’ (Honda 1967: 266)

Horton’s and Vovin’s translations look quite similar and are close to the reading (9a), adopting English “only.” Both Horton’s and Vovin’s translations can be taken to be either rhetorical or non-rhetorical reading. However, Honda’s translation implies the rhetorical reading, as indicated by the rhetorical question. The rhetorical question expresses strong denial of the consequent: the speaker’s determination not to stop loving the addressee. Similarly, in (11a-b) the translations clearly show that the rhetorical reading is a primary reading:

(2.11) a. ひさかたの天のみ空に照る月の失せなむ日 こそ 吾が恋やまめ

Pisakata no ama no misora ni teru tukwi no
distant COP.INF heaven GEN. sky LOC. shine.ADN. moon GEN

use-na-mu pi **koso**, a ga kwopwi yama-me.

disappear-PERF-CONJL.ADN day KOSO, I GEN longing stop-CONJL.EXCL (=1c))

‘On **the very** day when the moon that shines in the broad heavens ceased to be, my affection would come to an end.’

(adapted from Suga 1991: Part II, 364)

‘While the moon shines above (=not disappear), I shall **not** change, my love.’

(Honda 1967: 225)

b. 天地といふ名の絶えてあらばこそ汝と我と逢ふこと止まめ

Ametuti to ipu na no taye-te ara-ba **koso**,
heaven.and.earth COMP called name GEN cease-GER. exist-COND. KOSO,

imasi-to are-to apu-koto yama-me.

you-and I-and meet-to stop-CONJL.EXCL (=2b))

‘**As long as** the phrase heaven and earth does exist (=not pass away), you and I **will not** give up our rendez-vous-place where we embrace each other.’

(Suga 1991: Part II, 259)

‘O that I **could** keep our tryst (=not give up our place) **as sure as** heaven and earth exist (=not pass away).’

(Honda 1967: 192)

In (11a), Suga's translation adopts the reading close to (9a), while Honda's translation is closer to (9b), adopting the implication from the negation of the antecedent to the negation of the consequent. In (11b), both Honda's and Suga's translations pick up the reading in (9b). This indicates that the rhetorical reading is strongly implicated in (11b), as the translation clearly concludes the negation of the consequent. Finally, look at (12), for which the translations pick up either a non-rhetorical reading or a rhetorical reading:

(2.12) 薦枕あひまきし児もあらばこそ夜の更くらくも我が惜しみせめ

Komo makura api-maki-si kwo mo araba **koso**,
woven.straw pillow recip.-share-SPAST.ADN love ETOP exist.COND KOSO,

yo no pukuraku mo a ga wosimi se-me.

Night GEN advance.NMNL ETOP. I GEN feel.sad.INF do-CONJL.EXCL (= (4b))

'If I had my dear, I **could** lie and then slumber pillowing our heads upon the same reed-pillow, and sparing the advance of night.'

(Suga 1991)

'Alas, now that my wife is dead, all the same is my plight, **no matter whether** long or brief be the night.'

(Honda 1967: 114)

Suga's translation adopts the non-rhetorical counterfactual interpretation, which is close to (9c).

Honda's translation implicates the rhetorical reading: it has the negative connotation that the

speaker's wife is never going to be alive again, and therefore, the speaker disregards the consequent as an unattainable event.

To summarize, the rhetorical counterfactuals expressed in “*p-koso q-e*” are best translated as “only if it were the case that *p*, would it be the case that *q*” which can express either a rhetorical or a non-rhetorical reading. The translation in (9b), “as long as not *p*, not *q*” expresses a rhetorical reading, which concludes the denial of the consequent. The translation in (9c) can express a non-rhetorical reading suggesting a conceivable truth of the consequent.

2.2 SEMANTIC CHARACTERIZATION OF RHETORICAL COUNTERFACTUALS

In the last section, we have seen that English translations of rhetorical counterfactuals often adopt “only if” or equivalent expressions; this indicates that the *only-if* subjunctive is one of the best English translations of rhetorical counterfactuals. Thus, it seems reasonable for us to suppose that the semantics of *koso -e* simply amounts to *only-if*. I will adopt Lewis's (1973) truth conditions of *if* counterfactuals to state the truth conditions of *koso -e* counterfactuals.

2.2.1 Truth conditions of *koso -e*

Let us see Lewis's (1973) truth conditions of *if* counterfactuals in (13), which do not have a rhetorical reading:

(2.13) $\llbracket \text{If it were the case that } p, \text{ it would be the case that } q \rrbracket^{Ci} = 1$, iff either

- i) *p* is impossible (=there is no world in which *p* is true among the closest worlds to w_i , or
- ii) *p* is possible (=there is at least one world in which *p* is true among the closest worlds to w_i),
and $p \rightarrow q$ (if *p*, then *q*) holds at all the worlds closest to the actual world w_i .

According to (13), a counterfactual of the form “if it were the case that p , it would be the case that q ” is true if and only if one of the following holds. The counterfactual is vacuously true when the antecedent p is impossible. Or the counterfactual is non-vacuously true if and only if for all the closest worlds in which p holds, the material conditional $p \rightarrow q$ (‘if p , then q ’) holds. Now let us assume that *koso* –*e* counterfactuals are equivalent to *only if* counterfactuals and state the truth conditions of *koso* –*e* counterfactuals as in (14).

(2.14) $\llbracket p - \text{koso } q - e \rrbracket^{C_i} = 1$, iff either

- i) p is impossible (=there is no world in which p is true among the closest worlds to w_i , or
- ii) p is possible (=there is at least one world in which p is true among the closest worlds to w_i),
and $p \leftarrow q$ (q only if p) holds at all the worlds closest to the actual world w_i .

According to (14), the counterfactual of the form “*p-koso q-e*” or equivalently, “only if it were the case that p would q ” is true if and only if one of the following two cases hold. The counterfactual is vacuously true when the antecedent p is impossible. Or the counterfactual is non-vacuously true if and only if for all the closest worlds in which p holds, the material conditional $p \leftarrow q$ (‘ q only if p ’) holds.

The difference between (13) and (14) is that the antecedent p functions like a sufficient condition in (13), while the antecedent p functions as a necessary condition in (14). This difference is projected on the ordering source of the propositions that potentially cause the truth of the consequent q . The necessity of p can be reinterpreted as a scalar implicature of p : p is the least likely proposition among all other conditions that potentially contribute to the truth of q , but needs to be satisfied in order for q to be true. This makes the closest world in which p holds to

be the furthest to the actual worlds among all other closest worlds in which all other conditions are true.

There are two problems with the truth conditions of (14) in application to the rhetorical counterfactuals. First, the rhetorical counterfactuals will be vacuously true, contrary to our intuition, as the antecedent of rhetorical counterfactuals is considered “impossible” to the speaker. Secondly, there is no semantics/pragmatics that distinguishes the rhetorical reading from the non-rhetorical reading of the counterfactuals.

For the solution of the above stated problems, I argue that the antecedent of the rhetorical counterfactual is not “impossible” but “inconceivable.” Also, using the notion of conceivability we can characterize the semantics of the rhetorical reading that distinguishes from the non-rhetorical reading of counterfactuals.

Let us consider under what situation a rhetorical (or a non-rhetorical) counterfactual can be uttered. Consider the counterfactual *koso –e* statement in (2a), whose translation is provided in (15):

(2.15) Only if there was a law that allowed the cancelation of the past business transactions would you return my undergarment. (=translation of (2a))

Under the rhetorical reading, there is an additional implication that the speaker does not expect the existence of the law that allows the cancelation of the past business transaction in any conceivable future. From this assumption, the speaker concludes that the speaker would never allow the ex-lover to return her gift. However, we can change the scenario. Let’s assume that the speaker views the change of the law as likely to obtain in the conceivable future; for

example, the speaker may have the power to change the law. In such a situation, the counterfactual conditional obtains a non-rhetorical reading: the consequent could occur. That is to say, the antecedent of counterfactuals can be either conceivable or inconceivable depending on the context; the antecedent is “inconceivable” in some context, but not entirely “impossible.”

Using Kratzer’s (1977) definition of conversational background, let us define the notion of conceivability as a contextual restriction imposed by the speaker who is the agent of utterance in that context as follows:

(2.16) $\text{Conceivable}_{c_i} = \{p: p \text{ is compatible with what } x_i \text{ considers conceivable at } w_i\}$

Conceivability is a function, which applies to a context and yields a set of propositions that are compatible with what the speaker of the context (represented by x_i) considers possible in the conceivable future or in the actual world (represented by context world w_i). Let us represent the set of conceivable worlds as $\cap \text{Conceivable}_{c_i}$. Any conceivable proposition is a member of (or compatible with) all the propositions that are considered conceivable by the speaker at the context world. Let us suppose p is an antecedent of a non-rhetorical counterfactual. Then, p has the following characteristics:

(2.17) There is at least one world w such that $w \in \cap \text{Conceivable}_{c_i}$ and $\llbracket p \rrbracket(w) = 1$.

Let us examine propositions expressed in the antecedents of the rhetorical counterfactuals from (10-12):

- (2.18) a. [Shikama River disappears/stops flowing]
 b. [The moon disappears from the sky]
 c. [Heaven and earth pass away]
 d. [My wife returns to life]

All of the events described in (18) are not entailed from the set of propositions that describe the properties of the actual world, compared with the events in the antecedents of the non-rhetorical counterfactuals such as “the butter is heated up to 150°F” or “the match is scratched.” Compare the propositions in (18) with the negated propositions in (19) which seem to have an “unbounded⁴²” reading on the temporal denotation:

- (2.19) a. [The Shikama River flows]
 b. [The moon appears in the sky]
 c. [Heaven and earth exist]
 d. [My wife is dead]

To the speaker’s knowledge, these propositions in (19) are considered true through time: they are generic (or near generic) sentences. If true, a description of any event that contradicts generic sentences would be equivalent to inconceivable propositions. The temporal unboundedness of the truth of (19) is the reason why we perceive (18), the antecedent of the rhetorical counterfactuals, to be inconceivable.

⁴² The term is used by Carlson (1989: example (11)). He argues that the adverbial “every day” in the Generic sentence “A cat runs across my lawn every day” has an “unbounded reading.” The “unbounded” reading arises when it does not refer to a finite set of individuals; it has a reading of “whenever” (i.e. whenever there is a cat, it runs across my lawn.)

The generic sentences cannot be made into an antecedent of counterfactuals. Consider (20), in which generic (or near-generic) sentences are made into the antecedent of counterfactuals; and they are all anomaly. In the non-rhetorical counterfactual, as in (21a), the antecedent is not a generic sentence; therefore, the negated proposition can be easily made into a counterfactual as in (21b):

- (2.20) a. #If Shikama River had flown, I wouldn't have stopped longing for you.
 b. #If the moon had existed, I wouldn't have stopped longing for you.
 c. #If the heaven and earth had existed, you and I would not have stopped seeing each other.
 d. #If you had been dead, I wouldn't have felt sad as the night advances.
- (2.21) a. Only if the butter had been heated up to 150°F would it have melt.
 b. If the butter had not been heated up to 150°F, it wouldn't have melt.

The characteristic of the rhetorical counterfactual can be summarized as the speaker's assumption that the antecedent is inconceivable with respect to the context: there is no world in which the antecedent holds among those the speaker considers conceivable at the context world. The contextual definition of (in)conceivability contrasts with the alethic definition of (im)possibility. Inconceivable propositions can be defined as (22a), compared with impossible propositions as (22b):

- (2.22) a. p is inconceivable iff there is no world, w , such that $w \in \bigcap \text{Conceivable}_{c_i}$ and $\llbracket p \rrbracket^w = 1$.

b. p is impossible iff there is no world w such that $\llbracket p \rrbracket^w = 1$.

The proposition is inconceivable when the speaker finds no conceivability in the truth of the proposition. In other words, when p is inconceivable, the true proposition p is not entailed from (or incompatible with) the totality of all the conceivable propositions uniquely defined by the speaker of the context. In contrast, the proposition is impossible when there is no possibility in the truth of the proposition irrespective to the context and the speaker. Impossible propositions are simply contradictory or defy the rational analysis of the propositional content.

The counterfactuals with an inconceivable antecedent are distinguished from those with an impossible antecedent that give rise to a vacuous truth. The speaker optionally applies accessibility (i.e. conceivability) to truth conditions of a counterfactual conditional and draws different conclusions from it. When the antecedent of the counterfactual conditional is conceivable, the resulting counterfactual has a rhetorical reading, and when the antecedent of the counterfactual is inconceivable, the counterfactual has a non-rhetorical reading.

2.2.2 *Conceivability*

I propose that the speaker's application of "conceivability" determines whether a counterfactual proposition receives the rhetorical reading or not. In other words, conceivability is unspecified in a subjunctive, but a subjunctive obtains either a rhetorical or a non-rhetorical reading depending on whether the speaker considers its counterfactual antecedent to be conceivable or not. Let us consider how the notion of conceivability is to be applied in the semantics of counterfactuals.

Let us assume that when the speaker considers a counterfactual antecedent conceivable, the speaker takes the antecedent seriously and considers there are some possible worlds in which the

antecedent holds and evaluate whether the antecedent leads to the consequent in those worlds.

When a counterfactual antecedent proposition is considered inconceivable, on the other hand, the speaker doesn't take the antecedent seriously, and conclude that the consequent would never be true. Let us define conceivability and inconceivability of any arbitrary proposition p as follows:

(2.23) Conceivability

There is a world, w , such that $w \in \cap \text{Conceivable}_{C_i}$ and $\llbracket p \rrbracket^w = 1$.

(2.24) Inconceivability

There is no world, w , such that $w \in \cap \text{Conceivable}_{C_i}$ and $\llbracket p \rrbracket^w = 1$.

The proposition p is conceivable when the speaker considers that there is a world in which the proposition is possibly true among the conceivable worlds at the actual world; the proposition is inconceivable when the speaker considers that there is no such world.

In Lewis's (1973) truth conditions of counterfactuals, the closest worlds are members of accessible worlds. Thus, if conceivability is a kind of accessibility relation, it follows that the closest world is always selected out of the accessible worlds: the worlds in which the conceivable proposition is true. Let us take the non-rhetorical reading of an *only-if* counterfactual, "Only if the butter had been heated up to 150°F, would it have melted." Under the non-rhetorical reading, the speaker believes that there is a possibility that the consequent would be true. We can consider the non-rhetorical reading as a realization of a subjunctive conditional in which the speaker implicitly assigns an existential presupposition to the antecedent. Thus, in this case, there is an existential entailment:

(2.25) There is a world w in which $\llbracket \textit{the butter was heated up to } 150^\circ\text{F} \rrbracket^w = 1$ among those that speaker x_i considers “conceivable” at w_i . Namely, $\{w: w \in \cap \text{Conceivable}_{C_i} \ \& \ \llbracket p \rrbracket^w = 1\} \neq \emptyset$.

On the other hand, the rhetorical reading of *koso –e* counterfactual has an inconceivable antecedent. In this case, the closest world in which the antecedent holds is not selected from the accessible worlds. We can consider the rhetorical reading as a subjunctive conditional with no existential presupposition. Thus, there is no existential entailment as formalized in (26):

(2.26) There is no world in which $\llbracket \textit{the moon disappears} \rrbracket^w = 1$ among those that x_i considers “conceivable” at w_i . Namely, $\{w: w \in \text{Conceivable}_{C_i} \ \& \ \llbracket p \rrbracket^w = 1\} = \emptyset$.

However, this seems to bring an undesirable result: the truth conditions in (14), repeated here as (27) below, fail to assign non-vacuous truth to the rhetorical reading of counterfactuals. Recall that Lewis’s truth conditions of counterfactuals require that there is at least one closest world in which the antecedent holds.

(2.27) $\llbracket p - \textit{koso } q - \textit{e} \rrbracket^{C_i} = 1$, iff either

- i) p is impossible (=there is no world in which p is true among the closest worlds to w_i , or
- ii) p is possible (=there is at least one world in which p is true among the closest worlds to w_i),
and “ $q \rightarrow p$ (q only if p)” holds at all the worlds closest to the actual world w_i .

Inconceivable propositions fail this requirement, when the closest world is not a member of the conceivable worlds. I will come back to this problem in 2.3.

Some readers may wonder where the notion of “conceivability” comes from, and object that it is impossible to define such a notion, as the notion itself involves modality. For the time being, I adopt the idea that conceivability is tied to strictness: how strict the counterfactual assumption is in the speaker’s view of similarity to the actual world. Then, we can say that the counterfactual antecedent p is stricter when the speaker considers p to be inconceivable than when the speaker considers p to be conceivable. Thus, the degree of strictness of the counterfactual antecedent can vary depending on how conceivable the truth of the antecedent proposition would be from the speaker’s view of the world. This notion of strictness has not been clearly expressed in Lewis’s truth conditions of counterfactuals, but it can be incorporated into the speaker’s assumption about the conceivability of p , based on the laws and the states of the affairs of the world known to the speaker in the context. Then, we can say that what is conveyed by a rhetorical counterfactual is not what might be the case (i.e. presence of conceivability of p) in the normal sense of counterfactuals, but what would never be the case based on the speaker’s knowledge of what has been the case.

To summarize, we have discussed how the application of conceivability results in the rhetorical readings of the counterfactuals. This explains why the rhetorical reading cannot be felicitous in a context where the non-rhetorical reading is salient.

2.3 PROPOSAL: NON-VACUOUS TRUTH OF *KOSO* –*E*

In 2.1.3, we have observed that the non-rhetorical reading of a counterfactual conditional in the form of “*p-koso q-e*” is best translated to English counterfactuals in the form of “**only if** p , **would** q .” In this section, I propose that both the rhetorical and non-rhetorical readings of *koso* –

e can be derived from the same truth conditions of *koso* $-e$ by the optional application of “conceivability” by the speaker of the utterance. This uniform analysis can be achieved with some adjustments to Lewis’s truth conditions of counterfactuals. One adjustment is that we have to assume a kind of contextually defined accessibility optionally imposed by the speaker. Another assumption is that existential presupposition should be posited separately from accessibility to ensure that the rhetorical will be rendered a non-vacuous truth by the truth conditions given in (14) above.

In the last section, I argued that a counterfactual conditional obtains the standard reading only in the case that the speaker believes the counterfactual antecedent to be a conceivable proposition. According to this criterion, a rhetorical counterfactual will not receive the standard counterfactual interpretation, as the antecedent is not “conceivable.” The challenge for the truth conditions of a rhetorical counterfactual is that Lewis’s system does not allow it to be assigned a (non-vacuous) truth, as it fails to satisfy “existential presupposition.” Lewis’s truth conditions of counterfactuals require/presuppose the existence of a hypothetical situation (i.e. the closest world) in which the antecedent holds.

In the following, I argue that any counterfactual is assigned a non-vacuous truth value only if the existence of a hypothetical situation (i.e. “closest” world) is defined. We can define the closest world(s) in which a rhetorical counterfactual is rendered true by computing the “closest” world defined under the non-rhetorical reading. With that assumption, non-vacuous truth can be assigned to a rhetorical counterfactual by conjecturing some closest world(s) among those which the speaker considers conceivable. But the analysis also has to show that under the rhetorical interpretation, an empty set of accessible worlds can be still justified by the relation holding between p and q .

Let us state the truth conditions of counterfactuals stated in *koso –e*, assuming the non-rhetorical reading. Incorporating Lewis’s truth conditions of counterfactuals as variably strict conditionals, we can posit the truth conditions of *koso –e* as follows:

(2.28) $\llbracket p - koso, q - e \rrbracket^{Ci=1}$, iff for some sphere S in S_i which contains at least one closest p -world, actuality of q implies the truth of p .

The truth conditions in (28) state that the material conditional $q \rightarrow p$ ⁴³ (“the worlds in which p is true are a superset of the worlds in which q is true”) holds for the closest worlds restricted by what we consider conceivable in the context world. The only difficulty with the truth conditions in (28) is that accessibility is being presupposed for truth-value assignment. That is, in Lewis’s system, the counterfactual that fails this presupposition would be rendered true vacuously. However, even if that presupposition fails to be satisfied, I would argue that the counterfactual can have a truth-functional meaning just as the rhetorical counterfactuals do.

To avoid the undesirable consequence of assigning vacuous truth, let us redefine the truth conditions in (28) simply in terms of the set relation between the two propositions p and q . The set relation is a preferable choice, since sets do not preclude empty sets. Existential presupposition, on the other hand, precludes empty sets as either false or vacuous. Let us impose conceivability as an additional restriction to the domain (a set) of the possible worlds to which the truth conditions of counterfactual conditionals apply.

⁴³ This does not mean that q is “the antecedent of” p . This simply means that there is no world in which q is true but p is false. For all the worlds equally close to the closest world in which p is true, there will not be a world in which q is true but p is not; or all the worlds in which q is true, p is true.

We can apply the conceivability restriction to the set of closest worlds in which the antecedent p holds (=some sphere S), which automatically restricts the relevant possible worlds for the truth conditions of counterfactual-like *koso* – e in the following way:

$$(2.29) \llbracket p - koso, q - e \rrbracket^{C_i}=1, \text{ for some sphere } S \text{ in } S_i \text{ which contains at least one closest } p\text{-world, } \{w: w \in \cap \text{Conceivable}_{C_i} \& \llbracket q \rrbracket^w=1\} \subseteq \{w: w \in \cap \text{Conceivable}_{C_i} \& \llbracket p \rrbracket^w=1\}.$$

Recall the definition of conceivability given in (16) above, repeated here as (30):

$$(2.30) \text{ Conceivable}_{C_i} = \{p: p \text{ is compatible with what } x_i \text{ considers conceivable at } w_i\}$$

Conceivability uniquely defines the set of all the conceivable propositions given a context C_i (which includes the speaker of the utterance). When the speaker utters a counterfactual while assuming that the antecedent would be conceivable in the context, the antecedent proposition is compatible with a set of conceivable propositions obtained by (30). The counterfactual antecedent that the speaker believes to be conceivable gives rise to the non-rhetorical (or standard) reading of the counterfactuals. In order to derive this result, we can assume conceivability as a kind of “accessibility relation.” The “accessibility relation” is a function from a world to a set of worlds; for any world of the context, there is a set of worlds that are accessible to the context world with respect to what is considered conceivable. Conceivability, in this case, restricts the range of possible worlds in which the antecedent would be true:

(2.31) Conceivability as an accessibility relation

$$\text{Conceivable } (w_i)(w) \text{ iff } \{w: w \in \cap \text{Conceivable }_{C_i} \text{ and } \llbracket p \rrbracket^w = 1\}$$

Now let us take care of the existential presupposition triggered by at least one. This can be taken as a presupposition to which the truth conditions of counterfactuals apply. The closest worlds are then defined independently of accessibility (i.e. conceivability). Let us define “closest” as follows:

$$(2.32) \text{ Closest }_{w_i} (\llbracket p \rrbracket) = \{w: w \text{ is the closest to } w_i \text{ among those in which } \llbracket p \rrbracket^w \text{ is true}\}$$

The set of closest worlds are determined uniquely by the context (actual) world and the (subjunctive) proposition. Existential presupposition comes from the existence of the closest world to the context world regardless of conceivability. Let us define existential presupposition that has the notion of “closest” built in as follows:

$$(2.33) \llbracket \text{Closest } (p) \rrbracket^{g, C} \text{ is defined only if } g(w/j) \leq_{g(C_i)} w \text{ (the } w_j \text{ is closer to the actual world than any other worlds), in which case } \llbracket \text{Closest } (p) \rrbracket^{g, C} = g(j) \text{ and } \llbracket p \rrbracket(w_j) = 1.$$

Let us incorporate the existential presupposition (33) into the truth conditions of the counterfactuals. The truth conditions of *koso -e* can be stated as in (34):

(2.34) $\llbracket \text{Closest}(p) \rrbracket^{g,C}$ is defined only if $g(w/j) \leq_{g(C)} w$, in which case $\llbracket \text{Closest}(p) \rrbracket^{g,C} = g(j)$ and $\llbracket p \rrbracket(w_j) = 1$.

$\llbracket p - koso, q - e \rrbracket = 1$ iff for some sphere S in S_i which contains the closest p -world(s), $q \rightarrow p$ (q only if p) holds among those accessible to the actual world w_i .

Previously we had assumed that a rhetorical counterfactual violates existential presupposition. However, with (34), it is possible to posit the closest world no matter how strict the closest p -world is. Namely, the closest p -world of the rhetorical counterfactuals is always defined (non-empty).

(2.35) $\{w: w \in \text{Closest}_{w_i}(\llbracket p \rrbracket)\} \neq \emptyset$

Now that we have defined the closest world in a rhetorical counterfactual, we can express the non-vacuous truth of p -koso q -e shown in the possible world diagram in Figure 1:

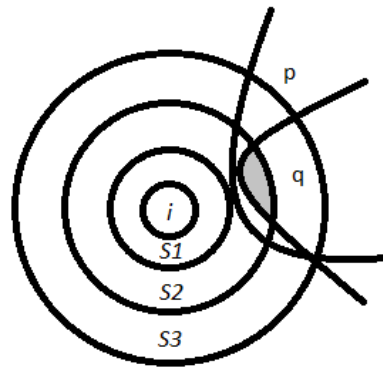


Figure 2.1. The non-vacuous truth of the counterfactual conditional in “ p -koso, q -e.”

In Figure 1, the sphere that contains the closest p -world is S_2 . For all the closest worlds in which p is true in the sphere S_2 , all the worlds in which q holds are a subset of the worlds in which p holds. This predicts that there is no world in S_2 such that q is true but p is false; in other words, the worlds in which q would be true are not any closer to the actual world than the closest p -world.

This semantics of *-koso -e* fits our intuition. For example, think of the rhetorical counterfactual “only if the moon disappeared would I stop thinking of you.” The consequent “I stop thinking of you” cannot be true in any possible world in which “the moon disappears” is false. Also, think about the non-rhetorical reading of “Only if there was a law that allowed cancelation of past business transactions would you return my gift.” The speaker intends to express that the consequent “you return my gift” cannot be true, as long as the antecedent “there is a law that allows cancelation of past transactions” is false.

In sum, I have proposed to separate existential presupposition from the truth conditions of counterfactuals, so that a rhetorical counterfactual is assigned a non-vacuous truth. Conceivability is assumed as an additional restriction that is being applied to the closest possible worlds. It is possible to render truth to the rhetorical counterfactual as long as the closest world is defined. Under the rhetorical reading, the closest world is more remote than all the worlds in which everything the speaker considers conceivable holds; in other words the antecedent of the rhetorical counterfactual is considered inconceivable, or not true at any accessible world.

2.4 DERIVATION OF RHETORICAL READING AND NON-RHETORICAL READING

In this section, I implement the truth conditions of *koso -e* and conceivability when the speaker considers the antecedent of a counterfactual to be not conceivable. Such counterfactuals were termed “rhetorical counterfactuals.” I argue that the rhetorical reading crucially differs from the

non-rhetorical reading in the speaker's assumption of the conditions and circumstances in which the antecedent of the counterfactual might hold.

2.4.1 *Derivation of rhetorical reading*

In section 2.2, I have argued that there are counterfactual conditionals that cannot be assigned a non-vacuous truth by Lewis's truth conditions, as the speaker may consider the antecedent of the counterfactual conditionals not "conceivable." We named such counterfactuals "rhetorical counterfactuals." Conceivability is defined as whether the uttered counterfactual proposition is compatible with what the speaker considers conceivable in the context, and conceivability is uniquely determined by the context and the speaker's expectation or belief of what is to be the possible courses of events.

Non-rhetorical counterfactuals are distinguished from the rhetorical counterfactuals by the presence of the closest antecedent-world among those that are considered conceivable. Let us see how this assumption works in the rhetorical reading of the *koso -e* counterfactuals. In the rhetorical counterfactuals, the closest world can be defined, but when the conceivability applies to the truth conditions of *koso -e*, the closest world(s) does not intersect with the conceivable worlds as in (36):

(2.36) Suppose p is not a conceivable proposition. Then,

$$\{w: w \in \bigcap \text{Conceivable}_{C_i} \ \& \ \llbracket p \rrbracket^w = 1\} = \emptyset$$

Let us apply (36) to the truth conditions of *koso -e* given in (37). Conceivability applies to all the possible worlds in the sphere that contains the closest antecedent-world. For all possible

worlds in this domain, the material condition $p \leftarrow q$ holds (i.e. q is a subset of p). This subset relation between p and q are expressed by their intersection with conceivability as in ①.

$$(2.37) \llbracket p - koso, q - e \rrbracket^{C_i} = 1 \text{ iff for some sphere } S \text{ in } \mathbb{S}_i \text{ which contains the closest } p\text{-world,} \\ \{w: w \in \cap \text{Conceivable}_{C_i} \& \llbracket q \rrbracket^w = 1\} \subseteq \{w: w \in \cap \text{Conceivable}_{C_i} \& \llbracket p \rrbracket^w = 1\} \quad \textcircled{1}$$

Let us apply (35).

$$\{w \mid w \in \cap \text{Conceivable}_{C_i} \& \llbracket p \rrbracket^w = 1\} = \emptyset. \quad \textcircled{2}$$

Applying ② to ①, the right hand of the set ($\{w: w \in \cap \text{Conceivable}_{C_i} \& \llbracket p \rrbracket^w = 1\}$) is empty.

$$\{w: w \in \cap \text{Conceivable}_{C_i} \& \llbracket q \rrbracket^w = 1\} \subseteq \emptyset$$

The set of worlds in which q is true is a subset of the empty set. Therefore,

$$\{w: w \in \cap \text{Conceivable}_{C_i} \& \llbracket q \rrbracket^w = 1\} = \emptyset.$$

Since the closest antecedent-world does not intersect with accessible world as shown in ②, it naturally follows from the semantics of *only if* (i.e. q is a subset of p) that the consequent q would be also an empty set: q is also inconceivable.

Let us apply (37) to the following example of the rhetorical counterfactual in *koso -e*:

$$(2.38) \llbracket [\text{the moon disappears-KOSO}], \text{I would stop longing for you-E} \rrbracket$$

Let us examine under what conditions and in what circumstance “the moon disappears” might hold when we take “the moon disappears” to be a conceivable proposition. We can imagine the counterfactual situations in which “my love ages” or “my love dies” might hold, and “the moon disappears” holds in some of those situations. However, if the speaker assumes that the

counterfactual situation in which “the moon disappears” is inconceivable, “the moon disappears” is not going to be true in any conceivable worlds in which “my love ages” or “my love dies” might hold. Therefore,

(2.39) $\llbracket \text{the moon disappears} - \text{KOSO, I stop longing for you} - \text{E} \rrbracket^{\text{Ci}} = 1$ iff

for some sphere S in \mathbb{S}_i which contains the closest p -world,

$\{w: w \in \cap \text{Conceivable}_{\text{Ci}} \& \llbracket \text{I stop longing for you} \rrbracket^w = 1\} \subseteq$

$\{w: w \in \cap \text{Conceivable}_{\text{Ci}} \& \llbracket \text{the moon disappear} \rrbracket^w = 1\}$ ③

Suppose there is no world in which the antecedent holds among conceivable worlds. Then, there is no conceivable world w (among all w in which

$\llbracket \text{my love ages. \& my love dies, etc.} \rrbracket^w = 1$), such that

$\llbracket \text{the moon disappear} \rrbracket^w = 1$.

Therefore,

$\{w: w \in \cap \text{Conceivable}_{\text{Ci}} \& \llbracket \text{the moon disappears} \rrbracket^w = 1\} = \emptyset$. ④

From ③ and ④,

$\{w: \llbracket \text{I stop longing for my love} \rrbracket^w = 1\} \subseteq \emptyset$.

$\{w: \llbracket \text{I stop longing for my love} \rrbracket^w = 1\} = \emptyset$.

Namely, there is no conceivable world w in which $\llbracket \text{I stop longing for my love} \rrbracket(w)$ is true.

In (39), none of the closest worlds in which “moon disappears” is true are considered conceivable, and therefore, the truth conditions of the counterfactual in (39) conclude that there is no conceivable world in which “I stop longing for my love” would hold. This semantics meets our intuition that rhetorical counterfactuals are not making any assertion as to what would be the

case. Thus, we have successfully derived the rhetorical reading of the counterfactual. However, the truth conditions of the counterfactuals in (34) do not render truth to the closest antecedent-world in the rhetorical counterfactual.

Now let us suppose that a closest world should be found (let us call this “closest p -world”) even among those (inconceivable) worlds in which some of the true propositions are not conceivable, and yet excluding those “absurd” worlds that we do not want to include in the accessible worlds. Let us suppose it is possible to posit such a closest p -world among those that are not conceivable. The inconceivable proposition p would be true at a world less similar to the actual world than any conceivable world. In such a world, the preconditions of the inconceivable proposition p include a true proposition such as “the speaker ceases to exist,” which would necessitate the truth of “the speaker stops longing for love”:

(2.40) Let us suppose w_j such that $\llbracket \text{Closest}(p) \rrbracket^{g,C} = \{w_j\}$ and $\llbracket p \rrbracket(w_j) = 1$.

$w_j \notin \{w \mid w \in \bigcap \text{Conceivable } C_i\}$.

$\llbracket \text{the moon disappears} \rrbracket(w_j) = 1$ implies the truth of preconditions such as

$\llbracket \text{my love dies} \rrbracket(w_j) = 1$ and

$\llbracket \text{I do not exist} \rrbracket(w_j) = 1$. _____ ③

③ pragmatically implies $\llbracket \text{I stop longing for you} \rrbracket(w_j) = 1$.

The truth of “I stop longing for you” follows naturally from “the moon disappears” by transitivity of entailment: the actuality of “the moon disappears” entails the preconditions such as “I do not exist,” and the truth of all the preconditions entails the truth of “I stop longing for you.” If the truth of consequent is entailed from the truth of the antecedent by the transitivity of

pragmatic entailment, the converse also holds: the falsity of “I stop longing for you” entails the falsity of “the moon disappears.” At the closest world where p is true, the truth of q is pragmatically compelled; and therefore there is no other condition distinct from p that satisfies q . Thus, the truth of p entails the truth of q only counterfactually; thus the counterfactuality of p cannot be canceled. Thus we assigned a truth value to a rhetorical reading of counterfactuals, using the truth conditions in (34) by defining the closest world.

To summarize, I have shown that the rhetorical reading of *koso* – e is derived from the truth conditions of p –*koso* q – e and the speaker’s assumption that p is an inconceivable proposition. By the definition of inconceivable proposition, p would not be true in any hypothetical situation that the speaker considers conceivable. From that assumption the speaker concludes that the consequent q would not be true in any of the conceivable situations. The only way to assign (non-vacuous) truth to the rhetorical counterfactual is to assume that there is a closest world that is not restricted by conceivability. Conceivability can be applied to the domain of possible worlds (a set of closest worlds) as an additional restriction. In the rhetorical reading, the closest world is outside the range of conceivable worlds. The rhetorical counterfactual would be rendered true when all possible worlds in which the consequent holds are those in which the antecedent holds. In other words, the emptiness of the worlds in which the antecedent holds pragmatically entails the emptiness of the worlds in which the consequent holds. I argued that this entailment relation holds by pragmatic relation between the antecedent and the consequent.

2.4.2 *Derivation of non-rhetorical reading*

Let us suppose that a counterfactual antecedent is felt to be conceivable by the speaker. Then, it follows that the closest world in which the antecedent holds is a member of the conceivable worlds. But what kind of world is the closest (best) world in the non-rhetorical reading?

This part of the implication is not clearly stated in the truth conditions of *koso -e*, as “actuality of q implies the truth of p ” does not say anything about the hypothetical situation in which p were the case. This is because we cannot pre-determine how strict p (the antecedent) is: under what condition p would be true in the speaker’s assumption in the context. For example, we cannot decide how strict the counterfactual antecedent such as “if the moon disappeared” is without the context. The speaker may be thinking of one of the conceivable situations where the moon would disappear behind the cloud, or one of the inconceivable situations in which the moon would become invisible or move away. Thus, as Lewis (1973: 13) described counterfactuals as being like “variably strict conditionals,” the counterfactual conditionals are vague because of their contextual dependency on how strict the counterfactual proposition is. The context uniquely determines under what conditions and circumstances the counterfactual would hold. The question is how strict the counterfactual antecedent is in the non-rhetorical reading, and how we can express the strictness of the antecedent of the counterfactual.

Let us suppose that the counterfactual conditional of “*p-koso, q-e*” is uttered in such a context in which the truth of p requires that there are preconditions⁴⁴ say, $\{r_1, r_2\}$, distinct from p , and the preconditions must be satisfied in conjunction with the antecedent p . For example, take Goodman’s (1947: 8) example: “(Only) if that match had been scratched, would it have lighted.” Goodman states that there are true statements such as “the match is well made,” “the match is dry,” “oxygen enough is present,” etc., that can be inferred from “that match is scratched.”

Now let us examine what the possible preconditions are that can be inferred from p in the context of “*p koso q-e*.” Let us observe (41) with the non-rhetorical reading:

⁴⁴ I have adopted the term from the concept of “(requisite) relevant conditions” from Goodman (1946:8). Goodman described, “...in asserting the counterfactual we commit ourselves to the actual truth of the statements describing the requisite relevant conditions. The first major problem is to define relevant conditions: to specify what sentences are meant to be taken in conjunction with an antecedent as a basis for inferring the consequent.”

(2.41) 死なばこそ 相見ずあらめ 生きてあらば 白髪児らに 生ひざらめやも

Sinaba **koso** api -mi -zu ara-me,

Die.COND KOSO recip.-see-NEG AUX.-CONJL.EXCL

iki-te araba sirokami kwora-ni opi-zara-me-yamo.

be.alive-GER. STAT.COND white.hair child.plural-DAT. grow-NEG-CONJL.EXCL.-RQ

(MYS 16: 3792)

‘If I died, I wouldn’t see my children, (but if I were alive, wouldn’t I see my children grow gray hair?)’

In the above example, *koso* is attached to the antecedent of the conditional and *-e* is attached to the end of the main clause as in (42):

(2.42) [[I die-KOSO], I would not see my children (grow gray hair)-E]

There are preconditions to be inferred from the condition, “if I died.” In this case, the speaker is assuming the counterfactual situation where he would unexpectedly die young; if he lived long and died, he would see his children grow their gray hair. Thus, we infer preconditions such as “I am not old,” or “my children are alive,” and so on. Let us represent the truth of non-rhetorical counterfactual in *koso -e* as in Figure 2, which depicts the case in which the non-rhetorical reading of *koso -e* is felt to be true:

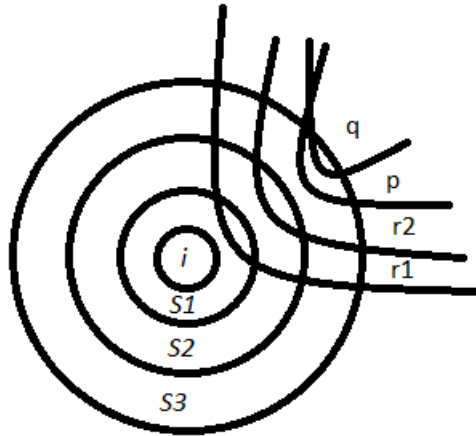


Figure 2.2. Non-rhetorical reading of “*p-koso q-e*”

The closest worlds in which the antecedent holds are those in which all of the preconditions, (in this case, $\{r_1, r_2\}$) are satisfied, just in the same manner as the sequence of the true antecedents are added to the common ground. In Figure 2, the sphere S_3 is the closest to i in which p as well as all the preconditions $\{r_1, r_2\}$ are satisfied. The closest worlds in which the speaker dies are limited to those worlds in which the speaker dies young, and his/her children are alive, so that he wouldn't see the children's gray hair grow. Let us strengthen the definition of the best/closest world to reflect the truths of preconditions of p as in (43).

- (2.43) $\llbracket \text{Closest}(p) \rrbracket^{g,C}$ is defined only if $g(w/j) \leq_{g(C_i)} w$, in which case $\llbracket \text{Closest}(p \wedge r_1 \wedge \dots \wedge r_n) \rrbracket^{g,C} = g(j)$ and $\llbracket p \rrbracket(w_j) = 1$. If defined,
 $\llbracket p - koso, q - e \rrbracket^{C_i} = 1$ iff for some sphere S in \mathbb{S}_i which contains the closest p -world,
 $q \rightarrow p$ (q only if p) holds among those accessible to the actual world w_i .

With the strengthened definition of “closest” in (43), the closest world (in which the antecedent p holds) is stricter than any other worlds in which other preconditions hold but p . Thus, at this closest world, the preconditions (or premises) that accompany the truth of p should be true. Thus, the strengthened definition of the closest world ensures that all the premises and the antecedent p are true. The truth conditions for [p-*koso* q-*e*] apply to this context. Then, the truth of the non-rhetorical reading can be stated as in (44).

(2.44) Suppose $\{w: w \in \cap \text{Conceivable}_{C_i} \ \& \ \llbracket p \rrbracket^w = 1\} \neq \emptyset$.

Let us define the closest world in which p is true at w_0 as $g(j)=v$. ⑤

From the definition of the closest in (42),

For any closest world w such that $w \in \{w: w \in \cap \text{Conceivable}_{C_i} \ \& \ \llbracket p \rrbracket^w = 1\}$,

$w \in \{w: w \in \cap \text{Conceivable}_{C_i} \ \& \ \llbracket p \rrbracket^w = 1 \ \& \ \llbracket r1 \ \& \ \dots \rrbracket^w = 1\}$ ⑥

From ⑤ and ⑥, $\llbracket r1 \ \& \ \dots \rrbracket(v) = 1$ and $\llbracket p \rrbracket(v) = 1$.

Then,

$\llbracket q \rrbracket(v) = 1$.

Assume that there is a closest world among the conceivable worlds. Then, (44) states that the truth of the consequent follows from the assumption that the antecedent is conceivable, and the truth conditions of *koso* –*e* with the strengthened definition of the closest as in (43). When p (the antecedent) is a conceivable proposition, “p-*koso* q-*e*” is true in the context where all the preconditions are presumably true, if and only if for all closest worlds in which p (the antecedent) is true, q (the consequent) would be true. In other words, the truth of q (the

consequent) implies the truth of p (the antecedent) and all the other preconditions for the truth of q .

To summarize, I have derived the non-rhetorical counterfactual reading from the truth conditions of *koso -e* and the assumption that the antecedent of the counterfactual is a conceivable proposition.

2.4.3 Possible sources of counterfactual interpretation in the *koso -e* construction

When we think about where the meaning of counterfactuality comes from in counterfactual constructions, the question cannot be easily answered in the case of the *koso -e* construction. Though the hypothetical conditional expressed in *-koso -e* expresses counterfactuality in a peculiar way, the morpheme *-koso -e* itself is not responsible for counterfactuality.

Iatridou (2000) argued that it is a cross-linguistic phenomenon that past tense morphemes are used to express counterfactuality. It is true with modern Japanese. In modern Japanese, the past-tense morpheme is used to express counterfactual conditionals (Ogihara 2006). Iatridou argued that counterfactuality is expressed by what is called a “fake” past tense morpheme, which does not contribute temporal anteriority, but simply exclusion of the world of utterance from a topic world (which corresponds to the worlds in which the proposition holds). However, the tense system was not yet developed in Old Japanese, and thus it is expected that Old Japanese used a particular modal *-masi* as well as other ways (including the conditionals in *-koso -e* discussed in this article) to express counterfactuality.

There remains a question as to what is responsible for counterfactuality in the *koso -e* construction. Yet there are certain things that seem to contribute counterfactuality. One is the realis/irrealis distinction of *-ba* clauses, which separates subjunctive conditionals from

factual/indicative type conditionals⁴⁵. The verbal conjugation, *a*-stem, which indicates a presence of a following negative morpheme, is used to mark irrealis form of *-ba* clauses, as in *-aba* within the conditional clause in (45) (repeated from (1b) above), or to connect to a conjectural modal that follows a verb as in *V-a-mu*, shown in the temporal adverbial clause in (46) (repeated from (1a)):

(2.45) ...taye-te **araba** **koso**, imasi-to are-to apu-koto yama-me. (=1b)
 cease-GER. exist.COND KOSO, you-and I-and meet-to stop-CONJL.EXCL
 ‘Only if (heaven and earth) pass away, would you and I stop meeting each other.’

(2.46) ...tukwi no use-**na-mu** **pi koso**, a ga kwopwi yama-me. (=1c)
 moon GEN. disappear-PERF.-CONJL.ADN day KOSO I GEN longing stop-CONJL.EXCL
 ‘On the day when moon disappeared (from the everlasting nightly sky), my feeling for you would stop.’

The second factor that is relevant to counterfactuality of *koso -e* is the verbal conjugation in the main clause *-e*, which could be used either in the concessive use as in (46) or non-concessive use as in (47) below. This morpheme seems to be related to polarity and/or assertion of the main clause, and the counterfactual meaning only comes when this morpheme is in the concessive use, which is translated as “but.”

⁴⁵ Not all the rhetorical counterfactuals are expressed by *-ba* clauses, as in (1c). I will discuss the morphological variations of the antecedent forms that express (counterfactual) conditionals in Chapter 4.

(2.47) ...Wa ga inoti ik-yeru pi ni **koso**, mi-maku pori sur-e.

I GEN life live-STAT.ADN day on KOSO, see-CONJL.NMNL want.INF do-EXCL

(MYS 7: 2592)

‘I would like to see my dear while I am alive.’

(Suga 1991: Part II, 282)

The third factor is the type of proposition used in the rhetorical counterfactuals: inconceivable propositions. As we have discussed, the counterfactuality of inconceivable propositions is not cancelable, thus counterfactuality is a pragmatic effect of inconceivability or implausibility. In this chapter, we have discussed the pragmatics of inconceivability for the rhetorical reading of counterfactuals. In Chapter 3, we will discuss the morphological distinction between reals and irrealis, and how this distinction is relevant to counterfactuality. In Chapter 4, we will discuss how the pragmatic effect of implausibility/inconceivability is relevant to counterfactuality. The distinction of concessive/simple emphatic uses of *-e* and the semantic effect of the concessive use of *-e* has to be left for future research.

2.5 CONCLUSION

I have shown that “rhetorical counterfactuals” has a distinct implication from standard counterfactuals. A standard counterfactual interpretation implicates a possibility that the consequent would be true if the antecedent condition held among possible worlds most similar to the actual world, while a rhetorical counterfactual implicates the negation of the consequent. The problem with adopting Lewis’s truth conditions of counterfactuals is that, if taken literally, those truth conditions would render the rhetorical counterfactual to be vacuously true as the

rhetorical counterfactuals have an antecedent that the speaker considers to be “inconceivable.” I have argued that i) both rhetorical and non-rhetorical counterfactual readings in the *koso –e* construction have the semantics equivalent to *only-if* counterfactuals and ii) the context determines whether a counterfactual has the non-rhetorical or the rhetorical reading of counterfactuals. The standard interpretation of the counterfactual obtains when the antecedent of the counterfactual is a conceivable proposition – the proposition is entailed from what the speaker considers possible. The rhetorical reading results when the speaker considers that there is no hypothetical situation in which the antecedent of the counterfactual holds. I showed that the counterfactual antecedent of rhetorical counterfactuals is stricter than that of non-rhetorical counterfactuals, in the view of possible world semantics based on comparative similarity to the actual world.

Chapter 3. NON-CONDITIONAL INTERPRETATIONS OF *KOSO –E*

In this chapter, I focus on a different interpretation produced by the *koso –e* construction: when *koso* is suffixed to a certain type of subordinate clause, the *koso* phrase offers an explanation/circumstance/reason to the proposition in the main clause. This *because*-like interpretation of *koso –e* is distinguished from the subjunctive interpretation of *koso –e* by two morphological properties: i) having the realis form of *–ba* (roughly meaning “when/whenever”) represented by *–eba*⁴⁶, and ii) co-occurrence with an epistemic/evidential type of modal in the main clause. I argue that the *because*-like *koso –e* is disambiguated from the counterfactual *koso –e* by the modal context in which it occurs.

⁴⁶ The glossing of a verbal form followed by *–eba* is termed PROV for “provisional,” while a verbal form followed by *–aba* is COND for “conditional,” following Frellesvig (2010).

3.1 NON-CONDITIONAL *KOSO -E*

It is interesting to observe that there is “another type of *koso -e*,” which can give rise to non-conditional interpretations. We will consider three sets of examples. All of the examples yield causation interpretations; however, three sets of examples have slightly different implications.

First, consider (1a)-(1c):

(3.1) a. 後瀬山のちも逢わむと思へこそ死ぬべきものを今日までも生けれ

Notise-yama noti-mo apa-mu to omope(-ba) koso,

Nochise-Mountain later-ETOP meet-CONJL.CNCL COMP think.PROV KOSO,

sinu-beki monowo kepu made mo ik-yere.

die-should.ADN though today until ETOP. live-STAT.EXCL

(MYS 4: 739)

Lit: ‘I thought I would see you again, **therefore**, I have lived until today.’

(Based on Modern Japanese translation)

‘Only the hope that later we shall meet again like Nochise Mountain has kept me alive until today.’

(Levy 1981)

b. 夕さらば君に逢はむと思へこそ日の暮るらくもうれしかりけれ

Yupu saraba kimi-ni apa-mu to omope(-ba) koso,

Evening end.COND you-DAT meet-CONJL.CONCL COMP think.PROV KOSO,

pi no kururaku mo uresikari-kyere
 sun GEN settle ETOP be.glad-MPAST.EXCL

(MYS 12: 2922)

Lit: ‘**Only because** I thought I could see you when evening came, I was happy to see the sun set.’

(Based on Modern Japanese translation)

‘**As** I hoped to see my dear man when evening came, I felt so happy when the sun went down and darkness fell all around.’

(Adapted from Suga 1991, II: 352)

In these examples, the speaker asserts that the truth of the consequent is caused/grounded by the truth of the antecedent⁴⁷. In (1a), for example, the speaker still lives because of her thought of seeing her love again. And yet the intention of the poem in (1a) lies in communicating the speaker’s frustration that her hope to see the addressee is not met in the context, as the addressee never comes to see her. Similar reasoning is observed in (1b). The speaker expresses that there was a past time when he/she was happy because of his/her thought of seeing his/her love in the evening, but implies that the speaker is not seeing his/her love. These poems thus express the actualization of the antecedent and the consequent; but also the speaker’s skepticism toward the truth of the consequent, as the truth of the antecedent is delimited to the past time.

⁴⁷ In these examples, the realis form of *-ba* (*-eba*) is used in the subordinate adverbial clauses. I will discuss this morphological attribute of these non-conditional *koso -e* in 3.2.

Now let us consider a second set of examples. These are examples of *because-like koso* –e with an implication that the antecedent and the consequent hold true in the actual world. The following examples are found in the same literature:

(3.2) a. 天地も依りてあれこそ...檜のつまでを...八十字治川に...浮かべ流せれ

Ametuti -mo yorite are(-ba) koso, ...

gods.in.earth.and.heaven-ETOP subdue.GER be.PROV KOSO

pwi no tumade-wo ... Yaso-Uzi-gapa-ni ... ukabe-nagasere.

cypress GEN log-ACC Yaso-Uzi-river-LOC float -flow.CAUS.EXCL

(MYS 1: 50)

“...even heaven and earth have drawn together to serve her; ...so men took timber of cypress, split thick pines, floated it down the Uji River, ...”

(Adapted from Levy 1981)

b. 明日香川 七瀬の淀に住む鳥も心あれこそ波立てざらめ

Asuka-gapa nanase-no yodo-ni sumu tori-mo kokoro are(-ba) koso,

Asuka-river shore-GEN waterside-LOC live.ADN birds-ETOP. mind have.PROV KOSO

nami tate-zarame.⁴⁸

waves stir-NEG.CONJL.EXCL

(MYS 7: 1366)

Lit: ‘Even birds at the shores of Asuka River don’t make waves **only because** they have thoughtful minds.’

‘Even the bird living on the seven calm waters of the Asuka does not raise waves or ripples, **for** she holds her heart within.’

(Suga 1991, I: 489)

‘The waterfowl that live upon the seven-rapid pools make no noise and hide themselves.’

(Honda 1967: 111)

In (2a), the speaker is looking at the cypress logs flowing down the Yaso-Uzi river, and imagining that such an event is effected by the existence of the emperor, whom even gods of earth and heaven give power to and glorify. In (2b), the speaker observes that the river is calm and imagines that the calmness is attributed to the thoughtfulness of the birds, which dare not make waves. In other words, the poem also implies that the birds could have made waves. The difference between the examples in (1) and (2) is that the poems in (2) imply that the speaker commits herself/himself to the actual truth of the antecedent and thus implicates that it still holds true. Thus, (3a-b) are entailed by uttering (2a-b), respectively:

⁴⁸ There is no clear morphological distinction between singular and plural in Japanese noun phrases. Honda translates *tori* as “the waterfowl” which is considered a plural noun in English. Suga translates *tori* as “the bird” which is a singular noun. The expression *tori* is a generic term for bird(s) and it may be considered as a bare plural form in English, which yields a generic reading, such as “Birds living on the Asuka River have a thoughtful mind.” (This translation issue has been pointed out by Laurel Preston through personal communication.)

- (3.3) a. The gods in heaven and earth serve emperor, God of Sun.
 b. The birds living at Asuka River have thoughtful minds.

For a third set of examples, let us now turn to the *because*-like *koso* *-e*, which is categorized under a “simple emphatic” use, according to Ohno’s (1993) diachronic classification of the uses of *koso* *-e*⁴⁹. According to Ohno, the truth of the antecedent and the consequent are positively affirmed; in Quinn’s terms, the antecedent functions as a “presupposed” infinitive, introducing a presupposed content from the previous context. Examples are shown in (4):

- (3.4) a. 思ひ出づる ときはの山の岩つつじ いはねばこそ あれ恋しきものを

Omowizuru tokiwa no yama no iwa.tutuzi iwa-neba **koso**,

Remember Tokiwa-GEN mountain-GEN rock.azalea say-NEG.PROV KOSO

are koisiki monowo⁵⁰

Alas! lonely.ADN though

(*Kokin* 11: 495)

Lit: ‘I am like a wild azalea on Tokiwa mountain when I remember (you).

Though/Because I don’t say a thing, how much I miss you.’

⁴⁹ According to Ohno, in the literature in the transition from OJ to MJ, we start to find increasing numbers of instances of *koso* *-e* that put emphasis on the affirmation of the consequent.

⁵⁰ There is no *-e* ending here; there were no exclamatory forms for adjectives in OJ. As a result, the adnominal form is used here, which is connected to the concessive conjunctive *monowo* “although.” (Morphologically, *monowo* consists of Nominal *mono* ‘thing’ and a case particle *wo*.) The resultant meaning is equivalent to the *-e* ending in a verb.

(Based on Modern Japanese translation)

‘Like the azalea on the e’ergreen mountain lonely and uncomplaining, I yearn for my love.’

(Honda 1970: 144)

b. 散ればこそいとど桜はめでたけれ

Tire-**ba** **koso** itodo sakura-wa medeta-kere

fall-PROV KOSO even.more cherry.blossom-TOP. be.nice-ACOP-EXCL

(*Ise monogatari: Nagisa no In* 82)

‘It’s **because** they fall, the cherry blossoms seem to us especially precious. (What in this sad world of ours lasts for any time at all?)’

(Mostow and Tyler 2010: 176)

In (4a), the speaker is emphasizing the consequent (i.e. how lonely he/she is) by stating the presupposed truth of the antecedent. In (4b), the speaker is emphasizing the fact that the cherry blossom is precious, by referring to the property of the cherry blossom (i.e. falling) as the cause. In these poems, the speaker presupposes the reason clause to be true.

In the examples of the *koso* –*e* construction presented earlier in (1), (2) and (4), where the *koso* clause is understood as a reason clause, the actuality of the proposition in the reason clause is implicated, as shown in (5). The examples in (5) contrast with the examples in (6), where the

koso clause is understood as a conditional clause, and the actuality of the proposition in the reason clause is not implicated.

(3.5) a. Because I thought that I would see you again, I have lived till today.

⇒ I thought that I would see you again.

(=(1a), *MYS* 739)

b. Even birds at the shores of Asuka River don't make waves **only because** they have thoughtful minds.

⇒ birds at the shores of Asuka River have thoughtful minds.

(=(2b), *MYS* 1366)

c. Because they eventually fall, cherry blossoms are even more precious.

⇒ Cherry blossoms eventually fall.

(=(4b), *Ise monogatari* 82)

(3.6) a. Only on the day when Shikama river dries up, my love (for you) will end.

⇒ Shikama river (will) dry up.

(=(12a), *MYS* 3605)

b. On **the very** day when the moon that shines in the broad heavens ceases to be, my affection would have come to cessation.

⇒ The moon ceases to exist.

(=(1a), *MYS* 3004)

c. **If** I had my dear, I **could** lie and then slumber pillowing our heads upon the same reed-pillow, and sparing the advance of night

⇒ I (will) have my wife.

(=(2b), *MYS* 1414)

To summarize, I have shown examples of *koso –e* in the form “p-*koso* q-*e*,” which are best understood as “because p, q.” There are slight differences in the context in which these *koso –e* are used felicitously. In (4a-c), the truth of the antecedent is presupposed; the truth of the consequent is emphasized by the truth of the antecedent⁵¹. In (1a-c) and (2a-c), the truth of the antecedent is not presupposed. When the consequent contains a past tense in (1a-c), there is a negative implication that the consequent was true when the antecedent was true, but the consequent is no longer true at the utterance time. In (2a-c), the consequent is in the present tense, and there is an implication that the truth of the consequent solely depends on the truth of the antecedent. For all the examples in (1), (2) and (4), there is an actuality entailment for the antecedent in the non-conditional interpretation of the *koso –e* construction. I argued that the actuality entailment is the characteristic of *because*-like *koso –e* that distinguishes it from a counterfactual-like interpretation of *koso –e*.

⁵¹ When the truth of the antecedent is presupposed, the truth of the consequent holds true whether or not the antecedent holds true. When the truth of the antecedent is not presupposed, the truth of the consequent holds only as a result of the actualization of the antecedent.

3.2 INDICATIVE/SUBJUNCTIVE CONDITIONAL FORMS AND INTERPRETATIONS

So far we have seen that there are two interpretations of *(-ba) koso -e*: counterfactual and ‘because.’ In this section, I examine morphological differences between these two interpretations. First, there is a subjunctive/indicative distinction in *-ba* clauses, and second, there is a demarcation of modal verbs (conjunctural vs. epistemic/evidential modals) in the main clause. The subjunctive conditional form *-aba* seems to be associated with the “counterfactual” interpretation, while the indicative conditional clause *-eba* with the “because” interpretation. I argue that in the modal context, a subjunctive *-aba* clause appears as an argument of the conjunctural modal, while an indicative *-eba* clause appears as an argument of the epistemic/evidential modals. I adopt and extend the analysis of modals by Kratzer (1977, 1981) and von Stechow (1994, 2001) and argue that subjunctive conditional clauses are restrictors of conjunctural modals, and indicative clauses are restrictor of epistemic/evidential type modals.

3.2.1 *Indicative conditional forms*

In Old Japanese, there are two morphological forms for conditional clauses: *-eba* for the indicative conditional form, and *-aba* for the subjunctive conditional form⁵². The *e*-stem (*Izen*⁵³) in *-eba* is associated with the notion of “realis” and the *a*-stem (*Mizen*) in *-aba* is related to the notion of “irrealis.” In the following subsections, I will show the range of meanings that the

⁵² The form *-aba* is not used in Modern Japanese. During the course of time, the indicative conditional form *-eba* took over the subjunctive conditional form *-aba*. However, the meaning of *-eba* in Modern Japanese is not causal, but indicative/subjunctive conditional. The reason clause is no longer expressed by *-ba*, but by the sentential connective *-no-de* ‘because/therefore,’ or concessive *-no-ni* ‘even though.’

⁵³ Ohno (1993) pointed out that the bare use of *e*-stem (*Izen*) could function as a subordinator in OJ, forming a subordinate clause on its own. Quinn (2015) states that the subordinate clause by the use of *Izen* functions to “ground” the information as an introduction to the main assertion stated in the main clause, by referring to conditions, time, circumstances, etc. These inherent meaning to the *e*-stem (or subordination) is also reflected in the use of *e*-stem with sentence connective particles such as *-ba* or *-do*. Thus, *-e* followed by *-ba* formed the provisional subordinator, *-eba*; *-e* followed by the concessive *-do* formed the concessive subordinator *-edo*.

indicative conditional form *-eba* can express, and a range of meanings that the subjunctive conditional form *-aba* can express.

The indicative conditional form can express a range of meanings including *when/whenever*, temporal sequence *and then*, a *because* reading, and a concessive *although* reading⁵⁴. The examples in (7) through (9) illustrate these readings. In (7a-b), we see the *when/whenever* reading; in (8) temporal series meaning *and then*; a *because* reading in (9).

In (7), *-eba* is used to indicate habitual conditions/events that precede the event described in the main clause.

<Examples of *e-ba* as “whenever” or “when”>

(3.7) a. 瓜食めば 子ども思ほゆ 栗食めば まして偲はゆ ...

Uri pameba, kwodomo omopoyu;

Gourd eat.PROV, child.plural think.of.CONCL;

kwuri pameba, masite sinopayu

chestnuts eat.PROV, more remember.CONCL

(MYS 5: 802)

‘**When** I eat a melon, I think of my children; **when** I eat chestnuts, I long for them even more.’
(Levy 1981)

⁵⁴ I am not going into the concessive clause here. The concessive *-eba* in OJ mostly suffixed the negative predicate in the form *-neba*, according to *Kokugo daijiten*.

b. 家にあれば 筥に盛る 飯を 草枕 旅にしあれば 椎の葉に盛る

Ipye ni areba, kwe-ni moru yipi-wo kusamakura

Home-LOC be.PROV bowl-DAT serve.ADN rice-ACC grass.pillow

tabi-ni-si areba siywi no pa ni moru.

travel-COP.INF-EMPH be.PROV vertebra GEN leave DAT serve.CONCL

(MYS 2: 142)

‘**Where** I at home, **then I would** heap my rice in a lunch box. Since I journey, I heap my food into an oak leaf.’ (Adapted from Levy 1981)

In (8), *-eba* indicates the temporal sequence of events, though not of a habitual/genetic nature in this case. In the form of *p-eba, q-*, it is a general rule that the event represented by *p* must precede the event represented by *q*.

< Examples of *e-ba* as “and then” or “followed by” >

(3.8) a. 天離る 鄙の長道ゆ 恋ひ来れば 明石の門より 大和島見ゆ

Amazakaru pina no nagati yu kwopi kureba,

Far.away.ADN country GEN long.distance ABL long.for.INF come.PROV,

Akasi-no to ywori yamato sima mi-yu.

Akasi GEN harbor from Yamato island see-PASS.CONCL

(MYS 3: 255)

‘Over a long road, from barbarian lands, at the far reach of the heavens, I have come, yearning. **And now** the Straits of Akashi open on the island Yamato.’

(Levy 1981)

b. 田子の浦ゆ うち出でてみれば 真白にそ 富士の高嶺に雪は降りける

Tago-no ura yu utwide-te mireba,

Tago GEN beach ABL came.out-GER see.PROV

masirwo ni so puji no takane ni yuki-pa puri-kyeru.

pure.white COP.INF SO (Mt.) Fuji GEN hights DAT snow-TOP fall-MPAST.ADN

(MYS 3: 318)

‘**Coming our from** Tago’s nestled cove, I gaze: white, pure white- the snow has fallen on Fuji’s lofty peak.’

(Levy 1981)

In (9), unlike the above examples, the temporal order is not at issue. The two events are connected based on the speaker’s knowledge that the truth of the consequent is based on the truth of the antecedent.

< Examples of *e-ba* as “because” >

(3.9) 吹くからに秋の草木のしほるればむべ山風を嵐といふらむ

Fuku karani aki no kusaki-no siorureba,

Blow as.soon.as autumn GEN grass.and.tree GEN wither.PROV

mube yamakaze wo arasi to iu-ramu.

therefore mountain.wind ACC storm COMP call-PCONJL.CONCL

(*Kokin* 5: 249)

‘**Because** autumn leaf and grass both wither as soon as “mountain wind” storms, people might be referring to it as *storm*.’

(Adapted from Honda 1970: 80)

On the other hand, when the realis conditional expressed by the *e*-stem is embedded in *koso* –*e*, a causal interpretation is elicited; a temporal sequence reading seen in (7) and (8) is not elicited. Observe (10a-b), in which –*eba koso* is used:

(3.10) a. 散ればこそ いとどさくらはめでたけれ

Tire-ba koso, itodo sakura-wa medeta-kere

fall-PROV KOSO even.more cherry.blossom-TOP. be.nice-ACOP.EXCL

(*Ise monogatari* 82)

‘**It is precisely because** they fall, cherry blossoms seem to us especially precious.’

(Adapted from Mostow and Tyler 2010: 176)

b. 秋の露 色々ことに 置けばこそ 山の木の葉のちくさなるらめ

Aki no tuyu iroiro kotoni okeba koso,

Autumn GEN dew colors variegated be.placed.PROV KOSO,

Yama no konofa no tikusa naru-rame

mountain GEN tree.leaves GEN various.colors COP.CONCL-PCONJL.EXCL

(*Kokin* 5: 259)

‘Maybe the autumn dew is of variegated hue. **That is why** the tree is colored differently.’

(Honda 1970: 82)

The temporal sequence reading is not elicited here, as the temporal sequence reading does not give us the correct meaning. The speaker’s intention of the poem is that cherry blossoms are admirable based on the speaker’s knowledge that cherry blossoms will fall after bloom, but not whenever or when they fall.

To summarize, the *because* part of the meaning of *because*-like *koso* *-e* comes from the indicative conditional form, *-eba*. However, *-eba koso* has much narrower range of meaning than *-eba*. In fact, *-eba koso* only express causation, while *-eba* allows many more meanings, such as ‘whenever’ and temporal sequence.

3.2.2 *Subjunctive conditional forms*

Now let us see examples of the subjunctive conditional form suffixed by *-aba*⁵⁵ in (11). In (11), the conditionals express a meaning close to *whenever/in any circumstance in which*, but do not express temporal sequence such as *and then* or *because*.

<Examples of *a-ba* as a subjunctive conditional>

(3.11) a. 家ならば妹が手まかむ草枕 旅に臥やせるこの旅人あはれ

Ipye naraba, imwo ga te maka-mu kusa-makura

Home be.COND, wife GEN arm wrap-CONJL.CONCL grass-pillow

tabi ni koyas-yeru kono tabito apare

journey DAT fall.down-STAT this traveler poor

(MYS 3: 415)

‘If he were home, he would be pillowed in his wife’s arms, but here on a journey he lies with grass for pillow- traveler, alas!’

(Levy 1981)

b. この世にし楽しくあらば来む世には虫に鳥にもなれはなりなむ

Kono yo ni si, tanosiku araba, ko-mu yo ni pa

this world LOC even be.fun.INF be.COND, come-CONJL.ADN world LOC TOP

⁵⁵ In OJ, the verbal stem *-a* is used in the derived verbal stem preceding *-ba* as in V-(*a*)*ba*, before the modal verbs as in -(*a*)*mu* “will/would” and -(*a*)*masi* “would/would have”; and before negation as in -(*a*)*zu*, -(*a*)*nu*, and -(*a*)*zi*.

musi ni tori ni mo ware pa nari -na -**mu**

bug COP.INF bird COP.INF ETOP I TOP become-PERF-CONJL.CONCL

(MYS 3: 348)

‘If I could but be happy in this life, what should I care if in the next I became a bird or a worm!’

(*Nippon Gagujutsu Shinkokai translation 1965*)

The meaning represented by the irrealis mode *-aba* is that the *-ba* clause is hypothetical. While the realis mode expressed by the *e*-stem on the *-ba* clause contributed to the clause having a sense of factivity (see example (7)-(9) above), the irrealis mode on the *-ba* clause here gives rise to a subjunctive/hypothetical meaning.

However, this subjunctive conditional becomes more like a “counterfactual” when some element in the conditional clause is focused. This can be observed by the use of *-sae* ‘even’ suffixed to the vP in the subjunctive clause. The following examples in (12) show this effect (though the examples are constructed based on Modern Japanese):

(3.12) a. Ie-ni i-sae **sureba**, tsuma-no ude-wo makura to suru daroo ni⁵⁶.

Home-at be-even do.COND, wife-GEN arm-ACC pillow COMP make COP.VOL though

‘If he were home, he would be pillowed in his wife’s arms.’

⁵⁶ The Modern Japanese translations in (3), (4) and (5) are adapted from those cited from *Shinpen Nihon Koten Bungaku Zenshu*.

b. Kono yo de (sake-wo nonde) tanosiku ari-sae sureba,
 this world in (sake-ACC drink.INF) happily be-even do.COND,

ano yo de wa mushi ni demo tori ni demo natte simawou.
 that world in TOP bug to even bird to even become.INF will.VOL

‘If I could but be happy in this life, I would become even a bird or a worm in the next world.’

Similarly, the subjunctive conditional expressed by *-aba* turns into a counterfactual when *-aba* clause is suffixed with the focus particle *koso* in the *koso -e* construction. The subjunctive conditional form *-aba* with *koso -e* gives rise to the rhetorical counterfactual in (13a) and the non-rhetorical counterfactual in (13b).

(3.13) a. 吾が思ふ妻 ありと言はばこそよ 家にも行かめ 国をも偲はめ

A ga omopu tuma ari to ipaba koso yo

I GEN think.of.ADN wife be COMP say.COND KOSO EMPH

ipye ni mo yuka-me kuni wo mo sinwopa-me

home LOC ETOP go-CONJL.EXCL country ACC ETOP yearn.for CONJL.EXCL

(*Kojiki* 89⁵⁷)

⁵⁷ Similar text is found in MYS 3293.

‘**Only if** I hear that she is there, do I wish to go home, do I yearn for my country.’

(English translation by Philippi⁵⁸)

b. 我が背子に直に逢はばこそ名は立ため言の通ひになにかそこ故

Wa ga seko ni tadani apaba koso, na pa tata-me,

I GEN master DAT directly meet.COND KOSO name TOP be.known-CONJL.EXCL

koto no kayopi ni nani ka soko yuwe.

words GEN exchange DAT what Q such.thing therefore

(MYS 11: 2524)

‘**Had** I met my man face to face and directly, our names might be known; but why should I be ill-rumored merely because I sent him word?’

(Suga 1991: Vol. II, 273)

The emphasis placed by *koso* –*e* makes the subjunctive conditional more like “counterfactual.” The rhetorical counterfactual basically asserts the negation of the consequent, as we saw in Chapter 2. (13a) above asserts that the speaker would never go home: it implies that there will be no possibility that the speaker will go home. In (13b), the subjunctive conditional is used in such a way that there would never be such a possibility, and this implication renders the subjunctive “counterfactual” interpretation.

⁵⁸ Cited from *The Oxford Corpus of Old Japanese*, edited by Frellesvig, B., Horn, S. W., Russell, K. L. and Sells, P.

To summarize, I have shown that the subjunctive/indicative conjugation in the *-ba* clause is one of the morphological differences that indicate whether the *koso -e* construction receives a (counterfactual) conditional or a *because*-like interpretation. The *because*-like interpretation of *koso -e* can be traced back to the realis conditional form *-eba*, which can express a range of meanings such as temporal and causal meanings. The conditional meaning of the *koso -e* construction comes from the irrealis conditional form *-aba*, which expresses a subjunctive/hypothetical conditional meaning. The interesting fact is that these two types of conditionals *-eba* and *-aba*, used in the *koso -e* construction, seem to express causation. The indicative conditional *-eba* with *koso* is only construed as a reason clause; and the subjunctive conditional form *-aba* with *koso* is construed as a counterfactual conditional with a rhetorical (or non-rhetorical) reading. Table 1 summarizes the available meanings of *-ba* clauses by subjunctive and indicative forms, and by with or without *koso -e*.

Table 3.1. Available meanings of *-ba* clauses with/without *koso -e*

	<i>(a)ba</i> : subjunctive conditional form	<i>-(e)ba</i> : indicative conditional form
Without <i>koso -e</i>	If it were the case that	Whenever/if And then Because/although
With <i>koso -e</i>	(Only) if it were the case that (rhetorical/non-rhetorical counterfactual)	(Only) because Since

3.2.3 Conjectural vs. epistemic/evidential modals

The other finding in the morphological patterns that distinguish conditional and *because*-like interpretations in the *koso -e* construction is that the (counterfactual) conditional interpretation of the *koso -e* construction appears exclusively with conjectural/subjunctive modals such as *-m(u)* ‘would/will’ or *-masi* ‘would’ in the main clause. On the other hand, the *because*-like

interpretation always involves evidential/epistemic modals *-ram-* “must/may”, or *-k(y)em-* “must have/may have” and all other non-modal verbs. The two morphological differences, realis/irrealis conjugations on the *-ba* clause and the type of a modal in the main clause, are schematically illustrated as follows:

(3.14) a. Conditional interpretation in *koso -e*

[... V-**aba**] koso, [... V-**Conjectural Modal**]-e

b. *Because*-like interpretation in *koso -e*

[... V-**eba**] koso, [... V-**Epistemic/evidential Modal**]-e

In (14a-b), V stands for a verb. The general pattern in this construction is that the irrealis form *-aba* co-occurs with a conjectural modal *-mu* or a subjunctive modal *masi*, and receives a conditional interpretation; the realis form *-eba* co-occurs with an epistemic/evidential modal such as *-ramu* or *-kyemu* or *-kyeri* and receives a *because*-like interpretation.

Kratzer (1977) argued that a modal has three components: relational modal, modal restriction, and modal scope. For example, the English sentence “Hillary must win the race” can be divided into the three components: the relational modal, *must*, the restriction from what the speaker knows in the context, and the scope of the modal, *Hillary wins the race*.

(3.15) Hillary must win the race.

[**must**]_{relational modal} [what x knows in w]_{restriction} [Hillary wins the race]_{scope}

The restriction is determined by the flavor of the modal: whether the modal is used as an epistemic, deontic, bouletic, circumstantial, etc. in the context. When *must* is used as an epistemic, the modal base consists of all the propositions that the speaker knows in the context. When *must* is used as a deontic modal, the modal base consists of the propositions that the speaker considers to be morally correct in the context. Considering all the possible worlds in which all what the speaker knows (or all what the speaker believes to be morally correct) in the context are true, the proposition “Hillary must win the race” is true if and only if the proposition “Hillary wins the race” turns out to be true in all those possible worlds. Thus, the type of the modal determines what types of possible worlds we take into consideration as a domain source for the modal. Thus, I am going to argue that the type of modal in the main clause of *koso –e* construction plays an important role to decide on the overall (conditional or *because-like*) interpretation of the sentence.

Before I will show this pattern in the examples, let us see the typology of modal verbs in Old Japanese given by Tsukahara (1979). I am going to show that conjectural modals are clearly distinguished from epistemic/evidential modals in his categorization of modals. According to Tsukahara’s distinction, conjectural modals are classified under irrealis⁵⁹; and epistemic/evidential modals are classified under realis. Tsukahara categorized modal verbs into two groups, realis and irrealis, depending on whether the proposition in the modal scope expresses a deictic tense⁶⁰ or not⁶¹. Deictic tense means a temporal location of the event/state relative to the speech time. In Old Japanese, tense is expressed by a modal verb or a morpheme

⁵⁹ I have translated Tsukahara’s notion of the modals that speculate on *jijitsu* ‘fact’ as ‘realis.’ Modals of realis category speculate on certainty of the factual realization of events. I translate the modals that speculate on *hi-jijitu* ‘non-fact’ as ‘irrealis,’ which refer to the modals that speculate on the hypothetical/non-factual realization of events.

⁶⁰ Frellesvig (2010: 3.2.4.9.1) states that there are two auxiliaries *–(i)ki* and *–(i)kyer-*, which both refer to “deictic past time.” In his system, *–(i)ki* is glossed as “simple past” and *–kyeri* as “modal past.”

⁶¹ There is also a distinction to the stem forms to which these modals attach. The realis modals are attached to either conclusive or infinitival forms, and the irrealis modals are attached to the negative form (*a*-stem).

in a modal verb, which express a deictic tense through the speaker's judgment on certainty of the present/past event. Tsukahara's classification of modal verbs in Old Japanese, is shown in the table 1, with English glosses adopted from Frellesvig (2010):

Table 3.2. Classification of modal verbs in OJ (Tsukahara 1979)

Realis	Confirmed	<i>-rasi</i> "presumptive" <i>-kyerasi</i> ⇒ <i>-kyeru + rasi</i>	
	Not confirmed (Epistemic modal)	<i>-ram(u)</i> "present conjectural" <i>-kyem(u)/kem(u)</i> ⇒ <i>-ki + (a)-m(u)</i> "past conjectural"	
Irrealis	Expected	<i>-besi</i> "necessitive"	<i>-(a)-masizi</i> "negative potential (probably /surely cannot)"
	Future	<i>(a)-m(u)</i> "conjectural"	<i>-(a)-zi</i> "negative conjectural (will/ would not)"
	Counterfactual	<i>(a)-masi</i> "subjunctive"	

Observe that modals of the realis category such as epistemic/evidential modals *-ram(u)* and *-kyem(u)*, *-rasi*, etc. express the notion of tense through the present/past morphological distinction between *-ru* 'present' and *-ki* 'past.' *-Ru* is a conclusive conjugation of a verb stem, and *-ki* is a modal verb that expresses a level of certainty of the actualized event through the speaker's recollection of the event. Modals of the irrealis category do not express tense. Tsukahara states that *-m(u)* and *-masi* do not refer to specific times of the propositions, and thus the time referred to by the proposition has to be inferred from the context. *-M(u)* and its negative form *-zi* are

categorized under the conjectural modal, and *-masi* is classed under subjunctive modal. The necessitive modal *-besi* expresses the expected event, and the negative potential modal *-masizi* expresses expected but not actualized content. These modals are clearly distinguished from the realis type modals.

In the following examples of *koso -e* constructions, the distinctions identified in Table 1 among the modal verbs seem to be distinguishing the counterfactual interpretation from the because interpretation. The because interpretation co-occurs with the realis modals such as *-ram-* and *-k(y)em-* as in (16) and (17), and with the other verbs including perfective *-tari* in (18). In (16)-(17), the epistemic/evidential modals express a speaker's judgment or belief about causation of the present/past event.

(3.16) a. 龍田姫 手向くる神のあればこそ秋の木の葉の幣と散るらめ

Tatuta fime tamukuru kami no areba koso,
Tatsuta princess offer.ADN gods GEN there.is.PROV KOSO,

aki no konofa no nusa-to tiru-**rame**
autumn GEN leaves GEN blessing-as fall-PRES.CONJL.EXCL

(*Kokin* 5: 298)

Lit: 'The autumn leaves **must** fall as a blessing **because** there are travel gods to whom Princess Tatsuta makes offerings (when she leaves).'

(Based on Modern Japanese translation)

‘Lady Autumn, wishing to make offerings to the God of Travel brings crimson leaves.’

(Honda 1970: 92)

b. この牛は用のあればこそただ来るらめ

Kono usi wa yō no areba **koso**, tada kuru-**rame**.

This cow TOP demand GEN exist.PROV KOSO, many.times come-PRES.CONJL.EXCL

(*Syasekishu* 9-18)

Lit: ‘This cow **must** come back **just because** she needs to.’

(Based on Modern Japanese translation)

In (16a), the speaker is providing a reason why the autumn leaves are falling. The proposition in the main clause is described based on a fact (that is, that autumn leaves are falling). The speaker is speculating on a reason why autumn leaves are falling, and claims that the cause must be “Princess Tatsuta’s making the autumn leaves as an offering to Travel Gods.”⁶² Similarly, in (16b), the speaker is speculating on the reason why the cow comes back. The proposition “the cow comes back” describes a fact, and the *koso* clause expresses the speaker’s speculation over the truth as to why that is the case. Thus, *-ram* ‘must’ expresses the speaker’s speculation of the cause of the actualized event in the present tense (the time interval that includes the speech time).

⁶² According to the annotation from translators, ‘Tatsuta’ is a name of a mountain located in the West of Nara area, and ‘Princess Tatsuta’ refers to a Spirit of autumn. The poem describes the imaginary scene in which Princess Tatsuta is traveling back (leaving the mountain) after all the duties she performs in autumn. ‘Travel Gods’ refer to the protectors on the traveling path that the Princess Tatsuta is supposed to journey.

(3.17) a. ものげなく過しければこそ さる憂きめも見けめ

Monogenaku sugusi-**kereba koso**, saru ukime mo mi **-keme**.

not.properly live-MPST.PROV KOSO, such misery ETOP encounter-PST.CONJL.EXCL

(*Sagoromo monogatari* I [43])

Lit: ‘(she) **must have** encountered such a misfortune **just because** (she) was not treated right.’

(Based on Modern Japanese translation)

b. もろこしの人はいみじと思へばこそ記しとどめて世にも伝へけめ、...

Morokosi no fito wa kore wo imizi to omoeba **koso**,

China GEN people TOP these ACC be.praiseworthy COM think.PROV KOSO

sirusi-todome-te yo ni mo tutae **-keme**, ...

write-inscribe-GER descendants DAT ETOP let.known-PST.CONJL.EXCL

(*Tsurezuregusa*, Chapter 18)

Lit: ‘**Just because** Chinese people thought that these stories were praiseworthy, they **must have** written down trying to pass down to generations, but (our people does not seem even to care to tell the stories.)’

(Based on Modern Japanese translation)

In (17a) and (17b), the modal *-kyem/-kem* ‘must have’ is used. In (17a), the speaker is speculating on the unfortunate circumstance in which his lover has been forced to live in. The speaker speculates that the unfortunate circumstance caused her misfortunes. The *koso -e* sentence in (17b) is referring to a folktale of a Chinese monk. The speaker (writer) of (17b) is speculating on the reason why the folktale was written, and claims that the tale was considered worthwhile by Chinese people to write down and pass down to generations. The speaker’s speculation is ongoing during speech time, but the speculation is directed toward the past event when the folktale was written. In (16a-b) and (17a-b), the speaker’s speculation on the present/past event is expressed by the epistemic modals *-ram* and *-kem*. However, there seems to be a sense of speculation even if there is no overt modal in a *because-like koso -e* sentence. In (18), for example, a perfect *-tari* is used in the main clause without any modal, but the translation seems to be close to ‘must have.’

(3.18) 龍王があればこそ雨をも降らせ、雨がなければこそ我はすべつて倒れたれ

Ryūwō ga areba koso, ame wo mo fur-ase;

Dragon.god NOM there.is.PROV KOSO, rain ACC ETOP fall-CAUS.INF

ame ga areba koso, are wa subetu-te taore -tare.

rain NOM there.is.PROV KOSO, I TOP slip-GER fall.down-PERF.EXCL

(*Taiheiki: ikkakusennin-no koto*)

Lit: ‘**Because** there is dragon god, (the dragon god) made it rain; and **because** it rained, I (**must have**) slipped and fell down.’

(Based on Modern Japanese translation)

In (18), the whole sentence sounds like a direct quote of the speaker's thought or recollection of what happened to himself in the past. This sentence seems more appropriate to be translated as if there is a modal *-mu*, since the event of falling down is beyond control of the undergoer, and the undergoer cannot have control over or any reason to fall down. This means that it is not the subject of the event who claims the reason why he fell down, but the speaker who can see the event of falling down based on his knowledge. The point here is that causation is inherently intensional, and the expression of the cause of the actual event can be only expressed based on the knowledge of the speaker with or without a modal in the main clause. The English translation for (18) with the reason clause is given in (19b). Compare (19b) with (19a) in which there is no reason clause.

(3.19) a. I must have slipped and fallen down.

b. I must have slipped and fallen down because it rained.

The difference between these sentences lies in the scope of the modal in these sentences. In (19a), since the embedded proposition under the epistemic modal is a non-factitive proposition, the modal sentence does not entail that the truth of the embedded proposition "I (have) slipped and fallen down." However, once the reason clause is added as in (19b), the sentence entails that the proposition "I (have) slipped down and fallen down" is true and a fact. The interpretation of the modal in the main clause is displaced in (19b); the speaker expresses modality on the

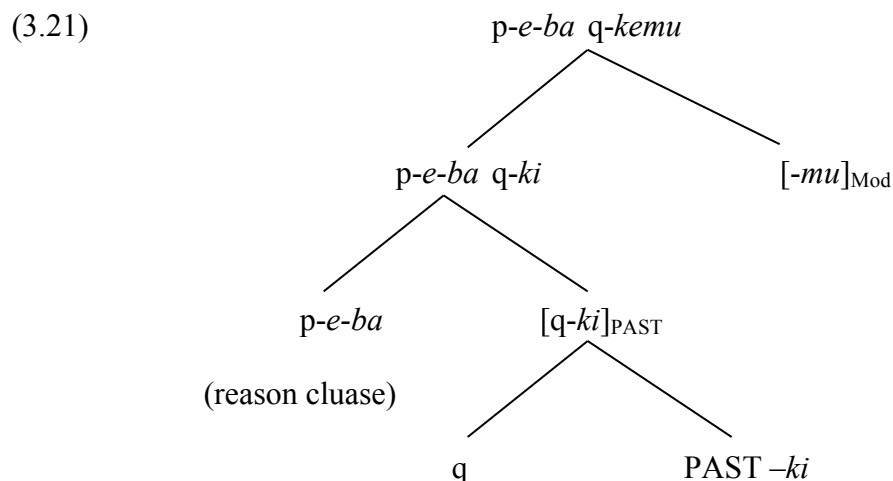
certainty of the cause, not on the embedded proposition. This may indicate that the modal in the main clause is taking scope over the reason clause:

(3.20) I **must** have fallen down because the dragon god made it rain.

=**Must** [[because the dragon god made it rain][I fell down]]

≠[[because the dragon god make it rain][I **must** have fallen down]]

In (20) the pragmatically possible interpretation is that the modal *-mu* takes scope over the rest of the sentence in (21).⁶³



In (21), the modal *-mu* takes two arguments, a reason clause and a tensed proposition in the consequent. Note that tense⁶⁴ is structurally lower in relation to the modal in (21). The tense of the main clause (such as *-ki*) is restricted to this clause, which may indicate that the modal *-m(u)*

⁶³ The presence of modal is not required in order for *-eba* to be interpreted as a reason clause. The scope relation between the modal and the adjunct is observed in the modal context only.

⁶⁴ Note that this is not based on the grammaticalized tense: there was no specific tense morpheme in Old Japanese. I used “tense” here just to indicate one of the expressions that indicate the temporal location of events in relation to the speech time. In OJ, the notion of temporal location was expressed by some modals (factual ones in Tsukahara’s distinction) and by the presence of aspectual verbs. See Ogiwara and Fukushima (2014) for the historical development of the past tense morpheme *-ta* in Japanese.

takes a tense projection as its complement, and that the modal $-m(u)$ combines with the tense of the embedded clause $-ki$ and gives rise to the past conjectural $-kyem-$ “must have⁶⁵.” Thus, the evidential/epistemic modality is a combination of modal and tense of the embedded clause. This explains why there is an actuality entailment in the event expressed in the main clause.

On the other hand, the “conjectural” modals such as $-m(u)$, in contrast to “present/past conjectural” modals $-ram(u)$ or $-kyem(u)$, co-occur with the subjunctive conditional form $-aba$. Let us analyze this phenomenon by assuming that $-m(u)$ is taking a tenseless proposition as its complement. Let us take the example of counterfactuals like *koso -e* represented in (22).

(3.22) 薦枕あひまきし児もあらばこそ夜の更くらくも我が惜しみせめ

Komo makura api-maki-si kwo mo araba koso,
woven.straw pillow recip.-share-SPAST.ADN. love ETOP. exist.COND. KOSO,

yo no pukuraku mo a ga wosimi se-me.
night GEN advance.NMNL ETOP. I GEN feel.sad.INF do-CONJL.EXCL

(MYS 7: 1414)

‘Only if my love who used to lie beside me were still alive, would I feel sad as the night advances.’

(Adapted from Suga 1991 and Honda 1967)

Consider the translation of (22), and the two possible representations of its meanings as given in (23a-b) below. In (23), the meaning of the modal $-mu$ ‘would’ is restricted by the conditional

⁶⁵ This morphological analysis is supported by Frellesvig (2010: 65).

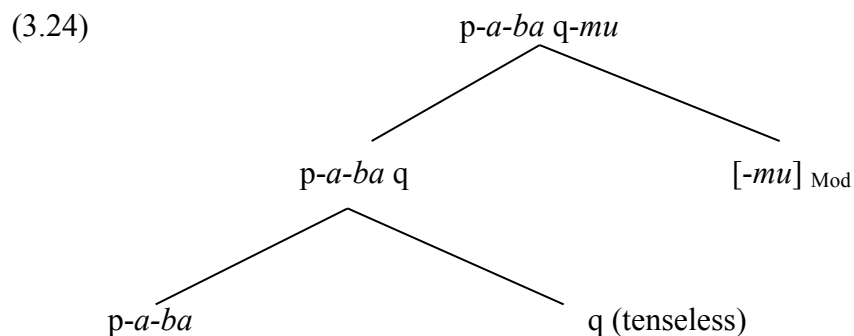
clause. The overall meaning of (23) does not entail the truth of the consequent in all the closest worlds, but the closest worlds is restricted by those in which the proposition in the conditional clause holds:

(3.23) Only if my love (who used to lie beside me) were still alive, would I feel sad as the night advances.

a. \nRightarrow [I would feel sad as the night advances]

b. \Rightarrow would [[if my love is still alive][I feel sad as the night advances.]]

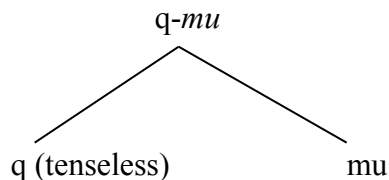
This implication relation suggests that the conditional clause takes narrow scope in relation to the modal. Thus, the structure assumed for (23) is (24):



(conditional clause)

In (24), *-mu* takes two arguments, the conditional clause and a tenseless proposition in the consequent. This structure explains why the implication in (23a) does not work. The consequent of (23a) has the following structure:

(3.25)

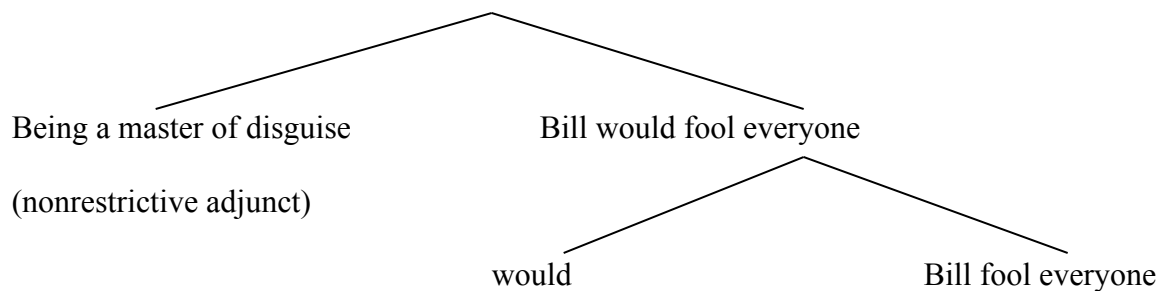


In (25), *-mu* takes a single argument, *q*. The truth of this clause can be implied if we switch the *if*-clause with a *because*-clause. This is exactly what Stump (1985) had predicted. Recall Stump's analysis of English absolutes, briefly discussed in Chapter 1. Stump claimed that the adsentential adjunct clause like *being a master of disguise* does not restrict the meaning of the modal. Thus, the overall meaning of (26a) does imply (26b):

(3.26) a. Being a master of disguise, Bill would fool everyone.

b. \Rightarrow Bill would fool everyone.

(3.27) Being a master of disguise, Bill would fool everyone.



In this case, there is no restriction on the meaning of the modal, as the adsentential adjunct is not restricting the meaning of the modal. As predicted, (26a) implies (26b). His analysis made the predication that the *because*-clause does not restrict the counterfactual modal. Note that (23) supports this prediction.

Also, the structures assumed for the two conditional forms, that is, (19) for the indicative conditional form and (22) for the subjunctive form account for the presence of actuality entailment in the *because*-like *koso –e* and the absence of the entailment in the subjunctive conditionals. The epistemic/evidential modals *–ram(u)* and *–kyem(u)* are taken to be the combination of temporal markings *–ru/–ki* that marks the tense of the embedded proposition and the conjectural modal *–m(u)* taking wide scope over the reason clause.⁶⁶

To summarize, I have shown that there are morphological differences that indicate the distinction between counterfactual and *because*-like interpretations in the *koso –e* construction. The *koso –e* construction obtains conditional meaning when there is a conjectural modal in the main clause and the subjunctive form *–aba* is used in the subordinate clause. The lack of tense in this construction may explain why there is no actuality entailment in this interpretation. The occurrence of *because*-type *koso –e* is complementary to the conditional-type *koso –e*. The *because*-type *koso –e* occurs in a modal sentence with epistemic/evidential modals. I presented my analysis of the epistemic/evidential modals taking a tensed proposition as their complement, and taking scope over a reason clause if there is one. The analysis explains the existence of an actuality entailment of the consequent in the *because*-like *koso –e*.

3.3 FURTHER DISCUSSION ON THE SCOPE OF MODALITY

In this section, I will extend the analysis using Kratzer's (1977) and von Stechow's (1994) semantics of quantifier restriction and claim that the epistemic modal takes a reason clause as its restrictor. Von Stechow (1994) argued that *if*-clause restricts the quantifier domain of *always*, and

⁶⁶ In the non-modal context, the tense-like morphemes are not required to be present for the proposition to have the temporal (non-past) interpretation. Only in the embedded proposition of the conjectural modal *–mu*, the temporal morphemes are required in order to distinguish the embedded proposition to be factitive or non-factitive. (i.e. the absence of tense-morpheme means non-factitive).

that *if*-clause acts as a restriction to the meaning of the quantifier. Here I simplify his analysis by illustrating the tri-structure of quantifier restriction.

(3.28) a. If it rains, John always takes the bus home.

b. Always [if it rains] [John takes bus home]

In (28a), the proposition ‘John takes the bus home’ is quantified by the variables of the adverbials of quantification, *always*. The domain of quantification is constrained by the proposition in the *if*-clause (‘it rains’). The sentence is true if and only if for all the situations in which it rains, John takes bus home.

Following Kratzer (1977, 1981) and Stump (1985), I consider conditionals as an expression of modality, and argue that the modal verb in the main clause acts as a quantifier of the consequent, as schematically illustrated in (29). The subjunctive conditional sentence in (30a), for example, can be broken down into tri-structure of modals as in (30b):

(3.29) Modal [if-clause] [the consequent]

(3.30) a. If it rained, John would take bus home.

b. Would [it rains] [John takes bus home]

According to this analysis, the proposition ‘John takes the bus home’ is quantified by the possible worlds, which are the variable of the subjunctive modal, *would*. The domain of possible worlds is constrained by the proposition in the *if*-clause, ‘it rains,’ which is intersected

with all the closest worlds to the actual world. The subjunctive conditional is true if and only if for all the closest worlds in which it rains, John takes bus home.

Now I am going to argue that in order to explain the behavior of reason clauses in the *because*-like *koso* –*e*, we can hypothesize that *if*- and *because*-clauses are parallels in that they both function to restrict the meaning of modals, but they restrict different kinds of modals. In this view, reason clauses can be considered as restrictors of the evidential/epistemic modals that express the speaker's degree of confidence in the certainty of actual truth. Zagana (2007, 2008) argued that epistemic modality is in an Agree relation with the contextual information (the context time and the speaker of the context, etc.) specified in the Force projection in the CP domain. This analysis predicts that the epistemic reading is eliminated when the subject of the modal has a person feature; for example, when the first person is in the subject of the modal. Epistemic modality is used when the speaker of the context expresses one's knowledge. Thus, it is usually the case that the first person is likely to appear as the subject of a root modal and does not appear as the subject of an epistemic modal, as shown in (31b-c) below. The reason for this difference is that the first person is usually the speaker of the context, and knowledge about oneself is considered self-evident and is unlikely to be the object of one's own judgment. This prediction is born out as shown in (31).

- (3.31) a. The cow must come back because she is hungry. (epistemic/*deontic)
 b. I must come back because I am hungry. (*epistemic/deontic)
 c. I must do my homework because I was told to do it. (*epistemic/deontic)

In the case of OJ, the factitive modals *-ramu* or *-kyemu* are naturally interpreted as an expression of the speaker's degree of certainty about the factual state of affairs based on his/her memory or sense experience. The speaker (or agent) of the utterance cannot be overtly expressed as the first person in the subject position of the epistemic modal. As a matter of fact, both the modal *-ram(u)* and *-kyemu* (as in the examples (16)-(17) above) express modality based on the speaker's knowledge, but without expressing the first person in the subject of the modal. That is the reason why the sentence sounds like a direct quote of the speaker's utterance. In the example (18) above, I mentioned that the *koso -e* sentence translated as "I (must) have slipped and fell down because it rained" sounds like a direct quote of the speaker, and the meaning of the sentence seems to be have the implicit modal *-mu*. The first person in (18) is the undergoer of the event of falling down, and it is possible the reason clause is added as a result of the speaker's recollection of the past event. This property of epistemic modals is reflected in the scope relation between the epistemic modal *must* and the reason clause. In English, the first person cannot be used as a subject of the epistemic modal. Thus, when the first person is used as a subject, the modal is interpreted as a deontic modal, and the modal takes narrow scope over the reason clause as in (32b-c).

- (3.32) a. **must** [[the cow comes back][because she is hungry]] (epistemic)
 b. [I **must** come back][because I am hungry] (deontic)
 c. [I **must** do my homework][because I was told to do it] (deontic)

In the *koso -e* construction such as (16b), repeated here as (33) below, the modal *-ram(u)* is interpreted higher than the reason clause, as indicated below.

(3.33) Kono usi wa yau no areba koso, tada kuru-**rame**.

This cow TOP demand GEN exist.PROV KOSO, many.times come-PRES.CONJL.EXCL

Lit: ‘This cow **must** come back **just because** she needs to.’

= **-ram-** [[the cow comes back][because she is hungry]] (epistemic)

≠[[the cow **-ram-** comes back][because she is hungry]] (deontic)

The present analysis of reason clauses supports Stump’s analysis of reason clauses as a main tense adverb. The main tense adverb functions to restrict the temporal denotation of the main clause. For example, the temporal denotation of the reason clause is restricted to the temporal denotation of the main clause. Thus, it is expected that there is a match in the temporal orientation in the main clause and *because*-clauses shown in (34-36):

(3.34) a. The cow came back because she *is/was hungry.

b. The cow comes back because she is/*was hungry.

(3.35) a. The cow must have come back because she *wants/wanted to eat.

b. The cow must come back because she wants/*wanted to eat.

(3.36) a. The cow might have come back because she *is/was hungry.

b. The cow might come back because she is/*was hungry.

This match can be accounted for if we assume that evidential/epistemic modality requires tensed propositions, and the tense of the subordinate reason clause is simultaneous with the main tense.

The notion of selection of the subordinate clause by the modals can be summarized in (37a-b):

(3.37) a. **Must**_{epistemic} [[**because** she is hungry] [the cow comes back]]

b. **Would**_{subjunctive}[[**if** my love is still alive] [I feel sad as the night advances.]]

To summarize, I have made an observation that there are some morphological differences between counterfactual-like *koso -e* and *because*-like interpretations. One of the observed differences is that there is a realis/irrealis distinction in the verbal stem that precedes *-ba*: one marks the indicative conditional form *-eba* and the other marks the subjunctive conditional form *-aba*. Another observation is that there is a relatively clear demarcation between the range of predicates that are used in counterfactual-like *koso -e* and *because*-like *koso -e*. I argued that there is a direct correlation between the two interpretations and the nature of the modals used in these. I made two assumptions that explain the correlation. One is that tense is present in the embedded clause of epistemic modals. The second assumption is that the reason clause and the conditional clause restrict different kinds of modality: the evidential/epistemic modality such as *-ram(u)* and *-kyem(u)*, etc. or the conjectural modal *-m(u)*. In the context of a subjunctive modal, the speaker expresses modality on the hypothetical actualization of the event in the conditional clause resulting in the consequent; while in the context of an epistemic modal in *koso -e*, the speaker expresses modality on the certainty of the actualized event resulting in the consequent.

3.4 CONCLUSION

In this chapter, we have observed that non-conditional examples of *koso –e* roughly correspond to a reason clause (interpreted as “because” in English) in relation to the main clause. The differences of this *koso –e* from those with the counterfactual interpretation are the following. First, a non-conditional subordinate clause in *koso –e* has an actuality entailment: the content expressed by the antecedent is factual. The conditional subordinate clause in *koso –e* does not entail the actuality of the antecedent. Second, the modal context indicates the distinction of *because*-like interpretation from conditional interpretation. The non-conditional *koso –e* contains evidential/epistemic type modals or non-modal predicates in the consequent; the conditional *koso –e* co-occurs with conjectural/subjunctive modals. Third, the modal that co-occurs with a reason clause (in *because*-like *koso –e*) takes scope over the reason clause; an actuality entailment in the consequent persists with the presence of the modal. I have argued that the presence/absence of the tense in the modal not only determines the presence of tense, but also the actuality entailment of the proposition in the embedded clauses in the modal context. The type of modals (whether the modal is subjunctive or epistemic) directly relates to the interpretation of the subordinate clause (whether it is conditional or *because*-like). The subjunctive modals subcategorize for tenseless propositions while the epistemic modals subcategorize tensed propositions. I have argued that the reason clause is restricting the meaning of epistemic modals in the consequent, just like the conditional clause is restricting the meaning of the subjunctive modal. I suggested that different kinds of modality are involved in conditional sentences and *because*-type sentences; this explains the reason why epistemic modals select a reason clause, while subjunctive modals select a conditional clause.

Chapter 4. SEMANTIC VARIABILITY OF SUBORDINATE CLAUSES IN THE *KOSO –E* CONSTRUCTION

In Chapter 2 and Chapter 3, I have discussed that the possible interpretations of biclausal *koso –e* can be reduced to either a counterfactual conditional meaning or a *because*-like meaning. As these interpretations correspond to two different morphological forms, the realis form *–eba* and the irrealis form *–aba*, it seems that the meanings are derived from morphology. However, such a conclusion would be premature, in light of the existence of antecedent forms other than *–ba* that exhibit the same variability, without possessing any morpheme or lexical item that assigns conditional or *because*-like meanings. This discovery will bring us to a new analysis: the conditional/*because*-like interpretation is pragmatically derived by the language users' inference for understanding the meanings of a subordinating conjunction. I argue that the conditional/*because*-like interpretation is underspecified in the presence of a temporal interpretation of a subordinating conjunction. Further I argue that a temporal relation tends to be taken as a causal relation when the language user infers that a causal relation is involved between the antecedent and the consequent based on their semantic relation. As for the distinction between causal and conditional interpretations, whether the antecedent is true with respect to the context is crucial in determining the semantic role of the antecedent clause. Similar variability is observed in English absolutes, and I show that Stump's (1985) characterization of the semantic variability of English absolutes is compatible with what is observed in the *koso –e* construction.

4.1 DIFFERENT ANTECEDENT FORMS AND THEIR SEMANTIC PROPERTIES

In this section, I argue that the conditional/causal meanings are independent of the forms, and that the variability comes from how language users infer the meaning of the subordinating conjunction that links two propositions standing in a certain relation.

4.1.1 *-Ba “consequential” clauses*

So far I have examined conditional and non-conditional meanings of *-ba* (‘when/whenever’) clauses in the *koso -e* construction. When the focus particle *koso* places focus on a *-ba* subordinate clause, it realizes either a causal or conditional interpretation, depending on whether the subordinate clause has a realis or an irrealis form. When the subordinate clause ends with the irrealis form *-aba*, it is interpreted as a ‘subjunctive/hypothetical’ conditional as in (1). However, when the subordinate clause ends with the realis form, *-eba*, it is interpreted as a ‘reason’ clause as in (2).

(4.1) 吾が思ふ妹有りと言はばこそよ 家にも行かめ 国をも俣はめ

A ga omopu tuma ari to ipaba koso yo

I-NOM think.of wife be.CONCL COMP say.COND KOSO EMPH

ipye ni mo yuka-me, kuni wo mo sinwopa-me.

home LOC ETOP go-CONJL.EXCL, country ACC ETOP yearn.for-CONJL.EXCL

(*Kojiki* III: Emperor Ingyoo [89]: 327; *MYS* 13: 3293)

‘**Only if** I hear that she is there, do I wish to go home, do I yearn for my country.’

(*The Oxford Corpus of Old Japanese*, English translation by Philippi)

(4.2) 龍田姫 手向くる神のあればこそ 秋の木の葉の幣と散るらめ

Tatuta fime tamukuru kami-no **areba koso**,

Tatsuta princess offer.ADN gods-GEN exist.PROV KOSO,

aki-no konofa-no nusa-to **tiru-rame**

autumn-GEN leaves-GEN blessing-as fall-PCONJL.EXCL

(*Kokin* 5: 298)

‘The crimson leaves **must** fall as offering (to Gods), **as/because** there is the God of
Travel to whom Princess Tatsuta wishes to make offering (when she leaves).’

(Adapted from Honda1970)

The subjunctive conditional in (1) takes the irrealis form *-aba*. As discussed in Chapter 3 at 3.2.1, in Old Japanese (OJ), the conjugation *-a* (called *Mizen*) is related to the notion of ‘irrealis.’ The irrealis form is used not only as the subjunctive/hypothetical form of *-ba* clauses as in *V-aba*, but also as a verbal conjugation for modals and negation. For instance, the irrealis form of a verb precedes the conjectural modal verbs as in *V-a-mu* ‘will/would V’ and *V-a-masi* ‘would/would have V-en’. The irrealis form of a verb also precedes the negation as in *V-a-zu* ‘not’ or *V-a-zari* ‘not.’ These types of sentences, which end in an *a*-stem, are non-veridical; and the *a*-stem indicates the existence of negative polarity or the lack of positive polarity. As we will discuss later, this indicates that the antecedent is not true in the context, the subordinate clause is interpreted as a conditional.

The conjugation *-e* (called *Izen*) indicates the notion of ‘realis,’ and the factivity/actuality of a proposition is expressed by the *e*-stem.⁶⁷ When the realis form of a verb precedes the consequential connective *-ba* as in *-eba*, the subordinate clause expresses a reason or an attending circumstance. Also, the *e*-stem functions as a subordinator, forming a subordinate clause on its own in OJ. The logical role of the subordinate clause ending with *-e*, either consequential ‘because’ or concessive ‘although’, is determined by the context in which it occurs. It is interesting to note that an *a*-stem cannot form a subordinate clause without *-ba*, while an *e*-stem can. This might be related to the fact that *e*-stem forms a veridical proposition. The presence of an *e*-stem indicates the presence of positive polarity or factivity of the event expressed by the subordinate clause. Over time, the bare use of *-e* became scarce, and *-e* was demoted to function as a linkage to grammaticalized subordinate conjunctions such as *-ba* or *-do/domo*. For instance, the *e*-stem is used as a linkage to a consequential subordinator *-ba* (consequential/concessive) as in *-eba* ‘because’; or to a concessive subordinator *-do/-domo* (concessive) as in *-edo/-edomo* ‘even though.’ Also, *e*-stem of the perfective *-tu* forms a gerund *-te*; the infinitival form *-i* of a verb precedes *-te* as in *V-i-te* and functions as a subordinating conjunction, such as *and, therefore, etc.*

In the next section, we will see that counterfactual and *because*-like interpretations of *koso -e* sentence can also occur in the absence of the realis/irrealis morphology.

4.1.2 *Temporal adverbial clauses*

In this section, I show that causal/conditional variability also appears in the bi-clausal sentences containing temporal adverbial clauses. As observed in Chapter 2, some of the counterfactual

⁶⁷ As mentioned in the footnote 7 in 3.2.1 above, Quinn (2015) claimed that an *Izen* ‘realis’ clauses are “presupposed infinitives.” When used as a subordinate adjunct clause, the *Izen* clause usually presents information previously introduced in the discourse, as a ground for the asserted content in the main clause. This means that the adjunct clause introduced by *Izen* is not a part of the assertion.

conditionals are expressed by temporal adverbial clauses, which end with subordinators such as such as *toki-ni* ‘when’ or *pi-ni* ‘on the day when’ as in (3):

(4.3) ひさかたの天のみ空に照る月の失せなむ日こそ吾が恋やまめ

Pisakata no ama no misora ni teru tukwi no
distance COP.ADN heaven GEN sky LOC. shine.ADN. moon GEN

use-na-mu pi koso, a ga kwopwi yama-me.
disappear-PERF-CONJL.ADN day KOSO, I GEN longing stop-CONJL.EXCL

(MYS 12: 3004)

‘**When** the moon that shines in the far empyreal sky is no more—**then, only then**, shall cease this love of mine.’

(*The Nippon Gakujutsu Shinkokai translation* 1965: 301)

In (3), the subordinate clause is headed by the postpositional phrase *pi-ni* ‘on the day when’ where the particle *ni* is deleted upon adding the focus particle *koso*. The temporal adverbial clause can be interpreted as a counterfactual conditional with *only-if*, even though the literal translation of the sentence is ‘on the day when.’ Thus, the following inference or paraphrase can be taken as valid:

(4.4) (On the day) when the moon disappears, my longing would come to an end.

→ Only if the moon disappeared would my longing come to an end.

In a parallel manner, if we look into the data closely, we find the same kind of temporal subordinating clauses expressing a reason rather than conditional, as in (5).⁶⁸

(4.5) 雪ふりて年のくれぬる時にこそ遂にもみぢぬ松も見えけれ (=9a)

Yuki furi-te tosi no kure-nuru **toki ni koso**,

snow fall-GER year GEN end-PERF.ADN time DAT KOSO

tuini momidi-nu matu-mo miye-kyere

finally change.color-NEG.ADN pine-ETOP see.PASS-MPAST.EXCL

(*Kokin* 6: 340)

‘**When** snow has fallen and the year draws to a close, ah, **then** it is clear that the pine tree is a tree whose color never changes.’

(McCullough 1985: 442)

In (5), the subordinate clause is headed by the postpositional phrase *toki-ni* ‘when.’ This temporal adverbial clause is literally translated as ‘only when,’ but it is possible for us to take it as a reason clause as follows:

(4.6) ‘**When** snow has fallen and the year draws to a close, ah, **then** it is clear that the pine tree is a tree whose color never changes.’

⁶⁸ This *koso -e* is said to be the innovative use of *-e*, the “simple emphasis.” Ishida (1939) and Ohno (1993) argue that the “simple emphatic” use replaced the “concessive” use over the years.

→It is precisely **because** the snow falls on withered grass and tree at the year's end, we can see only the pine that remains unchanged.

(Adapted from Honda 1970: 101)

The same semantic variability is observed even if there is no clear morphological distinction⁶⁹ in the subordinate clause. As we have seen in (4) and (6), a temporal adverbial clause can be understood as either a conditional or a reason clause. Here we have a complementary distribution between conditional and causal interpretations similar to that we have seen in *-aba* and *-eba*.

4.1.3 *Gerundive adjunct -te clauses*

There is another subordinate clause that shows the causal/conditional variability. It is the gerundive clause ending with a subordinator *-te* 'and.' When *koso* places the focus on a *-te* clause, the overall sentence suggests a temporal sequence, as shown in (7) and (8):

⁶⁹Edith Aldridge pointed out that there are morphological distinction in the examples like (3) and (5). In (3), the subordinate clause is marked by the conjectural modal *-mu*, while in (5), the subordinate clause contains the perfect aspectual verb *-nu*. These are indication of the irrealis/realis distinction in these subordinate clauses. Also, the modal verbs in the main clauses show the distinction between subjunctive in (3) and indicative in (5). For the distinction of the modal verbs, see 3.2.2.

However, there are cases where there is no modal verb in either in the main clause or in the subordinate clause, as shown in (i) below.

(i) 御心の疎かにおはします時こそ侍れ

Mikokoro no orosoka ni owasi-masu toki **koso** habere,
Hon.mind GEN flawed ACOP.INF be-Hon.ADN time KOSO serve.EXCL

(Utaho Tale III: Kuni yuduri III [1], p.253, written in 969-1011)

'When/Only if (emperor's) mind were flawed/unkind would I fill his post, (but why should I when the emperor is like a good king.)'

The sentence is supposed to be uttered by the emperor's close subordinate, who thinks that the emperor is excelling in his governance. This context gives the language users the information that the sentence is supposed to mean conditional, not causal.

(4.7) (荒小田をあら鋤き返しかへしても) 人の心を見てこそやまめ

...Fito no kokoro wo mi-te koso yama-me

...person GEN mind ACC see-GER KOSO stop-CONJL.EXCL

(*Kokin* 15: 817)

Lit: 'I will give up on my love (only) after I understand her mind.'

(Based on Modern Japanese translation)

'(Again and yet again the farmer till the land reclaimed), so will I struggle hard to see my love before we part.'

(Honda 1970: 210)

(4.8) (我妹子がやどの秋萩花よりは) 実になりてこそ恋増さりけれ

...mi ni nari-te koso kwopi masari-kyere

...seed DAT become-GER KOSO longing increase-MPST.ECXL

(*MYS* 7: 1365)

Lit: 'I admire (Hagi plant) even more after it formed seeds.'

(Based on Modern Japanese translation)

'Now it has gone to seed, which I cherish all the more indeed.'

(Honda 1967: 111)

In (7), the gerundive clause is interpreted as a conjunction, expressing the temporal sequence where the gerundive clause “I understand her mind” comes first, and then the main clause “I will give up on her” comes second⁷⁰. This temporal meaning is expressed by the temporal conjunctions such as ‘after/before’ in translations. In the same manner, in (8), the gerundive clause is taken as a temporal sequence where the gerundive clause “the seeds formed” comes first, and then the main clause “I admire Hagi plant even more” comes second. Interestingly, as we perceive a causative relation between the propositions in the gerundive clause and the main clause, the bi-clausal sentences obtain a conditional or a causative interpretation. The poem (7) can be paraphrased as a conditional, as in (9a) and the poem (8) with a *because*-sentence, as in (9b):

- (4.9) a. (Only) **after** I understand her mind will I give up on my love. (=7)
 → (Only) **if** I understand her mind will I give up on my love.
- b. **After** bush clover formed seeds, I came to admire it even more. (=8)
 → The bush clover formed seeds; and **that’s all the more reason to** admire it.

According to Modern Japanese translation⁷¹, there is a negative implication in (9a). The poem implies that “I cannot give up on my love until I understand her mind.” However, there is no such negative implication in (9b). I will come back to this in 4.2.2.

To sum up, I have shown that the causal/conditional variability is not always determined by morphology⁷². Even if there is no causal/conditional meaning to the subordinating conjunction,

⁷⁰ Gerundive clauses ending with *-te* originate in the perfect *-tu* in its infinite form. Here in both examples (7) and (8), there are meanings of perfect and they are in the infinitival (realis) form, not in the irrealis form.

⁷¹ The modern Japanese translation is provided in *Shinpen Nihon Koten Bungaku Zenshu* (1994) Vol. 11.

the causal/conditional variability exists. With subordinate *-ba* clauses, the semantic role can be predicted from a morphological property (realis/irrealis distinction), but with the temporal subordinating conjunctions and gerundive adjunct clauses, their semantic role is determined by whether or not there is a temporal interpretation in the subordinate clause, and subsequently an actuality entailment.

4.2 A POSSIBLE EXPLANATION OF THE OBSERVED INTERPRETIVE POSSIBILITIES

I have shown that when there is no specific lexical meaning to a subordinator, language users tend to assign a causal meaning when there is a causal relation under a factitive circumstance and tend to assign conditional meaning when there is a causal relation under a non-factitive circumstance. This tendency is observed across a range of subordinators such as consequential, temporal, and gerundive subordinating conjunctions that are embedded in the *koso -e* construction. Adopting Stump's (1985) idea that temporal subordinators underspecify interpretations of *koso -e* sentences, being compatible with both causal and conditional interpretations. Furthermore, I argue that the semantic role of the subordinating clauses is determined by whether the antecedent is true or not with respect to the context. The semantic variation of causal and conditional interpretations can be also accounted for by their having the same component in their truth conditions: that the occurrences of the antecedent is followed by the occurrences of the consequent.

⁷² This by no means indicates the lack of realis/irrealis distinction. I assume that such features can be syntactically supplied through feature agreement. The distinction between causal meaning and conditional meaning might be underspecified in such cases. Also, Paul Atkins pointed out that the adverbial *mosi* 'if/supposingly' is only compatible with irrealis *-ba* clauses, and thus might be considered to be the lexical item that provides the meaning of conditionality. However, *mosi* does not appear in the *koso -e* construction, even if *koso* is attached to the irrealis *-ba* clause. This makes our analysis of causal/conditional variability of the *koso -e* construction difficult if our analysis depends on the presence of *mosi* for the meaning of conditionality.

4.2.1 *Interpretive possibilities*

So far we have seen that the contextual information determines the semantic role of the subordinate clause. In this section, we examine specifically what determines the semantic variability. In Chapter 3, I have shown that the main distinction between the counterfactual and *because*-like interpretations lies in the presence or absence of actuality entailment in S_1 . Based on that distinction, I can state the semantic variability of a subordinating conjunction in the *koso* –*e* construction as follows:

(4.10) Semantic variability of *koso* –*e* (S_1, S_2) (Non-final version)

- a. When S_1 is a true statement with respect to the context, S_1 is a reason for S_2 .
- b. When S_1 is not a true statement with respect to the context, S_1 is a condition for the truth of S_2 .

When S_1 describes an event that is not true in the context, we can infer that S_1 is the condition for the truth of S_2 . When S_1 describes a state that is true in the actual world, we can infer that S_1 is a cause of or a reason for S_2 . The semantic variability of –*koso* –*e* stated in (10) predicts the semantic role of S_1 , which is either conditional or causal.

However, not all the temporal expressions may have causal and conditional counterparts. I will show a set of examples of *ba*-clauses in *koso* –*e*, each of which indicates an overlapping temporal relation such as ‘as long as’ or ‘while,’ and cannot be paraphrased with either causal or conditional sentences. The subordinating conjunction on which I focus here is a negative

consequential (NC). The irrealis form of NC is *zu-pa/wa*⁷³ ‘if not’: the combination of a negative morpheme *-zu* and a consequential connective *ba* (or *pa/wa*⁷⁴). The realis form of the NC is *ne-ba* ‘because not.’ The irrealis form can be interpreted as either ‘as long as/while not p’ (temporal) or ‘if not p’ (conditional), while the realis form obtains a causal interpretation ‘because not’ (causal). In (11a), *-zu pa/wa koso* means ‘if not’; in (11b) *-zu pa/wa koso* means ‘as long as not’; in (12) *-neba koso* means ‘because not.’

(4.11) a. 焼けずはこそ まことならめ

Yak-ye **-zu wa koso**, makoto nara-me.

Burn-STAT-NEG.COND KOSO real COP-CONJL.EXCL

(*Taketori monogatari* [10]: 41)

Lit: ‘Not being burned, it will be a real gem.’

=If it didn’t burn, it would be a real gem.

≠As long as it didn’t burn, it is a real gem.

b. かかることの 出で来ずはこそ 人の聞き思はむも思し憚からめ

Kakaru koto no ide -ko **-zu wa koso**,

This thing GEN arise-come-NEG.COND KOSO,

⁷³ For more details for the meanings of *-zupa/-zuwa*, refer to Ohno (1993: 91-98). He categorized the meanings of *-zuwa* into three types by the type of proposition *-zuwa* modifies. In the form “A-*zuwa*, B,” the meaning of *-zuwa* varies depending on the following: 1) A has already occurred but it is A is undesirable; 2) A has not occurred yet but it is expected to occur in the future, and 3) A has not occurred yet but it is not expected to occur in the future.

⁷⁴ *-Pa* in *-zupa* is considered a topic marker, but here I treat it as a cognate of *-ba*. There are variations in negative conditionals [*zu-wa*] and [*zu-ba*] (realized as as [*zunba*]) in Late Middle Japanese. (Frellevig 2010: 336) From the translation of *-zuwa* as a negative conditional as in (27), I consider *-pa* in *-zupa* to be treated as the same as *-ba*. For this connection, see Haiman (1978), in which he treats conditional *-ba* as a topic *-wa*.

Fito no kiki-omowa-mu mo obosi -fabakara -me, ...
 people GEN hear-think-CONJL.ADN ETOP think.INF-worry.about-CONJL.EXCL

(*Yuru no Nezame* II [47]: 192⁷⁵)

‘Not causing a rumor, I will care about what people might think (about us), ...’

≠**If** there was no rumor, I would care about what people might think.’

=**As long as** a rumor hadn’t arisen, I would have cared about what people might think.

(4.12) 思ひいづるときはの山の岩躑躅 (いはつつじ) いはねばこそあれ恋しきものを

Omowizuru tokiwa no yama no iwatutuji iwa-neba **koso**,
 Remember.ADN Tokiwa GEN mountain GEN rock.azalea say-not.PROV KOSO

are kwoisiki monowo
 Alas! lonely.ADN though

(*Kokin* 11: 495)

Lit: ‘I am like a wild azalea on Tokiwa mountain when I remember (you).

Because/though I don’t say a thing, how much I miss you.’

‘Like the azalea on the e’ergreen mountain lonely and uncomplaining, I yearn for my
 love.’

(Honda 1970: 144)

⁷⁵ *Yoru/Yowa no nezame* is edited around 1045-68. The text is found on page 192 in the story II [47] in the book volume 28 of *Nihon Koten Bungaku Zensyu*.

In (11a), the speaker is testing on the gem whether it burn or not. She claims that the real gem will not burn in fire, and that she expects that the gem that is presented to her is not real. The antecedent in (11a) thus expresses an implausible event, ‘the gem does not burn,’ which is clearly not expected by the speaker. Therefore, our theory correctly predicts that the subordinate clause receives the conditional interpretation. In (12), the sentence is uttered in the context where the rumor has already arisen, and this is uttered after the fact, stated as a kind of flashback. In this context, the antecedent ‘the rumor has not arisen’ is factual, in the sense that there was a time in the past when the proposition was true; but it is no longer true in the utterance time. Thus, our theory in (10) predicts that the subordinate conjunction should be realized as conditional and our prediction is borne out as it is realized as irrealis (conditional) form of the negative consequential (NC). However, the two meanings of NC, *-zu pa* are not identical, as the subordinate clause in (11a) states a non-factual event (conditional), while (11b) states a factual event in the past (temporal). Thus the irrealis NC form *-zu pa* has two distinct meanings: a conditional meaning ‘if not’ and a temporal meaning ‘while/as long as.’

In (12), the antecedent expresses a generic sentence. The speaker compares her feeling to the nature of wild azaleas on Tokiwa Mountain. The antecedent ‘an azalea on Tokiha Mountain does not say a word’ is true in the context, and thus the subordinate clause in (12) is interpreted as a reason for the truth of the consequent, ‘the flower is lonely.’ The interpretation is ambiguous whether the reason is offered as consequential (because) or concessive (although). It can be interpreted as ‘because azalea does not say (have a mean to express) that ‘I miss you,’ it is missing you. On the other hand, it can be also interpreted as ‘although the azalea does not express her feeling of loneliness, it keeps her loneliness within.’

Let us review the semantic variability stated in (10) above. As we have seen in (11b) above, there is a temporal interpretation that does not have causal/conditional realizations. The temporal adverbial clauses do not restrict the meaning of a modal⁷⁶, as both conditional and reason clauses do; rather, the temporal adverbial clauses restrict the temporal denotation of the consequent clause.

(4.13) Semantic variability of *koso* –*e* (S₁, S₂) (Final version)

- a. S₁ is clearly implausible with respect to the context; then S₁ is a condition for the truth of S₂.
- b. S₁ is possible and probable with respect to the context; then S₁ is a temporal adverbial of S₂.
- c. S₁ is a true statement with respect to the context; then S₁ is a reason for S₂.

In sum, I have shown that there are three interpretative possibilities of subordinating conjunctions, which are in complementary distribution. These semantic roles of an adjunct clause (suffixed by *koso*) are partly determined by morphology, but otherwise the language user uses inference to determine which logical relation (among the three available pragmatic types of relations) makes sense, thereby determining the semantic role of the adjunct clause.

4.2.2 *Similarity between causal and conditional interpretations*

In this section I argue that conditional and causal interpretations are similar in the sense that both conditional and causal interpretations are realized when the language user considers a causal

⁷⁶ Here I mean the cases where there is a temporal connection without any causal connection between the main clause and the subordinate clause, as in “Mary left when John came.” The temporal adverbial clause in this case still imposes a temporal restriction of the consequent, but not a restriction of the modality of the consequent.

relation to hold between the antecedent and the consequent. Also, they both tend to occur in a biclausal construction linked by a temporal subordinator that implicates a temporal sequence or an overlapping interval. I also argue that non-accidental occurrences of conditional and *because*-like interpretations in the various antecedent forms (such as *-ba* clauses, *when*-type clauses and *-te* clauses that we have seen so far) can be accounted for if causal/conditional meanings are realizations of interpretive variants assigned to the temporal subordinators, and that such variants will be realized whenever a causal connection is considered to be involved.

Let us review the subordinating conjunctions that express a temporal sequence we have seen so far. The temporal subordinate clauses such as *toki-ni* or *pi-ni*, the gerund *-te* clauses, and consequential *-ba* clauses all show the same variability. I will first summarize the example sentences that have the antecedent not true in the context. All the translations of these examples are given in (14); the corresponding texts in Old Japanese are repeated in (15):

(4.14) Examples of conditional interpretations among subordinating conjunctions

a. *-ba* clause (consequential “if/therefore”)

“**Only if** I hear that she is there, do I wish to go home, do I yearn for my country.”

b. *pi-ni* clause (temporal “on the day when”)

“**Only on the day** Shikama River forebears to flow into the sea of the sea God’s realm will my longing for you likewise end.”

c. *-te* clause (conjunctive “and” or temporal “after”)

“**Only after** I understand her mind will I give up on my love.”

(4.15) a. 吾が思ふ妹有りと言はばこそよ 家にも行かめ 国をも偲はめ (=1)

A ga omopu tuma ari to ipaba koso yo

I NOM think.of.ADN wife be.CONCL COMP say.COND KOSO EMPH

ipye ni mo yuka-me, kuni wo mo sinwopa-me.

home LOC ETOP go-CONJL.EXCL, country ACC ETOP yearn.for-CONJL.EXCL

(*Kojiki* III: Emperor Ingyoo, 90; *MYS* 13: 3293)

‘**Only if** I hear that she is there, do I wish to go home, do I yearn for my country.’

(*The Oxford Corpus of Old Japanese*, English translation by Philippi)

b. わたつみの海に出でたる飾磨川絶えむ日にこそ我が恋止まめ

Wata tu mi no umi ni ide-ta-ru Sikama-gapa

Sea GEN dragon GEN sea LOC exit-PERF/PROG-ADN Shikama-River

taye-mu pi ni koso, a ga kwopwi yama-me

end-CONJL.ADN day LOC KOSO, I GEN longing cease-CONJL.EXCL

(*MYS* 15: 3605)

‘**Only** on the day Shikama River forebears to flow into the sea of the sea God’s realm,
will my longing for you likewise end.’

(Horton 2012: 15)

c. (荒小田をあら鋤き返しかへしても) 人の心を見てこそやまめ

...Fito no kokoro wo mi-te koso yama-me

...person GEN mind ACC see-GER KOSO stop-CONJL.EXCL

(*Kokin* 15: 817)

Lit: 'I will give up on my love (only) after I understand her mind.'

'(Again and yet again the farmer till the land reclaimed), so will I struggle hard to see my love before we part.'

(Honda 1970: 210)

In (15a-b), the *koso -e* sentences obtain the rhetorical counterfactual interpretations, that is, a denial of the consequent. In (15c), the gerundive clause in the *koso -e* construction expresses a rhetorical counterfactual reading, which reads, "Only if I ever understood her mind would I give up on her." It has an implication that the speaker cannot see/understand her mind in the context world, and the speaker's frustration of not being able to give up on his love.

In the same manner, I will summarize examples of subordinating conjunctions that express a temporal sequence and that implicate a causal relation (the way a reason clause expresses) in (16), whose texts in Old Japanese are repeated in (17):

(4.16) Examples of causal interpretations among subordinating conjunctions

a. -ba clause (consequential "if/therefore")

“The crimson leaves must fall as offering to Gods, **as/because** there is the God of Travel to whom Princess Tatsuta wishes to make offering when she leaves.”

b. *pi-ni* clause (temporal “on the day when”)

“**Only when** the year ends, we can see (understand) pine trees that remain unchanged.”

c. *-te* clause (conjunctive “and” or temporal “after”)

“I admire (bush clover) even more **after** it formed seeds.”

(4.17) a. 龍田姫 手向くる神のあればこそ 秋の木の葉の幣と散るらめ

Tatuta fime tamukuru kami no **areba koso,**

Tatsuta princess offer.ADN gods GEN exist.PROV KOSO,

aki no konofa no nusa to tiru-**rame**

autumn GEN leaves GEN blessing as fall-PRES.CONJL.EXCL

(*Kokin* 5: 298)

‘The crimson leaves **must** fall as offering (to Gods), **as/because** there is the God of Travel to whom Princess Tatsuta wishes to make offering (when she leaves).’

(Adapted from Honda1970: 92)

b. 雪ふりて年のくれぬる時にこそ 遂にもみぢぬ松も見えけれ (=9a)

Yuki furi-te tosi no kure-nuru toki ni **koso,**

snow fall-GER year GEN end-PERF.ADN time DAT KOSO

tuini momidi-nu matu mo mie-kyere
 finally change.color-NEG.ADN pine ETOP see.PASS-MPAST.EXCL

(*Kokin* 6: 340)

Lit: ‘Only **when** the year ends, we can see (understand) pine trees that remain unchanged.’

c. (我妹子がやどの秋萩花よりは) 実になりてこそ恋増さりけれ

...mi ni nari-te koso kwopi masari-kyere
 ...seed DAT become-GER KOSO longing increase-MPST.ECXL

(*MYS* 7: 1365)

Lit: ‘I admire (bush clover) even more after it formed seeds.’

‘Now it has gone to seed, which I cherish all the more indeed.’

(Honda 1967: 111)

In (17a-c), the *koso* –*e* sentences express certain temporal relations between the propositions.

There seems to be a certain implication suggesting a temporal relation, such that the first event in the subordinating clause either precedes the second event as in (17b-c), or the first event prevails during the time(s) when the second event happens, as in (17a). At the same time, these sentences suggest a causal relation. In (17a), the existence of Gods is the reason for (Tatsuta princess’s act of) falling of crimson leaves (to make an offering to them) in the autumn. In (17b), coming to the year’s end (when other trees drop all the leaves) causes the pine tree to be perceived as

unique. In (17c), the plant's forming seeds causes the speaker to cherish the plant even more. These instances indicate that the causal relation can be established between the events that are temporally connected, when the language users infer a causal relation. In another words, the temporal relation permits a language user to infer or facilitates a causal relation.⁷⁷

A causal inference induced by pragmatic factors may be thought of as a type of 'invited inference,' as termed by Geis & Zwicky (1971) and Horn (1999). They argued that some sentence forms are interpreted with an additional implication, which invites an inference of a stronger relation than what we expect based on from the sentence form. In this view, the causal/conditional interpretations are the stronger or stricter relation than the temporal relation that the sentence can express. For example, the English sentences in (18) contain a temporal adverbial clause and an absolute, but these adjunct clauses tend to be interpreted as a reason for the main clause.

(4.18) a. After a large meal, we slept soundly.

b. Having finished the manuscript, she fell into a swoon.

In (18a), the temporal sequence between the two events, having a large meal and sleeping soundly, can be taken to be in the causal relation as well. In the absolute construction in (18b), we tend to infer that there is a causal relation between finishing the manuscript and falling into a swoon, although there is no clear morphological item that marks causation. Horn (1999) argued that this type of strengthening is an observable phenomenon among all the sentential connections that specify a temporal connection between the two propositions. Horn's work applies here

⁷⁷ I owe Laurel Preston for wording this concept in an informative and proper expression.

because the subordinate conjunctions in Old Japanese demonstrate that this is indeed the case; a causal or conditional meaning is assigned where a temporal sequence is indicated.

We are now ready to provide a formal statement of the semantic variability of conditional and causal interpretation observed in *koso –e*. Let *p* and *q* represent a sentence variable and *p* and *q* are in a certain temporally connected relation by which *p* precedes *q* or *p* prevails when *q*. We can then say that the semantic role of *p* is indeterminate in relation to the matrix clause *q*, summarized as follows:

(4.19) Any equivalent expression to *p-koso q-e* ‘it is *p* (and only *p*) from which *q* follows’ is

indeterminate as to

- a. Counterfactual interpretation: ‘*q* follows from *p*; if it were the case that *p*, it would be the case that *q*.’
- b. Causal interpretation: ‘*q* follows from *p*; because *p* is true, *q* is true.’
- c. Temporal interpretation: ‘*q* follows from *p*; when/after/while *p*, *q*.’

Though these interpretations are distinct, but they are also similar, in that they each have the following (same) semantic component in their meanings: the occurrence of the first event *p* is a prerequisite for the occurrence of the second event *q*.

This analysis provides a natural explanation for the negative implication of the *koso –e* construction that we have observed in Chapter 2. The temporal sequence of events ‘*p* is followed by *q*’ invites a stronger relation than occurrence of *p* implies occurrence of *q*; and suggests that non-occurrence of *p* entails non-occurrence of *q*. Let us consider the expressions of temporal adverbials in the *koso –e* construction as in (20a), (21a) and (22a) below. They express

either ‘*p* occurs, and then *q* occurs’ or ‘*p* is followed by *q*.’ In these expressions, the occurrence of *q* depends on the occurrence of *p*. This relation of temporal sequence invites a stricter relation when emphasized by the focus construction, *koso* –*e*. This stricter relation is expressed by the ‘negative implication’: non-occurrence of *p* implies non-occurrence of *q*. We can express the negative implication ‘non-occurrence of *p* implies non-occurrence of *q*’ by using *before* or *until*⁷⁸ as in (20b), (21b), and (22b):

(4.20) a. Only **when/if** the moon disappeared would my longing come to an end. (=3)

b. **Not before** the moon disappears will my longing come to an end.

(4.21) a. Only **after** I understand/see my love will I give up on her. (=6)

b. **Not until** I understand her mind will I give up on her.

(4.22) a. Only **when** the year ends can we see pine trees that remain unchanged. (=5)

b. **Not until** the year ends can we see pine trees that remain unchanged.

Schematically, the emphasis placed by *koso* on the temporal relation between *p* and *q* in the *koso* –*e* construction in (20)-(22) can be illustrated as follows:

(4.23) a. [**when/if/after** *p*]-**koso** [*q*-**e**].

b. → **Not before/until** *p* will *q*.

⁷⁸ The intensional use of *before* or *until* is discussed in Condoravdi (2010) and Ogihara (2016) among others.

In (23a), a causal relation is assumed to exist between p and q . As we have seen in Chapter 3 for $-eba$ and in the earlier examples in this chapter, the causal interpretations (conditional and *because*-like meanings) are elicited in the *koso -e* construction among all the available interpretations such as {when, if, after, and...} of subordinating conjunctions. If we assume that there is a stricter temporal relation requiring that ‘non-occurrence of p implies non-occurrence of q ’, then (23a) entails (23b). The temporal expressions in (23b) are equivalent to the negative implication of a conditional in *koso -e*, ‘as long as the moon exists (=before the moon disappears), I will not stop longing for you,’ or the negative implication of a *because*-like *koso -e*, ‘unless the year ends (=until the year ends) we will not see pine trees that remain unchanged.’ This explains why there is a negative implication in the *koso -e* construction. The negative implication follows from the semantics of temporal sequence between the antecedent and the consequent, and the additional implication that non-occurrence of the antecedent implies non-occurrence of the consequent.

4.3 FURTHER EVIDENCE OF SEMANTIC VARIABILITY

In the previous section, we have established that: 1) the causal/conditional variability exists across temporal subordinating conjunctions in the *koso -e* construction; 2) the causal/ conditional interpretations of a subordinating conjunction are variants of a temporal (sequential) interpretation; and 3) selection of conditional or causal interpretation is determined by whether the antecedent is true or not in the context. In this section, I will support these hypotheses by showing that a similar causal/conditional variability is observed in English absolutes as proposed by Stump (1981,1985). Further evidence comes from the idiomatic use of *koso -e*, in which a subordinate clause is used without the main clause. I also show that this idiomatic use of a reason clause is only felicitous when the speaker presupposes the truth of the consequent, while

the idiomatic use of a conditional clause is only felicitous when the truth of the consequent is not presupposed.

4.3.1 *English absolutes*

Stump (1981,1985) argued that the semantic variation of the English absolutes is due to indeterminacy of the interpretation of the subordinating conjunction, and that the semantic role of the absolute is determined by the language user's inference concerning the relation between the two propositions in the subordinate clause and the main clause. According to Stump, there are three types of absolute constructions:

(4.24) a. The free adjunct

Walking home, he found a dollar.

b. The nominative absolute

His father being a sailor, John knows all about boats.

c. The augmented absolute construction

With the children asleep, Mary watched TV.

(Stump 1985: 1)

English absolutes in (24) are syntactically characterized as “adverbial subordinate clauses.” The main verb of the subordinate clause may be a present or past participle as in (24a), augmented with a nominal as in (24b) or with a preposition as in (24c). Interestingly, the semantic role of the absolutes connection to the main clause is open to a range of meanings. Stump argues that

the semantic variability in English absolutes gives rise to interpretations that are comparable to *if*-clauses, *because*-clauses, and time adverbials. Consider Stump's examples:

- (4.25) a. Having unusually long arms, John can touch the ceiling. (reason)
 b. Standing on the chair, John can touch the ceiling. (conditional)
 c. Floating in the air, John can touch the ceiling. (temporal)

- (4.26) a. Containing twice the iron as a pound of calf's liver, it must be very effective. (reason)
 b. Taken in the prescribed dosage, it must be very effective. (conditional)
 c. Fighting in France, he was taken prisoner. (temporal)

(Stump 1985: 41-42)

The absolutes in (25) and (26) are naturally paraphrased with one of three types of free adjuncts:

- (4.27) a. **Because** he has unusually long arms, John can touch the ceiling.
 b. **If** he stands on the chair, John can touch the ceiling.
 c. **While** he floats in the air, John can touch the ceiling.

- (4.28) a. **Because** it contains twice the iron in a pound of calf's liver, it must be very effective.
 b. **If** it is taken in the prescribed dosage, it must be very effective.
 c. **When** fighting in France, he was taken prisoner.

(Jespersen 1940: 407; Stump 1985: 11)

Stump further observes that some *when*-clauses behave like *if*-clauses. The type of *when*-clause in (29a) below restricts the interpretation of the ‘relative frequency adverb’⁷⁹; or a *when*-clause can restrict a generic operator as in (29b). These *when*-clauses are potentially interpreted as *if*-clauses as in (30):

(4.29) a. **When** he is not busy in the weekend, he usually heads for open water.

(Slightly modified from Stump 1985: 24)

b. **When** their old steel teapot develops a leak, Donald plugs up the hole with a wood screw.

(Stump 1985: 25)

(4.30) a. **If** he is not busy in the weekend, he usually heads for open water.

b. **If** their old steel teapot develops a leak, Donald plugs up the hole with a wood screw.

When-clauses can be quantified by ‘situations’ and have the meaning equivalent to ‘whenever’ or ‘for all the situations in which p is true, q is true.’

There is another use of *when*-clauses, which is to be categorized under “main tense adverbs” in Stump’s terminology. In this use, the *when*-clause does not restrict the (frequency) operator, but is a function that refers to a time interval.

(4.31) a. John left **when** Mary came.

(Slightly modified from Stump 1985: 123)

⁷⁹ Stump makes a distinction between “relative frequency adverbs” and “fixed frequency adverbs.” The latter examples are *yearly*, *every year*, *once a year*, *monthly*, etc.

b. Being a superb dancer, she was in great demand for parties.

(Stump 1985: 25)

According to Stump, in (33a), the past tense of *came* in “Mary came” in the *when*-clause has to be co-referent with the past tense of *left* in “John left” in the main clause. Stump (1985:123) proposes that these past tenses in *when*-clauses show a “superficial tense-marking” and are different from the past tenses in independent clauses.⁸⁰ Thus, Stump concludes that these past tenses in the temporal adverbials are interpreted as “non-past,” whose tense (i.e. the relation to the speech time) must coincide with the tense of the main clause. In the same way, the absolute in (33b) functions as a main tense adverb, and gets its temporal interpretation from the main clause.

Stump observes that *because*-clauses (i.e. strong adjuncts) also function as a main tense adverb. The *when*-clauses of this (=a temporal adverbial) type can be interpreted as *because*-clauses as in (32), if a causal relation is inferred.

(4.32) a. **Because** she was a superb dancer, she was in great demand for parties.

b. John left **because** Mary came.

⁸⁰ This is the past tense that does not have a backward-shift effect: the time of Mary’s singing has to be co-referent with the time of John’s leaving. The past tense embedded under another past tense is realized as (superficial/relative) past tense in English, and as present tense in some languages such as Japanese. See Ogihara (1989, 1995a, 1995b) for details.

Thus, English absolutes⁸¹ are similar to temporal subordinate conjunctions in the *koso –e* constructions in that they can express conditional or causal interpretations when a causal relation is believed to hold.

As for the causal/conditional variability, Stump (1985: 53) makes a distinction between weak adjuncts and strong adjuncts (which will be defined below): weak adjuncts are interpreted as conditional clauses, and strong adjuncts as reason clauses. Observe that the optimal interpretation of the adjunct clause in (33) and (34), where the adjunct is either ‘weak’ or ‘strong’ and not ambiguous.

(4.33) Being a master of disguise, Bill would fool everyone.

a. ≠ If he were a master of disguise, Bill would fool everyone.

b. = Because he was a master of disguise, Bill would fool everyone.

(4.34) Wearing that new outfit, Bill would fool everyone.

a. = If he wore that new outfit, Bill would fool everyone.

b. ≠ Because he wore that new outfit, Bill would fool everyone.

(Stump 1985: 41)

Stump argues that the semantic role of English absolutes is determined and predicted by Greg Carlson’s distinction between stage-level and individual-level predicates. For example, the main clauses have the identical sentences in (33) and (34) above, but the semantic roles of the

⁸¹ Even in the sentences containing absolutes, the overall sentence forms are not completely the same between the causal and conditional sentences. The cases where the forms seem identical are in the modal context, as Stump (1985) points out. This is observed where the counterfactual modal *would* (or *might*) clearly selects weak adjunct (conditional clauses), but not strong adjuncts. He mentioned briefly that when there is no modal in the main clause, the absolutes are interpreted as strong adjuncts.

absolutes are quite different. The adjunct clause in (33) contains an individual-level predicate, *be a master of disguise*. Since the truth of the sentence in the present tense (“x is a master of disguise”) entails an actual truth, the adjunct clause containing that sentence is interpreted as a ‘strong’ adjunct as equivalent to a *because*-clause in (33b). On the other hand, the adjunct clause in (34) contains a stage-level predicate *wear a new outfit*. The truth of the sentence in the present tense (“x wears a new outfit”) does not entail an actual truth, and therefore, the only interpretation available for (34) is “weak” as paraphrased with an *if*-clause, as in (34a). Thus, in English absolutes, whether the antecedent is true or not with respect to the context is predictable from the individual/stage-level distinction in the adjunct clause.

To sum up, our claim about *koso* –*e* interpretations is supported by Stump’s distinction between weak and strong adjuncts; conditionality is the semantic role of the weak adjunct, and causality or reason is the semantic role of the strong adjunct. In the *koso* –*e* construction, when the antecedent is marked by the irrealis form, or not true in the context (=weak adjunct), it is interpreted as a conditional, and when the antecedent is marked by the realis form, or true in the context (=strong adjunct), it is interpreted as a reason for the consequent.

4.3.2 *Idiomatic use of –ba clauses*

In this section, I will argue that only reason clauses can restrict a proposition whose actual truth is presupposed, while conditional and temporal clauses cannot. I also show that this is compatible with what I have argued so far.

Let us discuss how the subordinate adverbial clauses suffixed by the focus particle *koso* restrict the consequent clause. It is interesting to observe that a *ba*-clause with *koso* can be used

without the main clause⁸² in Middle Japanese. Let us refer to this use as “stranded” use of *koso*.

Hando (1992, 2003b: 110) observes that the stranded uses of the irrealis clause *-aba* obtained an idiomatic meaning ‘no,’ a negatively biased answer to the previous question/request.

(4.35) a. A: 「起請文書き進ずべき」

B: 「とてもかうても鎌倉殿によしと思はれ奉ったらばこそ」

(*Heike Monogatari* XII *Tosaboo kirare*: 450)

A: ...kisyoomon wo kaki –sinzu –beki.

Pledge ACC write.INF -offer.(humble) -should.CONCL

“Let us offer (our) pledge to the general⁸³.”

B: Totemokautemo kamakura-dono ni yosi to

Either way kamakura-RES DAT good.CONCL COMP

omoware-tatematu-taraba koso.⁸⁴

be.thought-offer(humble)-PERF.COND KOSO.

“(no matter whether we thought of the general in good terms or not) **Only if** I was thought to be good by the general, no.”

⁸² This stranded use of *koso* is possible in the context where the content of the main clause is given in the discourse.

⁸³ This term (‘general’) means *shogun* ‘governor of the country’ in *Kamakura* period in Japanese history.

⁸⁴ In (37a), the context is found in the conversation between the disciple and his master. The disciple, worried about his master’s redemption over the general’s favor, suggests writing a pledge to the general. However, the master rejects this suggestion by using the stranded *koso*. The subjunctive conditional clause means “if I was thought favorably by the general.” In (37b), mother responds to her daughter’s suggestion for her coming with her to the new place to live. Mother thinks of staying in the village alone, but rejects that idea by uttering the stranded *koso*. The particle *koso* is on the irrealis clause meaning “if someone else come to see me,” which is implausible.

b. 里に住めども、吾子よりほかに見え通ふ人のあらばこそ

Sato ni sume-domo, ako yori foka ni mie.kayou. fito no araba **koso**.

Village DAT live-though you ABL other DAT. come.visit.ADN person GEN is.COND KOSO

(*Utsuho monogatari* I [30], *Toshikage*: 79)

“(I) would live in the village (by myself) – only if someone other than you come visit me
– no.” (Based on Modern Japanese translation)

The fact that these irrealis subordinate clauses express a negation suggests that the propositions in the antecedents are not true or not expected to be true in the actual world.

On the other hand, when the realis clause *-eba* suffixed by *koso* is stranded, it expresses a positively biased answer ‘yes.’ In (36a), the realis *-eba* is interpreted as a reason clause in the *koso -e* construction. In (36b), however, the realis *-eba* can be interpreted as an indicative conditional, close to ‘whenever.’

(4.36) a. あやしう、心憎く労ある人なればこそ

Ayasiu, kokoronikuku rau aru fito nareba **koso**.⁸⁵

Suspicious, modest.INF thoughtfulness have.ADN person be.PROV. KOSO

(*Utsuho monogatari* II, *Naishi-no kami* [1]: 160)

⁸⁵ In (36a), the emperor is conversing with his wife about someone who is suspicious for knowing a secret. The emperor is saying that the person is most suspicious just because he appears least suspicious. In (36b), father is giving advice to his son about how to marry to a good wife; in the context he is assuming that his son would marry a good wife only if he takes an action rather than waiting for his parents’ permission.

“(he is even more) suspicious, only/precisely because he is so modest and thoughtful.”

(Based on Modern Japanese translation)

b. 暇を見て、ふと入りぬればこそ

Fima-wo mite, futo iri -nureba koso. (yoki me wa e-te-mu)⁸⁶

chance-ACC find quickly come-PERF.PROV. KOSO (good wife Topic get-PERF CONJL)

(*Utsuho monogatari* II, *Kurabiraki*, *tyuu* [23]: 517)

“(A man will never fail to get a good wife) only when/if he approaches (a woman) as chance arrives.”

(Based on Modern Japanese translation)

The fact that the *koso*-phrase means ‘yes’ indicates that the conditional clause restricts the truth of the consequent clause, and suggests the actual truth of the consequent clause. The only difference between (36a) and (36b) is that the proposition in the adverbial clause, “(he is) modest and thoughtful” entails an actual truth in (36a), but “(he) quickly approaches the woman” does not entail an actual truth in (36b), though the actualization is strongly implicated. This difference is reflected in the translations; the subordinate clause in (36a) is a reason clause, while that in (36b) is a temporal or conditional clause.

In English, there are similar idiomatic use of a conditional and a reason clause. A subordinate adverbial clause, used without the consequent clause, expresses either a positively or negatively biased answer. The conditionals (especially *only-ifs*) are used for negatively biased

⁸⁶ I have supplied the bracketed sentence (to facilitate the readers’ understanding of the intention of the poem), but it is actually omitted in the original texts. The supplied text is extracted from the previous context and added to this context with slight modification.

answers, the temporal clauses are neutral, and the reason clauses are used for positively biased answers.

(4.37) Will you attend the conference?

- a. Only if/If my paper is accepted.
- b. When my paper is accepted.
- c. Because my paper is accepted.

(4.38) Will spring come early this year?

- a. Only if the ground hog didn't see his shadow.
- b. When the groundhog doesn't see his shadow.
- c. Because the groundhog didn't see his shadow.

This parallels the contrast we have seen in the irrealis *-aba* clauses and the realis *-eba* clauses.

Also, in English, we can test whether the subordinate adverbial clauses are compatible with *wh*-questions that presuppose the actual truth. Reason clauses, but not conditionals, can be used for an answer to a *wh*-question that presupposes the actual truth, as shown in (39). Conditional clauses and temporal clauses are compatible with the *wh*-questions that do not presuppose the actual truth, as in (40).

(4.39) A: Under what circumstance did he get arrested?

B: #If he shoplifted /#when he shoplifted/because he shoplifted.

(4.40) A: Under what circumstance will he get arrested?

B: If he shoplifts /when he shoplifts/#because he shoplifts.

The examples above suggest that conditionals differ from reason clauses in fundamental reasoning. In the conditional, the truth of the consequent is contingent on the fulfillment of the condition stated in the antecedent. Thus, conditional clauses are felicitous answers to a wh-question that does not presuppose the actual truth of the consequent, as the truth of the consequent cannot be assumed at the time of utterance. By contrast, reason clauses are not felicitous when the question does not presuppose the actual truth of the consequent.

The semantic variability of subordinating conjunctions can be further divided into subjunctive conditionals, temporal or conditional clauses and reason clauses depending on the language user's inference concerning the actuality of S_1 . The three possibilities are set out in the following statement:

(4.41) Semantic variability of $K(L) (S_1, S_2)$

- a. S_1 is not a true statement with respect to the context, S_1 is a subjunctive conditional of S_2 .
- b. The truth of S_1 is implicated with respect to the context, and then S_1 is a temporal or conditional clause of S_2 .
- c. The truth of S_1 is entailed with respect to the context, and then S_1 is a reason clause of S_2 .

The notation $K(L)$ represents a subordinate conjunction. The generalizations stated in (41) exhibit a clear divide between (41a-b) and (41c). The strong adjuncts (reason clauses) entail the actual truth of S_1 , while the weak adjuncts (subjunctive conditional clauses) and temporal clauses do not. This is expected because the strong adjuncts are the only adjuncts that can restrict a proposition (S_2) whose actual truth is presupposed. That is why the reason clause can be used as a positively biased answer. For the same reason, ‘never’ cannot be the answer to a *wh*-question that presupposes the actual truth of the consequent, as ‘never’ triggers a presupposition failure, just as answering the *wh*-question by a weak adjunct or a temporal clause will fail in the same manner. This prediction seems to bear out; the universally negative answer ‘never’ is only felicitous when a question does not have an existential presupposition such as “there is a time when you go to a doctor” as in (42):

(4.42) A: Will you go to a doctor?

B: Never/If I catch cold/#Because I catch cold.

(4.43) A: Under what circumstance will you go to a doctor?

B: (#)Never/If I catch cold/#because you say so.

(4.44) A: Under what circumstance did you go to a doctor?

B: #Never/#if caught cold/because I caught cold.

The *yes/no* question does not implicate the existence of the time in which the proposition comes out true; thus ‘never’ as well as a conditional clause is a felicitous answer, as in (42). The *wh*-

questions in the future tense in (43) implicate the existence of the time in which the proposition comes out true; thus ‘never’ is not a good answer, if the truth of the consequent is given. The *wh*-question in the past tense in (44) presupposes the existence of the time when the proposition is true; thus both ‘never’ and a conditional clause trigger a presupposition failure.

To summarize, conditionals are distinct from reason clauses in that conditionals are used for negatively biased answers because conditionals restrict a proposition that has no presupposition of its truth. Thus, a lack of actuality entailment is expected in the antecedent of the conditionals. Also, I have shown that reason clauses are used for positively biased answers, and that only reason clauses can be the answer to questions that presuppose the actual truth. Actuality entailment in reason clauses is thus expected, as strong adjuncts restrict the proposition whose truth is presupposed. These results are compatible with the generalization of semantic variability concerning conditional, temporal, and causative proposed in (41), and are expected from the properties of weak and strong adjuncts, as proposed by Stump.

4.4 CONCLUSION

I have examined the semantic variability of subordinating conjunctions in the *koso –e* construction, focusing on how conditional and *because*-like interpretations arise from the same *koso –e* construction. I have argued that counterfactuality and causality are underspecified in the subordinating conjunctions such as consequential *–ba* clauses, temporal adverbial clauses equivalent to ‘when,’ and gerund *–te* clauses equivalent to ‘and/after’. I have adopted the view that the causal/conditional interpretations result from the language user’s inference of a causal relation between the propositions linked by subordinating conjunctions. This is demonstrated by the existence of conditional and *because*-like interpretations across the subordinate clauses linked by these subordinators that do not have a lexical causal meaning. I have argued that

whether the antecedent is true or not with respect to the context determines the variation of meanings of these adjunct clauses: whether the subordinating clause receives conditional, causal, or temporal interpretations. In particular, I have shown that when there is an actuality entailment in the adjunct, it is interpreted as a reason clause. The actual truth of the proposition in *-ba* clauses is overtly marked by the realis (Izen) morphology *-eba*, and the lack of actuality by the irrealis (Mizen) morphology *-aba*. This explains the realization of *-eba* clauses as a reason clause and *-aba* as a counterfactual conditional clause. This is compatible with Stump's analysis of subordinating conjunction in English absolutes: conditionality is the semantic role of the weak adjuncts and causality is the semantic role of the strong adjuncts.

Chapter 5. CONCLUSION

This thesis investigates the semantics/pragmatics of conditional and causal interpretations of the subordinate adverbial clauses expressed in the *koso -e* construction during the era of Old Japanese. This thesis focuses on the meanings of the *koso -e* construction, with special attention to the additional meaning implicated by the utterance of the *koso -e* sentence, underlined in the following (abbreviated) translation:

(5.1) *A-koso B-e*

‘A (is) B; but non-A (is) non-B.’

When A is a subordinate *ba*-clause (roughly meaning ‘whenever’), we interpret the natural language expression “A-*koso* B-*e*” as “A is followed by B,” in which A and B represent propositions. In (1), [A (is) B] means “if/when it were the case that A, it will/would be the case

that B”; and [non-A (is) non-B] means “if/when it were not the case that A, it will/would not be the case that B.”

To illustrate the conditional interpretation of the *koso* –*e* construction, let us consider the example from Chapter 2, repeated here as (2):

(5.2) ひさかたの天つみ空に照る月の失せなむ日こそ吾が恋やまめ

Pisakata no ama no misora ni teru tukwi no

distant COP.ADN heaven GEN sky LOC shine.ADN moon GEN

use-na-mu pi **koso**, a ga kwopwi yama-me.

disappear-PERF.-SUPP.ADN day KOSO, I GEN longing stop-CONJL.EXCL

(MYS 12: 3004)

‘**Only if (on the very day when)** the moon that shines in the distant heavens ceased to be, would my longing likewise come to an end.’

(Adapted from Suga 1991: Part II, 364)

‘**When** the moon that shines in the far empyreal sky is no more–**then, only then**, shall cease this love of mine.’

(*The Nippon Gakujutsu Shinkokai translation* 1965: 301)

In the conditional interpretation of the *koso* –*e* construction in (1), “A-*koso* B-*e*” reads “only if it is/were the case that the moon disappears will/would it be the case that I stop longing for you.”

This interpretation has an implication “non-A (is) non-B”: in (1) it corresponds to “as long as it

is NOT the case that the moon disappears, it will NOT be the case that I stop longing for you.” When this implication is added, “A (is) B” (i.e. “if it were the case that the moon disappears, it would be the case that I stop longing for you”) is not intended by the speaker, but the negative implication “non-A (is) non-B” is intended.

Previous representative works that proposed to explain the negative implication attached to the *koso* –*e* construction are found in Ishida (1939), Ohno (1993), Whitman (1997), and recently, Tsuta (2011) among others. Both Ishida and Ohno view this implication as a joint effect of *koso* and the *e*-stem: the contrastive meaning brought by the emphasis on the focused phrase, and the –*e* ending forming a subordinating conjunction “and/but.” Tsuta (2011) argues that *koso* plays a major role in this implication, as the function of *koso* –*e* is to form a focus construction in which *koso* marks the focus and –*e* the domain. The focus particle introduces the alternatives, and the semantics excludes the alternative values (non-A) from forming true propositions. This semantics of focus naturally derives [non-A (is) non-B]. However, I claim that the theory of focus does not provide a sufficient explanation for the negative implication that comes with the rhetorical counterfactual conditionals expressed by *koso* –*e*. While the previous analyses handle the non-rhetorical reading of counterfactuals, my analysis improves on theirs by extending to the rhetorical reading of counterfactuals. The reason is that the *koso* –*e* construction in the form of [A-*koso* B-*e*] does not imply or intend to assert [A (is) B]; the speaker implies that [A (is) B] is “inconceivable” or “exceptional.”

I argue that the (counterfactual) conditional reading of the *koso* –*e* construction results from the lack of actuality entailment in the subordinate adjunct clause. As shown in Chapter 4, we have observed that a counterfactual interpretation is observed in consequential –*ba* clauses in the irrealis form, –*aba*, or in temporal adverbial clauses with a subordinating conjunction such as

toki-ni “when” or *pi-ni* “on the day when,” which express an implausible proposition, as in “on the day when the moon disappears.”

I argue that there are two possible counterfactual readings: a rhetorical reading and a non-rhetorical (standard) reading. As I argue in Chapter 2, a rhetorical reading is triggered by the speaker’s assumption that the subjunctive proposition is inconceivable. In particular, the rhetorical reading lacks an existence of the closest world that is assumed/presupposed in Lewis’s truth conditions of counterfactuals: the closest world(s) are found among those which are accessible to the actual world. I argue that the rhetorical reading of counterfactuals cannot receive a truth-value unless this presupposition is clearly spelled out. Thus, I reformulate the truth conditions of counterfactuals with the presupposition that the closest world(s) are defined when the counterfactual proposition has a truth-value. Conceivability is thought of as an additional restriction to accessibility. Rhetorical counterfactuals are characterized by having an antecedent that is ‘inconceivable’; the antecedent of the counterfactual is stricter than what is perceived as conceivable. From the assumption about inconceivability, the rhetorical counterfactual concludes that the consequent is inconceivable, too. This reasoning naturally follows if we adopt the logical function of *only-if* (i.e., an empty set of A implies an empty set of B) to be the truth conditions of counterfactuals expressed in *koso –e*, though the logical function of *only-if* is not identical to the lexical meaning of English *only-if*. I have briefly touched on the meaning of English *only-if*, but this is a broader topic and one to be pursued in further studies.

I also examined the semantic variability of the *koso –e* construction in which *koso* is suffixed to a subordinate adverbial clause (i.e. *–ba* ‘if’ and temporal adverbial clauses equivalent to *when*.) The semantic roles of the subordinate adverbial clauses in the *koso –e* construction are roughly divided into conditional and non-conditional interpretations. In Chapter 3, I show that non-

conditional subordinate adverbial *-ba* clauses in *koso -e* are interpreted as a cause, circumstance, or explanation. Based on my observations of the *koso -e* construction, the meanings of conditionality/causality are correlated with modal contexts. To be more specific, the type of modal predicate in the main clause disambiguates the conditional/causal interpretation of a subordinate adverbial clause. The modal contexts that elicit a conditional interpretation consist of the irrealis verbal form (i.e. *-aba*) in the conditional clause and the conjectural/subjunctive modal *-m(u)* in the main predicate. On the other hand, the realis form (i.e. *-eba*) and the epistemic/evidential modal such as *-ram(u)* or *-kem(u)* in the main clause elicit a causal interpretation. Based on Kratzer's (1977, 1979) semantics of modality, I argue that the semantic variation of causality and conditionality in *koso -e* is demarcated/elicited by the semantics of modality. Namely, subordinate adverbial clauses function to restrict the meaning of modality in the modal context. I propose that a reason clause restricts the meaning of the epistemic/evidential modal in the main clause, just like an *if*-clause restricts the meaning of the conjectural modal in the main clause. This analysis is supported by the fact that the addition of a reason clause to an epistemic/evidential modal sentence not only changes the scope of the modal, but also obtains an actuality entailment of the embedded clause of the modal. Moreover, the analysis accounts for the morphological make-up of the epistemic modals *-ram(u)* and *-kyem(u)*, in which the modal *-m(u)* is prefixed by tense, such as *-r(i)* or *-k(i)*. This indicates that these modals take a tensed (and realis) proposition as a complement, and therefore, imply factivity of the event embedded under the modal.

In a wider perspective, there are other subordinating conjunctions in the *koso -e* construction, which show the same complementary realization of conditional and causal interpretations, just as *-ba* clauses in the *koso -e* construction do. I argued that conditional and causal interpretations

are variants of a certain type of temporal interpretation, which implicate a temporal sequence or an overlapping interval. This is demonstrated by temporal subordinating conjunctions (equivalent to English *when*-clauses) and gerundive *-te* clauses (equivalent to a conjunction ‘and’), which can express conditional or *because*-like meanings in the *koso -e* construction. I adopted Stump’s (1985) view that conditional and causal interpretations are underspecified in temporal subordinating conjunctions, and they obtain either conditional or causal meaning whenever the causal relation is implicated or expected by the context. The question is how language users determine the underspecified meanings of a subordinate conjunction. I argued that the meaning of a subordinating conjunction is determined either by the morphosyntactic distinction between realis and irrealis or by the pragmatic context depending on whether the proposition in the subordinate clause is true or not with respect to the context. There are three mutually exclusive interpretations: conditional, causal, and temporal. While they are mutually exclusive, they are also similar, as they contain the same semantics that “the first event is followed by the second event.” This sequential meaning of the subordinating conjunction becomes further restrictive in the *koso -e* construction, and obtains the negative implication that the non-occurrence of the first event implies the non-occurrence of the second event. The same conditional/causal variability also occurs in English absolutes, as proposed by Stump (1985). Using Stump’s terminology, I argued that only strong adjuncts have an actuality entailment and can restrict the proposition that is presupposed to be true in the context. In the *-ba* clauses, factuality is expressed by the *e*-stem in *-eba*, and thus, it naturally receives the interpretation of a reason clause.

There are some distinct sources of restrictive force at work in the antecedent of the rhetorical counterfactuals. One is the restriction imposed by the modal itself (such as epistemic/

counterfactual conversational background and the ordering source). Another is the restrictive clause of a modal, which restricts the truth of the consequent clause, as we have discussed in this thesis. There is another source of restriction at work in the *koso -e* construction: a sense of adversity or the speaker's expression against his/her expectation or belief of normal course of events, etc., expressed by the concessive use of the exclamatory *-e* ("but" or "although"). In the traditional Japanese grammar, scholars discuss the semantic difference between the uses of *-e* (the exclamatory form), which are either 'concessive'⁸⁷ or 'simple emphatic,' and presumably correlated with additional implication and an assertive force. Also, because the scope of data in this thesis is limited to certain forms among all the occurrences of the *koso -e* construction, I could not reach a unified account on the semantics of *koso -e*. These issues will be left for further research.

⁸⁷ The term "concessive" is used differently from the use of "concessive" as in "concessive conditionals," which corresponds to English conditionals containing *whatever* or *no matter what*, as discussed in Citko (2003). In the *koso -e* construction, concessive meaning is attached to the exclamatory *-e*, and takes wider scope than the whole conditional sentence. In this thesis, I have not discussed the interesting similarities and differences between the conditional interpretations of *koso -e* and concessive conditionals. I will leave these further issues in syntax and semantics of various conditional types for future research.

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