# Tense and Aspect in Conditionals: A Contrastive Study of English and Japanese Naoaki WADA (University of Tsukuba) Email: wada.naoaki.gb@u.tsukuba.ac.jp

### 1. Introduction

-Numerous studies on conditionals, including the comparison between English and Japanese (cf. Athanasiadou & Dirven 1997; Masuoka 2006; Traugott et al. 1986; for English, see Dancygier 1998; Dancigyer & Sweetser 2005; Declerck & Reed 2001; Haegeman & Wekker 1984; Sweetser 1990; for Japanese, see Fujii 2018; Masuoka 1993; Narrog 2009; for their comparison, see Akatsuka 1985; Masuoka 2009; Takubo 2009).

### 2. Arita's (2006, 2009) analysis and its problems

- 2.1. An anayisis based on "settledness"
- -A proposition whose truth value is true at speech time is settled [settled proposition].
- ·· A futurate sentence denoting a schedule or plan can represent a settled proposition.
- →The settledness goes hand in hand with "speaker's knowledge."
- (1) Lewis {must/may} have come to the office. [unsettled past situation]
- $\rightarrow$ (1) does not represent a settled proposition because the speaker does not know its truth at speech time.
- 2.2. Two types of Japanese conditionals
- "Predictive" and "epistemic" conditionals represent unsettled and settled propositions.
- (2) a. Protases marked by ·(r)eba or ·tara, non-tensed (non-finite) clauses, depict unsettled situations. (→ "predictive" conditionals)
  - b. Protases marked by  $\cdot nara$  or  $\cdot n(o)nara$ , tensed (finite) clauses, depict settled situations. ( $\Rightarrow$  "epistemic" conditionals)
- (3) a. Ashita ame-ga hur-eba/hut-tara, shiai-wa chūshis-arer-u-darō. tomorrow rain-Nom fall-Cond/fall-Cond match-Top cancel-Pass-NPst-will 'If it rains tomorrow, the match will be cancelled.' (cf. Arita 2009: 127)
  - b. Moshi kaiketsusaku ga mitsukar eba/mitsukat tara, ureshi i desu. if solution Nom be.found Cond/be.found Cond be.happy-Prs-polite 'If a solution is found, I will be happy.'
- → The protases' predicates in -(r)eba and -tara clauses refer to non-scheduled future situations. [unsettled proposition]
- (4) (I hope Bolton won their home match yesterday.)

  Moshi (kinō) kat-ta-{nara/n(o)nara}, yūshō.sur-u chansu-ga

  if yesterday win-Pst-Cond/-Cond championship.do-NPst chance-Nom

  aru.
  exist-NPst
  - 'If they won (yesterday), they have a chance of winning the championship.'
- $\rightarrow$ The protases' predicates in *nara* and *n(o)nara* clauses refer to past or present situations whose truth is assumed by the speaker. [settled proposition]
- ··An exceptional case: The Japanese past form ·ta in ·nara clauses can represent an

unsettled future situation.

(5) Moshi kaiketsusaku ga mitsukat ta nara, ureshi i desu.

be.found-Pst-Cond be.happy-Prs-polite

'If a solution is found, I will be happy.'

solution-Nom

→The -ta form is a relative tense, representing anteriority relative to the apodosis' time located in the future (the time of *ureshi-i-desu* 'be happy') (cf. Ogihara 1996, 1999).

### Problems:

if

- The most problematic point: The ta form in n(o) nara clauses can refer to a future unsettled situation, as in (6ii), as well as a past settled situation, as in (6i).
- (6) Moshi kaiketsusaku-ga mitsukat-ta-n(o)nara, ureshi-i-desu.
  - if solution-Nom be.found-Pst-Cond be.happy-Prs-polite
  - (i) 'If (it is certain that) a solution was found, I am happy.'

[settled interpretation=Arita's interpretation]

(ii) 'If a solution is found, I will be happy.' [future unsettled interpretation]

- (7) Moshi kaiketsusaku ga (?)asu/shōrai mitsukat ta n(o)nara.
  - if solution Nom tomorrow/in the future be.found-Pst-Cond ureshi-i-desu.

be.happy-Prs-polite

'If a solution is found {tomorrow/in the future}, I will be happy.'

- -Another problem: She treats the -ta form in the -nara clause in (5) exceptionally.
- 3. An alternative analysis
- 3.1. A comprehensive model of tense interpretation
- -integrates a theory of modality as speaker's mental attitude and a general theory of language use (Wada 2013, 2017, 2019, 2021, 2022; cf. Wada 2001).
- 3.1.1. The theory of modality as speaker's mental attitude and the three-tier model of language use
- A. The theory of modality:
- -A sentential utterance consists of speaker's mental attitudes and propositional content (cf. Bybee et al. 1994: 176; Declerck 1991: 351; Lyons 1977: 452, 1995; Palmer 1986: 14).
- --Speaker's mental attitudes are divided into addressee-oriented speaker's attitudes (ASAs) and situation-oriented speaker's attitudes (SSAs); propositional content (PC) covers residue elements.
- (8) The semantic (de)composition of sentential utterances: [ASA [SSA PC ]]]
- --Prediction is an epistemic modality (SSA element); speech act types are ASA elements.
- -Assertion is a speaker's mental attitude when the speaker construes a situation as a fact or as if it is a fact.  $\Rightarrow$  a kind of modality (SSA element)
- ··Moore's paradox:
- (9) #It's raining, but I don't believe it.
- B. The three-tier model of language use (Hirose 1995, 2000, 2013, 2015):

- --Language use consists of three components: The situation construal tier, the situation report tier, and the interpersonal relationship tier.
- --The notion "speaker" is decomposed into the public self (the subject of communicating) and the private self (the subject of thinking/consciousness).
- (10) a. The situation construal (SC) tier: The speaker as private self construes a situation.
  - b. The situation report (SR) tier: The speaker as public self conveys (reports) a construed situation to the addressee.
  - c. The interpersonal relationship (IR) tier: The speaker as public self considers his or her social/psychological relationship to the addressee.

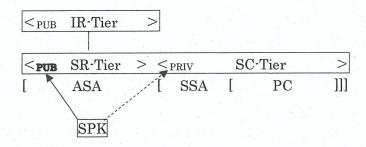


Fig. 1: The integration of the (de)composition of sentential utterances and the three-tier model of language use (English version)

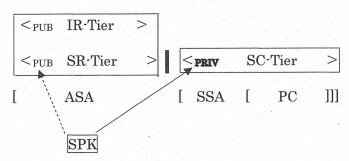


Fig. 2: The integration the (de)composition of sentential utterances and the three-tier model of language use (Japanese version)

IR-Tier: interpersonal relationship tier, SR-Tier: situation report tier, SC-Tier: situation construal tier, SPK: speaker (conceptualizer), ASA: addressee-oriented speaker's mental attitude, SSA: situation-oriented speaker's mental attitude, PC: propositional content, PUB: public self, PRIV: private self, —>: default preference ...>: marked choice

- --The most crucial difference: The deictic center is, by default, placed on the public self **PUB** in English but the private self **PRIV** in Japanese.
- (11) English is a public-self-centered language while Japanese is a private-self-centered language.
- --Major theories of modality are mainly based on European languages, connecting modality to non-factuality, often possibility and necessity.

- -In Japanese linguistics, assertion is often treated as a type of modality (Masuoka 1991, 2009; Miyazaki et al. 2002; Nakau 1992, 1994; Nitta 1991, 2019; Teramura 1984).
- (i) English as a public-self-centered language:
- -The public self (the subject of communicating) is necessarily involved even in situation construal (in the grammatical system).
- (12) a. He is a baseball player.
  - b. He may/must be a baseball player.
- (12a): The speaker construes the situation as a fact; an assertion is operative.
- →Due to the unification of the SR and SC tiers in Figure 1, an assertion in situation construal (SSA element) is "automatically" shared by the hearer and doubles as an ASA element.
- →The situation construed as a fact by the speaker is also a fact to the hearer.
- → Assertion is not treated as a type of modality in English. [→ objective truth]
- (ii) Japanese as a private-self-centered language:
- -The level of situation construal can be kept independently from the level of communication (in the grammatical system).
- (13) a. Kare-wa yakyū.senshu da. he-Top baseball.player Cop 'He is a baseball player.'
  - Kare-wa yakyū.senshu kamoshirenai/nichigainai.
     he-Top baseball.player may/must
     'He may/must be a baseball player.'
- (13a): The speaker construes the situation as a fact; an assertion is operative.
- →Due to the separation of the SC tier from the SR tier in Figure 2, the assertion by the speaker is "visible" (foregrounded) at the level of situation construal.
- → Assertion is treated as a type of modality in Japanese. [→ subjective element]
- C. The tense-form difference between English and Japanese:
- (14) English finite forms are absolute tense forms while Japanese finite predicates are relative tense forms.
- A morphemes: Tense morphemes integrated with grammatical deixis, such as person and mood, induce a direct reference to speech time (i.e., the default deictic center).
- · R-morphemes: Tense morphemes without grammatical deixis do not include such a reference in their semantics.
- --The English present and past are absolute tense forms; the Japanese past and non-past forms, i.e., -ta and -ru, are relative tense forms.
- $\rightarrow$ The -ta and -ru forms, respectively, represent anteriority and non-anteriority relative to the time of orientation.
- -- The -ta and -ru forms can be interpreted deictically (relative to speech time), especially in main clauses; they are usually interpreted non-deictically in subordinate clauses.
- -Our model does not distinguish between absolute and relative -ta forms.

(5) Moshi kaiketsusaku ga mitsukat ta nara, ureshi i desu. if solution Nom be found Pst Cond be happy Prs polite

'If a solution is found, I will be happy.'

 $\rightarrow$ All  $\cdot ta$  forms, including the  $\cdot ta$  form  $mitsukat \cdot ta$  in (5), are relative tense forms representing anteriority relative to the time of orientation, which is the main-clause time in the case of (5) but speech time in main clauses. [ $\rightarrow$  A solution to Arita's exceptional treatment of the  $\cdot ta$  form in (5)]

-In indirect-speech complements:

(15) John said that Mary was happy.

- (16) a. Jon-wa Meari-ga shiawase-da to it-ta.
  John-Top Mary-Nom happy-be.Prs QUOT say-Pst
  'John said that Mary was happy.'
  - b. Jon-wa Meari-ga shiawase-dat-ta to it-ta.

    John-Top Mary-Nom happy-be-Pst QUOT say-Pst

    'John said that Mary had been happy.'
- The English past tense was in (15) is an absolute tense form referring to a past situation relative to speech time.
- The Japanese ru and ta forms in the complement clauses in (16) are relative tense forms, referring respectively to a situation holding at, and one before, the time of orientation (i.e., John's utterance).

### 3.1.2. An analysis of two types of English conditionals by Wada (2019)

- -Type A conditionals (Haegeman & Wekker's (1984) "central if clauses", Dancygier's (1998) "predictive conditional clauses") describe a direct cause effect relationship between protasis and apodosis in the future (cf. Declerck 1991: 428).
- (17) If it rains tomorrow, the match will be cancelled. (Haegeman and Wekker 1984: 45)
- -Type B conditionals (Haegeman & Wekker's "peripheral *if* clauses", Dancygier's (1998) "non-predictive conditional clauses") do not express such a close link between protasis and apodosis.
- (18) a. If it will rain tomorrow, we might as well cancel the match now.

(Haegeman and Wekker 1984: 49)

b. If you like her so much, you should invite her to tea.

(Haegeman and Wekker 1984: 48)

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

(Haegeman and Wekker 1984: 48)

b. \*It is if you like her so much that you should invite her to tea.

(Haegeman and Wekker 1984: 48)

- · Type B conditionals
- -allow the tenses in the protasis and apodosis to behave independently from each other.
- -allow modal elements to appear in the protasis (18a).
- -do not allow their protasis to appear in the focus position of cleft sentences (19).
- -do not have to require modals to appear in their protasis (18b).

- (20) If it is certain that you like her so much, you are advised to invite her to tea.
- (i) Type A conditionals:

Fig. 3: The semantic (de)composition for type A conditionals

- · The protasis's situation:
- -It consists only of the propositional content PC and serves as a direct cause of the PC of the apodosis's situation.
- -The PC of the protasis and the PC of the apodosis constitute a complex proposition (represented by the shaded part [ [Protasis PC ]  $\rightarrow$  [Apodosis PC ]]).
- · The apodosis's situation:
- --The speaker construes the complex proposition (represented by [  $[Protasis PC] \rightarrow [Apodosis PC]]$ ) with a situation-oriented speaker's attitude (SSA).
- The speaker conveys the SSA + complex proposition (represented by [PRIV SSA [ [Protasis PC ]  $\rightarrow$  [Apodosis PC ]]]) to the addressee by adding an addressee oriented speaker's attitude (ASA).
- (17) If it rains tomorrow, the match will be cancelled.
- --The rainfall (the protasis's proposition) is regarded as a presupposition for (a cause of) the realization of the match's cancellation (the apodosis's proposition).
- --They are logically linked to each other in an "objective" scene.  $\rightarrow$  [a complex proposition in the PC domain]
- "The current speaker construes the complex proposition with a prediction (SSA element).
- --The same speaker conveys the SSA + PC to the addressee by adding a prediction as ASA element, i.e., an element belonging to the illocutionary point "assertive".
- N.B. A speech act can derive from the prediction as ASA element, as in *Private Jones will report at 08:00 hrs.* (instruction/order)
- (ii) Type B conditionals:

Fig. 4: The semantic (de)composition for type B conditionals

- The protasis's situation:
- -consists of an SSA element and propositional content (PC), represented by a bold underline: [Protasis SSA [PC]].
- · The apodosis's situation:
- -consists of an SSA element and propositional content (PC), represented by a wavy

### underline: [Apodosis SSA [PC]].

- →The protasis's situation serves as a trigger for the speaker's inference of the apodosis's situation.
- →The speaker as public self conveys the inference to the addressee by adding an addressee oriented speaker's attitude (ASA).
- (18) b. If you like her so much, you should invite her to tea.
- (22) <directive>

  [PUB suggestion [PRIV [P assertion [ you like her ]] → [A obligation [ you invite her ]]]]

  < SR-Tier > < SC-Tier >
- -The non-modalized form like in (18b) is accompanied by an assertion (SSA element).
- "Usually, the protasis of type B echoes the utterance of another speaker (especially the addressee). → The assertion as SSA element is attributed to that person.
- →The current speaker infers that if the addressee's love for a woman is asserted as true, the addressee's invitation should actualize. → The same speaker conveys the inference to the addressee with suggestion (ASA element), i.e., a member belonging to the illocutionary point "directive".
- 3.2. An analysis of Japanese conditionals based on the tense-interpretation model A. Conditionals with -(r)eba or -tara clauses:
- (2) a. Protases marked by -(r)eba or -tara, non-tensed (non-finite) clauses, depict unsettled situations.
- (3) a. Ashita ame-ga hur-eba/hut-tara, shiai-wa chūshis-arer-u-darō. tomorrow rain-Nom fall-Cond/fall-Cond match-Top cancel-Pass-NPst-will 'If it rains tomorrow, the match will be cancelled.' (Arita 2009: 127)
  - b. Moshi kaiketsusaku ga mitsukar eba/mitsukat tara, ureshi i desu. if solution Nom be.found Cond/be.founf Cond be.happy-Prs-polite 'If a solution is found, I will be happy.'
- -Hur-eba/hut-tara in (3a) and mitsukar-eba/mitsukat-tara in (3b) are non-finite.
- -- Non-finite forms are (basically) not accompanied by any mental attitude of a speaker.
- →These protases consist only of the PC domain; these conditionals are type A conditionals.
- -The notion of presumption is represented by the modal *darō* 'will/I think'.
- The speaker construes the complex proposition (represented by [ [P] it rains ]  $\rightarrow$  [A the match be cancelled ]]) with a presumption (SSA element), which doubles as an ASA element, i.e., a member belonging to "assertive".
- B. Conditionals with *-nara* or *-n(o)nara* clauses:
- (2) b. Protases marked by *nara* or *n(o)nara*, tensed (finite) clauses, depict settled situations.

- (6) Moshi kaiketsusaku-ga mitsukat-ta-n(o)nara, ureshi-i-desu.
  - if solution-Nom be.found-Pst-Cond be.happy-Prs-polite
  - (i) 'If (it is certain that) a solution was found, I am happy.'

[settled interpretation = Arita's interpretation]

(ii) 'If a solution is found, I will be happy.' [future unsettled interpretation]

### Interpretation (i):

-corresponds to type B conditionals, the protasis referring to a past settled situation.

- --The apodosis's situation (i.e., the speaker's being happy) is in the non-past form (ureshiirdesu 'be happy') and obtains at speech time.  $\rightarrow$  [assertable]
- -The *nonara* clause (the protasis) is a tensed one, containing an assertion (SSA element).
- → Type B protases often echo someone's subjective construal of a situation.
- The protasis represents a past situation. → [assertable]
- →The reporter as public self conveys to the addressee with an assertion, that the protasis's situation (i.e., someone's assertion about a solution having been found) induces the speaker as private self to construe the apodosis's situation (i.e., his/her being happy) with an assertion.

## Interpretation (ii):

- -corresponds to type B conditionals, the protasis referring to a future unsettled situation.
- (6) (ii) 'If a solution is found, I will be happy.' [future unsettled interpretation]
- ···no in ·n(o)nara is a variant of the modal ·noda, having an epistemic status (Arita 2009: 143; cf. Noda 1997).
- --The -noda relevant here has a function of the speaker's cognition without presupposing the presence of the hearer and preceding contexts (Miyazaki et al. 2002: 232).
- -This type of noda is used to express that the speaker has just noticed the situation involved.
- -This epistemic function of -noda is an SSA element attributed to the private self involved in the protasis.  $\rightarrow$  Type B conditionals
- (25) Moshi kaiketsusaku-ga mitsukat-ta-n(o)nara, ureshi-i-desu. if solution-Nom be.found-Pst-Cond be.happy-Prs-polite 'If I have found it a fact (at a future time) that a solution is found, I will be happy.'

ame-ga

hur-(u)-n(o)da.

tomorrow-Top rain-Nom

fall-NPst-n(o)da

(Arita 2009: 143)

<sup>&</sup>lt;sup>1</sup> In (i), the speaker has just found that it is certain that it will rain the next day.

<sup>(</sup>i) Ashita-wa

<sup>&#</sup>x27;(The fact is that) It rains tomorrow.'

- -The protasis's situation is accompanied by the notion "discovery".
- →[Suppose the speaker is male.] The speaker assumes that if he can assert at a future time that he has found the protasis's situation a fact, then he can infer that the realization of his being happy is assertable at that time.
- --How can we assert a future situation (because the speaker at speech time usually cannot assert a future unsettled situation)?

### Private-self floating:

- The current speaker's private self "floats into" a future time, at which the speaker can make an assertion about a future situation through the shifted private self.
- (25) Moshi kaiketsusaku-ga mitsukat-ta-n(o)nara, ureshi-i-desu.

  if solution-Nom be.found-Pst-Cond be.happy-Prs-polite

  'If I have found it a fact (at a future time) that a solution is found, I will be happy.'
- →In the protasis, the non-modalized -ta form (mitsukat-ta 'be found') is accompanied by an assertion, attributed to the private self of the current speaker shifted to a future time, i.e., the time of discovery.
- →In the apodosis, the non-modalized predicate (*ureshi-i-desu* 'be happy (polite)') is accompanied by an assertion, attributed to the shifted private self in the future.
- =>The target situation holds "in front of" the speaker, so he can make an assertion about it, construing it as if it is a fact.
- Why is private-self floating possible in Japanese? → <u>Japanese is a private-self-centered</u> <u>language</u>.
- -The private self is not necessarily under the control of the public self fixed at speech time, but can float into other time areas (cf. Wada 2022).
- -The same line of analysis applies to the -nara-clause version (e.g. (5)).<sup>2</sup>

#### 4. Conclusion

We have shown that the proposed analysis is useful to systematiclly explain the tense-aspect-modality phenomena in two types of English and Japanese conditionals as well as solving Arita's problems.

### **Appendix**

The semantic interpretation of (5) and (25) by way of private-self floating is schematized in Figure 5.

 $<sup>^2</sup>$  Noda (1997: 148) states that the -noda in subordinate clauses is used to view a target situation as having obtained or occurred. He also states (Noda 1997: 161) that while the semantic difference between -nara and -n(o)nara clauses is subtle, the latter is employed to show that the subordinate-clause situation is more certain to occur. In our analysis, this difference comes from whether the nuance of discovery exists or not.

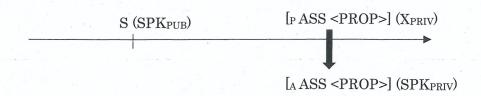


Fig.5: The semantic interpretation of a case like (5)/(25) by way of private-self floating

- · ASS and PROP indicate "assertion" and "proposition", respectively.
- · Subscript P and A mean "protasis" and "apodosis", respectively.
- The current speaker's public self (SPK<sub>PUB</sub>) is fixed at speech time (S).
- The private self of the current speaker or another (potential) speaker (represented by Xpriv) floats into a future time, at which he/she makes an assertion about the protasis's situation.
- The black downward arrow indicates an inference in which the private self's judgment about the protasis's situation induces the speaker to assume the actualization of the apodosis's situation, which consists of the propositional content and the SSA element attributed to the private self (represented by SPK<sub>PRIV</sub>) at a reference time in the future.

#### References

Akatsuka, Noriko (1985) "Conditionals and the Epistemic Scale," Language 61(3), 625-639.

Atanasiadou, Angeloki, and René Dirven (1997) On Conditionals Again, John Benjamins, Amsterdam.

Arita, Setsuko (2006) "Jiseisetsu to Nichieigo no Jōkenbun [Tensed Clauses and Conditionals in Japanese and English]," *Jōken Hyōgen no Taishō* [Comparisons of Conditional Expressions], 127-150, Kurosio, Tokyo.

Arita, Setsuko (2009) "Tense and Settledness in Japanese Conditionals," *Japanese Modality: Exploring its Scope and Interpretation*, ed. by Barbara Pizziconi and Mika Kizu, 117-149, Palgrave Macmillan, Hampshire.

Bybee, Joan, Revere Perkins, and William Pagliuca (1994) *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World*, University of Chicago Press, Chicago/London.

Dancygier, Barbara (1998) Conditionals and Prediction: Time, Knowledge and Causation in Conditional Constructions, Cambridge University Press, Cambridge.

Dancygier, Barbara and Eve Sweetser (2005) *Mental Spaces in Grammar: Conditional Constructions*, Cambridge University Press, Cambridge.

Declerck, Renaat (1991) A Comprehensive Descriptive Grammar of English, Kaitakusha, Tokyo.

Declerck, Renaat and Susan Reed (2001) Conditionals: A Comprehensive Empirical Analysis, Mouton de Gruyter, Berlin.

Fujii, Seiko (2018) "Conditionals," *The Cambridge Handbook of Japanese Linguistics*, ed. by Yoko Hasegawa, 557-584, Cambridge University Press, Cambridge.

Haegeman, Lilian and Herman Chr. Wekker (1984) "The Syntax and Interpretation of Futurate Conditionals in English," *Journal of Linguistics* 20(1), 45-55.

Hirose, Yukio (1995) "Direct and Indirect Speech as Quotations of Public and Private Expression," *Lingua* 95(4), 223-238.

Hirose, Yukio (2000) "Public and Private Self as Two Aspects of the Speaker: A Contrastive Study of Japanese and English," *Journal of Pragmatics* 32(11), 1623-1656.

Hirose, Yukio (2013) "Deconstruction of the Speaker and the Three-Tier Model of Language Use,"

Tsukuba English Studies 32, 1-28.

Hirose, Yukio (2015) "An Overview of the Three-Tier Model of Language Use," *English Linguistics* 21(1), 120-138.

Lyons, John (1977) Semantics, Two volumes, Cambridge University Press, Cambridge.

Lyons, John (1995) Linguistic Semantics: An Introduction, Cambridge University Press, Cambridge.

Masuoka, Takashi (1991) Modariti no Bumpō [The Grammar of Modality], Kurosio, Tokyo.

Masuoka, Takashi (ed.) (1993) Nihongo no Jōkenhyōgen [Japanese Conditional Expressions], Kurosio, Tokyo.

Masuoka, Takashi (ed.) (2006) *Jōken Hyōgen no Taishō* [Comparisons of Conditional Expressions], Kurosio, Tokyo.

Masuoka, Takashi (2009) "Modality from a Japanese Perspective," *Japanese Modality: Exploring its Scope and Interpretation*, ed. by Barbara Pizziconi and Mika Kizu, 36·55, Palgrave Macmillan, Hampshire.

Miyazaki, Kazuto, Taro Adachi, Harumi Noda, and Shino Takanashi (2002) *Modariti* [Modality], Kurosio, Tokyo.

Nakau, Minoru (1992) "Modality and Subjective Semantics," Tsukuba English Studies 11, 1-45.

Nakau, Minoru (1994) Ninchi Imiron no Genri [Principles of Cognitive Semantics], Taishūkan, Tokyo.

Narrog, Heiko (2009) Modality in Japanese: The Layered Structure of Clause and Hierarchies of Functional Categories, John Benjamins, Amsterdam/Philadelphia.

Nitta, Yoshio (1991) Nihongo no Modariti to Ninshō [Modality and Persons in Japanese], Hituzi, Tokyo.

Nitta, Yoshio (2019) "Suru' ga Mirai o Arawasu Toki [When 'Suru' Refers to the Future]," *Nihongo no Tensu Asupekuto Kenkyū o Toinaosu* [Reconsidering Studies of Tense and Aspect in Japanese], ed. by Isao Iori and Takumi Tagawa, 53-73, Hituzi, Tokyo.

Noda, Harumi (1997) 'No(da)' no Kinō [Functions of 'No(da)'], Kurosio, Tokyo.

Ogihara, Toshiyuki (1996) Tense, Attitudes, and Scope, Kluwer Academic, Dordrecht.

Ogihara, Toshiyuki (1999) "Tense and Aspect," *The Handbook of Japanese Linguistics*, ed. by Natsuko Tsujimura, 326-348, Blackwell, Malden.

Palmer, Frank R. (1986) Mood and Modality, Cambridge University Press, Cambridge.

Sweetser, Eve (1990) From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure, Cambridge University Press, Cambridge.

Takubo, Yukinori (2009) "Conditionals Modality: Two Types of Modal Auxiliaries in Japanese," Japanese Modality: Exploring its Scope and Interpretation, ed. by Barbara Pizziconi and Mika Kizu, 150-182, Palgrave Macmillan, Hampshire.

Teramura, Hideo (1984) Nihongo no Shintakusu to Imi II [Japanese Syntax and Semantics II], Kurosio, Tokyo.

Traugott, Elizabeth Closs, Alice Ter Meulen, Judy Snitzer Reilly, and Charles A. Ferguson (1986) On Conditionals, Cambridge University Press, Cambridge.

Wada, Naoaki (2001) Interpreting English Tenses: A Compositional Approach, Kaitakusha, Tokyo.

Wada, Naoaki (2013) "A Unified Model of Tense and Aspect and the Three-Tier Model of Language Use," Tsukuba English Studies 32, 29-70.

Wada, Naoaki (2017) "Gengo Shiyō no Sansō Moderu to Jisei, Modariti, Shintekitaido [The Three-Tier Model of Language Use and Tense, Modality, and Mental Attitudes]," Sansō Moderu de Mietekuru Gengo no Kinō to Shikumi [The Functions and Mechanism of Language Revealed by the Three-Tier Model of Language Use], ed. by Yukio Hirose, Masaharu Shimada, Naoaki Wada, Masaru Kanetani, and Akiko Nagano, 28-44, Kaitakusha, Tokyo.

Wada, Naoaki (2019) The Grammar of Future Expressions in English, Kaitakusha, Tokyo.

- Wada, Naoaki (2021) "Tense Choice and Interpretation in First-Person Stories: A Contrastive Study of English and Japanese," Aspects of Tenses, Modality, and Evidentiality, ed. by Laura Baranzini and Louis de Saussure, Brill, Leiden.
- Wada, Naoaki (2022) "Nichieigo no Wahō to Jisei narabini sono Kanrengenshō—Hōkatsuteki Jiseikaishaku Moderu niyoru Bunseki [Reported Discourse, Tense, and Related Phenomena in Japanese and English: An Analysis by the Comprehensive Tense Interpretation Model]," *Hikaku Taishō Gengokenkyū no Aratana Tenkai—Sansō Moderu niyoru Hirogari to Fukamari* [A New Development of Comparative and Contrastive Linguistic Studies: Expansion and Deepening by the Three Tier Model], ed. by Yukio Hirose, Masaharu Shimada, Naoaki Wada and Akiko Nagano, 35-82, Kaitakusha, Tokyo.