

Reanalyzing the “*to omou*” ‘I think’ Construction: A Corpus-Based Study of Natural Japanese Conversation*

TOMOKO ENDO

The University of Tokyo

HIKARU HOTTA

University of Neuchâtel, The University of Tokyo

1 Introduction

Mental state predicates that take complements often form fixed expressions. For example, the English verb *think* is used with the first person singular pronoun to form the expression *I think*, as in (1).

(1) I think it would be good to leave now.

The form *I think* is extremely common, and its syntactic status and discourse functions have been extensively studied (Thompson 2002, Boye & Harder 2021, inter alia).

This type of format, first person subject + mental state predicate, is repeatedly found in many genetically unrelated languages such as Finnish (Helasvuo 2014), Swedish (Bergqvist 2021), and

* This study was supported by KAKENHI Grant JP20H05630, JP22H00660, JP22K00526 and JP22K01879.

Japanese/Korean Linguistics 31.

Edited by William Giang, Lucien Brown, Shimako Iwasaki, Satoshi Nambu, and Daniel Pieper.

Copyright © 2024, Tomoko Endo and Hikaru Hotta.

Mandarin (Endo 2013). Nuyts (2001) classified mental state predicates that form this type of construction as one of the means for expressing epistemic modality, along with modal adverbs, adjectives, and auxiliaries. Considering the distinct importance of the first person subject in marking subjectivity (Benveniste 1971, Lyons 1977), it is not surprising that this combination is found universally across languages, including Japanese. In Japanese, the combination of quotation marker *to* and *omou* ‘to think’ can be attached after a clause, as in (2).¹

(2) (From Moriyama 1992: 110).

nihon no ima no iryoo seido wa machigatteru to omou.
 Japan GEN now GEN medical system TOP wrong.PROG QT think²
 ‘I think that the current medical system in Japan is flawed.’

Previous studies such as Moriyama (1992) and Nakau (1979) argued that the part *to omou* ‘(I) think that’ in (2) works as a modality marker. Used right after expressing an opinion, *to omou* marks the opinion as the speaker/writer’s personal view, emphasizing the subjective nature of the comment.

Although English *I think* and Japanese *to omou* serve seemingly similar functions, there are notable differences between them that cannot be overlooked. First, since Japanese has a basic SOV (Subject-Object-Verb) word order, *to omou* is located towards the end of a sentence or utterance rather than the beginning. As the sentence/utterance-initial position and sentence/utterance-final position, or the Left and Right periphery (Beeching & Detges 2014), have been argued to have a significant impact on subjective and intersubjective functions, the function of *to omou* should be further examined in terms of sentence/utterance-final expressions. Second, *to omou* expressions have more variations in form than English *I think*. For instance, besides *to*, forms such as *tte* and *toka* are also used as quotation markers, and the verb *omou* ‘to think’ can take various forms, including the nonfinite form *omotte* and the progressive form *omoinagara*. Whether these variations in form correspond to different discourse functions remains an empirical question. Therefore, the present paper calls the structure [complement clause + quotation marker + *omou*] the ‘*to omou* construction’, and aims to identify recurrent forms associated with the *to omou* construction and analyze their functions in natural conversation. The next section lays out the theoretical framework that forms the basis for subsequent analyses.

2 Background: A Usage-Based, Constructional View of Language

The present study adopts a usage-based, constructional model of language, in which linguistic knowledge is constructed from speakers’ experiences with concrete linguistic tokens, forming a network of form-meaning pairings or constructions (Ungerer & Hartmann 2023, Diessel 2023). In

¹ In Japanese, the first person subject is often unexpressed. Thus, the subject of *omou* ‘to think’ is generally understood as the speaker/writer.

² The glossing abbreviations used in this paper are as follows: ACC = accusative; BEN = benefactive; COP = copula; FP = final particle; GEN = genitive; INJ = interjection; INT = intentional; MOD = modality marker; NEG = negation; NML = nominalizer; NOM = nominal case marker; POL = polite marker; PROG = progressive; PST = past; S = soliloquy marker; SE = sentence extender; TE = *te* form; TOP = topic marker; Q = question marker; QT = quotation marker.

the context of the present study, there are two important implications. First, from a constructional perspective, concrete instances of construction play a pivotal role. An instance of the *to omou* construction, such as *to omotte*, constitutes not only a grammatical variant but also conveys distinct functions in discourse (Shimotani & Endo 2014). These functions become apparent when one examines discourse data, where the speaker’s subjective stance, interpersonal considerations, sequential positioning in conversation, and broader contextual cues such as registers can all be communicatively meaningful information for the participants. Through repeated usage, these functions may become conventionally associated with the forms (Bybee 2010). Although token frequency is not the only factor in the entrenchment and conventionalization of linguistic units (Divjak & Caldwell-Harris 2015), Section 4 uses frequency data to quantitatively identify recurrent patterns associated with the *to omou* construction.

Second, constructions are connected through various types of associative links. In other words, linguistic knowledge is not seen as a bag of constructions but rather as an interconnected network. Diessel (2023) identified six types of associative links: symbolic, sequential, taxonomic, lexical, constructional, and filler-slot relations. Of particular interest in this study are sequential relations, which capture the links between linearly cooccurring units such as morphemes, words, phrases, and clauses. If these links are sufficiently strong, the linearly connected units may instantiate symbolic relations on their own (Schmid 2020), in which entire forms are linked with semantic or pragmatic information. Furthermore, lexically specific constructions with overlapping constituent parts may form a paradigm, leading to a taxonomic relation in which low level instances are connected to their overarching schema.

The remainder of the paper is organized as follows. After a brief introduction of the data in Section 3, Section 4 provides a quantitative analysis to capture the variety of sequential links that encompass *to omou*. Section 5 focuses on the particular cooccurring unit *toka omotte* and analyzes its discourse functions in detail.

3 Data

We used the *Corpus of Everyday Japanese Conversation* (CEJC; Koiso et al. 2022), which contains 200 hours of naturally occurring conversations. For quotation markers, we included *to*, *tte*, *towa*, and *toka*. In total, the dataset contained 8,519 tokens of these quotation markers followed by the lemma [*omou*]. For the conjugations of the verb *omou*, we divided the tokens into eight categories: *omou* (plain), *omotte* (nonfinite), *omotta* (past), *omoimasu* (polite), *omottara* (conditional), *omotte(i)ru* (continuous), *omoinagara* (simultaneous), and others. We categorized the quotative markers and conjugated forms of *omou* in an exploratory manner, assigning distinct categories to the highly frequent types. Note that these categories are mutually exclusive; for instance, the frequency counts for *omotteru* were excluded from the *omotte* category. Examples were retranscribed using the standard transcription system for Conversation Analysis (for transcription symbols, see Hepburn & Bolden 2017).

4 Quantitative Analysis

The purpose of the quantitative analysis is to identify recurrent patterns associated with the *to omou* construction in natural conversation. In other words, we wanted to capture the ‘big picture’

of the sequential relations of the *to omou* construction. For this purpose, we take an exploratory approach and identify patterns primarily based on token frequency.

4.1 Complement Clause

To identify recurrent patterns between *to omou* forms and preceding complement clauses, we conducted an N-gram analysis. Table 1 lists the five most frequent 1-grams, 2-grams, and 3-grams immediately preceding the target *to omou* forms. The N-grams were extracted using ‘short utterance units’, which are largely equivalent to morphemes in the CEJC (Koiso et al. 2022).³

| | 1-gram | Freq | 2-gram | Freq | 3-gram | Freq |
|---|-----------------|------|-------------------------|------|-------------------------------|------|
| 1 | <i>na</i> FP(S) | 2231 | <i>ka-na</i> FP(Q-S) | 1013 | <i>no-ka-na</i> NML-FP(Q-S) | 258 |
| 2 | <i>da</i> COP | 1245 | <i>n-da</i> NML-COP | 286 | <i>nai-ka-na</i> NEG-FP(Q-S) | 127 |
| 3 | <i>nai</i> NEG | 559 | <i>da-na</i> COP-S | 284 | <i>ii-ka-na</i> good-FP(Q-S) | 105 |
| 4 | <i>ii</i> good | 498 | <i>ga-ii</i> NOM-good | 138 | <i>hoo-ga-ii</i> way-NOM-good | 96 |
| 5 | <i>ka</i> FP(Q) | 460 | <i>ii-na</i> good-FP(Q) | 119 | <i>n-da-na</i> NML-COP-FP(S) | 72 |

Table 1: Five Most Frequent N-Grams (1-Gram, 2-Gram, 3-Gram) Immediately Preceding the *to omou* Forms

From the table, we can observe that the complement clauses preceding *to omou* forms often end with sentence-final particles (FPs) that convey various subjective and intersubjective functions. For example, FPs such as *ka* (460), *ka-na* (1,013), and *na* (1,218, excluding *kana*) express a weak degree of commitment to the proposition. Moreover, these FPs, particularly *na* and *kana*, reduce the assertiveness with which the opinion is expressed (Suzuki 1990), which is closely related to notions such as hedging or politeness (Ohta 1991). In many cases, speakers use FPs to quote their internal thoughts, such as when telling a story (Maynard 1996, Shimotani & Endo 2014). Below are examples of the three most frequent 3-gram strings preceding *to omou*.

(3) *kyonen nani \$wo shite rassyatta\$ no ka na: to omotte.* (T009_004)
 last.year what ACC do-TE POL-PST SE FP FP QT think-TE
 ‘(I) was wondering/thinking what (you) were doing last year.’

(4) *dakara (0.2) sonnani hiroku nai n jya nai ka na::to omou n da yo.* (W007_002)
 so that.much wide NEG SE COP NEG FP FP QT think SECOP FP
 ‘That’s why (I) think it is not that spacious.’

(5) ... *soko wo kimete >itadaita hoo ga ii ka na to omoimasu<.* (W001_004)
 that ACC decide-TE BEN-POL way NOM good FP FP QT think-POL
 ‘(I) think it would be better if (you) decide that.’

³ The segmentation is based on the morphological information provided by the CEJC. In reality, *kana* can be treated as a single particle. In addition to marking questions, the sentence-final particle *ka* has the function of marking understanding. The glossing in Table 1 and the examples is simplified for convenience.

These results suggest that the complement clauses of *to omou* often express personal thoughts and views. Some uses of the highly frequent *kana to omou* may even represent grammaticalized units (Hotta, forthcoming).

4.2 Quotation Marker

We also analyzed the cooccurrence patterns of different types of quotation markers and conjugated forms of *omou*. Regarding quotative markers, Kato (2010) examined those followed by a pause (mainly in utterance-final positions) and discussed their functional similarities and differences in discourse. Following Kato (2010: 22) and the studies cited therein, we treat *towa*, which consists of the quotative marker *to* and topic marker *wa*, as a conventionalized quotative marker. In addition, we treat *toka*, along with *to* and *tte*, as distinct quotative markers.

Table 2 presents the contingency table. The numbers in parentheses represent the frequencies expected if there is no association between the quotation marker and the conjugated form of *omou*.⁴ A chi-squared test indicates a significant relationship between the choice of a quotation marker and the conjugated form of *omou* ($\chi^2(21) = 716.1, p < .001$). This suggests that the quotation markers followed by *omou* forms are not purely formal variants.

| | <i>omou</i> | <i>omotte</i> | <i>omotta</i> | <i>omoimasu</i> | <i>omottara</i> | <i>omotte[iru]</i> | <i>omoinagara</i> | <i>others</i> |
|-------------|--------------------|--------------------|---------------|------------------|------------------|--------------------|-------------------|-----------------|
| <i>to</i> | <u>3006</u> (2851) | <u>2049</u> (2019) | 742 (797) | <u>580</u> (513) | <u>179</u> (174) | 140 (173) | 71 (102) | 298 (435) |
| <i>tte</i> | 266 (379) | 264 (269) | 173 (106) | 13 (68) | <u>29</u> (23) | 41 (23) | <u>30</u> (14) | <u>124</u> (58) |
| <i>towa</i> | <u>126</u> (114) | 28 (81) | 23 (32) | <u>25</u> (20) | 0 (7) | <u>20</u> (7) | 0 (4) | <u>60</u> (17) |
| <i>toka</i> | 40 (94) | <u>94</u> (66) | 23 (26) | 0 (17) | 2 (6) | <u>8</u> (6) | <u>22</u> (3) | <u>43</u> (14) |

Table 2: Contingency Table Showing the Relationship Between Quotation Markers and Conjugated Forms of *omou*

Observed frequencies higher than the expected frequencies are underlined.

For the individual cells listed in Table 2, the observed frequencies can be compared to the expected frequencies. We decided not to compute the statistical significance for each cell, which could be calculated from the residuals, because this would require more data for some cells. Nevertheless, a few anecdotal observations can be drawn from this table. First, *to* and *tte* appear to exhibit an inverse tendency: Where one tends to be frequent, the other is not frequent, with the exception of *omottara*. For example, *to* is frequently used with present tense forms, the plain form *omou* and the polite form *omoimasu*, whereas *tte* is less common with these forms. The polite form *omoimasu* shows the most skewed pattern, with the quotation markers *tte* and *toka* appearing to be repelled by this conjugated form. Below are examples of these quotation markers, each followed by the preferred form of *omou*.

- (6) *koboreru to omou*. (K012_004)
 spill QT think
 ‘(I) think (it) will spill.’

⁴ The expected frequency is the product of the marginal totals of the row and the column, divided by the grand total of the contingency table.

- (7) *kowai na tte omotta no ne.* (K003_005)
 scary FP QT think-PST SE FP
 ‘**(I) thought** (it) is scary.’
- (8) ... *kekko mendokusai n jyanai kana: towa omou yo.* (K007_005)
 quite cumbersome SE MOD FP QT think FP
 ‘**(I) think** it would be quite cumbersome.’
- (9) *iyaa: omoshiroi jidai \$datta na toka omotte.\$* (K008_015)
 INJ interesting time COP-PST FP QT think-TE
 ‘Yeah. **(I) was thinking** it was an interesting time.’

These results suggest that the *omou* construction exhibits considerable formal variation relative to the quotation marker and the conjugated form of *omou* used. It is plausible that, unlike the English phrase *I think*, whose grammaticalized status has been extensively studied, the *to omou* construction may exist at a more abstract level, encompassing a range of formal variations. Specific combinations of quotative markers and conjugated forms of *omou* may well be conventionalized, aligning with constructional perspectives.

4.3 Position in Utterance

Finally, we investigated the position in the utterance in which *omou* is used, specifically the non-finite *omotte* form. It is well known that phrases like *I think* in English or *wo juede* in Mandarin are used in noncanonical positions, namely mid-sentence and sentence-final positions. Flexibility in position is generally considered a manifestation of their status as discourse markers rather than as the main verbs. In the case of *to omou*, however, it is quite rare for the phrase to be used in a noncanonical position; it is almost always used after a complement clause, which is towards the end of the sentence. Of course, some other elements can follow the verb, as in the example below.

- (10) *neyoo kana: to omou toki. kesu kara.* (C002_013a)
 sleep.INT FP QT think time turn.off so
 ‘(I) turn off (the light) when **(I) feel** like going to bed.’

In the corpus, a significant number of *omotte* were produced at the end of an utterance. Out of the 2,435 tokens of *omotte*, 1,244, about half of the total tokens, are immediately followed by the utterance-final tag in the CEJC, as in (11).

- (11) *nedan ga zenzen chigau to omotte.* (W009_001)
 price NOM totally different QT think-TE
 ‘**(I) was thinking** the price is totally different.’

The 1,244 tokens of utterance-final uses of *omotte* include turn-final uses. That is, the current speaker’s turn ends with [...] *omotte* ‘I think that [...] (and)’, and the interlocutor then takes a turn.

5 Discourse Functions

In the previous section, we presented frequency patterns of the *to omou* construction based on corpus analyses. To understand how the construction works in actual interaction, a qualitative analysis is necessary. Thus, we closely examined conversation sequences and found that *toka omotte* can work in several different ways, such as explaining the reason for an action (12) or expressing a feeling in a complaint (13). Let us first consider the following example:

(12) Participants are preparing for a party. They start drinking and B notices that A has brought a white beer. (K008_001a_0m)

- 01 B: *kore*. (0.4) *kore wa nan nanda?*
‘This. What is this?’
- 02 A: *kore howaito beeru*.
‘This is white beer.’
- 03 B: (.) *↑aa* (0.3) *kore koo natten no ne?*
‘Oh. This is how it is?’ (holding a can with the lid attached at the bottom)
- 04 A: *berugii beeru.=*
‘Belgium beer’
- 05 B: =*↑aa*=
‘oh’
- 06 A: =*so so so*.
‘yeah yeah yeah’
- 07 C: *.h aa::.*
‘ohh’
- 08 A: *nanka* [*mezura \$shii kana toka omotte.* \$
somewhat rare FP QT think-TE
‘(I) thought (this beer) might be somewhat rare.’
- 09 B: [*jyaa atashiwa kore ni un,*
‘Then I’ll have... yes’
- 10 *jyaa kore ni shiyo.*
‘(I)’ll have this.’

In this example, the participants share an understanding that A has brought the beer that they are talking about, partly due to the fact that A answered B’s question in line 1. A first says that it is white beer (line 2), then rephrases by saying ‘Belgium beer’ (line 4). Although A did not explicitly say that she brought the beer, it is understood that it was A who brought the beer. Then, A said that she thought it might be somewhat rare (line 8).

The natural understanding of A’s utterance in line 08 is that A is providing an account of her own actions, namely, purchasing the particular beer. That is, *nanka mezurashii kana toka omotte (katta)* ‘I (bought the beer because) I thought it is somewhat rare’ is the interpretation that the participants would attain. The form *toka omotte* (‘I thought’ in TE-form) in this example serves to connect the turn retroactively with the prior part of the conversation (Shimotani & Endo 2014). The falling intonation of the last part of her utterance also indicates that this turn does not continue, which is further evidenced by B’s taking the next turn in line 10 after overlap.

In the next example, the same form, *toka omotte*, is used in a significantly different way.

- (13) At a hair salon, the customer (A) tells the hairdresser (B) that a friend is visiting him during a particularly busy time. (T022_017a_14m)
- 01 B: *gekidan shiki*.
'The Shiki Theatre Company'
- 02 A: *soo. shiki ikitai tte iidashi te;*
'Yes. (The friend) started saying he wants to go to the Shiki.'
- 03 B: *ra[ion kingu*.
'The Lion King'
- 04 A: [*haa?* *mitaina(h)*. *ima kara ticketto ton no ka yo:: toka [omotte::*,
INJ like now from ticket get SE FP FP QT think-TE
'(I) was like, "What?" (I) thought, "(Do we/I) get the tickets from now?"']
- 05 B: [huh huh (=laughter)]
- 06 (3.0)
- 07 *e nani mini iku no gekidan shiki no*.
'And what (play) of the Shiki Theatre Company are you going to see?'
- 08 A: *arajin desu*.
'Aladdin'

In this example, A is engaging in a complaint narrative. His phrasing in line 2, *iidashi te* 'started saying' conveys his annoyance with his friends' wish to watch a play at a Shiki theatre (operated by the highly popular Shiki Theatre Company), where tickets tend to get sold out quickly. In line 4, A begins by self-quoting his thoughts, starting with the interjection *haa?* 'What?' produced in an emphasized manner. Finishing his first quote using *mitaina* 'like' (Maynard 2005), A immediately continues to say *ima kara ticketto ton no ka yo::* 'Do we/I get the tickets from now?', which contains the features of a direct quote, such as the use of the casual form *ton* for *toru* 'to get' and the final particles *ka* and *yo*. The second quote is closed with *toka omotte*. Although *omotte* carries a nonfalling intonation and is thus not marked as prosodically complete, A does not continue. After a 3.0-second lapse, B asks a question, with which the participants move on to the next phase of the conversation.

It has been argued that quotations are often used at the climax of storytelling (Schegloff 2000) and convey the speaker's evaluation of the situation (Chafe 1994). These features apply to this example. A is telling a story about a friend causing trouble for him, and the reported thought straightforwardly conveys the speaker's negative feelings about the situation. However, there is another aspect of the use of *toka omotte* in this example. The combination of the quotation marker and the 'think' verb marks the boundary between the reported thought and the reporting self. By producing *toka omotte*, the speaker conveys that he is not quoting any more. In other words, he shifts the production footing (Goffman 1981, Goodwin & Goodwin 2004), in the sense that his role changes from the figure—the character depicted—of the past thought to the author—the one who is responsible for the formulation of utterances in his reporting of past thought in the current speech event. The shift in footing indicates the end of the storytelling, which solicits turn-taking.

In this section, we presented the results of the qualitative analysis. We showed that *toka omotte* functions in substantially distinct ways depending on the context. Although the functions are not modal, the combination of a quotation marker and a conjugated form of the ‘think’ verb is repeatedly used to carry specific functions.

6 Discussion and Conclusion

In this study, we conducted both quantitative and qualitative analyses to capture the network of *to omou* constructions. The findings suggest that describing the *to omou* construction by focusing solely on its most studied form, *to omou*, is insufficient. A variant form such as the *toka omotte* may be conventionalized in its own way in the conversation genre, with multiple functions depending on the context. This supplements the existing description of Japanese modality, which draws examples from novels and comic books (Nitta 2009).

From a constructional perspective, our findings demonstrate various recurrent patterns associated with *to omou* constructions, particularly sequential relations involving *omou* forms. To adequately capture the multiple functions of the complement-taking predicate *omou* in conversation, we suggest that these recurrent patterns should be considered. In the domain of modality, Depraetere et al. (2023) provided a comprehensive overview of how constructional approaches can account for English modal verbs. We hope that the present findings will contribute to this development by offering data from Japanese and expanding the scope of the description of constructions.

References

- Beeching, K. and U. Detges. 2014. Introduction. *Discourse Functions at the Left and Right Periphery: Crosslinguistic Investigations of Language Use and Language Change*, eds. K. Beeching and U. Detges, 1–23. Leiden: Brill.
- Benveniste, E. 1971. *Problems in General Linguistics*. Translated by M. E. Meek. Coral Gables, FL: University of Miami Press.
- Boye, K. and P. Harder. 2021. Complement-taking predicates, parentheticals and grammaticalization. *Language Sciences* 88: 101416.
- Bergqvist, H. 2021. Egophoricity and Perspective: A View From Spoken Swedish. *Frontiers in Communication* 6: 627144.
- Bybee, J. 2010. *Language, Usage and Cognition*. Cambridge: Cambridge University Press.
- Chafe, W. 1994. *Discourse, Consciousness, and Time: The flow and Displacement of Conscious Experience in Speaking and Writing*. Chicago, IL: The University of Chicago Press.
- Depraetere, I., B. Cappelle, M. Hilpert, L. De Cuypere, M. Dehouck, P. Denis, S. Flach, N. Grabar, C. Grandin, T. Hamon, C. Hufeld, B. Leclercq, and H.-J. Schmid (eds.). 2023. *Models of Modals: from Pragmatics and Corpus Linguistics to Machine Learning*. Berlin: De Gruyter Mouton.
- Diessel, H. 2023. *The Constructicon: Taxonomies and Networks*. Cambridge: Cambridge University Press.
- Divjak, D. and C. Caldwell-Harris. 2015. Frequency and entrenchment. *Handbook of Cognitive Linguistics*, eds. E. Dabrowska and D. Divjak, 53–75. Berlin/München/Boston: De Gruyter Mouton.
- Endo, T. 2013. Epistemic stance in Mandarin conversation: The positions and functions of *wo juede* ‘I think’. *Chinese Discourse and Interaction: Theory and Practice*, eds. Y. Pan and D. Kádár, 12–34. London: Equinox.
- Goffman, E. 1981. *Frame of Talk*. Philadelphia: University of Pennsylvania Press.

- Goodwin, C. and M.-H. Goodwin. 2004. Participation. *A Companion to Linguistic Anthropology*, ed. A. Duranti, 222–4. Malden, MA: Blackwell.
- Helasvuo, M.-L. 2014. Agreement or crystallization: Patterns of 1st and 2nd person subjects and verbs of cognition in Finnish conversational interaction. *Journal of Pragmatics* 63: 63–78.
- Hepburn, A. and G. B. Bolden. 2017. *Transcribing for Social Research*. London: Sage.
- Hotta, H. Forthcoming. From reported thought to epistemic modality: a corpus-based study on the sentence-final particle *kana* with *omou* ‘think’ in Japanese. *Journal of Japanese Linguistics*.
- Kato, Y. *Hanashi kotoba ni okeru inyoo hyoogen: inyoo hyooshiki ni chuumoku shite* (Quoted expressions in spoken language: focusing on quotative markers). Tokyo: Kurosio Publishers.
- Koiso, H., H. Amatani, Y. Den, Y. Iseki, Y. Ishimoto, W. Kashino, Y. Kawabata, K. Nishikawa, Y. Tanaka, Y. Usuda, and Y. Watanabe. 2022. Design and Evaluation of the Corpus of Everyday Japanese Conversation. *Proceedings of the Thirteenth Language Resources and Evaluation Conference*, eds. N. Calzolari, F. Béchet, P. Blache, K. Choukri, C. Cieri, T. Declerck, S. Goggi, H. Isahara, B. Maegaard, J. Mariani, H. Mazo, J. Odijk, and S. Piperidis, 5587–94. Marseille: European Language Resources Association.
- Lyons, J. 1977. *Semantics*. Vol. 2. Cambridge: Cambridge University Press.
- Maynard, S. K. 2005. Another conversation: expressivity of *Mitaina* and inserted speech in Japanese discourse. *Journal of Pragmatics* 37: 837–69.
- Moriyama, T. 1992. Bunmatsu shikoo dooshi ‘omou’ wo megutte -- bun no imi toshitenno shukansei/kyak-kansei (On the sentence-final cognitive verb ‘omou’: Subjectivity and objectivity as sentence meaning). *Nihongogaku* (Japanese Linguistics) 11(9): 105–16.
- Nakau, M. 1979. Modariti to meidai (Modality and proposition). *Eigo to Nihongo to* (English and Japanese), ed. Hayashi Eiichi kyoju kanreki kinen ronbunshuu henshuiinkai, 223–50. Tokyo: Kurosio Publishers.
- Nitta, Y. 2009. *Nihongo no modariti to sono shuuhen* (Modality of Japanese and its surroundings). Tokyo: Hituzi Shobo.
- Nuyts, J. 2001. *Epistemic Modality, Language, and Conceptualization: A Cognitive-Pragmatic Perspective*. Amsterdam: John Benjamins.
- Ohta, A. S. 1991. Evidentiality and politeness in Japanese. *Issues in applied linguistics* 2(2): 211–38.
- Schegloff, E. A. 2000. On granularity. *Annual Review of Sociology* 26: 715–20.
- Schmid, H.-J. 2020. *The dynamics of the linguistic system: usage, conventionalization, and entrenchment*. Oxford: Oxford University Press.
- Shimotani, M. and T. Endo. 2014. Sequential patterns of storytelling using *omotte* in Japanese conversation. *Journal of Japanese Linguistics* 30(1): 28–48.
- Suzuki, R. 1990. The role of particles in Japanese gossip. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society* 16: 315–24.
- Thompson, S. A. 2002. “Object complements” and conversation: Towards a realistic account. *Studies in Language* 26(1): 125–64.
- Ungerer, T. and S. Hartmann. 2023. *Constructionist Approaches: Past, Present, Future*. Cambridge: Cambridge University Press.