The syntax, semantics and pragmatics of Japanese addressee-honorific markers

Akitaka YAMADA

November 25, 2019

Abstract

Despite the long tradition of studies on the Japanese honorific system, formal analyses of addressee-honorific markers have not been carried out until very recently. Although not explicitly claimed, it was more or less assumed that they were just extra 'ornaments' encoding politeness that piggy-back on the main body of the sentence. This study aims to demonstrate that such a naïve assumption fails to explain the complexity of this system. The syntax, semantics, and pragmatics of addressee-honorific markers all exhibit unexpected and intriguing behaviors that cannot be easily explained or predicted by extant theories.

The main body of this dissertation consists of one chapter summarizing the basic facts about the Japanese honorific system and three chapters discussing issues in the domain of (morpho)syntax, semantics, and pragmatics.

First, this study discusses the role of syntax in the Japanese addressee-honorific system and concludes that many of what have been regarded as syntactic properties are better understood to be morphological and/or pragmatic issues, reducing the role of syntax. The literature of the syntax-discourse interface has for the most part convincingly argued that discourse-oriented elements are distributed around/above CP (Speas and Tenny 2003; Haegeman and Hill 2013; Miyagawa 2012, 2017; Zu 2018). Nevertheless, the Japanese *-mas* is pronounced in a very low position far from the clause periphery. To account for the data, I adopt the framework of Distributed Morphology and argue that (i) an honorific feature is postsyntactically inserted by the morphology (sprouting) (Choi and Harley 2019; Oseki and Tagawa 2019) and (ii) that it has an agreement relation with the syntactically represented HEARER in the clause periphery. It is also known that addressee-honorific markers exhibit an interaction with sentence mood; i.e., they are necessary for response-seeking questions (Miyagawa 2017). Inheriting important insights from Dynamic Pragmatics, it is shown that this is much more easily explained in terms of pragmatic principles, rather than syntactic rules (Chapter 3).

Second, the way addressee-honorific markers contribute to the context update is discussed. One dominant view in previous studies is the real-based

approach, which assumes that there is a particular honorific range stored in the structured discourse context, and the context update is conceived of as a replacement for an old interval (e.g., $< Akitaka, [0.7, 0.9], Paul >$) with a new interval proposed by, or in negotiation with, the sentence (e.g., $< Akitaka, [0.6, 0.9], Paul >$) (Potts 2007b; cf., Potts and Kawahara 2004; McCready 2014, 2017, 2019). This dissertation demonstrates that such a simple replacement does not capture important properties of the context update regarding addressee-honorifics and, as an alternative, I propose a model in which the target of the update is a set of summary parameters that represent the past conversation. By integrating Bayesian statistics into Dynamic Pragmatics, we can characterize these summary parameters in many different ways. One can understand that discourse participants keep estimating each other person's hidden honorific attitude. Alternatively, it is also possible to see them as representing the speaker's publicized self-image (Chapter 4).

Finally, it is discussed why addressee-honorific markers are embedded in certain indirect speech contexts (cf., Alok and Baker 2018; Baker and Alok 2019; Alok 2019; Baker 2019; Kaur and Yamada 2019). Although we anticipate that discourse-oriented elements should be restricted to the main clause, Japanese addressee-honorific markers are often embedded in indirect speech contexts and, when embedded, special semantic and pragmatic effects emerge (the commitment effect and the enhancement effect). To account for these facts, I propose that speech act layers are embeddable. By elucidating the semantics of such functional projections, I argue that Speaker Projection (SpP) commits the speaker to the proposition expressed by the embedded clause (TP) and that the interpretable addressee-honorific feature from the embedded Addressee Projection (AddrP) enhances the politeness level of the sentence (Chapter 5).

Acknowledgements

This dissertation could never have been completed without the assistance and support of the following wonderful people. First and foremost, I thank my Ph.D. advisor, Paul H. Portner, for years of excellent advice, insight, and a wonderful farewell party! He has not only served as a researcher role model but has also showed us how to be a great father and be a sensible human being. If the world were a village of a hundred Pauls, many of the contemporary issues would completely disappear (at the risk of making the semantics job market extremely competitive...!). I also thank the full committee (Ruth Kramer, Satoshi Tomioka and Amir Zeldes) for their thoughtful consideration and feedback. They have made me aware of a good balance between tradition and creativity, between a theoretical implication and an empirical coverage, and between theoretical linguistics and other fields in the academia.

Various other faculty members at Georgetown have played key roles in the development of this work and/or in my professional development, and I highly appreciate their support: Ahmad Alqassas, Alison Biggs, Héctor Campos, Mark Meyer, Donna Lardiere, David Lightfoot, Hannah Sande, Natalie Schilling, and Elizabeth Zsiga.

My Georgetown days would not have been this delightful without intensive discussions in the semantics reading group with Laura (Ryals) Bell, Austin Boldgett, Lucia Donatelli, Tris Faulkner, Jessica Kotfila, James Maguire, Bokyung Mun, Siyao Peng, Jacob Prange, Sasha Slone, and Yilun Zhu. I am also so grateful to warm encouragement and critical comments from the faculty members including Paul and two other fantastic researchers, namely Elena Herburger and Nathan Schneider.

I am very thankful to my friends in Department of Linguistics and Department of Spanish and Portuguese. They were in my syntax and/or semantics classes asking challenging questions and making me a better teaching assistant; and sometimes in a hallway, in a student lounge or in a bar, having fun and talking about our future. These experiences have made my Georgetown days so precious, so much so that I am so missing these five years. Many thanks go

to the above-named as well as Leah Adelson, Yuka Akiyama, Amani Aloufi, Hana Altalhi, Bertille Baron, Maya Barzilai, Gorka Basterretxea Santiso, Amelia Becker, Tyler Bergin, Meghan Birch, Chrissy Bistline-Bonilla, Ho Fai Cheng (Viggo), Hanwool Choe, Abel Cruz Flores, Keith Cunningham, Felipe De Jesus, Matthew J. Dearstyne, Meagan Y. Driver, Iván Andrés Espinosa Orozco, Lydia Felice, Didem Ikizoglu, Adrienne Isaac, Md. Jahurul Islam, Amy Kim, Katelyn MacDouglad, Jordan MacKenzie, Tim McCormick, Emma Manning, Todd H. McKay, Shannon Mooney, Jeong Mun, Naomee-Minh Nguyen, Madeleine Oakley, Bernard O'Connor, Annie Ornelles, Alexandra Pfiffner, Sean Simpson, Shoko Sasayama, Young-A Son, Sakol Suethanapornkul, Emma Tierney, Will Travers, Mariko Uno, Mark Visona, Jeremy Wegner, and Lindley Winchester.

I owe what I am to people in the Department of East Asian Language and Cultures. I thank Kumi Sato, Motoko Omori and Yoshiko Mori for letting me teach intensive drill sessions, which were a very exciting teaching experience. Every class was full of eye-opening questions which I had never thought through by myself and which made me more and more aware of the complexity of my native language. Many students enthusiastically came to the Japanese Language Table where I could get their honest impressions and opinions of Georgetown students about the politics, the economics and the cultures of my country.

Georgetown linguistics department also gave me a chance to be a member of organizing a conference, namely GURT 2019 (Linguistics and the Public Good). Engaged in this conference management, I learned how a conference is carried out. This conference would not have been successful without the leadership of Elizabeth Zsiga and an amazing team, namely Helen Dominic, Arianna Janoff, Jessica Kotfila, and Bradford Salen. I am so proud of our team effort and also appreciate the incredible amount of support received from Jennifer Brusstar, Yulkiana Delgado Gonzalez and Conor Sinclair.

Outside of Georgetown, I would like to express my gratitude to the summer camp of LSA institute in 2017 held at Kentucky University, especially Joan Bybee, Brian Dillon, Norvin Richards, Jon Sprouse and Coppe van Urk, for introducing not only many cutting edge skills/theories but also providing us with

opportunities for interaction with many brilliant researchers, especially, Eunsun Jou, Young-Hoon Leo Kim, Akiko Kobayashi, Hitomi Minamida, Takashi Mino, Akari Ohba, Teigo Onishi, Masato Nakamura, Sarah Duong Phu, Sverre Stausland, Tran Truong, and Danfeng Wu.

I would also like to point out that many researchers kindly answered my questions, gave me critical comments, and provided data for this dissertation project. I am thankful to Deepak Alok, Mark Baker, Kaur Gurmeet, Hiroo Nonaka, Atsuhiko Kato, Elin McCready, Thomas McFadden, Miok Pak, Sandhya Sundaresan, Masato Takiura, and Tsutomu Yada.

I could not have gone to Georgetown University without warm encouragement and support from people at the University of Tokyo. I am very much indebted to the three committee members of my Master's thesis, Toshio Ohori, Seiko Fujii and Yoshiki Mori as well as amazing faculty members, colleagues, and friends at this university; Yasuhiro Arai, Marco Fonseca, Mina Fujii, Kiyono Fujinaga, Daiki Hashimoto, Yuki Hayashida, Xinqi He, Ryota Horikawa, Fumino Horiuchi, Shiori Ikawa, Katsumasa Ito, Woojin Jeong, Yusuke Kaimori, Ao Kameari, Midori Kamohara, Jun Kanazawa, Shota Kikuchi, Yusuke Kobayashi, Yoshinori Kosaka, Masahiro Kubota, Gaku Kurita, Xiaoyin Lin, Adam Manfredi, Sayaka Meguro, Hirotaka Nakayama, Fumiaki Nishihara, Daisuke Nonaka, Masaaki Ogura, Norihisa Ohara, Shin'ya Okano, Sera Palmer, Chunhong Park, Toshimitsu Rikuta, Hironobu Saigusa, Shigeru Sakahara, Kei Sakaguchi, Ken'ichi Sekimata, Midori Shimizu, Masaki Sone, Tianhong Song, Yu Sun, Arisa Takahashi, Sugumi Tamesue, Shoko Tanaka, Toshiki Tanaka, Haruka Tokitsu, Shodai Uchida, Shota Umeki, Yayoi Umemura, Kimie Yamamura, Yang Yang, Yui Yoshida, Midori Wada, Koki Washio, and Naoya Watabe.

Particularly, I would like to point out that I owe an enormous debt to Austin Blodgett, Tris Faulkner, Kaur Gurmeet, Jessica Kotfila, Sasha Slone and Tran Truong for their careful proofreading. Without their suggestions, this thesis would be very hard to read.

A Fulbright scholarship not only financially supported me but also made

it possible for me to see intellectuals from all over the world. I would like to thank the organizers and the participants of the gateway orientation at Lincoln University in 2014 and Matt Sussman and advisors working for Japan-U.S. Educational Commission and Institute of International Education.

Many thanks also go to my landlords, Junko Katada and Val Rowland Pisacane, and their cute and smart daughters, Mia Katada Pisacane and Erika Katada Pisacane, as well as their cats, Sumi-chan and Kuro-chan — who always ignore me — and their dog Amber — who always barks at me. They always welcomed me as a family member, offering various kinds of supports, inviting me to amazing parties and delightful dinners.

I would also thank PlayYou.House/Goose house/Play.Goose for giving me many dissertation BGMs and very adorable LINE Characters, *Usamaru* and *Usako*, for allowing my girlfriend and me to have pleasant conversations between Japan and US.

Last but not least, I would like to express my deepest gratitude to all my current and future family members. Emi Yamada, Shun'ya Yamada, Masao Yamada, Arato Torii, Takae Torii, and Hiroshi Torii have given me all kinds of support and love for my many years of schooling. In particular, Hiroshi Torii has always been my greatest teacher, my greatest philosopher, my greatest friend — and my beloved grandfather. Were I not your grandchild, I would never have joined academia and my life would be completely different. I appreciate you for taking care of me with sincere love. Finally, I would like to thank this cute, warm-hearted, intelligent lady, Mahiro Nunoue, for always being there for me (and for providing me with a lot of acceptability judgments!). I am so excited to begin our new journey together. I'll love you forever, till death do us part.

Abbreviations

ABL	ablative
ABS	absolutive
ACC	accusative
ADN	adnominal form
ANTIH	anti-honorific
APPL$_H$	high-applicative
APPL$_L$	low-applicative
DAT	dative
CAUS	causative
CMPL	completive
C	complimentizer
CONJ	conjunction
COP	copula
CV	converb affix
DECL	declarative
EPI	epistemic modal
EPENTH	epenthesis
ERG	ergative
EXPL	expletive
FAM	familiar
FEM	feminine
FUT	future
FOC	focus
FORMAL	formal
GEN	genetive
H	honorific (in Magahi)
HH	high honorific (in Magahi)
HON	honorific prefix
HON$_A$	addressee-honorific
HON$_B$	beautification
HON$_F$	formalization
HON$_O$	object-honorific
HON$_S$	subject-honorific
HON$_U$	addressee-honorific upgrader
IMP	imperative
IRREAL	irrealis
LOC	locative
MAL	malfactive
MASC	masculine
NEG	negation
NMLZ	nominalizer
NOM	nominative
NH	non-honorific (in Magahi)
PASS	passive
PL	plural
POSS	possessive
PRF	perfect
PRG	progressive
PRS	present
PST	past
Q	question/interrogative particle
REAL	real
ROOT	root
SFP	sentence final particle
SPN	spontaneity
SG	singular
SUBJ	subject
TOP	topic
VOL	volition

Contents

Abstract **i**

Acknowledgements **iii**

Abbreviations **vii**

1 Introduction **1**

1.1 A brief history of studies on the Japanese honorific system . . . 6

1.2 Outline . . . 9

1.2.1 Chapter 2: The honorific system in Japanese . . . 9

1.2.2 Chapter 3: Syntax . . . 14

1.2.3 Chapter 4: Semantics and pragmatics . . . 16

1.2.4 Chapter 5: Embedded addressee-honorific markers . . . 20

2 The Japanese honorific system **23**

2.1 Overview . . . 23

2.2 Major honorific constructions . . . 26

2.2.1 Subject-honorific markers . . . 27

2.2.1.1 Overview . . . 27

2.2.1.2 Examples . . . 31

2.2.2 Object-honorific markers . . . 85

2.2.2.1 Overview . . . 85

2.2.2.2 Examples . . . 89

2.2.3 Addressee-honorific markers . . . 106

2.2.3.1 Overview 106
2.2.3.2 Examples 116
2.3 Marginal honorific constructions 120
2.3.1 Addressee-honorific upgraders (*Teicho-go*) 124
2.3.1.1 Overview 124
2.3.1.2 Examples 131
2.3.2 Beautification (Bika-go) 152
2.3.2.1 Overview 152
2.3.2.2 Examples 155
2.3.3 Formalization (Aratamari-go) 157
2.3.3.1 Overview 157
2.3.3.2 Examples 158
2.4 Historical development of addressee-honorific markers 162
2.4.1 Object-honorific *ma(w)iras-* 163
2.4.2 From an object-honorific marker to an addressee-honorific marker 166
2.4.3 Emergence of the peculiar properties of *-mas* 169
2.4.4 Development of *des-* 177
2.4.5 Interim summary and a question 182

3 Syntax **185**
3.1 Overview 185
3.2 Addressee-honorific markers and puzzles 188
3.2.1 Puzzle 1: Pronunciation site 189
3.2.2 Puzzle 2: Morphological changes in T and Neg 201
3.2.3 Puzzle 3: Scope relations 204
3.2.4 Puzzle 4: Interaction with a sentence mood 206
3.2.5 Interim Summary 212
3.3 From syntax to morphology 213
3.3.1 Previous studies 213
3.3.2 Functional projections between *v*P and NegP 218
3.3.2.1 *v*P/VoiceP 218
3.3.2.2 High-ApplicativeP/AffP 220

3.3.2.3 AspP 226
3.3.3 Hypothesis I: A syntactic account 228
3.3.3.1 Outline 229
3.3.3.2 Solutions to the puzzles 232
3.3.3.3 Limitations 241
3.3.4 Hypothesis II: A morpohological account 243
3.3.4.1 Outline 244
3.3.4.2 Solutions to the puzzles 247
3.4 From syntax to pragmatics 252
3.4.1 A syntactic approach 253
3.4.2 A pragmatic approach 255
3.4.2.1 Dynamic pragmatics 255
3.4.2.2 Proposal 256
3.5 Chapter summary 264

4 Semantics and pragmatics **269**
4.1 Overview 269
4.2 Previous approaches to expressiveness 274
4.2.1 A single-value approach: Potts and Kawahara (2004) . . 278
4.2.2 Interval-based approaches 283
4.2.2.1 Potts (2007b) 283
4.2.2.2 McCready (2014, 2018, 2019) 286
4.2.3 Portner et al. (2019) 289
4.2.4 Interim summary 293
4.3 Desiderata 296
4.3.1 Desideratum 1: Independence 299
4.3.2 Desideratum 2: Immediacy 301
4.3.3 Desideratum 3: Descriptive ineffability 305
4.3.4 Desideratum 4: Cumulative effect 306
4.3.5 Desideratum 5: Learnablility 312
4.3.6 Desideratum 6: Correlating variables 312
4.4 Proposal 314
4.4.1 Summary parameters 316

4.4.2 Incorporating Bayesian statistics into dynamic pragmatics 321
4.4.2.1 Fundamentals in statistics 322
4.4.2.2 Interpreting summary parameters from a Bayesian perspective 326
4.4.3 How the analysis achieves the desiderata 335
4.5 Chapter summary 337
Appendix: Mathematical justification 341

5 Embedded addressee-honorific markers 347
5.1 Embedded declarative complementizers 352
5.1.1 Difference 1: Positions in the clause periphery. 353
5.1.2 Difference 2: Grammatical positions and available readings 360
5.1.3 Difference 3: Embedding predicates 367
5.1.4 Interim summary 374
5.2 Embedded addressee-honorific markers 375
5.2.1 Observation 1: Enhancement and consistency in politeness 376
5.2.2 Observation 2: Commitment 378
5.2.3 Observation 3: Grammatical environments 385
5.2.3.1 Subject clauses 388
5.2.3.2 Object (complement) clauses 389
5.2.3.3 Relative clauses 395
5.2.3.4 Adverbial clauses 397
5.2.4 Interim summary and puzzles to be discussed 401
5.3 Proposal 403
5.3.1 CP and MoodP 405
5.3.2 Embedded SpP-AddrP 422
5.3.3 Interim summary 454
5.4 Relation to other work 455
5.5 Chapter Summary 467
Appendix A: Japanese complementizer system 470
Appendix B: Embedded addressee-honorific markers 483

6 Conclusion 495

6.1 Morphology and syntax 496
6.2 Semantics and pragmatics 499
6.3 Looking forward 502

References **505**

List of Figures

2.1 Harada's (1976: 502) tripartite classification 24
2.2 Five-way classification proposed in Council for Cultural Affairs (2007) 121
2.3 Historical development of addressee-honorific markers 162

4.1 Classification of meanings proposed by Potts (2003, 2007a) . . . 275
4.2 Probability distributions that represent uncertainty of π 324
4.3 Update of the context set 329
4.4 Board game 330
4.5 Movements on the board 330
4.6 Possible future states 333
4.7 Influence on our uncertainty 334
4.8 Beta distributions 335
4.9 Functions 342
4.10 Caption 345

List of Tables

2.1 Subject-honorific expressions 30
2.2 Derived nouns of one mora 37
2.3 Suppletive subject-honorifics 52
2.4 *o*-NOUN da 61
2.5 *-te* AUX constructions (Based on Nakatani 2016: 388) 69
2.6 Applicatives and subject-honorifics. 76
2.7 Object-honorific expressions 88
2.8 Suppletive forms 97
2.9 Applicatives and object-honorifics I. 101
2.10 Applicatives and object-honorifics II. 103
2.11 Addressee-honorific upgraders 129
2.12 Applicatives and object-honorifics III. 165
2.13 Prescriptive form and the new variant 178

4.1 Gradualness in expressive elements 273
4.2 Alleged conventional implicatures 294
4.3 Comparison of theories 295
4.4 Comparison between coin-toss and speech style. 327

Chapter 1

Introduction

Addressee-honorific markers are morphemes that encode a particular social or psychological distance (e.g., respect, (un)familiarity and solidarity) to the addressee (Shibatani 1990: 379, 1998; McCready 2014, 2018, 2019; Brown 2015a; Portner et al. 2019; Yamada 2019a). They are found in genealogically unrelated languages, such as Basque (Bonaparte 1862; Oyharçabal 1993; De Rijk and Coene 2007; Adaskina and Grashchenkov 2009; Haddican 2015, 2018; Antonov 2013, 2015, 2016; Zu 2015, 2018; Wolpert et al. 2017), Burmese *-pà/-bà* (Allott 1965: 302, 306; Okell 1969: 375; Wheatley 1982; Soe 1999; Okell and Allott 2001; Romeo 2008; Jenny and Hnin Tun 2016: 309; Kato 2018), and Thai *khráp* (Smyth 2002; Iwasaki and Ingkaphirom 2005; McCready 2014, 2018, 2019), Tamil (McFadden 2017, 2018), Punjabi (Kaur 2017, 2018, 2019; Kaur and Yamada 2019), Magahi (Verma 1991; Alok and Baker 2018; Baker and Alok 2019; Alok 2019; Baker 2019) in addition to well-known East Asian languages

such as Ryukyuan languages (Antonov 2016), Korean *-supnita* and *-eyo* (Pak 2008; Antonov 2013; Portner et al. 2019) and Japanese *-mas* and *-des* (Harada 1976; Miyagawa 1987, 2012, 2017; Shibatani 1990, 1999; Kikuchi 1997 [1994]; Antonov 2013; Yamada 2018a, c, 2019a; McCready 2019; Kaur and Yamada 2019).

An example of an Japanese addressee-honorific marker in Japanese is given below. Unlike (1)a, (1)b includes an addressee-honorific marker, i.e., boldface suffix *-mas* 'HON$_A$.' If the speaker wishes to convey respect for the addressee, he uses the sentence in (1)b. If not, he uses the sentence in (1)a.

(1) Japanese addressee-honorific markers

a. *Watasi-wa* *hasir-u*
I-TOP run-PRS
'I will run.'

b. *Watasi-wa* *hasiri-**mas**-u*
I-TOP run-HON$_A$-PRS
'(i) I will run;
(ii) the speaker respects the addressee.'

At first glance, this does not seem so complicated. However, once we pursue a formal analysis, we will encounter many puzzles. For example, observe the following sentence.[1] The addressee-honorific marker *-mas* is pronounced between the progressive marker *-te i-* '-CV PRG' and the negation marker *-en* 'NEG.'

(2) *Watasi-wa* [$_{\text{NegP}}$*hasiri-**mas**-en*]*-yo.*
I-TOP run-HON$_A$-NEG-SFP
'(i) I will not run;
(ii) the meaning of -YO;
(iii) the speaker respects the addressee.'

[1] **Sentence-final particle:** The detailed meaning of sentence-final particle is not relevant. What is important in our discussion is to realize that the position of *-yo* is quite different from the position of *-mas*.

For the most part, the literature convincingly argues that the interface between syntax and pragmatics is situated above/around CP (Speas and Tenny 2003; Miyagawa 2012, 2017; Zu 2015, 2018; Zanuttini 2008; Zanuttini et al. 2012, 2019; Haegeman and Hill 2013; Hill 2014; Zu 2015, 2018; Slocum 2016; Thoma 2016; Wechsler and Hargreaves 2018; Kim 2018; Alok and Baker 2018; Baker and Alok 2019; Portner et al. 2019). The addressee-honorific marker is, as mentioned above, a morpheme that encodes the speaker's respect for the addressee. However, the sentence in (2) shows that it is located in some position lower than Neg. Given its highly-discourse oriented properties, this is a quite surprising data.

(3) * *Watasi-wa* [$_{\text{NegP}}$ *hasiri-en*]-*yo*-***mas***.
I-TOP run-NEG-SFP-HON$_{\text{A}}$
'(i) I will not run;
(ii) the meaning of -YO;
(iii) the speaker respects the addressee (intended).'

Although Korean also uses addressee-honorific markers (Pak 2008; Portner et al. 2019), they appear in a sentence-final position as shown in (4). This fact makes the sentence in (2) even more mysterious. Why does *-mas* 'HON$_{\text{A}}$' not appear in a sentence-final position in Japanese?

(4) Korean Pak (2008: 122)
cemsim-ul *mek-ess-****supnita***.
lunch-ACC eat-PST-DECL.HON$_{\text{A}}$
'(i) (I) ate lunch;
(ii) the speaker respects the addressee.'

Another puzzle of the Japanese addressee-honorific marker comes from its properties under embedding. Typically, highly discourse-oriented phenomena are restricted to the main clause, hence their description as main clause phenomena (Emonds 1970; Hooper and Thompson 1973; Heycock 2006; Aelbrecht et al. 2012; Miyagawa 2012, 2017, among many others). Therefore, we might predict that addressee-honorific markers are also prohibited in embedded contexts,

especially in indirect speech contexts.[2] However, observe the sentences in (5).

(5) Embedded addressee-honorific markers

a. *Kare$_i$-mo* [*kare$_i$-no musuko-ga kabin-o kowasi-te simat-ta koto*]-*o wabi-te ori-mas-u.*
he-also he-GEN son-NOM vase-ACC break-CV MAL-PST C-ACC apologizing-CV PRG.HON$_U$-HON$_A$-PRS
'(i) He$_i$ is also apologizing for his$_i$ son's having broken the vase;
(ii) the speaker respects the addressee very much.'

b. *Kare$_i$-mo* [*kare$_i$-no musuko-ga kabin-o kowasi-te simai-**masi**-ta koto*]-*o wabi-te ori-mas-u.*
he-also he-GEN son-NOM vase-ACC break-CV MAL-HON$_A$-PST C-ACC apologizing-CV PRG.HON$_U$-HON$_A$-PRS
'(i) He$_i$ is also apologizing for his$_i$ son's having broken the vase;
(ii) the speaker of the utterance context respects the addressee of the utterance context very much (< *ori-mas* in the main clause);
(iii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the embedded clause).'

In the above examples, the bracketed component is the complement clause of the verb *wabi-* 'apologize.'[3] Certainly, addressee-honorific markers can be omitted from this clause (= (5)a). But embedded indirect speech contexts with an addressee-honorific marker are still licit, as demonstrated in (5)b. Why do Japanese embedded clauses permit addressee-honorific markers?

Furthermore, the semantics and pragmatics of addressee-honorific markers are not easy to account for. As the name suggests, addressee-honorific markers are used when the speaker wishes to express his respect for the addressee. But do addressee-honorific markers simply add to the prejacent meaning the information that the speaker respects the addressee? The following sentences suggest that

[2] **Co-indexation:** The fact that *kare* 'he' in the main clause subject and *kare* 'he' in the embedded clause can refer to the same referent suggests that this is an indirect speech context.

[3] **HON$_U$ (Addressee-honorific upgrader 'teicho-go'):** *or-* in this example is an addressee-honorific upgrader, which enhances the politeness level of the utterance. Detailed descriptions of this element will be provided in Chapter 2. As of now, it suffices to underscore that *-mas* is embedded in the complement clause of *wabi-* 'apologize.'

this is a hasty conclusion.

(6) a. * *Watasi-wa anata-o sonkei si-nai-ga watasi-wa*
I-TOP you-ACC respect do-NEG-but I-TOP
anata-o sonkei sur-u.
you-ACC respect do-PRS
'I do not respect you but I respect you.'

b. *Watasi-wa anata-o sonkei si-**mas**-en.*
I-TOP you-ACC respect do-HONA-NEG
'(i) I do not respect you;
(ii) the speaker respects the addressee.'

The sentence in (6)a is a contradiction because the first conjunct says that the speaker respects the addressee, whilst the second conjunct says that the speaker does not. In contrast, the sentence in (6)b is not a contradiction at all. Readers might wonder if this is not a contradiction because the verb *sonkei sur-* 'respect do' is not the best verb to convey respect. But even if we change the verb to some other synonym, we cannot make the sentence in (6)b anomalous. Since there is no better way to represent the meaning, throughout this dissertation I shall put the phrase *the speaker respects the addressee* in the second line of the gloss as I have already done in (6)b and previous examples. But this is just a practical approximation. In service of a theoretical enterprise in which we attempt to elucidate the meaning of Japanese addressee-honorific markers, we must say something more about its meaning and its communicative effect in discourse. What kind of model is appropriate for the meaning of Japanese addressee-honorific markers?

The puzzles presented above are just the tip of the iceberg of many intriguing yet complicated issues concerning Japanese addressee-honorific markers. The purpose of this dissertation is to examine such challenging issues to better understand the syntax, semantics and pragmatics of the addressee-honorific system in Japanese.

Before delving into these problems, however, we need to clarify the theoretical background and outline the analysis proposed within this dissertation. In Section 1.1, we will see a brief history of previous studies on the Japanese

honorific system. In Section 1.2, we will see the theoretical directions of this study.

1.1 A brief history of studies on the Japanese honorific system

The study of the Japanese honorific system has a long tradition. The earliest attempt dates back to the Late Middle Japanese period (LME), when *Arte da Lingoa de Iapam* (1604-1608) was written by a Jesuit missionary, João Rodriguez, which gave a detailed explanation of the use of honorific expressions. Although a close examination of the system by Japanese scholars did not appear until around the early 20th century, several scholars had sporadically discussed the appropriate use of honorifics from a practical point of view (wrt., how to construct well-formed texts; e.g., Yasuhara 1650; Motoori 1792; Fujii 1799; Tojo 1818, see a review in Aoki 2014).

Around the transition from the 19th century to the 20th century, when systematized linguistic inquiry began to emerge, researchers sought good characterizations of the phenomenon (Mitsuhashi 1978 [1892]; Matsushita 1901, 1978 [1923], 1924, 1928; Yoshioka 1906; Mitsuya [1926] 1908; Yamada 1922a, 1922b, 1924). With several influential studies appearing around and after WWII (Tokieda 1941; Ishizaka 1944, 1951; Tsujimura 1963; Watanabe 1971), the 1970s witnessed a boom in the study of honorifics in Japanese academia, when ten-volume books on honorifics were published, covering diachronic, synchronic, sociological, and typological aspects of honorifics (Hayashi and Minami 1973-1974). Detailed examinations of the Japanese honorific system grew more sophisticated within traditional Japanese linguistics, leading to some insightful monographs, such as Minami (1986) and Kikuchi (1997 [1994]), to name a few.

However, the 1970s can also be seen as a turning point in honorific studies when researchers with training in Western tradition of linguistics started discussing the Japanese honorific system and making cross-linguistic comparisons. Until this time, within the tradition of Japanese linguistics, honorific expressions were discussed as a language-specific phenomenon tied to Japanese culture or

social structure. Although a handful of recent work has also emphasized the association between honorifics and Japanese indigenous culture or cognition (cf., Wakimae Theory, Ide 2002, 2005, 2006, 2012; partially shared by Kamio's (1990, 1995, 1997) Territory Theory), around the 1970s, linguistic theory had matured enough to provide us with a perspective from which honorifics could be analyzed as a realization of more general strategies present in human language.

One new trend of study under this new perspective came from pragmatics, i.e., Politeness Theory (Brown and Levinson 1987 [1978]), which embraces honorific as one of its chief domains of application by regarding honorifics as linguistic elements involved with negative politeness (ibid.: Ch. 5.4; Takiura 2008: Ch.3, 2017). The game-theoretic aspects of this theory have come to constitute an important framework for honorific studies (e.g., van Rooy 2003). In addition to Politeness Theory, there emerged different proposals on how politeness reflects social life, especially within sociological, functional and cognitive linguistics (Ide 2002, 2005, 2006, 2012; Kamio 1990, 1995, 1997; Dasher 1995; Lee and Kuno 2004). In his influential dissertation, Dasher (1995) discusses honorifics in the context of grammaticalization and, since then, honorifics have become an important case study in Grammaticalization Theory (Traugott and Dasher 2002: Ch. 6; Hopper and Traugott 2003; Kinsui 2004, 2005, 2011; Ohori 2005; Narrog 2005; Moriyama and Suzuki 2011; Yamaguchi 2015, among many others).

A second trend arising from this perspective shift is found in the formal research community. Around the 1970s, the Japanese honorific system was introduced to theoretical linguistics (especially, Harada 1976; but also see Prideaux 1970; Kuno 1978, 1983 [1973]; Shibatani 1977, 1978, 1985; Gunji 1987; Suzuki 1988), which inspired syntacticians to propose a view that the honorification is a type of agreement in superficially agreement-less languages (Suzuki 1988; Tribio 1990; Sells and Iida 1991; Ura 1996, 1999, 2000; Namai 2000; Niinuma 2003; Boeckx and Niinuma 2004; Hasegawa 2017 [2006]; Boeckx 2006; Ivana and Sakai 2007; Kishimoto 2010, 2012; ; Thompson 2011; Oseki and Tagawa 2019; see also some counterarguments, e.g., Matsumoto 1997; Bobaljik and Yatsushiro 2006; Kim and Sells 2007). Although it is controversial whether honorifics constitute a genuine example of agreement or not, it remains important that research

on honorifics has promoted a discussion of the universality of honorification in language (as opposed to being treated as a language-specific, ad-hoc phenomenon completely divorced from other languages, as was assumed in the first half of the 20th century). As Adger and Harbour (2008: 25-26) note, its agreement-like properties may make us reconsider the nature of phi-feature agreement. More recently, as syntactic theories on speech acts have been developed (Speas and Tenny 2003; Sigurðsson 2004; Haegeman and Hill 2013; Hill 2014; Miyagawa 2012, 2017; Zu 2015, 2018; Slocum 2016; Thoma 2016; Portner et al. 2019, among many others), the idea that honorification is linked to agreement has been extended to addressee-honorifics (Miyagawa 2012, 2017) and, together with other discourse-oriented phenomena, such as imperatives, promissives, vocatives and allocutivity, honorifics have become an indispensable component of the theory of CP-syntax — e.g., agreement in imperatives, promissives, and exhortatives (Zanuttini 2008; Zanuttini et al. 2012, 2019; Kaur 2017, 2018, 2019), vocatives (Haegeman and Hill 2013; Hill 2007, 2014; Slocum 2016), discourse-particles (Haegeman and Hill 2013; Thoma 2016), conjoint/disjoint phenomena in Newari (Zu 2015, 2018; Wechsler and Hargreaves 2018), agreement in speaker/hearer's position within the social hierarchy (Portner et al. 2019) and speaker agreement in bonding (Zu 2015, 2018).

In this way, the studies of honorifics initiated in the 1970s have played several important roles in contemporary linguistics, but this is not so say that no new trends have emerged since then. More recently, in the 21st century, honorifics are also studied within two novel disciplines. The first is formal semantics/pragmatics. In his influential dissertation, Potts (2003) used honorific data as one of his primary sources in order to discuss the issue of conventional implicature. Honorifics were treated as a linguistic element involved with expressiveness. The idea that the meaning of honorifics should be independent from the at-issue meaning of the sentence, or the view that the structured discourse context includes a component dedicated to honorifics has been developed by Potts and Kawahara (2004), Potts (2007b), Kim and Sells (2007), McCready (2014, 2018, 2019), Yamada (2017, 2018a, 2019a) and Portner et al. (2019).

Second, computational linguists are also interested in modeling politeness

in natural language. Using an English-language corpus of Wikipedia and Stack Exchange, Danescu-Niculescu-Mizil et al. (2013) examine the effect of power relations on politeness strategies. Yamada (2017, 2018a, 2019a) also provides a comparable model that bridges between dynamic pragmatics and statistical modeling.

1.2 Outline

With this historical perspective in mind, Japanese honorific systems are both old and new topics of study and have been attracting the attention of researchers with completely different research agendas. In view of such a diversity of approaches, the immediate research context of this dissertation is twofold: (i) studies that attempt to elucidate the syntax and semantics of the clause-peripheral region, and (ii) studies that discuss non-at-issue meanings.

This dissertation consists of four chapters, apart from this introduction and the final concluding chapter. Chapter 2 is a descriptive chapter that introduces the basics of the Japanese honorific system. Chapter 3 examines addressee-honorific markers from a syntactic perspective. Chapter 4 discusses the semantics and pragmatics of addressee-honorific markers. Finally, Chapter 5 focuses on embedded addressee-honorific markers especially from the perspective of syntax and formal semantics. The remainder of this chapter sets out detailed abstracts for each of these following chapters.

1.2.1 Chapter 2: The honorific system in Japanese

Chapter 2 is a descriptive chapter that introduces the Japanese honorific system in general and elucidates the characteristics of addressee-honorific markers, in both synchronic and diachronic perspectives.

Classification. Although the Japanese honorific system has at times been argued to consist of three categories, i.e., subject-honorification, object-honorification and addressee-honorification, previous studies, particularly within the tradition of Japanese linguistics, have elaborated on this tripartite grammatical system.

In addition to such major categories in (7)a, three additional marginal honorific expressions in (7)b have also been discussed.

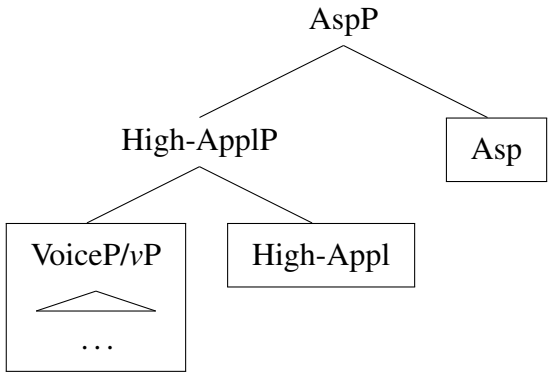
(7) Japanese honorific elements
  a. i. Subject-honorification
  ii. Object-honorification
  iii. Addressee-honorification
  b. i. Addressee-honorific upgraders 'teicho-go'
  ii. Beautification 'bika-go'
  iii. Formalization 'aratamari-go'

The main focus of this dissertation is the Japanese addressee-honorific system. Only two morphemes belong to this category — *-mas* and *des-* — and we will not give a formal analysis of any other honorific constructions. However, I have decided to provide an exhaustive description of all the constructions for two reasons. First, there has been scarcely any literature that describes in depth the Japanese honorific system in English. Second, when we see examples of addressee-honorific markers, other honorific elements usually coexist within the same sentence, which may make readers curious. I recommend that readers who are interested only in the theoretical part of this dissertation skip this chapter on the first reading and use it as a reference grammar when they have a question about a particular morpheme or construction.

Positions of honorific morphemes. In addition to giving a detailed description of each example, this chapter also elucidates the basic syntactic positions of content-honorific markers (subject-honorifics and object-honorifics) and addressee-honorific upgraders, to prepare the way for the syntactic arguments concerning addressee-honorific markers in Chapter 3.

As shown in (8), there are three different positions where we can find subject/object-honorifics and addressee-honorific upgraders.

(8)



The first position is the predicate, i.e., within the VoiceP/*v*P domain. For example, observe the sentences in (9). By replacing the verb *age-* 'give' with its corresponding honorific predicate *sasiage-* 'give.HONo,' we can encode our respect for the referent of the subject/object; e.g., in (9)b, the referent of the indirect object is honorified. Since *sasiage-* 'give.HONo' is no less a verb than its corresponding plain form *age-* 'give,' it is reasonable to conclude that it appears in the VoiceP/*v*P domain.

(9) VoiceP/*v*P domain

a. *Watasi-wa* *sensei-ni* *momo-o* ***age**-ru.*
I-NOM teacher-DAT peach-ACC give-PRS
'I will give the teacher a peach.'

b. *Watasi-wa* *sensei-ni* *momo-o* ***sasiage**-ru.*
I-NOM teacher-DAT peach-ACC give.HONo-PRS
'(i) I will give the teacher a peach;
(ii) the speaker respects the referent of the object (= the teacher).'

The second position is the head of High-ApplP. Japanese employs a high-applicative construction, as in (10)b. In the presence of *-te age* '-CV APPLH,' an applied argument *sensei-ni* 'teacher-DAT,' which is not present in (10)a, can now be integrated into the sentence. By replacing this *-te age-* with *-te sasiage-* as in (10)c, the speaker expresses respect for the teacher.

(10) High-ApplP domain

a. *Watasi-ga kaban-o mot-u.*
I-NOM bag-ACC carry-PRS
'I will carry the bag.'

b. *Watasi-ga sensei-ni kaban-o mot-te **age**-ru.*
I-NOM teacher-DAT bag-ACC carry-CV APPL$_{H}$-PRS
'I will carry the bag for the teacher.'

c. *Watasi-ga sensei-ni kaban-o mot-te **sasiage**-ru.*
I-NOM teacher-DAT bag-ACC carry-CV APPL$_{H}$.HON$_{O}$-PRS
'(i) I will carry the bag for the teacher;
(ii) the speaker respects the *teacher*.'

The third position is the head of AspP. For example, by replacing *-te i-* '-CV PRG' with *-te irassyar-* '-CV PRG.HON$_{S}$,' the speaker expresses his or her respect for the teacher.

(11) Aspectual domain

a. *Sensei-ga hasit-te **i**-ru.*
teacher-NOM run-CV PRG-PRS
'The teacher is running.'

b. *Sensei-ga hasit-te **irassyar**-u.*
teacher-NOM run-CV PRG-PRS
'(i) The teacher is running;
(ii) the speaker respects the referent of the subject (= the teacher).'

Outside of these three, we cannot find any other positions for subject/object-honorific markers and addressee-honorific upgraders; e.g., no such markers can appear in Neg or T. Rather, honorifics are distributed in the domain of event-denoting.

Crucially, honorific elements in these positions are followed by *-mas* as demonstrated below, suggesting that the position of *-mas* is higher than subject/object-honorific markers.

(12) a. *Watasi-wa sensei-ni momo-o* ***sasiage-mas****-u.*
I-NOM teacher-DAT peach-ACC give.HONo-HONa-PRS
'(i) I will give the teacher a peach;
(ii) the speaker respects the referent of the object (= the teacher);
(iii) the speaker respects the addressee.'

b. *Watasi-ga sensei-ni kaban-o mot-te*
I-NOM teacher-DAT bag-ACC carry-CV
sasiage-mas*-u.*
APPLh.HONo-HONa-PRS
'(i) I will carry the bag for the teacher;
(ii) the speaker respects the referent of the object (= the teacher);
(iii) the speaker respects the addressee.'

c. *Sensei-ga hasit-te* ***irassyai-mas****-u.*
teacher-NOM run-CV PRG-HONa-PRS
'(i) The teacher is running;
(ii) the speaker respects the referent of the subject (= the teacher);
(iii) the speaker respects the addressee.'

Description from a historical perspective. Chapter 2 also provides two historical facts about Japanese addressee-honorific markers. First, we will examine the development of *-mas*. Historical linguists and philologists have described the grammaticalization process of *-mas* (Miyachi 1960, 1971, 1977, 1980; Akita 1966; Tsujimura 1968, 1971; Sakurai 1971; Yasuda 1968, 1977, 1980; Miyachi and Miyakoshi 1971; Miyakoshi 1971, 1974, 1975, 1986; Toyama 1977; Miyazaki 1988; Dasher 1995; Moriyama 1996; Traugott and Dasher 2002; Ohori 2005; Narrog 2005; Mihara 2016). According to these previous studies, the predecessor of *-mas* is a sequence of an object-honorific marker *mawir-* 'come.HONo' and a causative marker *-as* 'CAUS.' This marker was reanalyzed as 'give.HONo' and developed into a high-applicative object-honorific marker *-ma(w)iras* 'APPLh.HONo' and finally became an addressee-honorific marker *-mas* with some phonological reductions, as illustrated in (13).

(13) Object-honorific marker to addressee-honorific marker

mawir-as- 'come.HON$_O$ + CAUS'	VoiceP/*v*P domain
> *mawiras-* 'give.HON$_O$'	
> *-mawiras-* 'APPL$_H$.HON$_O$'	High-ApplP domain
> *-mas* 'HON$_A$'	AH-marker

This historical change is all the more notable when we examine the relations among honorific expressions and bear in mind the synchronic observation that (i) object-honorific markers appear in the VoiceP/*v*P and High-ApplP domains and (ii) addressee-honorific markers appear in a higher position.

Second, contemporary Japanese employs an additional addressee-honorific marker *des-*, a copula marker; the origin of this marker is not clear as *-mas*. In colloquial contemporary Japanese, its use is expanding. Although the more novel *des*-constructions are not prescriptively accepted, Chapter 2 provides a description of the way this new variant is used in colloquial settings.

1.2.2 Chapter 3: Syntax

At the beginning of this introductory chapter we have seen that the position of *-mas* is perplexing. It precedes the negation marker. We have also seen that it is distributed at least higher than AspP. Where could it be?

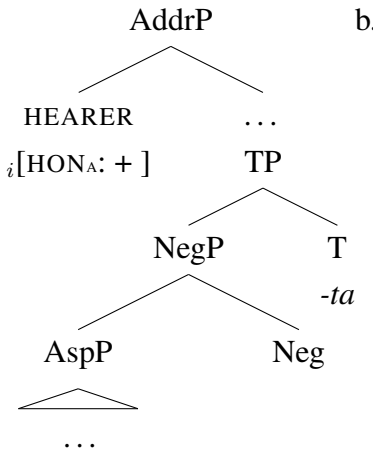
From syntax to morphology. To answer this question, one might propose that there is a distinct functional projection between Asp and Neg hosting the addressee-honorific marker and, in fact, I pursued this direction in Yamada (2017, 2018c, 2019b). However, it has been shown that this kind of syntactic approach encounters some empirical and conceptual problems.

As an alternative, this chapter proposes a morphological approach adopting some important insights from Distributed Morphology. First, it is argued that an honorific feature is postsyntactically sprouted in Neg (= (14)). This sprouting rule changes the structure created in the narrow syntax (= (15)a) into the structure in (15)b. Second, this inserted honorific feature enters into an agreement

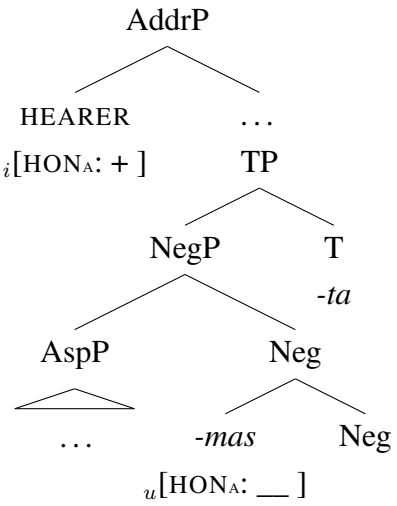
relation with the syntactically represented HEARER in the clause-periphery. It is explained that *-mas* is a realization of this sprouted honorific feature.

(14) **HONA-sprouting rule**
Neg → [Neg u[HONA : _] Neg] / [HEARER[HONA: +] . . . [. . . __ . . .]]

(15) a.



b.



Economy principles. In this chapter, we will also see several related problems. First, it will be pointed out that the presence of *-mas* affects the morphological realization of Neg and T. Observe the following sentences.

(16) a. *Hasir-**anak** **at**-ta.*
run-NEG COP-PST
'I did not run.'

b. *Hasiri-**mas**-**en** **desi**-ta.*
run-HONA-NEG COP.HONA-PST
'(i) I did not run;
(ii) the speaker respects the addressee.'

When *-mas* is present, the negation marker *-anak* and the *be*-support element 'COP' must change their forms to *-en* and *desi-*.

We will argue that there are two economy principles triggering movement from Neg to T, which results in morphological realization of these heads (Yamada 2018c).

From syntax to pragmatics. The latter half of Chapter 3 is dedicated to another intriguing property of an addressee-honorific marker: in order for a *ka*-marked interrogative clause to be used as a response-seeking question, an addressee-honorific marker is necessary. Observe the following sentences.

(17) Response-seeking questions

a. * *Hasir-u-ka?*
run-PRS-C
'Will you run? (intended)'

b. *Hasiri-**mas**-u-ka?*
run-HON$_A$-PRS-C
'(i) Will you run?;
(ii) the speaker respects the addressee.'

The sentence in (17)a is anomalous as a response-seeking question (i.e., a question to which the speaker expects the addressee to give an answer), whereas the sentence in (17)b is licit. Why are addressee-honorific markers prerequisite for a response-seeking question?

Previously, this interaction has been analyzed as a result of syntax, i.e., a problem of syntactic selection (Miyagawa 2012, 2017). However, such an approach results in the stipulation of multiple polysemous interrogative particles. To circumvent this problem, a pragmatic approach will be pursued in which only one single pragmatic rule needs to apply.

1.2.3 Chapter 4: Semantics and pragmatics

The interpretation of the addressee-honorific feature $_i$[HON$_A$: +] and its communicative effect in the discourse will be discussed in Chapter 4. As shown in (6), the 'respect' meaning of an addressee-honorific marker cannot be satisfactorily translated by the meaning of verbs.

In order to explain such a peculiar property of an expressive element, some researchers have developed a view that the honorific meaning should be analyzed as a triple of (i) the respect-bearer, (ii) the target of the respect and

(iii) the real-number-based honorific intensity and that its communicative effect is to update the relevant honorific intensity stored in the discourse (Potts and Kawahara 2004; Potts 2007b; McCready 2014, 2018, 2019). For example, in Potts' (2007) system, x's relatively high respect for y is modeled as in (18)a. The discourse is structured as in (18)b and the communicative effect is to replace the already-stored c_ε with the new honorific range proposed by the utterance.

(18) a. $< x, [0.7, 0.9], y >$

b. $c =< c_A, c_T, c_W, c_J, c_\varepsilon >$
where where c_A is the agent (speaker) of c, c_T is the time of c, c_W is the world of c, c_J is the judge of c, and c_ε is a set of expressive indices.

Since it is not a set of worlds/events or any other familiar set of objects, the honorific meaning cannot be satisfactorily expressed by at-issue meanings. This is to date the standard view expressed by previous studies.[4]

Cumulative effect. Such a dynamic treatment of honorific expressiveness succeeds in capturing some properties of honorifics. But in Chapter 4, we will see more desiderata for the pragmatics of addressee-honorific markers. One of them is the cumulative effect. Compare the following scenarios.

> Scenario A: *Speaker A is a dissolute student and the addressee is his homeroom teacher. He usually does not use addressee-honorific markers. But one day, because he has a favor to ask, he is, temporarily, speaking in an intermediate level of politeness.*

> Scenario B: *Speaker B is a very diligent student who has shown very high respect for the addressee, his homeroom teacher. But one day, he slightly changed his respect-paying manner and shifted from a very high respect to a mode in which he mildly respects the teacher but not too high, for example, to show that he feels bonded with the*

[4] **An alternative view in previous studies:** We will see another recent proposal of Portner et al. (2019) in Chapter 4.

teacher. Temporarily, speaker B is speaking in an intermediate level of politeness.

Suppose that the addressees in both scenarios temporarily think that the speaker is speaking in a mildly high-honorific register. Also suppose that Speaker A and Speaker B have both produced a sentence without an addressee-honorific marker.

Under the models of the previous studies, the context update is only sensitive to the previous state. So, once we have the i-th context update, we are meant to forget what the $(i-1)$-th state was like. If both A and B are speaking in an intermediate level of politeness, it would be predicted that A's use of a non-addressee-honorific marker is as surprising as B's use of a non-addressee-honorific marker. However, intuitively, Speaker B is less likely to use a non-addressee-honorific marker because this person has more often used addressee-honorific markers than Speaker A. This shows that, in order to measure the surprise, we need to somehow know what previous past states were like before the i-th state. In other words, past uses of addressee-honorific markers have some cumulative influence on the latest honorific state.

One question remains: do we have to retain all the past states? This seems too much. Is there any better model in which the impact of addressee-honorific markers is relativized with respect to past states but yet we can avoid such a memory overload?

Summary parameters. As a solution to this dilemma, I propose that what is stored in the structured discourse context is a set of summary parameters that summarize what the past states were like, rather than the current range of honorific intensity. For example, suppose that the structured discourse context is of the form of (19). If the honorific state h consists of the two summary parameters and α and β represent how many addressee-honorific markers and non-addressee-honorific markers have been used in past conversation, our update is still local (i.e., just replacing the previous honorific state with a new state) but yet captures the speaker's past honorific behavior.[5]

[5] **Discourse participants:** This is rather a simplified assumption, because this model assumes that there is only one speaker whose speech style the discourse participants are tracking down. In

(19) a. $c =< cs, qs, tdl, h, \ldots >$

b. $h = (\alpha, \beta)$

For example, if $(\alpha, \beta) = (99, 1)$, we have seen 100 utterances and just 1 of them used with a non-addressee-honorific marker. If $(\alpha, \beta) = (9, 1)$, we have seen 10 utterances and just one of them used an addressee-honorific marker.

Interpretation. We can give many interpretations to this h. One interpretation is, as I said, that it reflects and summarizes the past honorific uses. Another interpretation is that h reflects the AUDIENCE'S UNCERTAINTY about the speaker's honorific attitude. For example, if $h = (2, 1)$, the audience would infer that the speaker is a person who uses the addressee-honorific marker more often than the non-addressee-honorific marker but they must be quite uncertain about this conclusion. After all, they have only observed three utterances. However, if $h = (200, 10)$, they are more sure that the speaker is someone who uses addressee-honorific markers more often than the non-addressee-honorific marker.

In other words, we can interpret this h as a state that represents what kind of person the speaker is, or the SPEAKER'S PUBLICIZED SELF-IMAGE. For example, $h = (100, 0)$ and $h = (90, 10)$ are both possible states when the audience has heard 100 utterances and more addressee-honorific markers have been used than non-addressee-honorific markers. But we have different impressions; with $h = (100, 0)$, we will have the impression that the speaker is someone who is trying to be as polite as possible while, with $h = (90, 10)$, we will think that he or she is someone who is polite in general but is sometimes casual. By manipulating the amount of addressee-honorific markers and non-addressee-honorific markers, the speaker can create a publicized image and express what kind of impression he or she wants the audience to have about him- or her. Traditionally, it has been assumed that discourse participants update cs and shrink it to a smaller subset; that is, they are learning what the world is like. In this new model, discourse participants are engaged in a language game in which they not only narrow down

Chapter 4, we will analyze h as a set of such summary parameters of all the discourse individuals. But for the sake of simplicity, here we will assume that h only consists in just a single pair of (α, β).

the cs but also change the parameters to know what kind of neighbors they are surrounded by.

Bayesian dynamic pragmatics. If we interpret (α, β) as representing the audience's uncertainty about the speaker's attitude to politeness in terms of how often he uses addressee-honorific markers, we need to spell out the mechanism between these (α, β) and the uncertainty state. As a way of modeling the relation, I incorporate insights from Bayesian statistics, which uses probability distributions to represent our subjective uncertainty states. Probability distributions are practically identified by a few summary parameters, and the goal of Bayesian statistics is to dynamically update our estimation of such parameters each time we make an observation. Dynamicity in the estimation process makes this statistic paradigm quite akin to the context-update semantics/pragmatics and its integration enables a formal discussion of the relation between presence/absence of *-mas* and the uncertainty state.

1.2.4 Chapter 5: Embedded addressee-honorific markers

In Chapter 5, we examine addressee-honorific markers in relation to embedding. As seen in (5), Japanese addressee-honorific markers can be embedded in indirect speech contexts. However, for the most part, the literature that assumes superordinate speech act layers above/around CP has argued that these layers cannot be embedded (Zu 2015, 2018; Zanuttini 2008; Zanuttini et al. 2012, 2019; Haegeman and Hill 2013; Hill 2014; Zu 2015, 2018; Portner et al. 2019). Why can Japanese addressee-honorific markers be embedded?

Japanese embedded declaratives. In order to elucidate the mechanism of embedded addressee-honorific markers, we will first take a look at Japanese embedded declarative clauses and compare two subordinating markers *-to* and *-koto*. When they appear in the complement position of main clause predicates, we can see a division of labor: (i) *to*-clauses are used with predicates of saying/thinking and (ii) *koto*-clauses are used with many other predicates.

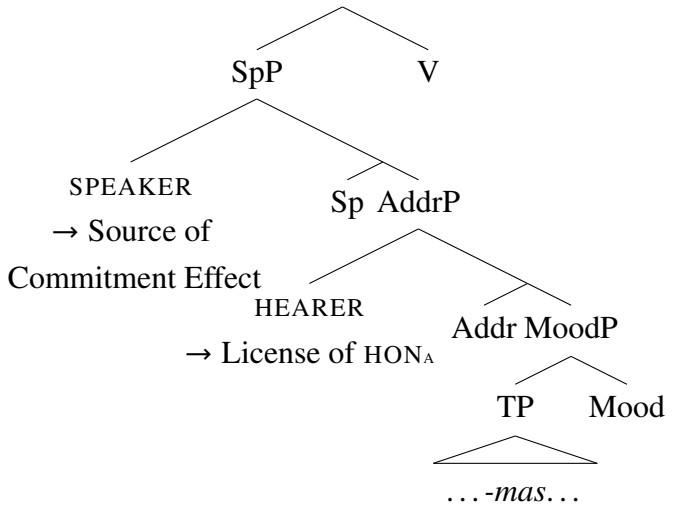
Previously, this *koto*-clause has been argued to be presuppositional and to disallow embedded addressee-honorific markers (Miyagawa 2012, 2017) but I

will demonstrate that, in certain contexts, embedded addressee-honorific markers are much more productively embedded than previous work might suggest.

Enhancement effect and commitment effect. When embedded, addressee-honorific markers exhibit two independent effects: i.e., the enhancement effect and the commitment effect. The ENHANCEMENT EFFECT refers to the fact that the presence of an addressee-honorific marker strengthens the politeness level. For example, the respect encoded in (5)b is higher than in (5)a. The COMMITMENT EFFECT refers to the fact that the presence of embedded addressee-honorific markers commits the utterance speaker to the embedded proposition (it is shown that there are two different types of commitment effects).

Embedded speech act projections. Why are embedded addressee-honorific markers observed in *koto*-clauses? Why do they trigger the enhancement effect and the commitment effect? To answer these questions, I will propose a view that the speech act layers (= SpP-AddrP) are, in fact, embeddable assuming the following structure for the embedded clauses with addressee-honorific markers.

(20)



First, I build upon the claim from Chapter 3 that *-mas* is the realization of the postsyntactically-inserted honorific feature in Neg, which enters into an agreement relation with the HEARER in the Spec of the embedded AddrP, and not with the HEARER in the main clause. This assumption is congenial to the common view that Agree should meet a phase condition (Baker 2008).

Second, the assumption that a syntactically-represented HEARER with an interpretable ${}_i[\text{HON}_\text{A}]$ is present in the left-periphery of the embedded clause gives us an answer to why an embedded addressee-honorific marker triggers the enhancement effect: in addition to the main clause ${}_i[\text{HON}_\text{A}]$, we have another ${}_i[\text{HON}_\text{A}]$ from the embedded clause, strengthening the politeness level.

Third, the idea that the speech act layer is embeddable also makes it easy for us to explain the commitment effect. When present, the SPEAKER is designed to be related to the proposition expressed by the embedded clause that it immediately c-commands.

Finally, in order to capture the difference between the *to*-clause and the *koto*-clause, we will propose that the semantics of the *to*-clause, not the *koto*-cause, prevents the SPEAKER from committing him- or herself to the embedded proposition.

Chapter 2

The Japanese honorific system

2.1 Overview

As far as theoretical linguistics is concerned, one of the most cited articles available in English discussing the classification of Japanese honorifics is Harada (1976), which is taken for granted by many recent studies including Niinuma (2003), Potts and Kawahara (2004), Potts (2007b), Miyagawa (2012, 2017), and Portner et al. (2019). In this work, he presents a tripartite classification reflecting arguments made within traditional Japanese linguistics.[1] Observe the classification tree in Figure 2.1. First, honorific expressions are divided into two ma-

[1] **Two-way distinction in honorifics**: The division between propositional honorifics and performative honorifics had been proposed by, for example, Matsuo (1936), Mio (1942), Miyake (1944), Tsujimura (1963), and Kitahara (1969). Some of these authors, however, have proposed more articulated classifications, as we will see in Section 2.3.

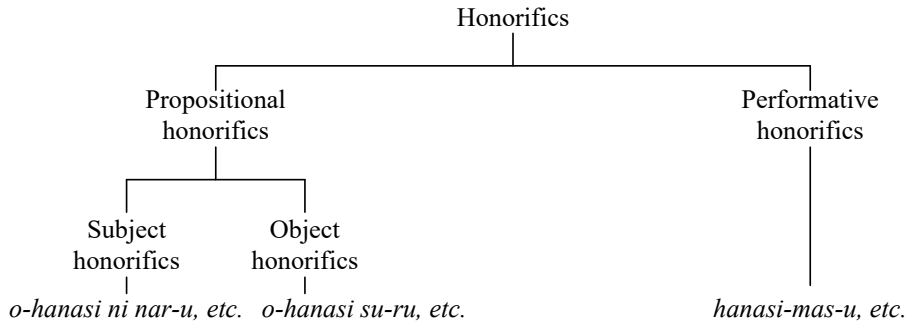


Figure 2.1: Harada's (1976: 502) tripartite classification

jor groups — PROPOSITIONAL HONORIFICS and PERFORMATIVE HONORIFICS. Propositional honorifics encode the speaker's respect for the referent of an argument, whereas performative honorifics encode the speaker's respect for the addressee. Second, propositional honorifics are further divided into two subgroups: subject-honorifics and object honorifics. As the names suggest, the referent of the subject is respected in subject-honorific constructions and the referent of the object is (typically) respected in object-honorific constructions.

We will scrutinize each category in the subsequent sections. But let us first briefly observe some representative examples in contemporary Japanese. First, the pair in (1) illustrates how the subject-honorific marker is used. In terms of the main message, these two sentences are equivalent: 'the teacher attended the conference.' But the sentence in (1)b is minimally different from (1)a in that it has an extra morpheme *-(r)are*, which encodes the secondary information that the speaker respects the teacher.

(1) Subject-honorifics

a. *Sensei-ga* *gakkai-ni* *syusseki* *sur-u.*
teacher-NOM conference-DAT attendance do-PRS
'The teacher attended the conference.'

b. *Sensei-ga* *gakkai-ni* *syusseki* *s-**are**-ru.*
teacher-NOM conference-DAT attendance do-HONs-PRS
'(i) The teacher attended the conference;
(ii) The speaker respects the teacher.'

This secondary honorific meaning has been considered to be independent of the main message, aka., the at-issue meaning (Potts and Kawahara 2004; Potts 2007b; McCready 2014, 2018, 2019; Portner et al. 2019; we will see evidence for this view in Chapter 4). So, I will provide two separate translations for each example if the sentence has an honorific element.

Second, an example of the object-honorific marker is given in (2)b. A detailed morphological analysis of this will be deferred to subsequent sections. At this moment, it is enough to know that the sequence of *o-*, *watasi*, and *sur-(si-)* forms a periphrastic object-honorific expression, by which the referent of the dative object (the teacher) is respected by the speaker.

(2) Object-honorifics

a. *Kare-ga* *sensei-ni* *hana-o* *watasi-ta.*
he-NOM teacher-DAT flower-ACC give-PST
'He gave the teacher a flower.'

b. *Kare-ga* *sensei-ni* *hana-o* ***o-****watasi* ***si-****ta.*
he-NOM teacher-DAT flower-ACC HON-giving do-PST
'(i) He gave the teacher a flower;
(ii) The speaker respects the teacher.'

Finally, an example of the performative honorifics, or the addressee-honorifics, is illustrated in (3)b. Unlike the above two cases, the speaker's deference is directed to the addressee (which is not overtly pronounced) and not to the referent of the argument of the predicate (i.e., *yuki* 'snow').

(3) Performative honorifics (addressee-honorifics)

a. *Yuki-ga* *hut-te* *i-ru.*
snow-NOM fall-CV PRG-PRS
'It is snowing.'

b. *Yuki-ga* *hut-te* *i-****mas****-u.*
snow-NOM fall-CV PRG-HON$_A$-PRS
'(i) It is snowing;
(ii) The speaker respects the addressee.'

These are the three major honorific classes discussed in Harada (1976). Although this tripartite system is able to capture important honorific categories in Japanese, it has been pointed out that this three-way classification has some problems upon closer scrutinization of the data. To overcome this problem, researchers have proposed a different, more elaborated system. The purpose of this chapter is to provide readers with a sufficient description of both major and minor refinements of the classification presented in Figure 2.1.[2]

Organization of this chapter. First, we will examine the above three categories more in depth in Section 2.2, so readers can gain a basic understanding of the major categories. Second, in Section 2.3, we will turn to some marginal constructions that do not fit into the above tripartite classification. Lastly, we will zoom in on addressee-honorific markers from a historical perspective in Section 2.4. Although the main concern of this dissertation is the system as it operates in contemporary Japanese, diachronic analyses are beneficial for two reasons; (i) the addressee-honorific system is subject to ongoing change in contemporary Japanese, so we need to carefully delimit the range of data, which would not be possible without fully understanding what is old and what is new; and (ii), as we will see, by knowing how it has been grammaticalized, we can relate what looks like an 'exotic' construction with phenomena with which we are (relatively) more familiar.

2.2 Major honorific constructions

Although the main purpose of this dissertation is to examine addressee-honorific markers (which Harada (1976) calls performative honorifics), I shall present a basic description of the content-honorifics, for the following reasons.

[2] **Terminology:** There is some variation in terminology. First, propositional honorifics are sometimes called content-honorifics, referential honorifics, *seibun keigo* (Matsuo 1936), *keijogo* (Mio 1942), *si ni zokusuru keigo* (Tokieda 1941) and *sozai keigo* (material honorifics). Second, performative honorifics are also described as utterance-honorifics, addressee-honorifics, *hi seibun keigo* (Matsuo 1936), *ji ni zokusuru keigo* (Tokieda 1941) and *taisya keigo* (honorifics for the addressee). Third, object-honorifics are sometimes referred to as non-subject honorifics, because morphologically there is no distinction between direct-object honorification and indirect-object honorification (Kuno 1987).

First, there are very few sources we can read in English that exhaustively discusses the honorific system in Japanese (Harada 1976; Hasegawa 2017 [2006]). Second, the addressee-honorific constructions historically developed out of the subject/object-honorifics and, even in contemporary Japanese, addressee-honorific markers exhibit some grammatical interactions with these content-honorific markers. Thus, knowledge of the content-honorifics becomes indispensable in building a theory of addressee-honorific markers. Third, many examples introduced in the subsequent chapters inevitably include content-honorific elements as well as addressee-honorific markers. It is expected that a detailed description of these elements will facilitate the reader's understanding of the examples.

This section consists of three parts. Section 2.2.1 introduces subject-honorific constructions. Section 2.2.2 describes object-honorific constructions. Lastly, Section 2.2.3 discusses addressee-honorific markers. Each subsection comprises two parts; (i) overview and (ii) examples. Readers who are not interested in the particulars of a specific construction are invited to skim the overview and skip the examples. They are free to return to the relevant description if they encounter any trouble interpreting a gloss in subsequent chapters.

2.2.1 Subject-honorific markers

2.2.1.1 Overview

As mentioned above, subject-honorific constructions are used to show deference to the referent of the subject noun phrase. For example, observe the sentences in (4). The verb in (4)a takes the plain form with no honorific meaning. But if the speaker has respect for *the teacher*, the sentence in (4)b is used instead.

(4) Subject-honorifics

a. *Sensei-ga* *kooen-ni* *i-ru.*
teacher-NOM park-at exist-PRS
'The teacher is in the park.'

b. *Sensei-ga* *kooen-ni* ***irassyar-u.***
teacher-NOM park-at exist.HONs-PRS
'(i) The teacher is in the park;
(ii) The speaker respects the teacher.'

There are two general remarks to be made on subject-honorification. First, the subject noun phrase does not have to be nominative (Harada 1976; Shibatani 1977, 1978; Kuno 1983; Kikuchi 1997 [1994]; Ura 1999; Niinuma 2003; Kishimoto 2010, 2012; Hasegawa 2017 [2006]). For example, observe the sentences in (5), which are examples of DATIVE SUBJECT CONSTRUCTIONS. In (5)b, a subject-honorific marker *irassyar-* is used in place of *i-*. In this sentence, it is *the teacher* (the referent of the dative argument), not *the assistants* (the referents of the nominative argument), that is respected by the speaker.

(5) Dative subject construction

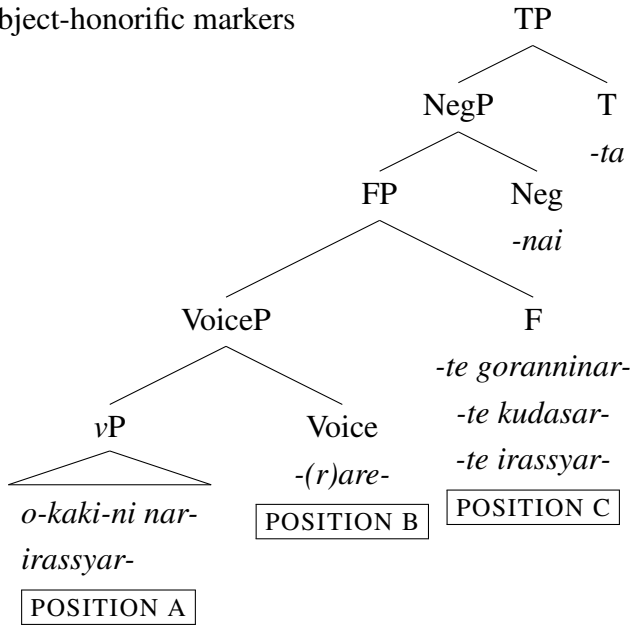
a. ***Sensei****-ni* *san-nin* *zyosyu-ga* ***i****-ru.*
teacher-DAT three-CL assistant-NOM exist-PRS
'The teacher has three assistants.'

b. ***Sensei****-ni* *san-nin* *zyosyu-ga* ***irassyar****-u.*
teacher-DAT three-CL assistant-NOM exist.HONs-PRS
'(i) The teacher has three assistants;
(ii) The speaker respects the teacher.'

Second, there are, roughly speaking, three different positions where we can encode subject-honorification, which are schematically represented in the structure in (6).[3]

[3] **Caveat:** While capturing the baseline word order, the structure in (6) is rather simplistic, firstly because, for illustrative purposes, it collapses different *v*P-peripheral functional projections into FP which could be split into finer-grained functional projections; and secondly because (for some speakers) the order between some Position B elements and those in Position C can be flipped.

(6) Distribution of subject-honorific markers



The first layer is the TIER OF ARGUMENT STRUCTURE (POSITION A). For example, in (5), the lexical verb *i-* 'be/exist' is replaced with a subject-honorific predicate *irassyar-* 'be/exist.HONs.' Syntactically, this *irassyar-* behaves as a main predicate just as its non-subject-honorific counterpart does; i.e., *irassyar-* is a suppletive form of *i-*. Just as non-honorific verbs provide the argument structure, this verb *irassyar-* determines the argument structure as well as the theta (semantic) roles (e.g., THEME and LOCATION). We will see examples of such subject-honorific predicates in Section 2.2.1.2.1.

For example, while *-(r)are* in most cases precedes *-te* AUX expressions as in (i)a, a Position C expression *-te simaw-* '-CV PRF' can appear both before and after *-(r)are* as illustrated in (i)b.

(i) a. *Sensei-wa toorisugi-**rare-te** **simat**-ta.*
teacher-TOP passing by-HONs-CV PRF-PST
'(i) The teacher passed by;
(ii) the speaker thinks that the teacher's passing-by is unfortunate;
(iii) the speaker respects the teacher.'

b. *Sensei-wa toorisugi-**te** **simaw-are**-ta.*
teacher-TOP passing by-CV PRF-HONs-PST
'(i) The teacher passed by;
(ii) the speaker thinks that the teacher's passing-by is unfortunate;
(iii) the speaker respects the teacher.'

subject-honorific expressions	page
Position A (Tier of argument structure)	
o-NOUN-*ni nar-*	p. 31
o-NOUN *nasar-*	p. 46
suppletive forms	p. 52
o-NOUN COP	p. 59
Position B (expressions derived from voice)	
-(r)are	p. 62
Position C (expressions in the *v*P-periphery)	
-te irassyar- etc.	p. 67

Table 2.1: Subject-honorific expressions

The second layer is what I would like to refer to as the TIER OF VOICE-RELATED ELEMENTS (POSITION B). Even though the basic individuals relevant to the depicted event have been introduced in the tier of argument structure, we can integrate more individuals into the event, for example, by specifying an individual who benefits from the depicted event. Grammatical markers that encode such applied elements are called APPLICATIVE EXPRESSIONS (Shibatani 1996; McGinnis 2001a,b, 2002; Legate 2002; Cuervo 2003; McGinnis and Gerdts 2004; Jeong 2006; Pylkkänen 2008; Lee 2012; Bosse et al. 2012). Japanese has developed a number of such applicative markers and I identify one such morpheme *-(r)are* as the head of a functional projection of Position B in (6). We will see relevant examples in Section 2.2.1.2.2.

The last layer is the TIER OF *v*P-PERIPHERY (POSITION C). Several *v*P-peripheral elements appear in a position higher than this *-(r)are* suffix, and they can also encode the subject-honorific meaning. These expressions differ in meaning and do not compete for one single position (because they can cooccur with each other). Therefore, we can identify distinct positions for these expressions. But for the purposes of presenting a general distributional tendency, I have presented a simplified structure and have used FP in (6), being agnostic about the detailed analysis these functional projections. We will examine these Position C expressions in Section 2.2.1.2.3.

Table 2.1 summarizes the three tiers. Importantly, subject-honorific markers do not appear outside of these three tiers. For example, tense markers,

negation markers and sentence-final particles cannot encode the subject-honorific meaning in contemporary Japanese.

2.2.1.2 Examples

2.2.1.2.1 Position A: Tier of argument structure

Subject-honorific construction 1: *o*-NOUN-*ni nar*-. This periphrastic expression is a commonly used subject-honorific marker in contemporary Japanese. For example, observe the sentences in (7). When the speaker has no particular respect for the referent of the subject (= *the teacher*), the sentence in (7)a is used, which is composed of a subject, an object and a verb with a past tense suffix. When the speaker wishes to express his or her respect, the sentence in (7)b is selected instead.

(7) *o*-NOUN-*ni nar*-

a. *Sensei-ga* *seito-o* *tasuke-ta.*
teacher-NOM student-ACC help-PST
'The teacher helped the students.'

b. *Sensei-ga* *seito-o* ***o-tasuke-ni*** ***nat-ta.***
teacher-NOM student-ACC HON-helping-DAT become-PST
'(i) The teacher helped students;
(ii) The speaker respects the teacher.'

This subject-honorific construction in (7)b is composed of four independent morphemes; (i) the honorific prefix *o*- 'HON', (ii) the nominalized verb *tasuke* 'help,' (iii) the dative marker *-ni* and (iv) a verb *nar*- 'become.' Let us look more closely at these components below.

(i) PREFIX *o-/go-*. In Japanese, the prefix *o*- (< *oo*- '(spiritually) big') is attached to a noun when the speaker wants to encode his or her respect for the referent of the noun, or for the possessor of the referent of the noun (Tsujimura 1968: 127; Kasuga 1971: 53; see also Section 2.3.2 for a different use). For example, in (8)b, the speaker expresses his respect for the possessor of the garden, while (8)a does not convey this extra honorific meaning.

(8) Prefix *o-* with a noun

a. *Kore-wa kireina niwa des-u-ne.*
this-TOP beautiful garden COP.HON$_A$-PRS-SFP
'(i) This is a beautiful garden, isn't it?;
(ii) the speaker respects the addressee (< *des-*).'

b. *Kore-wa kireina* ***o-****niwa des-u-ne.*
this-TOP beautiful HON-garden COP.HON$_A$-PRS-SFP
'(i) This is a beautiful garden, isn't it?;
(ii) the speaker respects the addressee (< *des-*);
(iii) the speaker respects (the possessor of) the garden (< *o-*).'

Nouns of Chinese origin are typically used with another prefix *go-* instead of *o-*; i.e., a contextual allomorph. An example is given in (9); *teian* 'proposal' is a noun of Chinese origin and it is prefixed by *go-*, not *o-* (Harada 1976: 503; Kikuchi 1997 [1994]).[4] Although these two morphemes are phonologically different, their grammatical functions are equivalent.

(9) Prefix *go-* with a noun

a. *Sore-wa subarasii teian des-u-ne.*
that-TOP excellent proposal COP.HON$_A$-PRS-SFP
'That is an excellent proposal, isn't it?'

b. *Sore-wa subarasii* ***go****-teian des-u-ne.*
that-TOP excellent HON-proposal COP.HON$_A$-PRS-SFP
'(i) That is an excellent proposal, isn't it?;
(ii) the speaker respects the proposal (and/or the person who proposes the idea).'

(ii) NOMINALIZED PREDICATE. Not only to the common noun but also to the derived noun can we add these prefixes if the speaker wants to encode his or her deference to the do-er/possessor or a respected person associated with the

[4] **Exceptions:** There are some exceptions. For example, *genki* 'vigor' is of Chinese origin but its honorific form is *o-genki* (**go-genki*). Kikuchi (1997 [1994]: 466-469) gives us a list of words that take *go-* prefix. Likewise, there are also some examples of Yamato words that take *go-*; e.g., *go-yukkuri* 'HON-slow' and *go-mottomo* 'HON-likely/reasonable.'

nominalized event. For example, in (10)b, unlike (10)a, the derived noun *tasuke* is prefixed by *o-*, with which the speaker expresses his respect for the *help-er* of this helping event.

(10) Prefix *o-* with a derived noun

a. *Anata-no tasuke-ga nakere-ba taihen desi-ta.*
you-GEN helping-NOM absent-if trouble COP.HON$_A$-PST
'(i) Without your help, I was in trouble;
(ii) the speaker respects the addressee (< *desi-*).'

b. *Anata-no* ***o-****tasuke-ga nakere-ba taihen desi-ta.*
you-GEN HON-helping-NOM absent-if trouble COP.HON$_A$-PST
'(i) Without your help, I was in trouble;
(ii) the speaker respects the addressee (< *desi-*);
(iii) the speaker respects the possessor/agent of the helping event (= you) (< *o-*).'

(iii)/(iv) DATIVE PARTICLE AND PREDICATE *become*. The verb *nar-* 'become' can take an *o/go*-prefixed derived noun as its dative argument. Of course, this verb can be used as a lexical verb denoting a change-of-state, as illustrated in (11). By replacing the bracketed noun with a derived noun, we can produce a subject-honorific construction as in (11)b.

(11) a. Lexical use

Sensei-ga [*kanreki*]*-ni* ***nat****-ta.*
teacher-NOM 60 years old-DAT become-PST
'The teacher became 60 years old.'

b. Honorific use

Sensei-ga [***o-****hasiri*]***-ni*** ***nat-****ta.*
teacher-NOM HON-running-DAT become-PST
'(i) The teacher ran;
(ii) The speaker respects the teacher.'

While there is no doubt that this subject-honorific construction evolved from a change-of-state construction, it has also been pointed out that the status of

the dative-marked noun phrase is different between the lexical 'become' and the one that appears in the honorific construction. First, the *tasuke* in (10)b and the one in (7)b are different in terms of their ability to take accusative case marking. In general, when nominalized, verbs lose their ability to assign accusative case to object arguments. For example, while the PAT(IENT) *seito* 'student(s)' is marked in the accusative in (12)a, when nominalized, the corresponding argument is no longer licit with an accusative particle as illustrated in (12)b. In (7)b, the verb *tasuke* seems nominalized because it receives a dative particle. If so, it is anticipated that the PAT(IENT) cannot be marked with an accusative. However, the accusative marked argument is licensed contrary to our prediction.

(12) Nominalization and accusative case marking

a. *Sensei-ga* *seito-o* *tasuke-ru.*
teacher-NOM student-ACC help-PRS
'The teacher helps the students.'

b. [*(*Seito-**o***) *(o-)tasuke*]*-ga* *hituyoo* *da.*
student-ACC HON-help-NOM necessary be
'(i) Helping *(the students) is necessary;
((ii) the speaker respects the agent of the helping event.)'

One might propose that the accusative *seito-o* in (7)b is licensed by the verb *nar-* 'become.' But given the fact that *nar-* is, etymologically, an intransitive predicate, one needs to propose some auxiliary theories to explain why an intransitive predicate is involved with assigning accusative case, which does not seem to be a easy task.[5]

[5] **Ditransitive?:** One might propose that, for an unknown reason, *nar-* in the subject-honorific construction is indeed a ditransitive predicate. However, such an analysis is not easy to adopt, because, unlike the canonical ditransitive verb (= (i)), this construction does not allow scrambling of the *ni*-marked constituent (= (ii)).

(i) a. *Sensei-ga* ***kare-ni*** *purezento-o* *age-ta.*
teacher-NOM he-DAT present-ACC give-PST
'The teacher gave him a present.'

b. *Sensei-ga* *purezento-o* ***kare-ni*** *age-ta.*
teacher-NOM present-ACC he-DAT give-PST
'The teacher gave him a present.'

Second, the derived noun in the subject-honorific construction cannot be relativized (Harada 1976: 525). The *nar-* in (13)a is used as a lexical verb and it can be relativized, as in (13)b. On the other hand, the *nar-* in (14)a is a part of the subject-honorific construction and it cannot be relativized, as illustrated in (14)b.

(13) Lexical use

a. *Taroo-wa Hamuretto-no yaku-ni nat-ta.*
Taro-TOP Hamlet-GEN role-DAT become-PST
'Taro played the role of Hamlet (lit., Taro became the role of Hamlet).'

b. [*Taroo-ga nat-ta*] *yaku*
Taro-NOM become-PST role
'the role that Taro played'

(14) Honorific use

a. *Sensei-wa o-hasiri-ni nat-ta.*
teacher-TOP HON-running-DAT become-PST
'(i) The teacher ran;
(ii) the speaker respects the *teacher*.'

b. * [*Sensei-ga nat-ta*] *o-hasiri.*
teacher-NOM become-PST HON-running
'(i) the running that the teacher did;
(ii) the speaker respects the *teacher* (intended).'

Finally, the *tasuke* in the subject-honorific construction cannot be used in clefts (Harada 1976: 525). The lexical use of *nar-* can be used in clefts (= (15)b) while the subject-honorific construction is incompatible with clefts (= (16)a).[6]

(ii) a. *Sensei-ga kare-o* ***o-tasuke-ni*** ***nat-****ta.*
teacher-NOM he-ACC HON-helping-DAT become-PST
'(i) The teacher helped him;
(ii) The speaker respects the teacher.'

b. * *Sensei-ga* ***o-tasuke-ni*** *kare-o* ***nat-****ta.*
teacher-NOM HON-helping-DAT he-ACC become-PST
'(i) The teacher helped him;
(ii) The speaker respects the teacher (intended).'

[6] **Ellipsis test:** Harada (1976: 525) also mentions the ellipsis test. But the judgments are not as

(15) Lexical use

a. *Taroo-wa Hamuretto-no yaku-ni nat-ta.*
Taro-TOP Hamlet-GEN role-DAT become-PST
'Taro played the role of Hamlet (lit., Taro became the role of Hamlet).'

b. [*Taroo-ga nat-ta-no*]-*wa* *Hamuretto-no yaku da.*
Taro-NOM become-PST-C-TOP Hamlet-GEN role COP
'What Taro played was the role of Hamlet.'

(16) Honorific use

a. *Sensei-wa o-hasiri-ni nat-ta.*
teacher-TOP HON-running-DAT become-PST
'(i) The teacher ran;
(ii) the speaker respects the *teacher*.'

b. * [*Sensei-ga nat-ta-no*]-*wa* *o-hasiri da.*
teacher-NOM become-PST-C-TOP HON-running COP
'(i) What the teacher did was running;
(ii) the speaker respects the *teacher* (intended).'

DETAILED PROPERTIES. In addition to these peculiar (morpho-)syntactic properties, this construction has a number of restrictions. Below, let us consider some important findings of previous studies (see, especially, Kikuchi 1997 [1994]: 156-172).

First, there is a general requirement on derived nouns that they must be longer than one mora. For example, the verbs listed in Table 2.2 are predicted to have the derived noun as in the second column. Indeed, when these nouns are used as a component of a compound, these forms are licit as shown by the boldface elements in (17). But when they are used alone, these forms are disallowed, as shown in (18).

clear as the other tests. So, I would like to refrain from introducing this test and refer the reader to his original paper instead.

verb	derived noun (only allowed in the compound)	expected *o*-NOUN-*ni nar*- form
sur- 'do'	*si* 'doing'	**o-si-ni nar-*
kur- 'come'	*ki* 'coming'	**o-ki-ni nar-*
i- 'be'	*i* 'being'	**o-i-ni nar-*
mi- 'see'	*mi* 'seeing'	**o-mi-ni nar-*
ki- 'put on'	*ki* 'wearing'	**o-ki-ni nar-*
ne- 'sleep'	*ne* 'sleeping'	**o-ne-ni nar-*
ni- 'resemble'	*ni* 'resemblance'	**o-ni-ni nar-*
ni- 'boil'	*ni* 'boiling'	**o-ni-ni nar-*

Table 2.2: Derived nouns of one mora

(17) Derived nouns in a compound

a. *iki-**ki*** 'going and coming'

b. *naga-**i*** 'staying long'

c. *nusumi-**mi*** 'a stolen glance'

d. *kasane-**gi*** 'wearing many layers of clothing'

e. *zako-**ne*** 'sleeping bundled together in one room'

f. *sora-**ni*** 'an accidental resemblance'

g. *motu-**ni*** 'giblet soup'

(18) Derived nouns in a non-compound environment

**Kono ni oisii.*
this boiled food delicious
'This boiled food is delicious (intended).'

The same phonological constraint is applied to the derived noun in this *o*-NOUN-*ni nar*- construction. For example, the sentence in (19)b is illicit because *ni* only consists of one mora.

(19) a. *Sensei-wa* *motu-o* ***ni**-ru.*
teacher-TOP giblets-ACC boil-PRS
'The teacher boils giblets.'

b. * *Sensei-wa* *motu-o* *o-**ni**-ni* *nar-u.*
teacher-TOP giblets-ACC HON-boiling-DAT become-PRS
'(i) The teacher boils giblets;
(ii) the speaker respects the teacher (intended).'

Second, foreign nouns (except for those of Chinese origin) cannot be used in this periphrastic construction. For example, the noun *sketti* 'sketch' cannot be used in this construction.

(20) Restriction on etymology

a. *Sensei-ga* *huukei-o* *o-kaki-ni* *nar-u.*
teacher-NOM scenery-ACC HON-drawing-DAT become-PRS
'(i) The teacher draws the scenery;
(ii) the speaker respects the teacher.'

b. * *Sensei-ga* *huukei-o* *{o/go}-suketti-ni* *nar-u.*
teacher-NOM scenery-ACC HON-sketch-DAT become-PRS
'(i) The teacher makes a sketch of the scenery;
(ii) the speaker respects the teacher (intended).'

Third, onomatopoeic nouns cannot be used in this construction, either. For example, in (21)a, an onomatopoeic noun *tin* 'a tinkle' is used with a light verb *sur-* 'do' to describe the heating event using a microwave (when they finish heating, microwaves makes a noise that sounds like *tin*). But this noun cannot be placed in the periphrastic subject-honorific construction, as shown in (21)b.

(21) Restriction on onomatopoeic expressions

a. *Sensei-wa densirenzi-de gohan-o* ***tin*** *si-ta.*
teacher-TOP microwave-with food-ACC 'tin' do-PST
'The teacher heated the food in a microwave (which makes the noise 'tin (a tinkle)').'

b. * *Sensei-wa densirenzi-de gohan-o* {*o-/go-*}***tin****-ni*
teacher-TOP microwave-with food-ACC HON-'tin'-DAT
nat-ta.
become-PST
'(i) The teacher heated the food in a microwave (which makes the noise 'tin (a tinkle)');
(ii) the speaker respects the teacher (intended).'

Fourth, in contemporary Japanese, there is a requirement that object-honorific markers must not be used together with this subject-honorific construction; cf., addressee-honorific markers, which can be used together with subject-honorific expressions (except for a few cases).

(22) Restriction on object-honorific expressions

a. *Yamada sensei-wa Tanaka sensei-ni dengon-o*
Yamada teacher-TOP Tanaka teacher-DAT message-ACC
itadai*-ta.*
receive.HONo-PST
'(i) Teacher Yamada received a message from Teacher Tanaka;
(ii) the speaker respects Teacher Tanaka.'

b. * *Yamada sensei-wa Tanaka sensei-ni dengon-o*
Yamada teacher-TOP Tanaka teacher-DAT message-ACC
*o-****itadaki****-ni nat-ta.*
HON-receiving.HONo-DAT become-PST
'(i) Teacher Yamada received a message from Teacher Tanaka;
(ii) the speaker respects Teacher Tanaka;
(iii) the speaker respects Teacher Yamada (intended).'

Fifth, if the depicted event has a negative nuance, the use of this construction is prohibited. For example, *hager-* 'get bald' denotes a negative property of

the referent of the subject and cannot be used in this periphrastic subject-honorific construction.

(23) Restriction on negative connotation

a. *Sensei-wa* *sukosi* *hage-te* *i-ru.*
teacher-TOP little get bald-CV PRF-PRS
'The teacher is slightly bald.'

b. * *Sensei-wa* *sukosi* ***o**-hage-**ni*** ***nat**-te*
teacher-TOP little HON-getting bald-DAT become-CV
i-ru.
PRF-PRS
'(i) The teacher is slightly bald;
(ii) the speaker respects the teacher (intended).'

Not all subject-honorific constructions are illicit with such negative predicates. For example, as we see below (on page 80), we can encode the subject-honorific meaning by replacing the perfective marker *i-* 'PRF' with its suppletive form *irassyar-* 'PRF.HONs.' Unlike (23)b, this suppletive replacement is licit even with verbs describing a negative property of the subject (= (24)). Negative predicates are illicit only with this *o*-NOUN-*ni nar-* construction.

(24) *Sensei-wa* *sukosi* *hage-te* ***irassyar**-u.*
teacher-TOP little get bald-CV PRF.HONs-PRS
'(i) The teacher is slightly bald;
(ii) the speaker respects the teacher.'

Other negative predicates that are reported to be disallowed in this construction are given in (25) (Kikuchi 1997 [1994]: 163-167).

(25) Predicates with a negative nuance

a. *boke-* 'become senile'
b. *gokai sur-* 'misunderstand'
c. *hage-* 'get bald'
d. *hasyag-* 'make merry'
e. *hikerakas-* 'show off'
f. *izime-* 'ill-treat'
g. *konran sur-* 'be confused'
h. *koros-* 'kill'
i. *nameke-* 'be being lazy'
j. *nosabar-* 'be pushy/bossy'
k. *nusum-* 'steal'
l. *tarum-* 'be slack'
m. *toosan sur-* 'go bankrupt'
n. *tubure-* 'go out of business'
o. *rakusen sur-* 'be defeated (in an election)'
p. *ryuunen sur-* 'repeat a year (in school)'
q. *sin-* 'die'
r. *sippai sur-* 'fail'

Sixth, expressions belonging to the casual register have a difficult time appearing in this periphrastic construction. For example, the verb *otos-* 'drop' can be used in the periphrastic subject-honorific construction as illustrated below:

(26) Predicates in a normal register

a. *Sensei-wa* *ono-o* *mizuumi-ni* ***otosi**-ta.*
teacher-TOP axe-ACC pond-in drop-PST
'The teacher dropped his axe in the pond.'

b. *Sensei-wa* *ono-o* *mizuumi-ni* *o-**otosi**-ni*
teacher-TOP axe-ACC pond-in HON-dropping-DAT
nat-ta.
become-PST
'(i) The teacher dropped his axe in the pond;
(ii) the speaker respects the teacher.'

In addition to *otos-*, there is a synonymous expression that means 'drop' in Japanese, i.e., *okkotos-* 'drop.' This verb is almost the same as *otos-* except that it is used in a casual register. Kikuchi (1997 [1994]) observes that such casual expressions do not fit into the periphrastic subject-honorific construction as shown below:

(27) Predicates in a casual register

a. *Sensei-wa* *ono-o* *mizuumi-ni* ***okkotosi****-ta.*
teacher-TOP axe-ACC pond-in drop-PST
'The teacher dropped his axe in the pond.'

b. * *Sensei-wa* *ono-o* *mizuumi-ni* *o-****okkotosi****-ni*
teacher-TOP axe-ACC pond-in HON-dropping-DAT
nat-ta.
become-PST
'(i) The teacher dropped his axe in the pond;
(ii) the speaker respects the teacher (intended).'

Other examples that Kikuchi (1997 [1994]) lists are as follows:

(28) Predicates with a casual nuance

a. *bate-* 'be played out'
b. *bunnagur-* 'give someone a good whaling'
c. *buttamage-* 'be astonished'
d. *buttatak-* 'beat'
e. *koke-* 'fall down'
f. *kutabire-* 'get tired'
g. *hippatak-* 'thrash'
h. *nokkar-* 'get on'
i. *okkotos-* 'drop'
j. *tamage-* 'be astonished'
k. *zukkoke-* 'slip down'

Seventh, some compound nouns are not allowed in this periphrastic construction. In Japanese, two different types of verbal compound have been studied: LEXICAL COMPOUNDS and SYNTACTIC COMPOUNDS (Kageyama 1993, 2016a, b; Kageyama and Yumoto 1997, among many others). For example, observe the minimal pair in (29). The boldface elements are compound verbs.

(29) a. Lexical compound

Sensei-wa *wain-o* ***nomi-kurabe****-ta.*
teacher-TOP wine-ACC drink-compare-PST
'The teacher compared the taste of different kinds of wine.'

b. Syntactic compound

Sensei-wa *wain-o* ***nomi-hazime****-ta.*
teacher-TOP wine-ACC drink-begin-PST
'The teacher began to drink wine.'

Several tests have been proposed to distinguish the two classes (for details see, e.g., Kageyama 2016b: 278) and one of them is, indeed, the *o*-NOUN-*ni nar*- test. While lexical compounds are allowed to fall inside this NOUN position (= (30)a), the second component of this compound cannot be placed outside the *o*-NOUN-*ni nar*- construction (= (31)a), unlike syntactic compounds (= (31)b) (Kikuchi 1997 [1994]: 170; Kageyama 2016b: 276).

(30) a. Lexical compound

Sensei-wa *wain-o* *o-****nomi-kurabe****-ni*
teacher-TOP wine-ACC HON-drink-comparing-DAT
nat-ta.
become-PST
'(i) The teacher compared the taste of different kinds of wine;
(ii) the speaker respects the *teacher*.'

b. Syntactic compound

(?)*Sensei-wa* *wain-o* *o-****nomi-hazime****-ni* *nat-ta.*
teacher-TOP wine-ACC HON-drink-beginning-DAT become-PST
'(i) The teacher began to drink wine;
(ii) the speaker respects the *teacher*.'

(31) a. Lexical compound

Sensei-wa* *wain-o* *o-nomi**-ni*
teacher-TOP wine-ACC HON-drinking-DAT
*nari-**kurabe**-ta.*
become-compare-PST

'(i) The teacher compared the taste of different kinds of wine;
(ii) the speaker respects the *teacher* (intended).'

b. Syntactic compound

Sensei-wa *wain-o* *o-**nomi**-ni* *nari-**hazime**-ta.*
teacher-TOP wine-ACC HON-drink-DAT become-begin-PST

'(i) The teacher began to drink wine;
(ii) the speaker respects the *teacher*.'

Kikuchi (1997 [1994]: 169), however, points out that some lexical compounds are not as easily placed into this NOUN position as other lexical compounds. For example, it is said that the sentence in (32)b sounds unacceptable despite the well-formed sentence in (32)a:

(32) a. *Sensei-wa* *sono* *kikai-ni* ***tukai-nare**-te*
teacher-TOP that machine-DAT use-get accustomed to-CV
i-ru.
PRF-PRS

'The teacher is accustomed to using that machine.'

b. ?? *Sensei-wa* *sono* *kikai-ni*
teacher-TOP that machine-DAT
*o-**tukai-nare**-ni* *nat-te* *i-ru.*
HON-use-getting accustomed to-DAT become-CV PRF-PRS

'(i) The teacher is accustomed to using that machine;
(ii) the speaker respects the teacher (intended).'

The following list is taken from his work.[7]

[7] **Variation in acceptability:** While admitting that the compound verbs in (33) are not perfect in the periphrastic subject-honorific construction, I have some reservations about the claim that these verbs are completely ungrammatical. The sentence in (32)b may be produced. Kikuchi himself also anticipates that variation may exist among native speakers.

(33) Lexical compounds not easily used in *o*-NOUN-*ni nar*-

a. *huri-kaer-* 'recollect'
b. *kaki-aratame-* 'rewrite'
c. *nage-sute-* 'throw away'
d. *oki-agar-* 'wake up'
e. *sagai-das-* 'find out'
f. *tukai-nare-* 'get accustomed to using'

Eighth, there are some verbs that cannot be used in this construction which previous studies could not motivate in anyway. Examples of such predicates are shown below (Kikuchi 1997 [1994]: 167).

(34)
a. *ansin sur-* 'be relieved'
b. *eigyoo sur-* 'do business'
c. *kekkon sur-* 'get married'
d. *kyooryoku sur-* 'cooperate'
e. *seityoo sur* 'grow up'
f. *sizi sur-* 'give guidance'
g. *suiei sur-* 'swim'
h. *unten sur-* 'drive'
i. *yakyuu sur-* 'play baseball'
j. *yuusyoo sur-* 'win (the game)'
k. *zikken sur-* 'conduct an experiment'

Finally, it is important to note that some particles can intervene between *o*-NOUN-*ni* and *nar*-. For example, in (35)b, a focus particle *-mo* is placed between *o-hasiri-ni* and *nar*-.[8] Other such interveners are *-wa* 'FOC,' *-koso* 'FOC,' *-sae* 'even,' *-dake* 'only' and *-sura* 'even.'

[8] **Multiple *-mo* construction:** The *mo*-marked *o*-NOUN-*ni* can be juxtaposed with another *mo*-marked *o*-NOUN-*ni*, as illustrated in (i).

(i) *Sensei-wa* [*o-yorokobi-ni*]-***mo*** [*o-kanasimi-ni*]-***mo*** *nat-ta.*
teacher-TOP HON-rejoicing-DAT-also HON-grieving-DAT-also become-PST
'(i) The teacher both rejoiced and grieved;
(ii) the speaker respects the teacher.'

Though the morpho-syntax of *o*-NOUN-*ni nar*- construction is complicated and beyond the scope of this dissertation, it is clear from this data that *o*-NOUN-*ni* and *nar*- are two distinct constituents (i.e., separable from each other), not a fused, single lexical item, which might be inferred from the data in (14) and (16).

(35) Intervening particles

a. *Sensei-wa* *o-hasiri-ni* *nar-u.*
teacher-TOP HON-running-DAT become-PRS
'(i) The teacher runs;
(ii) the speaker respects the teacher.'

b. *Sensei-wa* *o-hasiri-ni-**mo*** *nar-u.*
teacher-TOP HON-running-DAT-also become-PRS
'(i) The teacher also runs;
(ii) the speaker respects the teacher.'

Subject-honorific construction 2: *nasar-*. Another subject-honorific encoding involves a light verb construction. In Japanese, there are two distinct types of light verb constructions (Grimshaw and Mester 1988; Kageyama 1993, 2016a, b; Miyamoto 1993, 1999; Uchida and Nakayama 1993; Miyamoto and Kishimoto 2016). Observe the sentences in (37). The word *doraibu* is borrowed from English *drive*. In general, borrowed words cannot be used as verbs (= (36)).

(36) * *Sensei-ga* ***doraibu**-ru.*
teacher-NOM drive-PRS
'The teacher drives (intended).'

Instead, they are used as a noun with the least meaningful verb, i.e., the light verb, *sur-* as illustrated in (37)a. In addition, (verbal) nouns can be incorporated into this light verb, yielding the construction in (37)b.

(37) Light verbs in Japanese

a. *Sensei-ga* ***doraibu**-o* *sur-u.*
teacher-NOM drive-ACC do-PRS
'The teacher drives.'

b. *Sensei-ga* ***doraibu*** *sur-u.*
teacher-NOM drive do-PRS
'The teacher drives.'

While there are some words of English origin, many more words were borrowed from Chinese and used in such light verb constructions. Examples are given in

(38).[9]

(38) a. *Sensei-ga* ***syusseki-o*** *sur-u.*
teacher-NOM attendance-ACC do-PRS
'The teacher attended.'

b. *Sensei-ga* ***syusseki*** *sur-u.*
teacher-NOM attendance do-PRS
'The teacher attended.'

The verb *sur-* 'do' has a subject-honorific suppletive form *nasar-* 'do.HONs' and, by replacing *sur-* in (37) with this suppletive form, the speaker can encode his or her respect for the referent of the subject (Yamada 2019f). For example, observe the sentences in (39). If the speaker wants to encode his or her deference, the light verb is replaced with *nasar-* 'do.HONs.'

(39) Subject-honorific light verb construction I

a. *Sensei-ga* *syusseki-o* ***nasar-u.***
teacher-NOM attendance-ACC do.HONs-PRS

b. *Sensei-ga* *syusseki* ***nasar-u.***
teacher-NOM attendance do.HONs-PRS
'(i) The teacher will attend;
(ii) the speaker respects the teacher.'

In addition to this simple replacement, *nasar-* can also be used with a noun with the honorific prefix *go- (o-)* 'HON,' as shown below.

[9] **Words of Yamato Japanese origin:** There are few native words that fit into this construction; e.g., *yomi-kaki* 'reading and writing' and *tati-yomi* 'browsing (lit., stopping to read).'

(40) Subject-honorific light verb construction II

a. *Sensei-ga* ***go****-syusseki-o* ***nasar****-u.*
teacher-NOM HON-attendance-ACC do.HONs-PRS
'(i) The teacher will attend;
(ii) the speaker respects the teacher.'

b. *Sensei-ga* ***go****-syusseki* ***nasar****-u.*
teacher-NOM HON-attendance do.HONs-PRS
'(i) The teacher will attend;
(ii) the speaker respects the teacher.'

DETAILED PROPERTIES. There are several important comments regarding the use of these subject-honorific light verb constructions. First, unlike nouns of Chinese origin, native words (aka., words of Yamato origin) are not as easily used in this light-verb construction with some exceptions (Kikuchi 1997; Yamada 2019f). Observe the examples below. The sentence in (41)a shows that Yamato verbs such as *yom-* 'read' are not compatible with non-incorporated subject-honorific light verb constructions.

(41) Subject-honorific light verb construction I

a. * *Sensei-ga* *hon-*{*o/no*} *kaki-o* ***nasar****-u.*
teacher-NOM book-ACC/GEN writing-ACC do.HONs-PRS
'(i) The teacher writes a book;
(ii) the speaker respects the teacher (intended).'

b. ? *Sensei-ga* *hon-o* *kaki* ***nasar****-u.*
teacher-NOM book-ACC writing do.HONs-PRS
'(i) The teacher writes a book;
(ii) the speaker respects the teacher.'

The sentence in (42)a also shows that non-incorporated light verb constructions prohibit verbs of Yamato origin with or without the prefix *o-* (but see Yamada 2019f).

(42) Subject-honorific light verb construction II

a. * *Sensei-ga* *hon-*{*o/no*} ***o-****kaki-o*
teacher-NOM book-ACC/GEN HON-writing-ACC
nasar*-u.*
do.HONs-PRS
'(i) The teacher writes a book;
(ii) the speaker respects the teacher (intended).'

b. *Sensei-ga* *hon-o* ***o-****kaki* ***nasar****-u.*
teacher-NOM book-ACC HON-writing do.HONs-PRS
'(i) The teacher writes a book;
(ii) the speaker respects the teacher.'

As for the incorporated light-verb construction, the presence of the prefix makes it possible for a native word to be used in this construction, as shown in (42)b. However, when the honorific prefix is absent, the acceptability gets degraded (= (41)b) (Kikuchi 1997: 177).

Second, this subject-honorific construction exhibits an interaction with imperatives; i.e., there are three ways of making an imperative sentence. For example, observe the sentences in (43) (Yamada 2019g). The sentence in (43)a is the imperative for the non-subject-honorific sentence.

(43) Imperatives with *nasar-*

a. *Hon-o* *yom-e.*
book-ACC read-IMP
'Read the book.'

b. *Hon-o* *(o-)yomi* ***nasar-e.***
book-ACC HON-read(ing) HONs-IMP
'(i) Read the book;
(ii) the speaker respect the referent of the subject (= the addressee).'

c. *Hon-o* *(o-)yomi* ***nasai.***
book-ACC HON-read(ing) HONs
'(i) Read the book;
(ii) the speaker thinks that the referent of the subject is socially lower than him/her.'

d. *Hon-o* **(o-)yomi.*
book-ACC HON-read(ing)
'(i) Read the book;
(ii) the speaker thinks that the referent of the subject is socially lower than him/her.'

Subject-honorific markers can be integrated into the sentence, as illustrated in (43)b and (43)c.

Nasar-e FORM. The *nasar-e* form (= (43)b) sounds archaic and native speakers of contemporary (Tokyo) Japanese rarely use it in daily conversation, unless they wish to achieve a poetic effect.[10] In this imperative, the subject, i.e., the addressee, is respected by the speaker.[11]

Nasai FORM. The *nasai* form differs from *nasar-e* in three important ways; (i) no

[10] **History of *nasar-*:** Presumably, this archaic nuance reflects its use in the premodern Japanese. The already introduced *o*-NOUN-*ni nar-* construction was indeed a newcomer in Japanese grammar system that started being used around the Late Edo period and became widespread around the turn of the 20th century (Komatsu 1966; Tsujimura 1951, 1968, 1974; Haraguchi 1974; Kikuchi 1997 [1994]: 151; Yamada 2013, 2015). The *nasar-* construction had been used before the advent of *o*-NOUN-*ni nar-* construction.

[11] **A stereotypical image:** Because of this archaic nuance, the stereotypical situation in which this *nasar-e* is used is the case where a (wise) old man gives an advice to a young noble prince or the main character in folktales.

imperative suffix is attached; (ii) it does not sound archaic;[12] and (iii) despite the presence of a subject-honorific marker, the referent of the subject (= the addressee) is typically someone who is supposed to be subordinate/obedient to the speaker, which is unlikely in other situations where subject-honorific markers are utilized. For example, unlike (43)b, the sentence in (43)c cannot be used when a student is talking to a teacher. In fact, this form is typically used when a teacher or a parent is giving their student/child — in many cases, angrily — instructions that the addressee is obliged, or at least expected, to obey; with the prefix *o-* this nuance is attenuated. In this sense, the sentence in (43)c does not represent a genuine use of subject-honorification.[13] It is, however, wrong to say that the honorific meaning is completely vacuous in (43)c. If the speaker wants to choose the most blunt way of making a command, he would use the sentence in (43)a. The fact that the speaker does not select the bare imperative in (43)a suggests that the addressee is 'well-treated' by the speaker (Yamada 2019g).[14]

This means that none of the forms in (43) can be used when the speaker wants to make a command to someone he/she respects. In fact, none of the subject-honorific encodings in position A in (6) is licit in making a command to someone the speaker respects. Of course, such a scenario is conceivable. For example, if a secretary asks the president to have a seat, he/she would say '(please) have a seat,' which would not be rude, provided that the addressee benefits from

[12] ***O-*:** When the prefix *o/go-* is present, the sentence still sounds archaic. In contemporary Japanese, *yomi-nasai* is the most common.

[13] **Idioms:** There are some well-established imperative expressions using *nasai*, e.g., *o-yasumi-nasai* 'Good night! (lit., Please take a rest)' or *o-kaeri-nasai* 'Welcome back (lit., Please go home'; as a reply to 'I'm home'), which are devoid of strong imperative force.

[14] **Enhancement of the speaker's self-image:** One way of explaining the peculiarity in (43)c is to take into account the 'self-image' of the speaker. The presence of the honorific marker in (43)c contributes to enhance the speaker's self-image, which facilitates the speaker's command-making speech act. (i) First, the fact that the speaker uses a subject-honorific marker even though he does not have to implies that the speaker is a well-behaved person who is trying to be as polite as he can (even to children/students). (ii) Second, based on the assumption that the speaker is a well-behaved person, the command-making speech act becomes easier to implement; if the command is given from a well-behaved person, then it is likely that the command itself is also a reasonable order. If the command is taken to be reasonable, the addressee's rejection to obey the order is considered irrational. Thus, imperative sentences with a subject-honorific marker conventionally encode the meaning that the obedience of the addressee is highly expected. The idea that honorific expressions are related to the speaker's self-image will be formally presented in Chapter 4.

plain form		subject-honorific suppletive form	
i-	'be'	*irassyar-*	'be.HONs'
-te i-	'-CV PRG'	*-te irassyar-*	'-CV PRG.HONs'
-te i-	'-CV PRF'	*-te irassyar-*	'-CV PRF.HONs'
ik-	'go'	*irassyar-*	'go.HONs
kur-	'come'	*irassyar-*	'come.HONs'
		o-kosi-ni nar-	'come.HONs'
		o-ide-ni nar-	'come/appear.HONs'
		mi-e-	'come.HONs'
		o-mie-ni nar-	'come.HONs'
iw-	'say'	*ossyar-*	'say.HONs
mi-	'see'	*go-ran-ni nar-*	'see.HONs'
tabe-	'eat'	*mesiagar-*	'eat.HONs'
		o-mesiagari-ni nar-	'eat.HONs'
nom-	'drink'	*mesiagar-*	'drink.HONs'
		o-mesiagari-ni nar-	'drink.HONs'
ki-	'put on'	*mes-*	'put on.HONs'
		o-mesi-ni nar-	'put on.HONs'
ki-ni ir-	'be satisfied with'	*o-ki-ni mes-*	'be satisfied with.HONs'
sit-te i-	'come to know-CV PRF'	*go-zonzi da*	'HON-knowing COP'
		go-zonzi-de irassyar-	'HON-knowing-CV COP.HONs'
kure-	'give'	*kudasar-*	'give.HONs'
-te kure-	'-CV APPLH'	*-te kudasar-*	'-CV APPLH.HONs'

Table 2.3: Suppletive subject-honorifics

the outcome of the request. In such cases, contemporary Japanese uses an applicative construction, which we will examine on page 72.

O-NOUN FORM. When *o-* is present, one can omit *nasai*, as illustrated in (43)d. However, this imperative form sounds archaic except for a few fixed expressions (e.g., *go-ran* as seen in (77)). Just as in the case of *yomi nasai*, the sentence is used as a strong imperative (i.e., as a command).

Subject-honorific construction 3: *Suppletion*. Some predicates have a suppletive form under subject-honorification (see Table 2.3). For example, observe the pair of sentences in (44). The non-honorific verb in (44)a, i.e., *i-* 'be/exist' is replaced by its suppletive form *irassyar-* 'be/exist.HONs,' by which the speaker encodes his respect for the referent of the subject.

(44) Suppletive subject-honorifics

a. *Sensei-ga* *kooen-ni* ***i**-ru.*
teacher-NOM park-at exist-PRS
'The teacher is in the park.'

b. *Sensei-ga* *kooen-ni* ***irassyar**-u.*
teacher-NOM park-at exist.HONs-PRS
'(i) The teacher is in the park;
(ii) The speaker respects the teacher.'

DETAILED PROPERTIES I (CHARACTERISTICS OF HONORIFIC SUPPLETION). However, suppletion in honorifics is slightly different from suppletion as it operates in English. First, in English the presence of the suppletive form exhibits a BLOCKING EFFECT: it prevents other competing alternatives to appear in the same slot; e.g., the existence of *went* disallows *go-ed* from being used in adult language. But observe the sentences in (45) below. The referent of the subject of the baseline sentence in (45)a can get honorificated not only by the *(r)are*-honorific, but also by the *o*-NOUN-*ni nar*- construction and the suppletive form *mesiagar-*.

(45) Absence of blocking effect

a. *Sensei-ga* *koohii-o* *nom-u.*
teacher-NOM coffee-ACC drink-PRS
'The teacher drinks coffee.'

b. *Sensei-ga* *koohii-o* *nom-**are**-u.*
teacher-NOM coffee-ACC drink-HONs-PRS

c. *Sensei-ga* *koohii-o* ***o-**nomi-**ni*** ***nar**-u.*
teacher-NOM coffee-ACC HON-drinking-DAT become-PRS

d. *Sensei-ga* *koohii-o* ***mesiagar**-u.*
teacher-NOM coffee-ACC drink.HONs-PRS
'(i) The teacher drinks coffee;
(ii) the speaker respects the teacher.'

Second, suppletive verbs can also appear in another subject-honorific construction, aka., the DOUBLE HONORIFICATION (Sells and Iida 1991; Oseki and

Tagawa 2019). For example, *mesiagar-* 'eat/drink.HONs' can be nominalized and fit into the *o*-NOUN-*ni nar-* construction. The sentence in (46) illustrates such a hybrid honorific construction, composed of the combination of the patterns observed in (45)c and (45)d; cf., **went-ed*.

(46) *Sensei-ga* *koohii-o* ***o-[mesiagari]-ni*** ***nar-u.***
teacher-NOM coffee-ACC HON-drinking.HONs-DAT become-PRS
'(i) The teacher drinks coffee;
(ii) the speaker respects the teacher.'

Finally, there are cases in which the semantic-selection properties of the suppletive predicate are not identical to those of the non-suppletive form. For example, compare the sentences in (45) with those in (47). The only difference comes from the object noun; *coffee* in (45) is replaced with *medicine*. The data show that the suppletive form has a more strict semantic selection; i.e., the PAT of *mesiagar-* 'eat/drink.HONs' needs to be something that is commonly served as food and something that delight to the person who eats/drinks it.

(47) Suppletive subject-honorifics

a. *Sensei-ga* *kusuri-o* *nom-u.*
teacher-NOM medicine-ACC drink-PRS
'The teacher takes a medicine.'

b. *Sensei-ga* *kusuri-o* *nom-**are**-u.*
teacher-NOM medicine-ACC drink-HONs-PRS
'(i) The teacher takes a medicine;
(ii) the speaker respects the teacher.'

c. *Sensei-ga* *kusuri-o* ***o-**nomi**-ni*** ***nar**-u.*
teacher-NOM medicine-ACC HON-drinking-DAT become-PRS
'(i) The teacher takes a medicine;
(ii) the speaker respects the teacher.'

d. * *Sensei-ga* *kusuri-o* ***mesiagar**-u.*
teacher-NOM medicine-ACC drink.HONs-PRS
'(i) The teacher takes a medicine;
(ii) the speaker respects the teacher (intended).'

e. * *Sensei-ga* *kusuri-o* ***o-mesiagari-ni***
teacher-NOM medicine-ACC HON-drinking.HONs-DAT
***nar**-u.*
become-PRS
'(i) The teacher takes a medicine;
(ii) the speaker respects the teacher (intended).'

DETAILED PROPERTIES II (INTERACTION WITH IMPERATIVES). Suppletive forms in imperatives exhibit three peculiar properties. First, suppletive imperatives are different from the *o*-NOUN-*ni nar*- construction in that they can take the imperative. For example, observe the imperative sentences in (48). The imperative in (48)a is the imperative in the plain form. If the speaker wants to integrate the subject-honorific marker into the sentence, the *o*-NOUN-*ni nar*- form is disallowed as shown in (48)b. In contrast, the suppletive form is accepted as in (48)c. But the hybrid form in (48)d is illicit.

(48) Suppletive subject-honorifics

a. *Koohii-o* *nom-e!*
coffee-ACC drink-IMP
'Drink coffee!'

b. * *Koohii-o* ***o-****nomi****-ni*** ***nar****-e!*
coffee-ACC HON-drinking-DAT become-PRS
'(i) Please drink coffee!;
(ii) the speaker respects the addressee (intended).'

c. *Koohii-o* ***mesiagar****-e!*
coffee-ACC drink.HONs-PRS
'(i) Please drink coffee!;
(ii) the speaker thinks that the addressee is subordinate to the speaker.'

d. * *Koohii-o* ***o-[mesiagari]-ni*** ***nar****-e!*
coffee-ACC HON-drinking.HONs-DAT become-IMP
'(i) Please drink coffee!;
(ii) the speaker thinks that the addressee is subordinate to the speaker (intended).'

Second, some suppletive imperatives take special imperative morphology. In general, the imperative form changes form depending on whether the verbal stem ends with a consonant or not.

(49) a. Consonant-stem verb
*Nom-{e/*ro}!*
drink-IMP
'Drink!'

b. Vowel-stem verb
*Tabe-{*e/ro}!*
eat-IMP
'Eat!'

In the case of *mesiagar-* 'drink.HONs,' it takes the same imperative suffix *-e* as its non-honorific counterpart *nom-* 'drink,' as shown in (48)a and (48)c, which is expected because both *nom-* and *mesiagar-* end with a consonant. However, *irassyar-* 'be, go, come.HONs' — which is the suppletive subject-honorific marker for *i-* 'be/exist' — cannot take *-e* or *-ro*. Observe the sentences in (50).

(50) a. Plain form

Sanzi-ni *koko-ni* *i-{*e/ro}!*
three o'clock-at here-DAT be-IMP
'Be here at three!'

b. Expected subject-honorific form

Sanzi-ni *koko-ni* *irassyar-{*e/*ro}!*
three o'clock-at here-DAT be.HONs-IMP
'(i) Be here at three!;
(ii) the speaker thinks that the addressee is subordinate to the speaker (intended).'

The intended reading is obtained by the bare form; n.b., the last consonant *r* changes into *i* (= (51)); for a comparable change, see Section 2.4.3 (Yamada 2019g).

(51) Correct subject-honorific form

Sanzi-ni *koko-ni* *irassyai!*
three o'clock-at here-DAT be.HONs
'(i) Be here at three!;
(ii) the speaker thinks that the addressee is subordinate to the speaker.'

Such exceptional imperative morphology is observed in the following verbs; (i) *irassyar-* 'be, go, come.HONs' > *irassyai* 'be, go, come.HONs,' (ii) *ossyar-* 'say.HONs' > *ossyai* 'say.HONs', (iii) *kudasar-* 'give.HONs' > *kudasai* 'give.HONs,' and (iv) *nasar-* 'do.HONs' > *nasai* 'do.HONs'; as for *nasai*, see also (43).[15]

[15] **Other contexts where *i* appears:** Replacement of the stem-ending consonant with an *i* also observed (i) when *-mas* is preceded by these verbs (see the discussion on page 173) and (ii) when a *k*-stem verb is followed by a past tense marker. For example, observe the following sentences. The second *k* in *kak-* 'write' becomes *i* when *-ta* is attached.

(i) a. * *Kak-ta.*
write-PST
'(I) wrote.'

b. *Kai-ta.*
write-PST
'(I) wrote.'

Another relevant example might be the imperative form of *kur-* 'come', i.e., *ko-i* 'come-IMP.'

It should also be noted that some suppletive forms do not have an imperative form. For example, *mes-* 'put on.HONs' can be used in declaratives as in (52).

(52) a. *Sensei-ga* *kimono-o* ***ki**-ru.*
teacher-NOM kimono-ACC put on-PRS
'The teacher puts on a kimono.'

b. *Sensei-ga* *kimono-o* ***mes**-u.*
teacher-NOM kimono-ACC put on.HONs-PRS
'(i) The teacher puts on a kimono;
(ii) the speaker respects the teacher.'

But it cannot be used in imperatives, as shown below.

(53) a. *Kimono-o* *ki-ro!*
kimono-ACC put on-PRS
'Put on a kimono.'

b. * *Kimono-o* ***mes**-e!*
kimono-ACC put on.HONs-PRS
'(i) Put on a kimono;
(ii) the speaker thinks that the addressee is subordinate to the speaker.'

Third, the respect encoded by the subject-honorific meaning is attenuated and a downward-looking nuance is suggested. This is the same as the discussion on page 50. When used in imperatives, the addressee is subordinate to the speaker.

(54) *Sanzi-ni* *koko-ni* *irassyai!*
three o'clock-at here-DAT be.HONs
'(i) Be here at three!;
(ii) *the speaker respects the addressee
(ii) the speaker thinks that the addressee is subordinate to the speaker.'

Subject-honorific construction 4: *o*-NOUN COP. The derived noun with an honorific prefix can be used with a copula to describe the state of the referent of the subject.

First, in Japanese, a copula construction is formed with a copula marker *da*.[16] For example, observe the sentence below, in which the subject is predicated by a common noun *omamori* 'a good-luck charm.'[17]

(55) *Kore-wa* [***omamori***] *da.*
this-TOP good-luck charm COP
'This is a good-luck charm.'

Second, this bracketed component in (55) can be replaced with an event-denoting noun. For example, in (56)a, *tootyaku* 'arrival' appears in this predicative position and the sentence means that the referent of the subject is in the state of arriving at the destination in an hour.

(56) Futurate

a. *Sensei-wa* *itizikan-de* [***tootyaku***] *da.*
teacher-TOP one hour-in arrival COP
'The teacher is arriving in one hour.'

b. *Sensei-wa* *itizikan-de* [***go-tootyaku***] *da.*
teacher-TOP one hour-in HON-arrival COP
'(i) The teacher is arriving in one hour;
(ii) the speaker respects the referent of the subject (= the teacher).'

Just as we can attach the honorific prefix to a noun in the *o*-NOUN-*ni nar*- construction, we can add the prefix to *tootyaku* 'arrival' in order to express our respect for the referent of the subject. This is what is shown in (56)b.

RESTRICTIONS ON USE. A few comments are in order. First, though in (56) the futurate reading is available, we can also get a progressive reading if we change

[16] ***des*-:** In Section 2.2.3, we will see another copula *des*-, which has the function of addressee-honorification.

[17] **Opaqueness in etymology:** In fact, etymologically speaking this noun is also derived from a verb *mamor*- 'guard' with an honorific suffix *o*-, though it is so entrenched that this derivational process is opaque in contemporary Japanese.

the boldface element. For example, the following sentence is ambiguous. The speaker can describe the current situation or the future plan of the referent of the subject.

(57) Progressive/Futurate

a. *Sensei-wa* {*itinitizyuu/itizikan-de*} [***sigoto***] *da.*
teacher-TOP all day long/one hour-in work COP
'The teacher is working all day long/will start working in an hour.'

b. *Sensei-wa* {*itinitizyuu/itizikan-de*} [***o-sigoto***] *da.*
teacher-TOP all day long/one hour-in HON-work COP
'(i) The teacher is working all day long/will start working in an hour;
(ii) the speaker respects the referent of the subject (= the teacher).'

Second, some nouns are not compatible with the a-sentence despite the fact that they are compatible with the b-sentence. For example, observe the following minimal pairs.

(58) a. * *Sensei-wa* *kyuuka-o* ***sugosi*** *da.*
teacher-TOP vacation-ACC spending COP
'The teacher is taking vacation (intended).'

b. *Sensei-wa* *kyuuka-o* ***o-sugosi*** *da.*
teacher-TOP vacation-ACC HON-spending COP
'(i) The teacher is taking vacation;
(ii) the speaker respects the referent of the subject (= the teacher).'

(59) a. ?* *Sensei-wa* *issyuukan* ***taizai*** *da.*
teacher-TOP one week staying COP
'The teacher is/will be staying for a week (intended).'

b. *Sensei-wa* *issyuukan* ***go-taizai*** *da.*
teacher-TOP one week HON-staying COP
'(i) The teacher is/will be staying for a week;
(ii) the speaker respects the referent of the subject (= the teacher).'

o-NOUN *da*	meaning	*o*-NOUN *da*	meaning
go-zonzi da	'HON-knowing.HONo COP'	*o-moti da*	'HON-having COP'
o-tazune da	'HON-asking COP'	*o-wakari da*	'HON-understanding COP'
o-ide da	'HON-coming COP'	*o-yobi da*	'HON-calling COP'
o-dekake da	'HON-going out COP'	*o-kangae da*	'HON-thinking COP'
o-wasure da	'HON-forgetting COP'	*o-sagasi da*	'HON-looking for COP'
o-soroi da	'HON-matching COP'	*o-kiki da*	'HON-listening/asking COP'
o-nari da	'HON-becoming COP'	*o-komari da*	'HON-being perplexed COP'
o-tukai da	'HON-using COP'	*o-sumai da*	'HON-living COP'
o-sugosi da	'HON-spending COP'	*o-omoi da*	'HON-feeling COP'
o-tomari da	'HON-staying COP'	*o-kosi da*	'HON-transcending COP'
o-tutome da	'HON-working for COP'	*o-mesi da*	'HON-wearing COP'
go-tassya da	'HON-being well	*o-modori da*	'HON-returning COP'
	(despite his/her age) COP'	*o-motome da*	'HON-seeking for COP'
o-yasumi da	'HON-taking a rest COP'	*o-isogi da*	'HON-making haste COP'
o-mezame da	'HON-waking up COP'	*o-atumari da*	'HON-gathering COP'
o-mukae da	'HON-welcoming COP'	*o-azukari da*	'HON-keeping COP'
o-mitome da	'HON-recognizing COP'	*o-sodati da*	'HON-growing up COP'
o-konomi da	'HON-liking COP'	*o-mitoosi da*	'HON-understanding COP'
o-kaeri da	'HON-returning COP'	*o-moosituke da*	'HON-requesting COP'
o-niai da	'HON-looking good COP'	*o-toori da*	'HON-passing by COP'
o-ikari da	'HON-getting angry COP'	*o-syare da*	'HON-being fashionable
o-wakare da	'HON-being farewell COP'		COP'
o-nozomi da	'HON-desiring COP'	*o-hanasi da*	'HON-speaking COP'

Table 2.4: *o*-NOUN da

(60) a. * *Sensei-ga* ***yobi*** *da.*
teacher-TOP calling COP
'The teacher is calling (you) (intended).'

b. *Sensei-wa* ***o-yobi*** *da.*
teacher-TOP HON-calling COP
'(i) The teacher is calling (you);
(ii) the speaker respects the referent of the subject (= the teacher).'

Third, for some predicates, neither the a-sentence nor the b-sentence is accepted. For example, the sentence *the teacher is ordering coffee* cannot be translated using this copula construction (= (61)). Table 2.4 summarizes frequently used expressions.

(61) a. * *Sensei-wa* *koohii-o* ***tanomi*** *da.*
teacher-TOP coffee-ACC ordering COP
'The teacher is ordering coffee (intended).'

b. * *Sensei-wa* *koohii-o* ***o-tanomi*** *da.*
teacher-TOP coffee-ACC HON-ordering COP
'(i) The teacher is ordering coffee;
(ii) the speaker respects the referent of the subject (= the teacher) (intended).'

The intended readings will be expressed by other subject-honorific constructions. For example, the *o*-NOUN-*ni nar*- construction is used to refer to the future state (= (62)a) and, as we see in Section 2.2.1.2.3, the subject-honorific meaning can be encoded by *-te irassyar-* (= (62)b).

(62) a. Future-oriented reading
Sensei-wa *koohii-o* ***o**-tanomi-**ni*** ***nar**-u.*
teacher-TOP coffee-ACC HON-ordering-DAT become-PRS
'(i) The teacher will order coffee;
(ii) the speaker respects the referent of the subject (= the teacher).'

b. Progressive
Sensei-wa *koohii-o* *tanon-**de*** ***irassyar**-u.*
teacher-TOP coffee-ACC order-CV PRG.HONs-PRS
'(i) The teacher is ordering coffee;
(ii) the speaker respects the referent of the subject (= the teacher).'

2.2.1.2.2 Position B: Tier of the High-Applicative layer

Subject-honorific construction 5: *-(r)are*. The suffix *-(r)are* is a polysemous morphemes that encode a wide range of meanings, subject-honorification being one of them (Shibatani 1990: 375; Kikuchi 1997 [1994]). Let us see the polysemous network of this morpheme.

First, this morpheme is attached to verbs-of-recollection, such as *omoidas-* 'recall' and *sinob-* 'remember,' to highlight the fact that the recollection has occurred spontaneously. For example, while the sentence in (63)a

is agnostic about the spontaneity, the sentence in (63)b guarantees that this recollection happened spontaneously (Shibatani 1990: 332); the b-sentence cannot be used with a volitional adverb, e.g., *issyookenmei* 'passionately' and *nessinni* 'enthusiastically.'[18]

(63) Spontaneity

a. *Watasi-ga mukasi-o omoidasi-ta.*
I-NOM past-ACC recall-PST
'I recalled the past.'

b. *Mukasi-ga omoidas-**are**-ta.*
past-NOM recall-SPN-PST
'I spontaneously recalled the past (lit., the past was spontaneously recalled).'

Second, it has been pointed out that this use of spontaneity developed into the use of passive marker (Kikuchi 1997 [1994]: 149). Observe the second set of examples in (64). The active sentence in (64)a gets passivized with the passive marker *-(r)are* as in (64)b.

(64) Direct passive

a. *Kare-ga kanozyo-o tasuke-ta.*
he-NOM she-ACC help-PST
'He helped her.'

b. *Kanozyo-ga (kare-ni) tasuke-**rare**-ta.*
she-NOM he-by help-PASS-PST
'She was helped (by him).'

[18] **Case-marking:** Native speakers may find that the use of nominative case for the subject noun sounds less natural and may prefer to replace *-ga* with the topic marker *-wa*. However, the use of the topic marker makes it less clear what case is assigned to each noun. Thus, for the purposes of clarification, I use case-particles in each case. Since, in the embedded environment, the case particle is preferred to the topic marker, as shown below, readers can think of the presented examples as being taken from embedded clauses.

(i) [$_{CP}$*Watasi-ga mukasi-o omoidasi-ta-koto*]*-ga.*
I-NOM past-ACC recall-PST-C-NOM
'that I recalled the past.'

Third, in addition to this direct passive, Japanese is famous for the existence of the indirect passive construction (Shibatani 1990; Kubo 1992; Pylkkänen 2008; among many others). In (65)a, we have an intransitive construction. By adding the suffix *-(r)are*, we can increment the valency as in (65)b, in which the *affectee* of the rain-falling event is introduced.

(65) Indirect passive

a. *Ame-ga* *hut-ta.*
rain-NOM fall-PST
'It rained.'

b. ***Watasi-ga*** *ame-ni* *hu-**rare**-ta.*
I-NOM rain-by fall-PASS-PST
'It rained on me.'

Fourth, the suffix *-(r)are* can also be attached to a verb to create the potential form. For example, by adding the suffix to the sentence in (66)a, we get (66)b, in which the speaker's ability is highlighted. Unlike the previous cases, the valency of the predicate is not affected.

(66) Potential form

a. *Watasi-ga* *asita* *yo-zi-ni* *oki-ru.*
I-NOM tomorrow four-o'clock-at wake up-PRS
'I will wake up at 4 o' clock tomorrow.'

b. *Watasi-ga* *asita* *yo-zi-ni* *oki-**rare**-u.*
I-NOM tomorrow four-o'clock-at wake up-can-PRS
'I will be able to wake up at 4 o' clock tomorrow.'

Finally, the suffix can also be used as the subject-honorific marker. Observe the sentences in (67). These two sentences are both grammatical but they differ with respect to the speaker's attitude to the teacher. The speaker encodes his or her deference to the teacher in (67)b. As in the case of the potential usage, the valency does not change between the two sentences.

(67) Subject-honorification

a. *Sensei-ga* *kare-o* *tasuke-ta.*
teacher-NOM he-ACC help-PST
'The teacher helped him.'

b. ***Sensei**-ga* *kare-o* *tasuke-**rare**-ta.*
teacher-NOM he-ACC help-HONs-PST
'(i) The teacher helped him;
(ii) The speaker respects the teacher.'

DETAILED PROPERTIES. First, it is said that the degree of politeness expressed by this *-(r)are* construction is lower than that of the *o*-NOUN-*ni nar* construction; e.g., (7)b sounds (slightly) better than the sentence in (67)b.

Second, there is a variation as to where this subject-honorific *-(r)are* is encoded. To see this point, let us consider the word order between *-(r)are* and a periphrastic completive expression *-te simaw-*.[19] Observe the sentences in (68). For some speakers, if not all, these sentences are acceptable, in which a passive maker or a marker of spontaneity are used together with a higher subject-honorific *-(r)are* 'HONs,' and in which the two *-(r)are*'s are distributed in two distinct positions.

[19] ***-te simaw-*:** Further information of *-te simaw-* is given on page 82.

(68) a. *Sensei-wa nyuuten-o kotowar-**are**-te*
teacher-TOP shop visiting-ACC reject-PASS-CV
*simaw-**are**-ta yoo da.*
CMPL-HONs-PST seem COP
'(i) As for the teacher, it seems that the shop visiting was rejected, which the speaker thinks is unfortunate (< the first *-(r)are*);
(ii) the speaker respects the teacher (< the second *-(r)are*).'

b. [*Minasama-ga go-hukai-ni kanzi-**rare**-te*
you-NOM HON-unpleasantness-DAT feel-SPN-CV
*simaw-**are**-ta*] *koto-ni hukaku o-wabi si-mas-u.*
CMPL-HONs-PST C-DAT deeply HON-apologizing do-HONA-PRS
'(i) (We) apologize deeply for your having felt unpleasant, which happened in a sponteneous manner (< the first *-rare*);
(ii) the speaker respects the referent of the embedded subject (= *you*; < the second *-(r)are*);
(iii) the speaker respects the addressee (< *-mas*).'

Some native speakers even accept the sentences in (69)b and c as well as the one in (69)a. In (69)a, the subject-honorific *-(r)are* is followed by the periphrastic completive expression *-te simaw-* '-CV CMPL' and this is considered to be the unmarked, baseline word/morpheme order. However, in (69)b, the subject-honorific marker is preceded by the same completive marker. The sentence in (69)c is even more peculiar in that the subject-honorific marker is duplicated before and after the completive expression.[20] Although not all native speakers share this judgment, the presence of variation concerning the position of the subject-honorific marking suggests a process of ongoing syntactic change. It is anticipated that detailed studies of this variation may contribute to better understanding of subject-honorific system in general.

[20] **Ambiguity in (68):** Those who accept the sentences in (69) may find the sentences in (68) ambiguous between the PASS-HONs reading and HONs-HONs reading.

(69) a. *Sensei-wa* *sagi-no* *higai-ni* *aw-**are**-te*
teacher-TOP fraud-GEN damage-DAT encounter-HONs-CV
simat-ta *yoo* *da.*
CMPL-PST seem COP
'(i) It seems that the teacher became a victim of a fraud, which is unfortunate (< *-te simaw-*);
(ii) the speaker respects the teacher (< *-(r)are*).'

b. *Sensei-wa* *sagi-no* *higai-ni* *at-te*
teacher-TOP fraud-GEN damage-DAT encounter-CV
*simaw-**are**-ta* *yoo* *da.*
CMPL-HONs-PST seem COP
'(i) It seems that the teacher became a victim of a fraud, which is unfortunate (< *-te simaw-*);
(ii) the speaker respects the teacher (< *-(r)are*).'

c. *Sensei-wa* *sagi-no* *higai-ni* *aw-**are**-te*
teacher-TOP fraud-GEN damage-DAT encounter-HONs-CV
*simaw-**are**-ta* *yoo* *da.*
CMPL-HONs-PST seem COP
'(i) The teacher became a victim of a fraud, which is unfortunate (< *-te simaw-*);
(ii) the speaker respects the teacher (< *-(r)are*'s).'

2.2.1.2.3 Position C: Tier of expressions of *v*P-periphery

Some lexical verbs (and adjectives) have grammaticalized and developed particular grammatical functions in conjunction with a converb suffix *-te*.[21] The

[21] **The status of *-te*:** Nakatani (2013, 2016) uses GER (a gerund marker) for the gloss of this suffix. However, as he acknowledges, unlike English gerunds, which are distributed in positions where nouns can appear, *te*-marked verb phrases cannot be placed in nominal positions. For example, the following sentences show that Japanese *te*-marked phrases are not allowed to appear in the subject position.

(i) Running a marathon is a good hobby.

(ii) * [*Marason-o* *hasit-te*]-*wa* *ii* *syumi* *da.*
marathon-ACC run-CV-TOP good hobby COP
'Running a marathon is a good hobby (intended).'

For this reason, I use CV (converb suffix) for the gloss of *-te*, to signify that this is a linker that connects verbs with an auxiliary.

progressive/perfective construction, *-te i-* 'CV PRG/PRF, is one such example. The sentence in (70) is a non-progressive sentence. If one wishes to integrate a progressive meaning using a progressive auxiliary *-i* 'PRG,' *-te* must be attached to the preceding verbal phrase as a 'glue' that links the preceding verb and the auxiliary. The contrast in (71) illustrates this point.

(70) *Sensei-ga* *hasir-u.*
teacher-NOM run-PRS
'The teacher runs.'

(71) *-te* AUX

a. * *Sensei-ga* *hasir(i)* ***i****-ru.*
teacher-NOM run PRG-PRS
'The teacher is running (intended).'

b. *Sensei-ga* *hasit-****te*** ***i****-ru.*
teacher-NOM run-CV PRG-PRS
'The teacher is running.'

However, not all raising auxiliaries allow this intervening *-te*. For example, an inchoative suffix *-hazime* 'begin' must be linearly adjacent to the preceding main predicate.

(72) a. *Sensei-wa* *hasiri-****hazime****-ta.*
teacher-TOP run-start-PST
'The teacher started running.'

b. * *Sensei-wa* *hasit-****te*** ***hazime****-ta.*
teacher-TOP run-CV start-PST
'The teacher started running.'

The auxiliaries (secondary predicates) that requires this converb suffix are summarized in Table 2.5.

Subject-honorification can be encoded on these *te*-taking auxiliaries (Kishimoto 2010, 2012). For example, compare the sentence in (71)b with (73). By replacing *i-* 'PRG' with *irassyar-* 'PRG.HONs,' the speaker expresses his or her respect for the referent of the subject.

-te AUX constructions	translations	subject-honorifics	page
From verbs-of-looking			p. 69
-te mi-	trial/attempt	*-te go-ran-ni nar-*	
-te mise-	demonstration	*	
From low-applicative verbs			p. 72
-te kure-	benefactive	*-te kudasar-*	
-te moraw-	benefactive	*-te itadak-*	
From verbs-of-movement			p. 80
-te kur-	coming/going motion, a gradual change/	*-te o-ide-ni nar-*	
-te ik-	advancement of state/event etc.	*-te irassyar-*	
From verbs-of-existence			
-te i-	progressive/perfective	*-te irassyar-*	
-te ar-	perfective/preparation	*-te irassyar-*	
From verbs of placement			p. 82
-te ok-	preparation	*	
-te simaw-	emphasis of completion	*-te o-simai-ni nar-*	

Table 2.5: *-te* AUX constructions (Based on Nakatani 2016: 388)

(73) *-te* AUX.HONs

Sensei-ga *hasit-**te*** ***irassyar**-u.*
teacher-NOM run-CV PRG.HONs-PRS
'(i) The teacher is running;
(ii) the speaker respects the teacher.'

Likewise, other periphrastic constructions in Table 2.5 have their own corresponding subject-honorific marking, as shown in the last column in this table (except for *-te mise-* and *-te ok-*). Below, we examine these constructions in depth.

Subject-honorific construction 6: *-te go-ran-ni nar-*. In Japanese a sequence of *-te* '-CV' and *mi-* 'see' has grammaticalized into an expression that denotes that the depicted event constitutes a trial attempted by the agent; n.b., I use TRIAL for the gloss. Comparable to English expressions such as *take a look* and *take a walk* (as opposed to *look* and *walk*), this trial denoting expression highlights the fact that the event is not carried out in an entirely serious manner and/or that the difficulty of carrying out the event does not bother the agent. Observe the sentences below.

(74) a. *Sensei-wa* *zimen-o* *mi-**te*** ***mi**-ta.*
teacher-TOP ground-ACC see-CV TRIAL-PST
'The teacher took a look at the ground.'

b. *Sensei-wa* *zimen-o* *mi-**te*** ***go-ran-ni*** ***nat**-ta.*
teacher-TOP ground-ACC see-CV HON-seeing-DAT become-PST
'(i) The teacher took a look at the ground;
(ii) the speaker respects the referent of the subject (= the teacher).'

c. *Sensei-ga* *zimen-o* *mi-**te*** ***goranninat**-ta.*
teacher-NOM ground-ACC see-CV TRIAL-PST
'(i) The teacher took a look at the ground;
(ii) the speaker respects the referent of the subject (= the teacher).'

In (74)a, two distinct *mi-*'s are used. The first *mi-* is the main predicate and the second *mi-* in *-te mi-* expresses the trial meaning. Just as the subject-honorific form of the verb *mi-* is replaced with its suppletive form *go-ran-ni nar-* 'HON-seeing-DAT become,' the *mi-* in this periphrastic expression changes to *go-ran-ni nar-* when the subject-honorific meaning is integrated. This is what is shown in (74)b (Kikuchi 1997 [1994]: 233). In order to easily see the parallelism between the plain form and the honorific form, we can reassign the glosses as in (74)c.

DETAILED PROPERTIES. First, the productivity of this *-te go-ran-ni nar-* construction is not so high in contemporary Japanese; it sounds slightly archaic and/or too polite to use, and only people who are highly proficient in the honorific register would use it. I believe people in my generation do not use this construction in a productive way, even if they may understand what the sentence is intended to mean.

Second, this construction exhibits an interaction with the imperative clause type. When used in the declarative clause type, it is the *o/go-*NOUN*-ni nar-* that this trial denoting expression fits into. Another subject-honorific construction *o/go-*NOUN*(-o) nasar-* is illicit, as shown in (75) and (76).

(75) Based on subject-honorific light verb construction I

a. * *Zimen-o* *mi-te* ***ran-o*** ***nasat****-ta.*
ground-ACC see-CV seeing-ACC do.HONs-PST
'(i) (The teacher) took a look at the ground:
(ii) the speaker respects the referent of the subject (intended).'

b. * *Zimen-o* *mi-te* ***ran*** ***nasat****-ta.*
ground-ACC see-CV seeing do.HONs-PST
'(i) (The teacher) took a look at the ground:
(ii) the speaker respects the referent of the subject (intended).'

(76) Based on subject-honorific light verb construction II

a. * *Zimen-o* *mi-te* ***go-ran-o*** ***nasat****-ta.*
ground-ACC see-CV HON-seeing-ACC do.HONs-PST
'(i) (The teacher) took a look at the ground:
(ii) the speaker respects the referent of the subject (intended).'

b. * *Zimen-o* *mi-te* ***go-ran*** ***nasat****-ta.*
ground-ACC see-CV HON-seeing do.HONs-PST
'(i) (The teacher) took a look at the ground:
(ii) the speaker respects the referent of the subject (intended).'

Nevertheless, in imperatives, despite the fact the sentence (76)b is unacceptable, the *nasai* form becomes licit, as demonstrated in (77)a.

(77) Imperatives

a. *Zimen-o* *mi-****te*** ***go-ran*** ***nasai****.*
ground-ACC see-CV HON-seeing do.HONs
'(i) Please take a look at the ground;
(ii) the speaker thinks that the referent of the subject is socially lower than him/her.'

b. *Zimen-o* *mi-****te*** ***go-ran****.*
ground-ACC see-CV TRIAL
'(i) (I recommend that you) Take a look at the ground;
(ii) the speaker thinks that the referent of the subject is socially lower than him/her.'

Note that the imperative form based on *o*-NOUN-*ni nar-* is not allowed as in (78).

(78) * *Zimen-o* *mi-te* ***go**-ran-**ni*** ***nar**-e!*
ground-ACC see-CV HON-seeing-DAT become-IMP
'(i) Please take a look at the ground!;
(ii) the speaker respects the referent of the subject (intended).'

Two comments must be made. The first caveat is that, for unknown reasons, this *nasai* can be omitted, as in (77)b (cf., (43)). Although (77)a is still too polite and is not commonly used in contemporary Japanese, the shorthand form in (77)b is productively used even by those who would not say the other examples above.

The second is that these imperatives in (77) are, however, used when the speaker, not the addressee, has more experience and skills, which is typically the case where the speaker has higher status and when the speaker is giving some sort of instruction or advice to the addressee, the obedience of which is typically highly expected.

Subject-honorific construction 7: Benefactive construction. High-applicative phrases can also accommodate subject-honorific encoding (Yamada 2019g). In section 2.2.1.2.2, we saw that the Japanese passive suffix *-(r)are* has developed a use as a subject-honorific marker (= (67)b), as well as a use as a high-applicative expression (= (65)b; aka., the indirect passive construction). In addition to this *-(r)are* suffix (which is derived from a voice-related expression), Japanese has another set of high-applicative constructions (which are derived from ditransitive predicates/low-applicative constructions). One of such high-applicative expressions is *-te kudasar-* '-CV APPL$_{H}$.HON$_{S}$,' which not only introduces an applied argument but also has a function of encoding the subject-honorific meaning. An example is given below.

(79) *Sensei-ga* *kare-o* *tasuke-**te*** ***kudasat**-ta.*
teacher-NOM he-ACC help-CV APPL$_{H}$.HON$_{S}$-PST
'(i) The teacher helped him;
(ii) the speaker thinks that the *he* belongs to the speaker's domain (< APPL$_{H}$; i.e., the speaker benefits from the depicted event);
(iii) the speaker respects the referent of the subject (< HON$_{S}$).'

LOW AND HIGH-APPLICATIVES. In order to understand this high-applicative, subject-honorific marker, a brief introduction to applicative constructions is necessary. Let us study these constructions in a step-by-step manner.

First, Japanese contrasts a number of fine-grained distinctions among low-applicative predicates. For example, observe the sentence in (80). Most languages have a means of adding an indirect object to the argument structure of the verb and such additional arguments are called applied arguments. Among the applicative constructions, if the referent of the indirect object participates in the REC(IPIENT) or SOURCE of a *giving/receiving* event, it is called a low-applicative (Pylkkänen 2008; cf., Shibatani 1996; McGinnis 2001a, b, 2002; Legate 2002; Cuervo 2003; McGinnis and Gerdts 2004; Jeong 2006; Lee 2012; Bosse et al. 2012) and *watas-* in (80) is an example of such a low-applicative predicate in contemporary Japanese.

(80) Low-applicative I: *watas-*
Kare-ga *kanozyo-ni* *hana-o* ***watas**-u.*
he-NOM she-DAT flower-ACC give-PRS
'He gives her a flower.'

However, *watas-* is not the only low-applicative predicate in Japanese. Observe the sentence in (81). The verb *kure-* also denotes a giving event and the referent of the indirect object is the REC(IPIENT).

(81) Low-applicative II: *kure-*

Kare-ga {*watasi/anata/kanozyo*}*-ni* *hana-o* ***kure****-ru.*
he-NOM I/you/she-DAT flower-ACC give-PRS
'(i) He gives a flower to {me/you/her};
(ii) the speaker thinks that {I/you/she} belongs to the speaker's domain.'

Unlike *watas-* in (80), this verb requires the REC(IPIENT) of the giving event to be the first person or an associate of the speaker (i.e., someone who the speaker thinks belongs to the speaker's territory).[22] For example, even though the dative argument is a third person, the sentence is felicitously uttered if the referent of the dative argument is, for example, the speaker's girlfriend/daughter/sister etc. In contrast, the sentence is unacceptable if the referent of the dative noun is totally a stranger to the speaker.

Second, this verb *kure-* has a subject-honorific suppletive form. If the referent of the subject is respected by the speaker, *kure-* 'give' is replaced by *kudasar-* 'give.HONs.' For example, observe the sentence in (82).

(82) Low-applicative III (subject-honorific): *kudasar-*

Sensei-ga {*watasi/anata/kanozyo*}*-ni* *hana-o* ***kudasar****-u.*
teacher-NOM I/you/she-DAT flower-ACC give.HONs-PRS
'(i) The teacher gives a flower to {me/you/her};
(ii) the speaker thinks that {I/you/she} belongs to the speaker's domain;
(iii) the speaker respects the teacher.'

Third, an applied argument outside the argument structure is introduced by the same morpheme, i.e., the high-applicative construction. In English, an applied phrase is introduced by a preposition *for* — e.g., *I ran* ***for*** *him*. In order to encode the BEN(EFICIARY) of the depicted event, Japanese has two options. Just like English, a postposition (a complex postposition) can be used as in (83).

[22] **Point-of-view:** This restriction in person is sometimes referred to as a point-of-view phenomenon.

(83) a. *Kare-ga hasir-u.*
he-NOM run-PRS
'He runs.'

b. {***Watasi/kimi/kanozyo***}*-no-tame-ni kare-ga hasir-u.*
I/you/she-GEN-sake-for he-NOM run-PRS
'(i) He runs.
(ii) {I/you/she} receives some benefit from his running event.'

The other option is to attach a high-applicative suffix to the verb. For example, compare the sentences in (84). In (84)b, the *kure-* is no longer the main verb of the sentence. Rather, it is attached to the main predicate *hasit-* 'run' (which is a phonologically conditioned allomorph of *hasir-* 'run') with a converb suffix *-te*, and as a result of this, the BEN(EFICIARY) of the depicted event is introduced. Just like the low-applicative *kure-*, the BEN(EFICIARY) should be within the speaker's domain (the speaker himself or his or her associates). The difference between (83)b and (84)b lies in this territorial information. In (84)b, since the BEN belongs to the speaker's territory, the speaker (in)directly benefits and is thankful to AGENT for his running event.

(84) High-applicative I: *kure-*

a. *Kare-ga hasir-u.*
he-NOM run-PRS
'He runs.'

b. *Kare-ga hasit-**te** **kure**-ru.*
he-NOM run-CV APPL$_{\text{H}}$-PRS
'(i) He runs;
(ii) There is an implied individual *x* who benefits from his running events;
(iii) the speaker thinks that *x* belongs to the speaker's domain.'

One can use both *no-tame-ni* and *kure-* at the same time. In that case, the BEN(EFICIARY) is the referent of the *no-tame-ni* phrase. The sentence below is an example of this type.

	low-applicative	high-applicative
non-HONs	**low-applicative II** *kure-* Example: (81)	**high-applicative I** *-te kure-* Example: (84)
HONs	**low-applicative III** *kudasar-* Example: (82)	**high-applicative II** *-te kudasar-* Example: (86)

Table 2.6: Applicatives and subject-honorifics.

(85) {***Watasi/kimi/kanozyo***}*-no-tame-ni* *kare-ga* *hasit-te* ***kure****-ru.*
I/you/she-GEN-sake-for he-NOM run-CV APPL$_{H}$-PRS
'(i) He runs;
(ii) {I/you/she} benefits from his running events;
(iii) the speaker thinks that {I/you/she} belongs to the speaker's domain.'

Fourth, just like the low-applicative *kure-* changes to *kudasar-*, the high-applicative *-te kure-* is replaced by *-te kudasar-* when the speaker respects the referent of the subject. The sentence in (86) is an example of this.

(86) High-applicative II (subject-honorifics): *kudasar-*
({***Watasi/kimi/kanozyo***}*-no-tame-ni*) *sensei-ga* *hasit-te*
I/you/she-GEN-sake-for teacher-NOM run-CV
kudasar*-u.*
APPL$_{H}$.HONs-PRS
'(i) The teacher runs;
(ii) {I/you/she} benefits from the teacher's running event;
(iii) the speaker thinks that {I/you/she} belongs to the speaker's domain;
(iv) the speaker respects the teacher.'

Table 2.6 summarizes the discussion so far. If the speaker thinks that the BEN/REC belongs to the speaker's territory, we have four possibilities depending on (i) whether it is a low/high-applicative and (ii) whether the referent of the subject is respected by the speaker.

DETAILED PROPERTIES. First, unlike *-(r)are*, which can be ambiguous between the subject-honorific reading and the passive reading (and many more), the *-te*

kudasar- construction conveys both meanings at the same time, as shown by the contrast in (87)a and (87)b.

(87) a. *Sensei-ga* *hasir-**are**-ta.*
teacher-NOM ask-HON$_S$/-PASS-PST
Reading 1: 'The teacher was under the negative influence of someone's running.'
Reading 2: '(i) The teacher ran; (ii) the speaker respects the teacher.'

b. *Sensei-ga* *hasit-**te** **kudasat**-ta.*
teacher-NOM ask-CV APPL$_H$.HON$_S$-PST
'(i) The teacher ran for the speaker;
(ii) the speaker respects the teacher.'

Second, the *(-te) kudasar* construction deserves our special attention because it exhibits a clear interaction between (i) the subject-honorific encoding and (ii) the imperative clause type. The other subject-honorific encodings are all illicit in making a command to a respected addressee.

(88) Position A

a. *o*-NOUN-*ni nar-*

***O**-ide-**ni** **nar**-e.*
HON-coming-DAT become-IMP
'(i) Come (here)!;
(ii) the speaker respect the referent of the subject (= the addressee) (intended).'

b. *o*-NOUN *nasar-*

***O**-ide* ***nasar**-e.*
HON-coming-DAT become-IMP
'(i) Come (here)!;
(ii) the speaker respect the referent of the subject (= the addressee)).'
(archaic)

c. *o*-NOUN *nasai*

***O**-ide* ***nasai**.*
HON-coming-DAT become
'(i) Come (here)!;
(ii) the referent of the subject (= the addressee)) is subordinate to the speaker.'

d. Suppletive form

Irassyai.
come.HONs
'(i) Come (here)!;
(ii) the speaker thinks that the addressee is subordinate to the speaker.'

Of all the two high-applicative constructions, it is only the *-te kudasar-* construction that is used in the imperative form. Observe the sentences in (89). As in the case of the contrast between *nasar-e* and *nasai* from page 50, the *e*-form sounds quite archaic even when accepted and *kudasai* is used in everyday conversation. But unlike *nasai*, there is no downward-looking attitude conveyed by this construction; cf., see the discussion on page 56.

(89) a. *-(r)are*

Ko-rare**-ro.*
come-HONs-IMP
'(i) Come (here)!;
(ii) the speaker respects the referent of the subject (= the addressee) (intended).'

b. *-te kudasar-* (i)

Ki-te ***kudasar**-e.*
come-CV APPLH.HONs-IMP
'(i) Come (here)!;
(ii) the speaker respects the referent of the subject (= the addressee) (archaic).'

c. *-te kudasar-* (ii)

Ki-te ***kudasai**.*
come-CV APPLH.HONs
'(i) Come (here)!;
(ii) the speaker respects the referent of the subject (= the addressee).'

Third, *-te kudasar-* has a shorter-hand form. As we saw in (71), the converb suffix *-te* is necessary for certain auxiliaries and *kudasar-* is one of them. For example, as a subject-honorificated equivalent of (90)a, (90)b is licit whereas (90)c is unacceptable.

(90) a. *Sensei-ga* *hasir-u.*
teacher-NOM run-PRS
'The teacher runs.'

b. *Sensei-ga* *hasit-**te*** ***kudasar**-u.*
teacher-NOM run-PRS
'(i) The teacher runs for the speaker;
(ii) the speaker respects the teacher.'

c. * *Sensei-ga* *hasiri-**kudasar**-u.*
teacher-NOM run-APPLH.HONs-PRS
'(i) The teacher runs for the speaker;
(ii) the speaker respects the teacher (intended).'

However, when the main predicate is nominalized with the prefix *o-*, *kudasar-* can be immediately preceded by a nominalized verb, as illustrated in (91).

(91) *Sensei-ga* ***o**-hasiri-**kudasar**-u.*
teacher-NOM HON-running-APPL$_{H}$.HON$_{S}$-PRS
'(i) The teacher runs for the speaker;
(ii) the speaker respects the teacher.'

This is only allowed in honorific high-applicative *-te* AUX constructions. That is, the non-honorific high-applicative *-te kure-* does not permit a similar pattern (= (92)a) and other subject-honorific *-te* AUX constructions (e.g., *-te mi-*) cannot be used in the same way (= (92) b).[23]

(92) a. * *Sensei-ga* ***(o-)**hasiri-**kure**-ru.*
teacher-NOM HON-running-APPL$_{H}$.HON$_{S}$-PRS
'(i) The teacher runs for the speaker;
(ii) the speaker respects the teacher (intended)).'

b. * *Sensei-ga* ***(o-)**hasiri-**goranninar**-u.*
teacher-NOM HON-running-TRIAL.HON$_{S}$-PRS
'(i) The teacher took a run;
(ii) the speaker respects the teacher.'

Subject-honorific construction 8: Progressive/perfective. First, *-te irassyar-* is a subject-honorific, aspectual expression used in progressive/perfective constructions. In Japanese, perfective and progressive meanings are encoded by a combination of the converb suffix *-te* and *i-* 'PRG/PRF' (Shirai 2000; Nishiyama 2006). The second component of this expression, *i-* is derived from the verb *i-* 'be/exist,' which we saw in (4)a. Just as the main verb *i-* has its own suppletive form *irassyar-* 'be/exist.HON$_{S}$,' *i-* in *-te i-* can be replaced with *irassyar-*. For example, observe the sentences below.

[23] **The other exception:** Another that permits a similar pattern is the object-honorific high-applicative *-te itadak-* '-CV APPL$_{H}$.HON$_{O}$,' which we will see on page 105.

(93) Progressive

a. *Sensei-ga* *hasit-**te*** ***i**-ru.*
teacher-NOM run-CV PRG-PRS
'The teacher is running.'

b. *Sensei-ga* *hasit-**te*** ***irassyar**-u.*
teacher-NOM run-CV PRG.HONs-PRS
'(i) The teacher is running;
(ii) the speaker respects the referent of the subject (= the teacher).'

(94) Perfective

a. *Sensei-wa* *tootyaku* *si-**te*** ***i**-ru.*
teacher-TOP arrival do-CV PRF-PRS
'The teacher has arrived.'

b. *Sensei-wa* *tootyaku* *si-**te*** ***irassyar**-u.*
teacher-TOP arrival do-CV PRF.HONs-PRS
'(i) The teacher has arrived;
(ii) the speaker respects the referent of the subject (= the teacher).'

In the a-sentences, the respect for the referent of the subject is not grammatically encoded. But in the b-sentences, the speaker expresses his or her respect by changing the non-honorific aspectual expression with its suppletive counterpart.

The subject-honorification does not have to be encoded in this *-te i-* part (Position C). Alternatively, the same meaning can be expressed as in (95) and (96) (Position A); to my ear, there is no significant difference in politeness level.

(95) Progressive

Sensei-ga ***o**-hasiri-**ni*** ***nat-te*** ***i**-ru.*
teacher-NOM HON-running-DAT become-CV PRG-PRS
'(i) The teacher is running;
(ii) the speaker respects the referent of the subject (= the teacher).'

(96) Perfective

a. *Sensei-wa* ***(go-)tootyaku-ni*** ***nat-te*** *i-ru.*
teacher-TOP HON-arrival-DAT become-CV PRF-PRS
'(i) The teacher has arrived;
(ii) the speaker respects the referent of the subject (= the teacher).'

b. *Sensei-wa* ***go-tootyaku*** ***nasat-te*** *i-ru.*
teacher-TOP HON-arrival do.HONs-CV PRF-PRS
'(i) The teacher has arrived;
(ii) the speaker respects the referent of the subject (= the teacher).'

Second, for some native speakers, *-te o-ide-ni nar-* 'HON-appearing/coming-DAT become-' can be used in place of *-te irassyar-* (Kikuchi 1997 [1994]: 232).[24]

For example, in (97)b, *i-* is replaced with *o-ide-ni nar-*; given its grammaticalized status, it may be better for the sentence to be glossed as in (97)c.

(97) a. *Sensei-ga* ***hasit-te*** ***i-ru.***
teacher-NOM run-CV PRG-PRS
'The teacher is running.'

b. *Sensei-ga* ***hasit-te*** ***o-ide-ni*** ***nar-u.***
teacher-NOM run-CV HON-appearing-DAT become-PRS
'(i) The teacher is running;
(ii) the speaker respects the referent of the subject (= the teacher).'

c. *Sensei-ga* ***hasit-te*** ***oideninar-u.***
teacher-NOM run-CV PRG.HONs-PRS
'(i) The teacher is running;
(ii) the speaker respects the referent of the subject (= the teacher).'

However, this construction is not as frequently used as *-te irassyar-* in daily conversation.

Subject-honorific construction 9: Completive. Another subject-honorific marking in the *v*P-periphery is *-te o-simai-ni nar-* '-CV CMPL (lit., -CV HON-CMPL-DAT become).' The baseline, non-honorific form is *-te simaw-* '-CV

[24] **Variation among native speakers:** To my ear, this expression sounds slightly archaic or too polite to use. I do not think people in my generation use this construction productively (unless they are brought up in a very strict family/school), though it is still understandable.

CMPL,' which is used to emphasize the completion of the depicted event and to insinuate that the speaker thinks that (the result of) this event is unfortunate. For example, observe the sentence in (98)a.

(98) a. *Sensei-wa* *toorisugi-**te*** ***simat**-ta.*
teacher-TOP pass by-CV CMPL-PST
'The teacher passed by, which the speaker thinks is unfortunate (< *-te simaw-*).'

b. *Sensei-wa* *toorisugi-**te*** ***o-simai-ni*** ***nat**-ta.*
teacher-TOP pass by-CV HON-CMPL-DAT become-PST
'(i) The teacher passed by, which the speaker thinks is unfortunate (< *-te simaw-*);
(ii) the speaker respects the teacher.'

Due to this *-te simaw-* construction, the speaker expresses his or her feeling that *the teacher's by-passing event* is unfortunately completed; e.g., maybe, the speaker had wanted to talk to the teacher but s/he could not, or the speaker had wanted the teacher to recognize him/her but the teacher simply passed by.[25] In such circumstances, the sentence in (98)a can be felicitously uttered. If the speaker also wants to encode his or her respect for the teacher, the sentence in (98)b is used instead, where *simaw-* is replaced by *o-simai-ni nar-*.

DETAILED PROPERTIES. First, though the form in (98)b is grammatical in contemporary Japanese and — it is preferred in a very formal context — *-te o-simai-ni nar-* sounds too sophisticated to use in daily conversation. This is presumably

[25] **The meaning of *simaw-*:** This *simaw-* is also used as a lexical verb (= as a main predicate) meaning 'to tidy/put back.'

because the intended meaning can be expressed in other ways as shown in (99).[26]

(99) a. ? *Sensei-wa* *o-toorisugi-ni* *nat-**te*** ***simat**-ta.*
teacher-TOP HON-passing by-DAT become-CV CMPL-PST
'(i) The teacher passed by, which the speaker thinks is unfortunate (< *-te simaw-*);
(ii) the speaker respects the teacher.'

b. *Sensei-wa* *toorisugi-**te*** ***simaw**-are-ta.*
teacher-TOP pass by-CV CMPL-HONs-PST
'(i) The teacher passed by, which the speaker thinks is unfortunate (< *-te simaw-*);
(ii) the speaker respects the teacher.'

Second, this subject-honorific construction also exhibits an interaction with imperatives. As for the non-honorific form, the imperative sentence is formed with the imperative suffix *-e* as shown below.

(100) a. *Yattuke-**te*** ***sima**-u.*
defeat-CV CMPL-PRS
'(We) will have defeated (them), which the speaker thinks is unfortunate (for them).'

b. *Yattuke-**te*** ***sima**-e.*
defeat-CV CMPL-IMP
'Defeat (them), which the speaker thinks is unfortunate (for them)!'

As for the subject-honorific *-te o-simai-ni nar-*, this *-e* suffix cannot be attached (= (101)).

(101) * *Yattuke-**te*** ***o-simai-ni*** ***nar**-e.*
defeat-CV HON-CMPL-DAT become-IMP
'(i) Defeat (them), which the speaker thinks is unfortunate (for them)!;
(ii) the speaker respects the referent of the subject (intended).'

[26] ***-(r)are* and *-te simaw-*:** For more on the relation between *-(r)are* and *-te simaw-*, see the discussion on page 65.

If we want to create a well-formed imperative, we use the *o*-NOUN *nasar*- form as shown in (101)b; cf., in some cases, the *-nasai* part is not pronounced.[27] This imperative sentence is peculiar in two ways; (i) despite the presence of subject-honorific marking, the speaker does not respect the addressee and (ii), as in (102)a, *-te simaw*- does not take the *o*-NOUN *nasar*- form when used in declaratives.

(102) a. * *Yattuke-**te** **o-simai** **nasar-**u.*
defeat-CV HON-CMPL do.HONs-PRS
'(i) (He) will have defeated (them), which the speaker thinks is unfortunate (for them);
(ii) the speaker respects the referent of the subject (intended).'

b. *Yattuke-**te** **o-simai** **(nasai)**.*
defeat-CV HON-CMPL do.HONs
'(i) Defeated (them), which the speaker thinks is unfortunate (for them)!;
(ii) the speaker thinks that the addressee is subordinate to the speaker.'

2.2.2 Object-honorific markers

2.2.2.1 Overview

Object-honorifics (or the non-subject-honorifics) are not a monolithic category. As in the case of subject-honorific expressions, the category contains many different constructions. But the primary goal of this subsystem of honorification is quite straightforward: the referent of the object noun phrase is respected by the speaker. Observe the contrast in (103).

[27] **A possible scenario:** Of course, such an imperative is quite rare in use, given that the speaker is making a command that he believes will produce an unfortunate outcome. One such (stereotypical) scenario where this kind of complicated imperative can be observed would be a scene in which a mafia boss orders his henchmen to attack other people; the people who are attached would be negatively affected.

(103) a. *Watasi-wa* *sono* *yakuza-ni* [*yakuza-o* *yamer-u* *yooni*]
I-TOP that gangster-DAT gangster-ACC stop-PRS C
it-ta.
say-PST
'I told the gangster to quit a life of a gangster.'

b. # *Watasi-wa* ***sono*** ***yakuza-ni*** [*yakuza-o* *yamer-u*
I-TOP that gangster-DAT gangster-ACC stop-PRS
yooni] ***moosiage****-ta.*
C say.HONo-PST
'(i) I told the gangster to quit a life of a gangster;
(ii) I respect the gangster.'

While the predicate in (103)a, i.e., *iw-* (*it-*) 'say' is neutral, the predicate in (103)b is an object-honorific predicate, which tells that the speaker has respect for the referent of the object noun phrase (in this case, 'that gangster'). Typically, based on our world knowledge that gangsters are not quite respectable, this sentence is judged strange (Kikuchi 1997 [1994]: 306).

OTHER PROPERTIES. As far as contemporary Japanese is concerned, however, a secondary effect of the object-honorifics has also been acknowledged. First, the speaker must thinks of the referent of the object noun as having a higher social status than the referent of the subject. For example, the sentence in (104)a is higher in acceptability than (104)b (Kikuchi 1997 [1994]: 258; Moriyama 1996: 160).

(104) a. *Butyoo-ga* ***syatyoo-o*** *bessoo-e*
manager-NOM president-ACC vacation house-to
go-syootai *si-ta.*
HON-invitation do-PST
'(i) The manager invited the president to his vacation house;
(ii) The speaker respects the president;
((iii) The speaker thinks that **the president** (object) has a higher social status than **the manager** (subject)).'

b. # *Syatyoo-ga* ***butyoo-o*** *bessoo-e*
president-NOM manager-ACC vacation house-to
go-syootai *si-ta.*
HON-invitation do-PST
'(i) The manager invited the president to his vacation house;
(ii) The speaker respects the president;
((iii) The speaker thinks that **the manager** (object) has a higher social status than **the president** (subject)).'

Note that researchers have found that this subsidiary requirement was absent in the Old/Middle Japanese and is a characteristic pertaining only to the data in contemporary Japanese (Kikuchi 1997 [1994]: 269; Moriyama 1996).

Second, when the object-honorific marker is used, the speaker assumes that the subject of the sentence should also have respect for the object (Moriyama 1996: 161-162; Kikuchi 1997 [1994]: 258). For example, the sentence in (105)b sounds worse than the sentence in (105)a, because when a culprit sends a letter, s/he does not do so to someone they respect.[28]

[28] **Gloss:** For the sake of simplicity, this dissertation refrains from giving all the meanings for the remaining examples in the translation of each example, providing only (i) the at-issue meaning and (ii) the direction of the respect.

subject-honorific expressions	page
Position A (Tier of argument structure)	
o-NOUN *sur-*	p. 89
o-NOUN *moosiage-*	p. 94
suppletive forms	p. 96
Position C (expressions in the *v*P-periphery)	
-te sasiager-	p. 98
-te itadak-	p. 102

Table 2.7: Object-honorific expressions

(105) a. *Mahiro-ga* ***sensei-ni*** *tegami-o* *o-dasi* *si-ta.*
Mahiro-NOM teacher-DAT letter-ACC HON-sending do-PST
'(i) Mahiro sent a letter to the teacher;
(ii) The speaker respects the teacher;
((iii) The speaker thinks that **the teacher** (object) has a higher social status than **Mahiro** (subject));
((iv) the speaker assumes that **Mahiro** (subject) has also respect for **the teacher** (object)).'

b. # *Hannin-ga* ***sensei-ni*** *tegami-o* *o-dasi* *si-ta.*
culprit-NOM teacher-DAT letter-ACC HON-sending do-PST
'(i) The culprit sent a letter to the teacher;
(ii) The speaker respects the teacher;
((iii) The speaker thinks that **the teacher** (object) has a higher social status than **the culprit** (subject));
((iv) the speaker assumes that **the culprit** (subject) has also respect for **the teacher** (object)).'

Table 2.7 summarizes the five different object-honorific constructions we will investigate in this subsection. Unlike subject-honorific constructions, Japanese does not have an object-honorific marking that derives from Voice-related categories. We will examine the tier of the argument structure in Section 2.2.2.2.1 and the tier of *v*P-peripheries in Section 2.2.2.2.2.

2.2.2.2 Examples

2.2.2.2.1 Position 1: Tier of argument structure

Object-honorific construction 1: *o*-NOUN *sur*-. The most frequently used object-honorific construction takes the form of *o*-NOUN *sur*- 'HON-NOUN do.' Similar to the case of the subject-honorific *o*-NOUN-*ni nar*-, the derived noun receives the prefix *o-/go-* and then is plugged into the NOUN-slot. For example, compare the examples in (106). In (106)a, the speaker does not have a particular respect for the teacher, whereas, in (106)b, the speaker encodes his or her deference to the teacher.

(106) a. *Kare-ga sensei-o tasuke-ta.*
he-NOM teacher-ACC help-PST
'He helped the teacher.'

b. *Kare-ga sensei-o* ***o-****tasuke* ***si-****ta.*
he-NOM teacher-ACC HON-helping do-PST
'(i) He helped him;
(ii) The speaker respects the teacher.'

As in the case of the subject-honorifics, *o-tasuke* 'HON-helping' cannot be scrambled to the front, as demonstrated by the ungrammaticality of (107). The only elements that can intervene between NOUN and *sur*- (*s*-) 'do' are focus particles (e.g., *-wa* or *-koso*).

(107) * *Kare-ga* ***o-****tasuke* ***sensei****-o* ***si****-ta.*
he-NOM HON-helping teacher-ACC do-PST
'(i) He helped the teacher;
(ii) The speaker respects the teacher.'

(108) *Kare-wa* ***sensei****-o* ***o-****tasuke-wa* ***si-****ta-ga,*
he-NOM teacher-ACC HON-helping-FOC do-PST-although
sonkei-wa si-te i-nak at-ta.
respect-FOC do-CV PRG-NEG COP-PST
'(i) He helped the teacher but did not respect (the teacher);
(ii) The speaker respects the teacher.'

DETAILED PROPERTIES. There are several restrictions on the use of this construction. First, there is a phonological constraint that the NOUN should be longer than one mora (Kikuchi 1997 [1994]: 287). For example, as in (109)a, the verb *mi-* cannot be used with this construction, because *mi-* is a one-mora noun. On the other hand, a synonymous verb *mitume-* can be used because it has more than one mora (= (109)b).

(109) a. * *Kare-ga* ***sensei****-o* ***o-****mi* ***si****-ta.*
he-NOM teacher-ACC HON-seeing do-PST
'(i) He watched the teacher;
(ii) The speaker respects the teacher (intended).'

b. *Kare-ga* ***sensei****-o* ***o-****mitume* ***si****-ta.*
he-NOM teacher-ACC HON-watching do-PST
'(i) He watched the teacher;
(ii) The speaker respects the teacher.'

Second, there is an etymological restriction: loan words from European languages cannot fit into the NOUN slot. For example, even though *suketti sur-* 'sketching do' is a licit expression, one cannot put the prefix before *suketti* as shown below.

(110) a. *Watasi-ga sensei-o suketti sur-u.*
I-NOM teacher-ACC sketching do-PRS
'I will sketch the teacher.'

b. * *Watasi-ga sensei-o* {***o/go-***}*suketti sur-u.*
I-NOM teacher-ACC HON-killing do-PRS
'(i) I will sketch the teacher;
(ii) the speaker respects the teacher (intended).'

Third, there is a semantic restriction; verbs with a negative connotation cannot be used with this construction (Matsumoto 1997: 723). For example, even though the sentence in (111)a is grammatically acceptable, the sentence in (111)b is not.[29]

[29] **Alleged counter-examples:** Some researchers have found that verbs with a negative nuance

(111) a. (*Ayamatte,*) *watasi-ga* *sensei-o* ***korosi****-ta.*
accidentally I-NOM teacher-ACC kill-PST
'(Accidentally,) I killed the teacher.'

b. * (*Ayamatte,*) *watasi-ga* *sensei-o* {***o/go-***}***korosi*** *si-ta.*
accidentally I-NOM teacher-ACC HON-sketching do-PRS
'(i) (Accidentally,) I killed the teacher;
(ii) the speaker respects the teacher (intended).'

Fourth, subject-honorific verbs cannot be placed in this NOUN position. For example, we can encode our respect either for the subject DP (= (112)a) or for the object DP (= (112)b). But we cannot use both the *o*-NOUN-*ni nar*- and the *o*-NOUN *sur*- construction at the same time (= (112)c).

---

can be used in *o*-NOUN *sur*- constructions. For example, Matsumoto (1997: 725) claims that "what is essential in the use of the *o-V-suru* form is the possible benefactive relation between the subject and the targeted nonsubject referent, the latter of which may not be expressed as a verb argument" and gives the following examples.

(i) a. *Oisi-ga* *nikui* *Kira-o* *(tono-no* *tame-ni)* ***o-****korosi* ***si****-ta.*
Oisi-NOM odious Kira-ACC lord-GEN sake-for HON-killing do-PST
'(i) Oishi killed odious Kira (for his lord);
(ii) the speaker respects the lord.'

b. [*Sensei-no* *tame-ni* *watasi-ga* *deki-ru* *koto-*]*wa* [*ano* *Koetu-no*
teacher-GEN sake-for I-NOM can do-PRS thing-TOP that Koetsu-GEN
kakeziku-o *bizyutukan-kara* *o-nusumi* *sur-u* *koto*]*-dake* *desi-ta.*
scroll-ACC art museum-from HON-stealing do C-only COP.HONA-PST
'(i) The only thing I could do for my teacher was to steal that Koetsu scroll from the gallery;
(ii) the speaker respects (the possessor of) the scroll (< *o-nusumi sur-*);
(iii) the speaker respects the addressee (< *des-*).'

These judgments may, however, vary among native speakers. For example, I personally do not accept the sentence in (i)a; if I force myself to interpret the sentence, it is Kira who the speaker respects, not the lord. As for (i)b, to my ear, the sentence is only acceptable if the metonymy between the scroll and the teacher is contextually self-evident, so the speaker's respect is clearly related to the possessor of the scroll; e.g., the scroll was originally owned by the teacher but it was stolen and sold to the art museum.

(112) a. *Yamada sensei-ga Tanaka sensei-o*
Yamada Teacher-NOM Tanaka Teacher-ACC
***o**-tazune-**ni** **nar**-u.*
HON-visiting-DAT become-PRS
'(i) Teacher Yamada visits Teacher Tanaka;
(ii) the speaker respects Teacher Yamada.'

b. *Yamada sensei-ga Tanaka sensei-o **o**-tazune*
Yamada Teacher-NOM Tanaka Teacher-ACC HON-visiting
***sur**-u.*
do-PRS
'(i) Teacher Yamada visits Teacher Tanaka;
(ii) the speaker respects Teacher Tanaka.'

c. * *Yamada sensei-ga Tanaka sensei-o*
Yamada Teacher-NOM Tanaka Teacher-ACC
***o**-[**o**-tazune-**ni** **nari**] **sur**-u.*
HON-HON-visiting-DAT becoming do-PRS
'(i) Teacher Yamada visits Teacher Tanaka;
(ii) the speaker respects Teacher Yamada;
(iii) the speaker respects Teacher Tanaka (intended).'

d. * *Yamada sensei-ga Tanaka sensei-o*
Yamada Teacher-NOM Tanaka Teacher-ACC
***o**-[**o**-tazune **si**]-**ni** **nar**-u.*
HON-HON-visiting doing-DAT become-PRS
'(i) Teacher Yamada visits Teacher Tanaka;
(ii) the speaker respects Teacher Yamada;
(iii) the speaker respects Teacher Tanaka (intended).'

However, it is well-known that the combination of the subject-honorific marker and the object-honorific marker was possible in Old/Middle Japanese (Kikuchi 1997 [1994]: 267-269; Moriyama 1996: 154). For example, Kikuchi (1997 [1994]: 267) gives us the following example.

(113) *yoroduni* *kosirape-**kikoe**-**tamape**-do,*
by all means try to please-HONo-HONs-although
'(i) although (Princess Genji) tries to please Ms. Murasaki by all means;
(ii) the speaker respects the referent of the subject (Princess Genji; < *tamap-* 'HONs');
(iii) the speaker respects the referent of the object (Ms. Murasaki; < *kikoy-* 'HONo')'

In this example, the object-honorific marker *-kikoy* and the subject-honorific marker *-tamap* are used within the same sentence and the sentence is grammatical. When two content-honorific markers are used, the order is fixed and the object-honorific marker should precede the subject-honorific marker, which mirrors the relative order of the object-agreement and the subject-agreement.

Fifth, verbs used in the casual register cannot be used in the object-honorific form (Kikuchi 1997 [1994]: 290). For example, the verb *nose-* 'put . . . on' has a colloquial form *nokke-* 'put . . . on.' As shown below, this colloquial form cannot be used in this object-honorific construction.

(114) a. *Watasi-wa* *sensei-o* *watasi-no* *kuruma-ni* ***o**-nose*
I-TOP teacher-ACC I-GEN car-to HON-putting
***sur**-u.*
do-PRS
'(i) I had the teacher in my car;
(ii) the speaker respects the teacher.'

b. * *Watasi-wa* *sensei-o* *watasi-no* *kuruma-ni* ***o**-nokke*
I-TOP teacher-ACC I-GEN car-to HON-putting
***sur**-u.*
do-PRS
'(i) I had the teacher in my car;
(ii) the speaker respects the teacher (intended).'

Sixth, some compound verbs cannot be used in this object-honorific construction. Kikuchi (1997 [1994]: 291) gives the following list of verbs.

(115) Lexical VV-compounds that lack an object-honorific form

a. *sagasi-das-* 'find out'

b. *sasoi-das-* 'invite . . . out'

c. *tazune-aruk-* 'walk searching'

d. *ture-aruk-* 'walk accompanied by'

e. *moti-age-* 'lift'

As in the case of the subject-honorifics, syntactic verbal compounds can also not be placed in the NOUN slot.

Finally, there are some verbs that cannot be used in this construction, for reasons that seem beyond the scope of the above rules (Kikuchi 1997 [1994]: 290).

(116) a. *akogare-* 'be attracted to/long for'

b. *ow-* 'pursue'

c. *mane-* 'imitate'

d. *mezas-* 'aim, consider . . . as one's goal'

e. *keitoo sur-* 'be devoted to'

Object-honorific construction 2: *o*-NOUN *moosiage*-. The verb *moosiage-* is used as the suppletive form for the verb *iw-* 'say.' For example, if the speaker respects the teacher, the sentence in (117)b is used, not (117)a; *i-* is a phonologically conditioned allomorph.

(117) a. *Watasi-ga* *sensei-ni* *orei-o* ***i-u.***
I-NOM teacher-DAT gratitude-ACC say-PRS
'I say (express) my gratitude to the teacher.'

b. *Watasi-ga* *sensei-ni* *orei-o* ***moosiage-ru.***
I-NOM teacher-DAT gratitude-ACC say.HONo-PRS
'(i) I say (express) my gratitude to the teacher;
(ii) the speaker respects the teacher.'

This *moosiage-* can be used as a light verb and occupy the position of *sur-* in the *o*-NOUN *sur-* construction. For example, as seen above, respect for the teacher is expressed by the *o*-NOUN *sur-* construction; e.g., (118)b is the object-honorific counterpart of (118)a.

(118) a. *Watasi-ga* *sensei-ni* *buzi-o* *tutae-ru.*
I-NOM teacher-DAT being safe-ACC tell-PRS
'I tell the teacher about my being safe.'

b. *Watasi-ga* *sensei-ni* *buzi-o* ***o**-tutae* ***sur**-u.*
I-NOM teacher-DAT being safe-ACC HON-telling do-PRS
'(i) I tell the teacher about my being safe;
(ii) the speaker respects the teacher.'

We can replace this light verb *sur-* with *moosiage-*. An example is given in (119).[30]

(119) *Watasi-ga* *sensei-ni* *buzi-o* ***o**-tutae* ***moosiage**-ru.*
I-NOM teacher-DAT being safe-ACC HON-telling HONo-PRS
'(i) I tell the teacher about my being safe;
(ii) the speaker respects the teacher.'

DETAILED PROPERTIES. Two comments are in order. First, with regard to the level of politeness, the respect encoded in *o*-NOUN *moosiage-* is much higher than that encoded in *o*-NOUN *sur-*. In other words, the sentence in (119) is much more polite than (118)b. Kikuchi (1997 [1994]: 296) observes that this form is not commonly observed in daily conversation and is more frequently used in formal letters/talks. As a result, typically the person respected coincides with the second person, i.e., the discourse addressee.

Second, even though *moosiage-* originates from a speech act predicate, the original lexical meaning of 'say' is weakly bleached out (Kikuchi 1997

[30] **Variation in judgment:** Judgments here seem to vary among native speakers. Some say that the sentence in (119) does not sound perfect. Besides, it seems that some verbs are more easily used with this construction than other verbs; for example, some say that (120)c is much better than (119).

[1994]: 296) and this construction can be used with non-speech act events. For example, as in (120)c, it can be used with the verb *sitaw-* 'revere.'

(120) a. *Watasi-ga sensei-o sitaw-u.*
I-NOM teacher-ACC revere-PRS
'I revere the teacher.'

b. *Watasi-ga sensei-o* ***o**-sitai* ***sur**-u.*
I-NOM teacher-ACC HON-revering do-PRS
'(i) I revere the teacher;
(ii) the speaker respects the teacher.'

c. *Watasi-ga sensei-o* ***o**-sitai* ***moosiage**-ru.*
I-NOM teacher-ACC HON-revering HON$_{\text{o}}$-PRS
'(i) I revere the teacher;
(ii) the speaker respects the teacher;
(iii) the degree of the speaker's respect is quite high.'

Object-honorific construction 3: Suppletion. Suppletive forms are available for a limited number of predicates. For example, observe the sentences in (121). The sentence in (121)a is a sentence without object-honorific marking. The verb *moraw-* 'receive' cannot take the *o*-NOUN *sur-* construction, as shown in (121)b. Instead, it has its own suppletive form *itadak-* 'receive.HON$_{\text{o}}$,' as in (121)c. Table 2.8 is a list of such suppletive predicates.

(121) a. *Watasi-wa sensei-kara purezento-o morat-ta.*
I-TOP teacher-GEN present-ACC receive-PST
'I received a present from the teacher.'

b. * *Watasi-wa sensei-kara purezento-o* ***o**-morai* ***si**-ta.*
I-TOP teacher-GEN present-ACC HON-receiving do-PST
'(i) I received a present from the teacher;
(ii) the speaker respects the referent of the *teacher* (intended).'

c. *Watasi-wa sensei-kara purezento-o* ***itadai**-ta.*
I-TOP teacher-GEN present-ACC receive-PST
'(i) I received a present from the teacher;
(ii) the speaker respects the *teacher*.'

plain form		object-honorific form	
ik-	'go'	*ukagaw-*	'go.HONO'
kur-	'come'	*ukagaw-*	'come.HONO'
		sanzyoo sur-	'come.HONO'
		o-zyama sur-	'come.HONO'
yobidas-	'call'	*o-yobidate sur-*	'call.HONO'
yom-	'read'	*haidoku sur-*	'read.HONO'
kari-	'borrow'	*haisyaku sur-*	'borrow.HONO'
mi-	'see'	*haiken sur-*	'see.HONO'
mise-	'display'	*o-me-ni kake-*	'display.HONO'
		go-ran-ni ire-	'display.HONO'
tabe-	'eat'	*itadak-*	'eat.HONO'
nom-	'drink'	*itadak-*	'drink.HONO'
iw-	'say'	*moosiage-*	'say.HONO'
kik-	'listen to, hear'	*ukagaw-*	'listen to, hear.HONO'
		uketamawar-	'listen to, hear.HONO'
		haityoo sur-	'listen to, hear.HONO'
		ukagaw-	'listen to, hear.HONO'
aw-	'meet'	*o-me-ni kakar-*	'meet.HONO'
		o-me-mozi sur-	'meet.HONO'
age-	'give'	*sasiage-*	'give.HONO'
		kenzyoo sur-	'give.HONO'
		sintei sur-	'give.HONO'
moraw-	'receive'	*itadak-*	'receive.HONO'
		tamawar-	'receive.HONO'
		tyoodai sur-	'receive.HONO'
uketor-	'receive'	*haizyu sur-*	'receive.HONO'
		tyoodai sur-	'receive.HONO'
sir-	'know'	*zonziage-*	'know.HONO'
sirase-	'let . . . know'	*o-mimi-ni ire-*	'let . . . know.HONO'

Table 2.8: Suppletive forms

DETAILED PROPERTIES. First, it is important to note that not all suppletive forms trigger a blocking effect (Thompson 2011). For example, unlike *moraw-*, *kik-* 'listen to, hear' can take the *o-*NOUN *sur-* construction and the 'suppletive' form. The sentence in (122)a does not have any object-honorific marking. In contrast, the speaker encodes his or her respect for the teacher using the sentences in (122)b and (122)c, which are both acceptable.

(122) a. *Watasi-wa sensei-kara hanasi-o **kii**-ta.*
I-TOP teacher-from talk-ACC listen to-PST
'I listened to/received the talk from the teacher.'

b. *Watasi-wa sensei-kara hanasi-o **o**-kiki **si**-ta.*
I-TOP teacher-from talk-ACC HON-listening to do-PST
'(i) I listened to/received the talk from the teacher;
(ii) the speaker respects the *teacher*.'

c. *Watasi-wa sensei-kara hanasi-o **ukagat**-ta.*
I-TOP teacher-from talk-ACC listen to.HONo-PST
'(i) I listened to/received the talk from the teacher;
(ii) the speaker respects the *teacher*.'

Second, some suppletive forms can be plugged into the *o*-NOUN *sur*- construction. For example, the same verb *ukagaw*- can be nominalized and occupy the NOUN position, as shown in (123).

(123) *Watasi-wa sensei-kara hanasi-o **o-ukagai** **si**-ta.*
I-TOP teacher-from talk-ACC HON-listening to.HONo do-PST
'(i) I listened to/received the talk from the teacher;
(ii) the speaker respects the teacher.'

2.2.2.2.2 Position 2: Tier of high-applicative expressions

Object-honorific construction 4: Applicative construction. As in the case of the subject-honorific *-te kudasar*-, some high-applicative constructions allow object-honorific encodings. For example, observe the sentence below.

(124) *Watasi-wa sensei-ni ronbun-o yon-**de** **itadai**-ta.*
I-TOP teacher-DAT paper-ACC read-CV APPLH.HONo-PST
'(i) I had my teacher read the/my paper (my teacher read the paper for me;
(ii) I respect the teacher.'

Here, the central event depicted in this sentence is the teacher's reading of a paper and *watasi* 'I' is the person who benefits from this reading event. This *-te itadak*-

has an honorific meaning and the referent of the indirect object (= the teacher) is respected.

LOW/HIGH-APPLICATIVE CONSTRUCTIONS. As we discussed above, Japanese employs several low-applicative predicates. Recall from Section 2.2.1.2 that *watas-* is the non-honorific ditransitive verb. For example, observe the sentence in (125).

(125) Low-applicative I: *watas-* (cf., (80))

Kare-ga *watasi-ni* *hana-o* ***watas**-u.*
he-NOM I-DAT flower-ACC give-PRS
'He gives me a flower.'

As in the case of subject-honorifics, there are some honorific constructions that derive from applicative expressions. Here, we will examine these constructions in a step-by-step fashion.

First, our point of departure is the non-object honorific low-applicative verb *age-* 'give,' as given in (126). This verb is another low-applicative verb but, unlike *watas-*, the verb has a restriction that the indirect object, i.e., REC(IPIENT), must NOT be the first person, as illustrated in (126)a. The distinction is, however, not so much between the first person versus others but rather between elements in the speaker's territory versus the others. As shown in (126)b, if the referent of the noun phrase is considered to fall under the speaker's territory, the sentence is illicit.

(126) Low-applicative IV: *age-*

a. *Kare-ga* {*kimi/kanozyo/*watasi*}*-ni* *hana-o* ***age****-ru.*
he-NOM you/she/I-DAT flower-ACC give-PRS
'(i) He gives a flower to {you/her/*me};
(ii) the speaker thinks that {you/she/*I} does not belong to the speaker's domain.'

b. * *Kare-ga* ***watasi-no*** ***musuko-ni*** *hana-o* *age-ru.*
he-NOM I-GEN son-DAT flower-ACC give-PRS
'(i) He gives a flower to my son
(ii) my son does not belong to the speaker's domain (intended).'

Second, if the referent of the indirect object is respected by the speaker, the verb *age-* is replaced by *sasiage-* 'give.HONo.'

(127) Low-applicative V (object-honorific): *sasiage-*

Kare-ga *sensei-ni* *hana-o* ***sasiage****-ru.*
he-NOM teacher-DAT flower-ACC give.HONo-PRS
'(i) He gives a flower to the teacher;
(ii) the speaker thinks that the teacher does not belong to the speaker's domain;
(iii) the speaker respects the teacher.'

Third, as in the case of *kure-* in (84)b, *age-* can also be used as a high-applicative. Observe the sentences in (128). The sentence in (129)a is the baseline sentence without any applicative morpheme. When *-te age-* is used as in (128)b, then an applied argument *tomodati-ni* is introduced into the sentence, whose role in the event is the BEN(EFICIARY).

	low-applicative	high-applicative
non-HONo	**low-applicative IV** *age-* Example: (126)	**high-applicative III** *-te age-* Example: (128)
HONo	**low-applicative V** *sasiage-* Example: (127)	**high-applicative IV** *-te sasiage-* Example: (129)

Table 2.9: Applicatives and object-honorifics I.

(128) High-applicative III: *-te age-*

a. *Watasi-ga syasin-o tor-u.*
I-NOM picture-ACC take-PRS
'I will take a picture.'

b. *Watasi-ga tomodati-ni syasin-o* ***tot-te*** ***age****-ru.*
I-NOM friend-DAT picture-ACC take-CV APPL$_H$-PRS
'(i) I will take a picture;
(ii) my friends may benefit from my picture-taking event.'

Finally, *sasiage-* also has a high-applicative use. Observe the sentences in (129). The sentence in (129)a is the baseline sentence without any applicative morpheme. If the speaker has respect for the referent of the applied noun, then *age-* in (128)b is replaced with *sasiage-*. This is shown in (129)b. Table 2.9 summarizes the constructions we have examined so far.

(129) High-applicative IV (object-honorific): *-te sasiage-*

a. *Watasi-ga syasin-o tor-u.*
I-NOM picture-ACC take-PRS
'I will take a picture.'

b. *Watasi-ga sensei-ni syasin-o* ***tot-te*** ***sasiager****-u.*
I-NOM teacher-DAT picture-ACC take-CV APPL$_H$.HONo-PRS
'(i) I will take a picture;
(ii) the teacher may benefit from my picture-taking event;
(iii) I respect the teacher.'

Another important high-applicative object-honorific construction is *-te itadak-* '-CV APPL$_H$.HONo.' First, in order to understand this high-applicative con-

struction, it is necessary for us to first consider the corresponding low-applicative, non-object-honorific predicate, *moraw-* 'be given/receive.' Observe the sentence below.

(130) Low-applicative VI: *moraw-*

Kare-ga {*kimi/kanozyo/*watasi*}*-ni* *hana-o* ***mora****-u.*
he-NOM you/she/I-DAT flower-ACC be given-PRS
'He is given a flower from {you/her/*me}'

Here, the referent of the subject is the recipient of the giving event and this referent is the speaker's associate. The referent of the indirect object is the *giver*, who is typically outside the speaker's territory.

Second, if the speaker respects the referent of the *ni*-marked object, *moraw-* is replaced with *itadak-*, as shown below.

(131) Low-applicative VII: *itadak-*

Kare-ga {*anata/anokata*}*-ni* *hana-o*
he-NOM you/that person.HON-DAT flower-ACC
itadak*-u.*
be given.HONo-PRS
'(i) He is given a flower from {you/that person};
(ii) the speaker respects the referent of the object (= *you/that person*).'

Third, this *moraw-* can be used as a high-applicative construction, which affects the valency and integrates an individual into the event structure. For example, observe the following sentences.

(132) High-applicative V: *-te moraw-*

a. *Sensei-ga* *syasin-o* *tor-u.*
teacher-NOM picture-ACC take-PRS
'The teacher will take a picture.'

b. *Watasi-ga* *sensei-ni* *syasin-o* *tot****-te*** ***moraw****-u.*
I-NOM teacher-DAT picture-ACC take-CV APPLH-PRS
'(i) The teacher will take a picture;
(ii) I benefit from the picture-taking event.'

	low-applicative	high-applicative
non-HONo	**low-applicative VI** *moraw-* Example: (130)	**high-applicative V** *-te moraw-* Example: (132)
HONo	**low-applicative VII** *itadak-* Example: (131)	**high-applicative VI** *-te itadak-* Example: (133)

Table 2.10: Applicatives and object-honorifics II.

In (132)b, the valency of the predicate is affected and *watasi* 'I' is newly related to the event as a recipient who benefits from the depicted event.

Finally, when the speaker has respect for the referent of the indirect object, *moraw-* is replaced with *itadak-*. This is what the sentences in (133) illustrate.

(133) High-applicative VI: *-te itadak-*

a. *Sensei-ga* *syasin-o* *tor-u.*
teacher-NOM picture-ACC take-PRS
'The teacher will take a picture.'

b. *Watasi-ga* *sensei-ni* *syasin-o* ***tot-te*** ***itadak-u.***
I-NOM teacher-DAT picture-ACC take-CV APPL$_{H}$.HONo-PRS
'(i) The teacher will take a picture;
(ii) I benefit from the picture-taking event;
(iii) I respect the *teacher*.'

DETAILED PROPERTIES. First, *-te itadak-* construction exhibits an interaction with the causative suffix. In Japanese, the causative suffix *-(s)ase* is attached to the main verb, as in (134), affecting the valency of the argument structure.

(134) a. [*Watasi-ga* *kanozyo-ni* *at*]*-ta.*
I-NOM her-DAT meet-PST
'I met her.'

b. *Sensei-ga* [*watasi-*{**ga/o*} *kanozyo-ni* *aw*]***-ase****-ta.*
teacher-NOM I-NOM/ACC her-DAT meet-CAUS-PST
'The teacher made me meet her.'

Since Japanese is a *pro*-drop language, the accusative-marked *doer* can be phonologically null given a clear contextual cue. For example, in the following sentence, the person who met her should be determined pragmatically. If it is obvious that *Mahiro* should have met her, then the interpretation of *pro* would be *Mahiro*.

(135) *Sensei-ga* [***pro*** *kanozyo-ni aw*]-***ase****-ta.*
teacher-NOM *pro* her-DAT meet-CAUS-PST
'The teacher made *pro* meet her.'

With this in mind, observe the pair in (136). These sentences are the same except that the b-sentence includes a causative suffix *-(s)ase*. When *-te itadak-* is present, the empty category that is expected to appear in front of *kanozyo-ni* in (136)b must have the same referent as *kare* 'he', as though *pro* has become PRO.

(136) a. [*Kare-ga* [*sensei-ni kanozyo-ni at*]*-te itadai-ta*]
he-NOM teacher-DAT she-DAT meet-CV APPL$_{H}$.HON$_{O}$-PST
no-o kimi-wa sir-anak at-ta-no?.
C-ACC you-TOP come to know-NEG COP-PST-Q
'(i) Did you not know that he had the teacher meet her? (lit., Did you not know that he benefited from the event of the teacher's meeting her?);
(ii) the speaker respects the *teacher*.'

b. [*Kare$_i$-ga* [*sensei-ni* [*ec$_i$ kanozyo-ni aw*]-***ase***]*-te*
he-NOM teacher-DAT she-DAT meet-CAUS-CV
itadai-ta] *no-o kimi-wa sir-anak*
APPL$_{H}$.HON$_{O}$-PST C-ACC you-TOP come to know-NEG
at-ta-no?.
COP-PST-Q
'(i) Did you not know that he had the teacher [make **him** meet her]? (lit., Did you not know that he benefited from the event of the teacher's making *ec* (= **him**) meet her?);
(ii) the speaker respects the *teacher*.'

As shown in (137)a, this referential requirement disappears when *-te itadak-* is absent. In fact, a full noun phrase can occupy the same position (= (137)b). But even in that case, *Mahiro* has to be interpreted as an associate of *kare* 'he.' It can be supposed that the presence of *-te itadak-* (and *-te moraw-*) regulates the interpretation of the noun it c-commands.

(137) a. [*Kare-ga* [*sensei-ni* [***Mahiro**-o* *kanozyo-ni* *aw*]-***ase***]-*te*
he-NOM teacher-DAT Mahiro-ACC she-DAT meet-CAUS-CV
itadai-ta] *no-o* *kimi-wa* *sir-anak*
APPL$_{H}$.HON$_{O}$-PST C-ACC you-TOP come to know-NEG
at-ta-no?.
COP-PST-Q
'(i) Did you not know that he had the teacher [make **Mahiro** meet her]? (lit., Did you not know that he benefited from the event of the teacher's letting/making **Mahiro** meet her?);
(ii) the speaker respects the teacher.'

b. [*Kare-ga* [*ec* *kanozyo-ni* *aw*]-***ase**-ta*] *no-o*
he-NOM she-DAT meet-CAUS-CV APPL$_{H}$.HON$_{O}$-PST
kimi-wa *sir-anak* *at-ta-no?*.
C-ACC you-TOP come to know-NEG COP-PST-Q
'Did you not know that he [made *ec* meet her]?'

Second, as in the case of *-te kudasar-*, *-te itadak-* (but not *-te moraw-*) allows a shorter form without the converb suffix *-te* when the main verb is nominalized with the prefix *o-*. Observe the pair in (138). In (138)a, the verb *hasir-* is followed by *itadak-* with an intervening *-te.* In (138)b, *hasiri* is immediately followed by *itadak-*.

(138) a. *Watasi-wa sensei-ni hasit-**te** **itadai**-ta.*
I-TOP teacher-DAT run-CV APPL$_{H}$.HON$_{O}$-PST
'(i) I benefited from the event of the teacher's running;
(ii) the speaker respects the teacher.'

b. *Watasi-wa sensei-ni **o**-hasiri-**itadai**-ta.*
I-TOP teacher-DAT HON-running-APPL$_{H}$.HON$_{O}$-PST
'(i) I benefited from the event of the teacher's running;
(ii) the speaker respects the teacher.'

When the prefix is absent, the sentence becomes ungrammatical (= (139)).

(139) * *Watasi-wa sensei-ni hasiri-**itadai**-ta.*
I-TOP teacher-DAT running-APPL$_{H}$.HON$_{O}$-PST
'(i) I benefited from the event of the teacher's running;
(ii) the speaker respects the teacher (intended).'

2.2.3 Addressee-honorific markers

2.2.3.1 Overview

Addressee-honorific markers stand in sharp contrast with content-honorific markers with respect to its reference. As seen so far, the target of content-honorific markers is the referent of the argument noun phrase (or his or her associate). In contrast, the target of the addressee-honorific marker is the addressee, an individual in the discourse participant structure — an individual completely independent from the argument structure. But its basic semantic contribution is the same as content-honorific markers. By using addressee-honorific markers, the speaker shows deference to the referent (i.e., addressee). Observe the sentences below.

(140) Addressee-honorific construction

a. *Ore-ga ik-u-yo.*
I-NOM go-PRS-SFP
'I will go.'

b. *Ore-ga iki-**mas**-u-yo.*
I-NOM go-HON$_A$-PRS-SFP
'(i) I will go;
(ii) the speaker respects the addressee.'

The only difference between the two sentences lies in the presence of the addressee-honorific marker. In (140)a, no addressee-honorific marker is used. The speaker does not encode a special respect for the addressee. In (140)b, on the other hand, an addressee-honorific marker *mas-* is used. The speaker's respect for the addressee is grammatically encoded.

ALLOCUTIVITY AND ADDRESSEE-HONORIFICATION. A terminological note should be made at this point. Grammatical encodings that target the addressee have been called ALLOCUTIVITY, based on the tradition of Basque grammar (Bonaparte 1862; Oyharçabal 1993; De Rijk and Coene 2007; Adaskina and Grashchenkov 2009; Haddican 2015, 2018; Antonov 2015, 2016; Zu 2015, 2018; Wolpert et al 2017) and indeed, Basque and Japanese have been compared in several previous studies (Oyharçabal 1993; Miyagawa 2012, 2017; Zu 2015, 2018). An example of Basque allocutive marking is given in (141).

(141) Standard Basque (Antonov 2015: 57)

a. *Bilbo-ra n-oa.*
Bilbao-to 1.SG-go
'I am going to Bilbao.'

b. *Bilbo-ra n-oa-**k**.*
Bilbao-to 1.SG-go-ALLOC:MASC.FAM
'(i) I am going to Bilbao;
(ii) the addressee is male;
(iii) the speaker is talking to the addressee in a colloquial way.'

c. *Bilbo-ra n-oa-**n**.*
Bilbao-to 1.SG-go-ALLOC:FEM.FAM
'(i) I am going to Bilbao;
(ii) the addressee is female;
(iii) the speaker is talking to the addressee in a colloquial way.'

In this language, the gender of the familiar interlocutor is morphologically distinguished (*-k* for masculine addressees and *-n* for feminine addressees); cf., Antonov (2015) reports that Pumé, Nambikwara, Mandan, and Beja have similar gender-based allocutive systems.

In Souletin Basque, the allocutive marking is not only sensitive to the addressee's gender but also to the "speaker's respect." Observe the sentences below.

(142) Souletin Basque (Antonov 2015: 57-58)

a. *etʃe-a* *banu*
house-to 1.SG.go
'I am going to the house.'

b. *etʃe-a* *banu-**k***
house-to 1.SG.go-ALLOC:MASC
'(i) I am going to the house;
(ii) the addressee is male;
(iii) the speaker is talking to the addressee in a colloquial way.'

c. *etʃe-a* *banu-**n***
house-to 1.SG.go-ALLOC:FEM
'(i) I am going to the house;
(ii) the addressee is female;
(iii) the speaker is talking to the addressee in a colloquial way.'

d. *etʃe-a* *banu-**sy***
house-to 1.SG.go-ALLOC:RESP
'(i) I am going to the house;
(ii) the speaker respects the addressee.'

If *-sy* is treated as another instance of an allocutive marker, addressee-honorification would be considered a subclass of allocutive markings.[31] Antonov (2015) writes:

> *Eastern Basque varieties which have "polite" allocutive verb forms have never been described as showing some type of honorificity no doubt because of the absence of such a system (of, say, referent honorific) elsewhere in their grammar. The fact that Javanese, Japanese,*

[31] **Practical benefits:** By subsuming addressee-honorification under the more general allocutivity, we can discuss languages which would have never been compared otherwise. Certainly, future studies may prove that such a conflation results in undesirable consequences. But we would never know whether this is right or wrong unless we at least try to compare these languages and clarify major and minor differences. Although addressee-honorific encoding is limited to a few languages (Japanese, Korean, Ryukyuan languages, Burmese, Thai, Punjabi, Tamil, Magahi, and Eastern Basque dialects, as far as I am aware), it is also known that some languages allow addressee-gender encoding (Pumé, previously called Yaruro, Nambikwara, Mandan, and Beja; Antonov 2015) and examination of more languages may be able to shed new light on how addressee-oriented expressions are used in natural languages.

> *and Korean do have such complex honorific systems should therefore not prevent us from seeing that their addressee-honorifics, especially those whose exponents are verbal, have a lot in common with allocutivity as it has been described for Basque, and thus should be regarded as another instance of the same phenomenon* (Antonov 2015: 60).

GENERAL REMARKS. Returning to Japanese, there are some general remarks that need to be made before we go into details. First, there are two morphologically and syntactically distinct addressee-honorific markers in contemporary Japanese — namely *-mas* and *des-* — which are in complementary distribution. Prescriptively, the former element, *-mas*, is a suffix that is attached to a verb or an auxiliary, e.g., (143)a, while *des-* is an addressee-honorific copula, which therefore appears with nonverbal projections such as noun phrases and adjective phrases, e.g., (143)b.

(143) a. With a verb phrase

Watasi-wa hasiri-{***mas/*des***}*-u.*
I-TOP run-HON$_A$-PRS
'(i) I will run;
(ii) the speaker respects the addressee.'

b. With a noun phrase

Kore-wa raion {**mas/des*}*-u.*
this-TOP lion COP.HON$_A$-PRS
'(i) This is a lion;
(ii) the speaker respects the addressee.'

It is important to note that, in contemporary Japanese, there has been an ongoing change within the addressee-honorific system and the simplistic *des-mas* dichotomy just described only holds in the prescriptive grammar. In Section 2.4, we will see how more colloquial grammars are moving towards a new paradigm. In any case, in this dissertation, I will primarily focus on the paradigm given in the prescriptive grammar.

Second, the use of addressee-honorific markers is INDEPENDENT OF THE USE OF CONTENT-HONORIFIC MARKERS. For example, observe the sentences

in (144). All of them are grammatical, suggesting that subject-honorific markers can be used with or without an addressee-honorific marker and that addressee-honorific markers can also be used with or without a subject-honorific marker. This is also true of the object-honorific marker.

(144) Subject-honorifics and addressee-honorifics

a. *Sensei-ga* ***uta****-u.*
teacher-NOM sing-HON$_A$-PRS
'The teacher will sing.'

b. *Sensei-ga* ***utai-mas****-u.*
teacher-NOM sing-HON$_A$-PRS
'(i) The teacher will sing;
(ii) the speaker respects the addressee.'

c. *Sensei-ga* ***o****-utai-****ni*** ***nar****-u.*
teacher-NOM HON-singing-DAT become-PRS
'(i) The teacher will sing;
(ii) the speaker respects the teacher.'

d. *Sensei-ga* ***o****-utai-****ni*** ***nari-mas****-u.*
teacher-NOM HON-singing-DAT become-HON$_A$-PRS
'(i) The teacher will sing;
(ii) the speaker respects the teacher;
(iii) the speaker respects the addressee.'

Third, the use of addressee-honorific markers is INDEPENDENT OF THE USE OF SECOND PERSON PRONOUNS. In Basque, there exists an requirement that there can only be a single second person agreement within a single clause. If a sentence contains a second person subject or object, the allocutive agreement cannot occur. For example, we cannot integrate the allocutive marking into the following sentences (Miyagawa 2012: 82).

(145) Basque

a. *(Nik **hi**)* *ikusi* *haut.*
1.SG.ERG 2.SG.C.ABS see.PRF AUX-2.SG.C.ABS-1.SG.ERG
'I saw you'

b. *(**Zuek** ni)* *ikusi* *naizue.*
2.PL.ERG 1.SG.ABS see.PRF AUX-1.SG.ABS-2.PL.ERG
'You saw me'

Likewise, in Magahi, "[a]llocutive agreement with the addressee is barred if and only if another expression of the addressee triggers agreement on the verb (Alok and Baker 2018)." For example, observe the sentences in (146). The sentence (146)b is illicit because there is a marker of subject-honorific agreement whose reference is the second person.

(146) Magahi Subject-agreement

a. *Tu/tohani* *jaa-it* *h-**a**.*
you.SG/you.PL go-PRG be-2.HON$_S$
'You (e.g., a parent/parents) are going.'

b. * *Tu/tohani* *jaa-it* *h-**a-o**.*
you.SG/you.PL go-PRG be-2.HON$_S$-HON$_A$
'You (e.g., a parent/parents) are going.'

In Tamil, when a second person subject triggers regular argument agreement on the verb, allocutive marking is ruled out (McFadden 2017, 2018). For example, observe the following sentence.[32]

(147) Tamil

**niiŋgae* *rombaa* *smart-aa* *iru-kk-iiŋgae-ŋgae.*
you.PL very smart-PRED be-PRS-2.PL-HON$_A$
'You are very smart.'

[32] **Exceptions:** (i) The second person object is compatible with allocutive marking; (ii) Dative subjects never trigger agreement in Tamil and second person subjects are compatible with allocutive marking; (iii) when the main predicate is a resultative participial form, it does not show agreement with the subject and allocutive marking is available with the second person subject; see McFadden (2017, 2018).

Exhibiting a sharp contrast with these languages, Japanese addressee-honorific markers can be used without any restriction on overt second person pronouns as illustrated in (148) and (149).[33]

(148) Japanese — Second person subject

a. ***Anata****-wa* *soo* *yat-te* *itumo* *muri-o*
you.HON-TOP so do-CV always impossible thing-ACC
i-u.
say-PRS
'You are always asking difficult favors (of us) like this (= by doing so).'

b. ***Anata****-wa* *soo* *yat-te* *itumo* *muri-o*
you.HON-TOP so do-CV always impossible thing-ACC
*i-**mas**-u.*
say-HON$_A$-PRS
'(i) You are always asking difficult favors (of us) like this (= by doing so);
(ii) the speaker respects the addressee.'

(149) Japanese — Second person object

a. ***Anata****-ni* *hontoo-no* *koto-o* *tutae-te* *ok-u.*
you.HON-DAT true-GEN feeling-ACC tell-CV PRF-PRS
'I will have told you the truth.'

b. ***Anata****-ni* *hontoo-no* *koto-o* *tutae-te* *oki-mas-u.*
you.HON-DAT true-GEN feeling-ACC tell-CV PRF-HON$_A$-PRS
'(i) I will have told you the truth;
(ii) the speaker respects the addressee.'

This generalization holds irrespective of the presence of overt subject/object-honorific marking. For example, even with overt honorific morphology on the verb, addressee-honorific markers can be used without any problems.

[33] **Absence of an addressee-honorific marker:** Nevertheless, sentences with an addressee-honorific marker are much more commonly used. Absence of an addressee-honorific marker makes the sentence sound like a sentence from a monologue or soliloquy.

(150) Japanese Subject-honorifics

a. ***Anata****-wa* *soo* *yat-te* *itumo* *muri-o*
you.HON-TOP so do-CV always impossible thing-ACC
ossyar*-u.*
say.HONs-PRS
'(i) You are always asking difficult favors (of us) like this (= by doing so);
(ii) the speaker respects the referent of the subject (= you).'

b. ***Anata****-wa* *soo* *yat-te* *itumo* *muri-o*
you.HON-TOP so do-CV always impossible thing-ACC
ossyai-mas*-u.*
say.HONs-HONa-PRS
'(i) You are always asking difficult favors (of us) like this (= by doing so);
(ii) the speaker respects the referent of the subject (= you);
(iii) the speaker respects the addressee.'

(151) Japanese Object-honorifics

a. ***Anata****-ni* *hontoo-no* *koto-o* ***o-****tutae* ***si****-te*
you.HON-DAT true-GEN fact-ACC HON-telling do-CV
ok-u.
PRF-PRS
'(i) I will have told you the truth;
(ii) the speaker respects the referent of the object (= you).'

b. ***Anata****-ni* *hontoo-no* *koto-o* ***o-****tutae* ***si****-te*
you.HON-DAT true-GEN fact-ACC HON-telling do-CV
*oki-****mas****-u.*
PRF-HONa-PRS
'(i) I will have told you the truth;
(ii) the speaker respects the referent of the object (= you);
(iii) the speaker respects the addressee.'

Fourth, addressee-honorific markers exhibit an INTERACTION WITH INTERROGATIVE CLAUSES. It has been known that interrogative clauses are formed by different linguistic means (König and Siemund 2007: 292-303; Whaley 2011:

476). In Japanese, interrogative particles are used to create interrogative clauses. For example, observe the following pairs in (152). The interrogative sentence in (152)b is minimally different from the corresponding declarative sentence in (152)a in that it has an interrogative particle *-ka*.

(152) a. *Kare-wa asita hasiri-**mas**-u.*
he-TOP tomorrow run-HON$_A$-PRS
'(i) He will run tomorrow;
(ii) the speaker respects the addressee.'

b. *Kare-wa asita hasiri-**mas**-u-**ka**.*
he-TOP tomorrow run-HON$_A$-PRS-Q
'(i) Will he run tomorrow?;
(ii) the speaker respects the addressee.'

While the sentence in (152)b can be used as a question that seeks for an answer from the addressee, the sentence becomes unacceptable if we take *-mas* away from the sentence. In other words, addressee-honorific markers are a prerequisite for response-seeking questions; for more detailed description, see Section 3.2.4.[34]

(153) a. *Kare-wa asita hasir-u.*
he-TOP tomorrow run-PRS
'(i) He will run tomorrow;
(ii) the speaker respects the addressee.'

b. * *Kare-wa asita hasir-u-**ka**.*
he-TOP tomorrow run-PRS-Q
'(i) Will he run tomorrow? (intended);
(ii) the speaker respects the addressee.'

[34] **Basque interrogatives:** An interaction between the allocutive marking and interrogatives is seen in Basque, but the situation is just the opposite. Oyharçabal (1993: 100-101) reports that in classical Basque and Souletin, "assertives and interrogatives contrast sharply with respect to the occurrence of allocutivity (ibid. 101)." For example, the following sentence is a question and thus allocutive marking is absent.

(i) *Hire amak badaki?*
you.GEN mother.ERG ba.3.ACC.know.3.ERG
'Does your mother know it?'

Finally, addressee-honorific markers have an INTERACTION WITH IMPERATIVES. Observe the sentence in (154). In general, the addressee-honorific marker is difficult to use in the imperative.

(154) *Kono hon mot-te-masi-ta-yone? Onegai-des-u!*
this book have-PRS-HON$_A$-PST-SFP wish-HON$_A$-PRS
*Kasi-te kudasai-(#**mas**-e)!*
lend-CV APPL$_H$.HON$_S$-HON$_S$-IMP
'(i) You have this book, right? This is my wish! Please lend (me) the book (for my benefit);
(ii) the speaker respects the addressee (intended).'

It is too much to say that *-mas* makes the sentence ungrammatical. Rather, it sounds over-polite and/or archaic. Therefore, it is quite bizarre to use this sentence in our daily lives, such as in the scenario depicted above.

2.2.3.2 Examples

Addressee-honorific construction 1: *-mas*. In Japanese, there are two distinct addressee-honorific markers, *-mas* and *des-*. Of the two, *-mas* is a verbal suffix which only attaches to a verb or other verbal suffixes. For example, observe the sentences in (155). In (155)a, *-mas* is directly preceded by a verb *hasir-* 'run' and, in (155)b, the verb is combined with a verbal suffix *-(s)ase* 'CAUS', to which *-mas* is attached.

(155) a. Verb
*Kare-ga hasiri-**mas**-u.*
he-NOM run-HON$_A$-PRS
'(i) He will run;
(ii) the speaker respects the addressee.'

b. Other verbal suffix
*Kare-ga kanozyo-o hasir-ase-**mas**-u.*
he-NOM she-ACC run-CAUS-HON$_A$-PRS
'(i) He will make her run;
(ii) the speaker respects the addressee.'

On the other hand, *-mas* cannot be used with nouns (= (156)a) or adjectives (= (156)b and (156)c). Furthermore, it cannot be used alone (= (156)d).[35]

(156) a. Noun

Kore-wa raion-mas**-u.*
this-TOP lion-HON$_A$-PRS
'(i) This is a lion;
(ii) the speaker respects the addressee (intended).'

b. *i*-Adjective

Kore-wa utukusiku-mas**-u.*
this-TOP beautiful-HON$_A$-PRS
'(i) This is beautiful;
(ii) the speaker respects the addressee (intended).'

c. *na*-Adjective

Kore-wa rippa-mas**-u.*
this-TOP awesome-HON$_A$-PRS
'(i) This is awesome;
(ii) the speaker respects the addressee (intended).'

d. No preceding element

*Ore-wa hasiri-mas-u. *Soreni kare-mo -**mas**-u.*
I-TOP run-HON$_A$-PRS in addition he-NOM -HON$_A$-PRS
'(i) I will run. In addition, he will also do so;
(ii) the speaker respects the addressee (intended).'

[35] **Adjectives:** Japanese has two morphologically distinct types of adjectives, but neither is used with *-mas*.

INTERACTION WITH NEGATION. The presence of *-mas* affects the morphological realization of the negation suffix. In the plain form (= without *-mas*), the negation marker gets realized as *-(a)nai*. In contrast, it becomes *-en* when used in the polite form (= with *-mas*) (Yamada 2017, 2018c).

(157) a. Plain form
Hasir-{***anai/*en***}.
run-NEG
'(I) will not run.'

b. Polite form
Hasiri-mas-{***anai/en***}.
run-HON$_A$-NEG
'(i) (I) will not run;
(ii) the speaker respects the addressee.'

INTERACTION WITH BE-SUPPORT. The presence of *-mas* also affects the form of the *be*-support element at T. If it is present, we have to change *ar-* 'COP' to *des-* 'COP.HON$_A$' (Yamada 2018c, 2019b); for more information, see Section 3.2.2.

(158) a. Plain form
Hasir-anak {***at/*desi***}*-ta.*
run-NEG COP/COP.HON$_A$-PST
'(I) did not run.'

b. Polite form
Hasiri-mas-en {***at/desi***}*-ta.*
run-HON$_A$-NEG COP/COP.HON$_A$-PST
'(i) (I) will not run;
(ii) the speaker respects the addressee.'

Addressee-honorific construction 2: *des-*. The other addressee-honorific marker is *des-*. It is a copula marker and appears in the position immediately before the tense marker. For example, in Japanese, nouns and adjectives must be used with a copula. Thus, they must be accompanied with this element (= (159)a-c) if they are used in the polite register. As in (159)d, it appears with an elided phrase.

(159) a. Noun

Kore-wa raion ***des****-u.*
this-TOP lion COP.HON$_A$-PRS
'(i) This is a lion;
(ii) the speaker respects the addressee.'

b. *i*-Adjective

Kore-wa utukusii ***des****-u.*
this-TOP beautiful COP.HON$_A$-PRS
'(i) This is beautiful;
(ii) the speaker respects the addressee.'

c. *na*-Adjective

Kore-wa rippa ***des****-u.*
this-TOP awesome COP.HON$_A$-PRS
'(i) This is awesome;
(ii) the speaker respects the addressee.'

d. Ellipsis

Ore-wa hasiri-mas-u. Soreni kare-mo ***des****-u.*
I-TOP run-HON$_A$-PRS in addition he-NOM COP.HON$_A$-PRS
'(i) I will run. In addition, he will also do so;
(ii) the speaker respects the addressee (intended).'

Although these nouns and adjectives are prototypical cases of the *des*-construction, in colloquial Japanese, verbs and other verbal suffixes have also become widely used with *des*- especially when under negation and, for such speakers, *-mas* and *des*- are no longer in complementary distribution. For example, observe the sentences in (160). I will describe some of these more innovative tendencies in Section 2.4.

(160) Free variation in non-prescriptive grammar (colloquial Japanese)

a. *Hasiri-**mas**-en.*
run-HON$_A$-NEG
'(i) (I) will not run;
(ii) the speaker respects the addressee.'

b. *Hasir-anai **des**-u.*
run-NEG COP.HON$_A$-PRS
'(i) (I) will not run;
(ii) the speaker respects the addressee.'

INTERACTION WITH NEGATION. Unlike *-mas*, presence of *des-* does not result in any morphological change in the negation marker.

(161) a. Plain form
Hasir-{***anai/*en***}.
run-NEG
'(I) will not run.'

b. Polite form (New variant)
Hasir-{***anai/*en***} *des-u.*
run-NEG COP.HON$_A$-PRS
'(i) (I) will not run;
(ii) the speaker respects the addressee.'

2.3 Marginal honorific constructions

In the previous subsection, we saw three major honorific classes playing a central role in Harada's (1976) work; (i) subject-honorifics, (ii) object-honorifics and (iii) addressee-honorifics. However, researchers have found some puzzling cases where this tripartite classification does not work as expected, proposing more elaborated classification systems.

Indeed, it is not only the researchers who have been curious about the classification of honorific expressions. The Japanese government made several attempts to elucidate the way honorific expressions are classified. The most recent

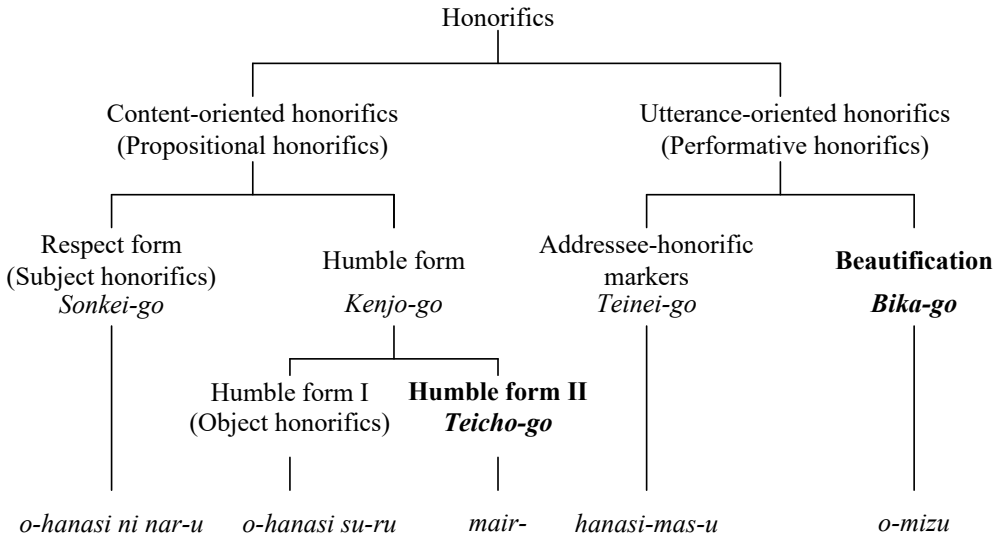


Figure 2.2: Five-way classification proposed in Council for Cultural Affairs (2007)

examination was one conducted on March 30, 2005. The Minister of Education Culture Sports Science and Technology officially consulted with the Council for Cultural Affairs regarding concrete guidelines on appropriate use of honorifics. Over the following two years, the committee consisting of a wide range of 'language experts' (linguists, novelists, translators, and so on) formed several meetings and submitted a reply to the minister on February 2, 2007 (Council for Cultural Affairs 2007), reflecting their findings and decades of discussions about honorifics in Japanese linguistics (Tsujimura 1963, 1968, 1984, 1988; Oishi 1977, 1983; Miyaji 1971a, b; Sugisaki 1984; Kumai 1986, 1988; Kikuchi 1997 [1994], to name a few).[36] One influential remark of this report is its five-way classification system as shown in Figure 2.2. The boldface subcategories are newly identified, i.e., the humble form II (called *teicho-go*) and beautification (called

[36] **Other government-initiated studies on honorifics:** There were two other government-initiated studies on Japanese honorifics. The first attempt was in 1952 and it was published as *Korekara no keego* [*Honorifics from now on*]. The second one was conducted in 2000 and the results were published as *Gendai syakai ni okeru keei hyoogen* [*Honorific expression in modern society*]. The purpose of these two preceding attempts was to make an official, prescriptive grammar. The last attempt in 2007 was, on the other hand, more descriptive and more emphasis was put on the way honorific expressions are used in practice (though there are some remarks on how they are to be used).

bikago).

First, *teicho-go*, or humble form II, refers to honorific elements attached to an addressee-honorific marker to upgrade the quality of the politeness (Miyaji 1971). For example, observe the sentences in (162).

(162) a. {*Sensei/watasi*}*-wa* *raigetu* *kekkon* *si-**mas**-u.*
teacher/I-TOP next year marriage do-HON$_A$-PRS
'(i) {The teacher/I} will get married;
(ii) the speaker respects the addressee.'

b. {*Sensei/*watasi*}*-wa* *raigetu* *kekkon* ***nasai**-mas-u.*
teacher/I-TOP next year marriage do.HON$_S$-HON$_A$-PRS
'(i) {The teacher/*I} will get married;
(ii) the speaker respects the teacher/*me;
(iii) the speaker respects the addressee.'

c. {**Sensei/watasi*}*-wa* *raigetu* *kekkon* ***itasi**-mas-u.*
teacher/I-TOP next year marriage do.HON$_U$-HON$_A$-PRS
(i) '{*The teacher/I} will get married next month;
(ii) the speaker respects the addressee;
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee.'

The sentence in (162)a has an addressee-honorific marker, encoding the speaker's respect for the addressee. In (162)b, a subject-honorific construction is used, encoding the speaker's respect for the referent of the subject. In (162)c, instead of *-nasar*, another honorific expression *itas-* 'do.HON$_U$' is used. It is not a subject-honorific marker; the referent of the subject cannot be a person the speaker respects. Rather, it should be the speaker or his or her associate(s) who is given a (social) status lower than that of the addressee. As a result, the speaker's deference to the addressee is strengthened. Such an honorific element does not fit into any of the three major categories we have seen above. A different grammatical category needed to be identified and as such, 'teicho-go' was added.

Second, *bika-go* 'beautification' or 'beautified words' is the category named by Tsujimura (1958, 1963, 1988). They are words that give the audience

an impression that the speaker has chosen a word with a noble nuance. For example, observe the sentences in (163). Flowers can be referred in two different ways. One of them is *hana* 'flower,' as in (163)a. The other is *o-hana*, which is a combination of *hana* 'flower' and the honorific prefix *o-* 'HON,' as in (163)b.

(163) Beautification

a. *Watasi-wa* *hana-ga* *hosii.*
I-TOP flower-NOM want
'I want flowers.'

b. *Watasi-wa* ***o-****hana-ga* *hosii.*
I-TOP HON-flower-NOM want
'I want flowers.'

Truth-conditionally, these two sentences are equivalent. However, the use of *o-hana* in place of *hana* gives an impression that the speaker is a noble person. Notice that the speaker is not expressing his or her respect for the flower or the person who sells the flower.[37] Since no respect is given to anyone, it is not an honorific expression in the strict sense. Rather, the use of *o-hana* 'HON-flower' creates a good public image of the speaker.

In addition to these newly incorporated honorific categories, researchers have also found another group of words which seems to be related to honorific elements. Such words are *aratamari-go* 'formalization.' It has been debated whether this is a genuine honorific expression or not. For example, Council for Cultural Affairs (2007) excludes this from the repertories of honorifics (Figure 2.2).

In this subsection, we will examine these three marginal honorific and semi-honorific categories. In Section 2.3.1, we will see *teicho-go*. In Section 2.3.2, we will see *bika-go* 'beautification.' Finally, a description about *aratamari-go* 'formalization' will be discussed in Section 2.3.3.

[37] **Ambiguity:** It is not impossible, though, for the sentence in (163)b to be used to encode the speaker's deference to the employee of the shop who sells the flowers.

2.3.1 Addressee-honorific upgraders (*Teicho-go*)

2.3.1.1 Overview

Researchers have found a set of honorific elements which show some properties of both content-honorific markers and addressee-honorific markers. In Japanese linguistics, *teicho-go* is the most common grammatical term to refer to these elements (Miyaji 1971; Tsujimura 1988). As far as this study is aware, there is no entrenched English translation.[38] For convenience's sake, I call them ADDRESSEE-HONORIFIC UPGRADERS (or, AH-UPGRADERS for short) reflecting the properties we will see below.

Examples. An example of AH-upgrader use is given in (164)b; I use HON$_U$ for the gloss of AH-upgraders. The only difference between (164)a and (164)b is the form of the verb *say*. In (164)a, the unmarked verb *iw*- (*ii*-) 'say' is used. In (164)b, this verb is replaced with *moos*- 'say.HON$_U$.' This replacement results in a change of the level of politeness. (164)a is already polite because of *-mas* but (164)b is even more polite than (164)a. In other words, the honorific meaning of *-mas* is 'upgraded.'

[38] **Courtesy honorifics**: Oshima (2018) coins the term 'courtesy honorifics' to refer to these expressions.

(164) Addressee-honorific upgraders (*teicho-go*)

a. *Watasi-wa* *sono* *yakuza-ni* [*yakuza-o* *yamer-u* *yooni*]
I-TOP that gangster-DAT gangster-ACC stop-PRS C
***ii**-masi-ta.*
say-HON$_{A}$-PST
'(i) I told the gangster to quit a life of a gangster;
(ii) the speaker respects the addressee.'

b. *Watasi-wa* *sono* *yakuza-ni* [*yakuza-o* *yamer-u* *yooni*]
I-TOP that gangster-DAT gangster-ACC stop-PRS C
***moosi**-masi-ta.*
say.HON$_{U}$-HON$_{A}$-PST
'(i) I told the gangster to quit a life of a gangster;
(ii) the speaker respects the addressee;
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee.'

General characteristics. Two important properties deserve our attention. First, existence of *-mas* is a prerequisite for the use of AH-markers. Observe the pairs of sentences in (165) and (166). While the verb *sir-* 'know' can be used in the plain form (= (165)a) and in the polite form (= (165)b), the plain form is illicit when it is replaced with the AH-honorific marker *zonzi-* 'know.HON$_{U}$,' as illustrated in (166)a. If an AH-upgrader is used, *-mas* must be present (= (166)b).

(165) a. ***Watasi**-wa* *sore-o* ***sir**-anai.*
I-TOP it-ACC know-HON$_{A}$-NEG
'I do not know that.'

b. ***Watasi**-wa* *sore-o* ***siri**-mas-en.*
I-TOP it-ACC know-HON$_{A}$-NEG
'(i) I do not know that;
(ii) the speaker respects the addressee.'

(166) a. * ***Watasi****-wa* *sore-o* ***zonzi****-nai.*
I-TOP it-ACC know.HONU-HONA-NEG
'(i) I do not know that;
(ii) the referent of the subject, who is in the speaker's territory, is not as highly respected as the addressee (intended).'

b. ***Watasi****-wa* *sore-o* ***zonzi****-mas-en.*
I-TOP it-ACC know.HONU-HONA-NEG
'(i) I do not know that;
(ii) the speaker respects the addressee;
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee.'

Second, as in the case of content-honorific markers, AH-upgraders impose restrictions on the subject noun phrase (save one *gozar-*, which we will see in detail below)[39] — (i) the subject of the clause is either the speaker himself or his associate and (ii) the speaker thinks that the referent of the subject has a social status lower than the addressee.[40] As a result, the quality of the speaker's respect for the addressee is enhanced, or upgraded. Typically, (165)b is used in a more formal, more polite register than (166)b. This is evidenced by the second-person restriction. Observe the sentences in (167). While *your sister* is compatible with the plain form *sir-* 'know' as in (167)a, it is illicit with the AH-upgrader *zonzur-* 'know.HONU' as in (167)b. This is because *your sister* is

[39] **The status of *gozar-*:** Since this *gozar-* lacks this subject restriction, previous studies have not treated this as an AH-upgrader. Nevertheless, *gozar-* cannot be used unless there exists an addressee-honorific marker, which is a distinct feature of AH-upgraders.

[40] **Historical change:** The requirement that the referent of the subject should be a the speaker's associate is said to be a condition only observed in contemporary Japanese. For example, the sentence in (i) is typically used when the speaker has a high social status and asks a name of a person who the speaker thinks is a stranger and has a social status lower than the speaker (Tsujimura 1988: 48).

(i) Archaic Japanese
Onusi *na-wa* *nan-to* ***moos****-u?*
you name-TOP what-as say.HONU-PRS
'(i) How do you say your name?
(ii) the subject of the referent has a status lower than the speaker.'

close to the addressee, not the speaker.[41]

(167) a. ***Anata-no imooto**-wa sore-o **siri**-mas-en.*
you-GEN sister-TOP it-ACC know-HON$_A$-NEG
'(i) Your sister does not know that;
(ii) the speaker respects the addressee.'

b. * ***Anata-no imooto**-wa sore-o **zonzi**-mas-en.*
you-GEN sister-TOP it-ACC know.HON$_U$-HON$_A$-NEG
'(i) Your sister does not know that;
(ii) the speaker respects the addressee;
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (intended).'

Relation with other honorific markers. In the past, due to the fact they lower the status of the referent of the subject, AH-upgraders were regarded as a special type of humble form (object-honorific marker) — the classification in Figure 2.2 reflects such a view. However, unlike object-honorific markers, they do not impose any restriction on the object noun phrase. For example, remember the contrast in (168). In the non-object-honorific sentence in (168)a, the object noun may refer to an individual who the speaker does not respect, whereas, in the object-honorific construction, the object needs to be someone who he respects, as the unacceptability in (168)b suggests.

[41] **Person-restriction in periphrastic expressions:** As we see in Section 2.3.1.2.2, some AH-upgraders have grammaticalized and are used higher positions (i.e., Position C in (170)). Such higher AH-upgraders seem to be devoid of the restriction on the subject. See, for example, the sentences in (198), (200) and (199).

(168) Object-honorifics

a. *Watasi-wa sono yakuza-ni* [*yakuza-o yamer-u yooni*]
I-TOP that gangster-DAT gangster-ACC stop-PRS C
ii-masi-ta.
say-HON$_{A}$-PST

b. # *Watasi-wa* ***sono yakuza-ni*** [*yakuza-o yamer-u*
I-TOP that gangster-DAT gangster-ACC stop-PRS
yooni] ***moosiage****-masi-ta.*
C say.HON$_{O}$-HON$_{A}$-PST
'(i) I told the gangster to quit a life of a gangster;
(ii) I respect the gangster.'

In contrast, AH-upgraders do not have such a restriction (Kikuchi 1997 [1994]: 254), suggested by the acceptability of the sentence in (169).

(169) Addressee-honorific upgraders (teicho-go)

Watasi-wa ***sono yakuza-ni*** [*yakuza-o yamer-u yooni*]
I-TOP that gangster-DAT gangster-ACC stop-PRS C
moosi*-masi-ta.*
say.HON$_{U}$-HON$_{A}$-PST
'(i) I told the gangster to quit a life of a gangster;
(ii) I respect the addressee;
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee.'

This suggests that there is no relation between AH-upgraders and the object noun phrase. In this regard, AH-upgraders are different from object-honorific markers. Instead of viewing them as a subtype of object-honorific markers as assumed in Figure 2.2, it is, perhaps, more appropriate for us to consider them as 'hybrid' honorific expressions inheriting properties from both (anti-)subject-honorific markers (content-honorifics) and addressee-honorific expressions (utterance-honorifics).

Positions. Finally, it is important to distinguish two positions for the AH-upgraders. In Section 2.2.1, we have seen three different positions for the

	plain forms		AH-upgraders		page
Position A (Tier of argument structure)					
verbs-of-saying	*iw-*	'say'	*moos-*	'say.HONU'	p. 131
verbs-of-thinking/ knowing	*omow-*	'think'	*zonzur-*	'know.HONU'	p. 132
	sir-	'know'	*zonzur-*	'know.HONU'	
verbs-of-action	*sur-*	'do'	*itas-*	'do.HONU'	p. 133
verbs-of-movement	*ik-*	'go'	*mair-*	'go.HONU'	p. 136
	kur-	'come'	*mair-*	'come.HONU'	
verbs-of-existence	*i-*	'be (animate)'	*or-*	'be.HONU (animate)'	p. 138
	ar-	'be (inanimate)'	*gozar-*	'be.HONU'	p. 138
			ar-	'be.HONU'	p. 141
Position C (Tier of *v*P-periphery)					
	-te ik-	'come to'	*-te mair-*	'come to.HONU'	p. 142
	-te kur-	'come to'	*-te mair-*	'come to.HONU'	
	-te i-	'PRG/PRF'	*-te or-*	'PRG/PRF.HONU '	p. 143
	-te ar-	'PRF'	*-te gozar-*	'PRF.HONU'	p. 144

Table 2.11: Addressee-honorific upgraders

subject-honorific markings; (i) the tier of argument structure (Position A); (ii) the tier of voice-oriented expressions (Position B); and (iii) the tier of *v*P-periphery (Position C). The AH-upgraders appear in two of such positions — in the tier of argument structure (Position A) and the tier of aspectual expressions (Position C).

(170)

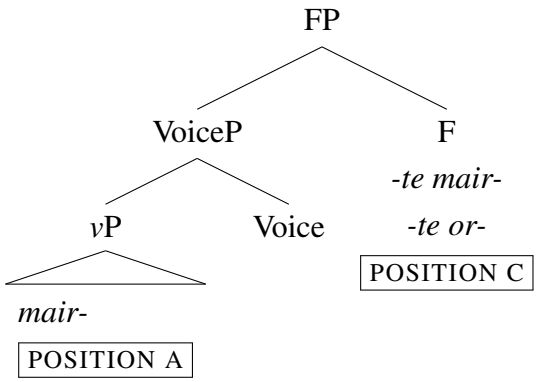


Table 2.11 summarizes the list of AH-upgraders. The examples we have seen are all AH-upgraders in the tier of argument structure (Position A). An example of AH-upgrader in Position C is given in (171), where the progressive/perfective construction *-te or* is used, which is an AH-upgrader for *-te i-* 'PRG/PRF' (Shirai

2000; Nishiyama 2006).

(171) *-te i-* construction

a. *Watasi-wa ohiru gohan-o tabe-te **i**-mas-u.*
I-TOP lunch meal-ACC eat-CV PRF-HON$_A$-PRS
'(i) I have eaten my lunch;
(ii) the speaker respects the addressee.'

b. *Watasi-wa ohiru gohan-o tabe-te **ori**-mas-u.*
I-TOP lunch meal-ACC eat-CV PRF.HON$_U$-HON$_A$-PRS
'(i) I have eaten my lunch;
(ii) the speaker respects the addressee (< *-mas*);
(iii) (iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *or-*).'

Notice that we have seen a similar replacement when we discussed the subject-honorific marking (Section 2.2.1.2.3). For example, observe the sentence in (172). In both cases, the marking of the aspectual head manipulates the honorific information of the subject noun phrase.

(172) *Sensei-wa ohiru gohan-o tabe-te **irassyai**-mas-u.*
I-TOP lunch meal-ACC eat-CV PRF.HON$_S$-HON$_A$-PRS
'(i) The teacher has eaten his lunch;
(ii) the speaker respects the referent of the subject (< *-te irassyar-*);
(iii) the speaker respects the addressee (< *-mas*).'

The detailed examination of AH-upgraders is beyond the scope of this dissertation. However, when we discuss embedded addressee-honorific markers in Chapter 5, they play an important role. Embedded addressee-honorific markers typically appear in the hyperpolite speech style, which in many cases requires AH-upgraders to be present within the same sentence (see Section 5.2.1). Here, we will see some fundamental facts about AH-upgraders in contemporary Japanese. In Section 2.3.1.2.1, we will examine the tier of argument structure (Position A). Then, in Section 2.3.1.2.2, we will see the tier of *v*P-periphery (Position C). Finally, the interaction between the two tiers is discussed in 2.3.1.2.3.

2.3.1.2 Examples

2.3.1.2.1 Position 1: Tier of argument structure

AH-upgrader 1: *moos-* 'say.HON$_U$.' Historically, the verb *moos-* 'say.HON$_U$' used to be an object-honorific marker. But in contemporary Japanese, it is exclusively used as an AH-upgrader of the verb *iw-* 'say'; cf., nowadays, the object-honorific marker for *iw-* 'say' is *moosiage-* 'say.HON$_O$.'

Examples in (173) illustrate this contrast. Unlike the object-honorific marker in (173)b, the AH-upgrader *moos-* does not impose any restriction on the object noun phrase, as shown in (173)a.

(173) *moos-* 'say.HON$_U$' and *moosiage-* 'say.HON$_O$'

a. *Watasi-wa* ***sono yakuza****-ni* [*yakuza-o* *yamer-u* *yooni*]
I-TOP that gangster-DAT gangster-ACC stop-PRS C
moosi*-masi-ta.*
say.HON$_U$-HON$_A$-PST
'(i) I told the gangster to quit a life of a gangster;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *moos-*).'

b. # *Watasi-wa* ***sono yakuza****-ni* [*yakuza-o* *yamer-u*
I-TOP that gangster-DAT gangster-ACC stop-PRS
yooni] ***moosiage****-masi-ta.*
C say.HON$_O$-HON$_A$-PST
'(i) I told the gangster to quit a life of a gangster;
(ii) the speaker respects the gangster (< *moosiage-*);
(iii) the speaker respects the addressee (< *-mas*).'

As mentioned above, it cannot be used with a second-person subject, as shown in (174). This is the mirror image of the subject-honorific marker, *ossyar-* 'say.HON$_S$,' which is illicit with the first person subject, as shown in (175).

(174) * ***Anata****-wa sono yakuza-ni* [*yakuza-o yamer-u yooni*]
you-TOP that gangster-DAT gangster-ACC stop-PRS C
moosi*-masi-ta.*
say.HON$_U$-HON$_A$-PST
'(i) I told the gangster to quit a life of a gangster;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject (= the addressee), who belongs to the speaker's territory, is not as highly respected as the addressee (< *moos-* ; intended).'

(175) {**Watasi/anata*}*-wa sono yakuza-ni* [*yakuza-o yamer-u*
I/you-TOP that gangster-DAT gangster-ACC stop-PRS
yooni] ***ossyai****-masi-ta.*
C say.HON$_S$-HON$_A$-PST
'(i) {*I/you} told the gangster to quit a life of a gangster;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the speaker respects the referent of the subject (= *I/you) (< *ossyar-*).'

AH-upgrader 2: *zonzur-* 'think/know.HON$_U$.' *Zonzur-* is another AH-upgrader, the suppletive form for both *omow-* 'think' and *sir-* 'come to know.' First, the sentence in (176)b is an instance of the suppletive form for *omow-* 'think.'

(176) a. *Watasi-wa* [*sono an-wa muzukasii-ka-to*] ***omoi****-mas-u.*
I-TOP that plan-TOP difficult-Q-C think-HON$_A$-PRS
'(i) I think that the plan is difficult;
(ii) the speaker respects the addressee (< *-mas*).'

b. *Watasi-wa* [*sono an-wa muzukasii-ka-to*]
I-TOP that plan-TOP difficult-Q-C
zonzi*-mas-u.*
think.HON$_U$-HON$_A$-PRS
'(i) I think that the plan is difficult;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *zonzi-*).'

Second, an example of *zonzur-* with the meaning 'come to know' is given in (177)b. The corresponding non-honorific form is *sir-* (*siri-*) in (177)a.

(177) a. *Watasi-wa sono yakuza-wa* ***siri****-mas-en.*
I-TOP that gangster-FOC know-HON$_A$-NEG
(i) I do not know the gangster;
(ii) I respect the addressee.'

b. *Watasi-wa sono yakuza-wa* ***zonzi****-mas-en.*
I-TOP that gangster-FOC know.HON$_U$-HON$_A$-NEG
'(i) I do not know the gangster;
(ii) the speaker respects the addressee;
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *zonzi-*).'

Notice that the sentence in (178) is illicit because *zonziage-* 'know.HON$_O$' is an object-honorific marker. The contrast between (177)b and (178) shows that an AH-upgrader is orthogonal to the respect for the referent of the object.

(178) # *Watasi-wa sono yakuza-wa* ***zonziage****-mas-en.*
I-TOP that gangster-FOC know.HON$_O$-HON$_A$-NEG
'(i) I do not know the gangster;
(ii) the speaker respects the gangster.'

AH-upgrader 3: *itas-* 'do.HON$_U$'. The verb *itas-* 'do.HON$_U$' is the suppletive form for *sur-* (*si-*) 'do.' Observe the sentences in (179).

(179) a. *Sore-wa watasi-ga **si**-masi-ta.*
that-TOP I-NOM do-HON$_{A}$-PST
'(i) (I) did it;
(ii) the speaker respects the addressee.'

b. *Sore-wa watasi-ga **itasi**-masi-ta.*
that-TOP I-NOM do.HON$_{U}$-HON$_{A}$-PST
'(i) (I) did it;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *itas-*).'

FOUR USES OF *sur-* 'DO'. In Japanese, *sur-* 'do' is used in four ways. First, it can be used as a lexical verb meaning 'do'. The *sur-* in (179)a is of this type and the example in (179)b shows that *itas-* 'do.HON$_{U}$' can be used as a lexical verb.

Second, *sur-* and *itas-* can be used as a light verb. Observe the sentences in (180). The word *hakken* is a noun but, with the aid of *sur-* 'do,' it can be used as a predicate (= (180)a). By replacing *sur-* with *itas-*, we can increase the amount of respect.

(180) *sur-* 'do' and *itas-* 'do.HON$_{U}$'

a. *Sore-wa watasi-ga hakken **si**-masi-ta.*
that-TOP I-NOM discovery do-HON$_{A}$-PST
'(i) (I) did it;
(ii) the speaker respects the addressee.'

b. *Sore-wa watasi-ga hakken **itasi**-masi-ta.*
that-TOP I-NOM discovery do.HON$_{U}$-HON$_{A}$-PST
'(i) (I) did it;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *itas-*).'

Third, *sur-* and *itas-* are both used as a *do*-support element (Yamada 2019b). Observe the sentences in (181).

(181) *do*-support

a. *Watasi-wa susume-masi-ta.*
I-TOP recommend-HON$_A$-PST
'(i) I recommended;
(ii) the speaker respects the addressee.'

b. *Watasi-wa susume-wa **si**-masi-ta.*
I-TOP recommend-FOC do-HON$_A$-PST
'(i) Recommend, I did;
(ii) the speaker respects the addressee.'

c. *Watasi-wa susume-wa **itasi**-masi-ta.*
I-TOP recommend-FOC do.HON$_U$-HON$_A$-PST
'(i) Recommend, I did;
(ii) the speaker respects the addressee;
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *itas*-).'

When we want to focalize the verb phrase *susume*- in (181)a, the focus marker *-wa* is attached to the verb. This is what is shown in (181)b. Here, the verb is no longer adjacent to *-mas*. In such a case, *sur*- 'do' is inserted; i.e., the sentence in (182) is ungrammatical. This inserted *sur*- 'do' can be replaced with *itas*- 'do.HON$_U$,' as in (181)c, when it is uttered in the hyperpolite speech style.

(182) * *Watasi-wa susume-wa masi-ta.*
I-TOP recommend-FOC HON$_A$-PST
'(i) Recommend, I did;
(ii) the speaker respects the addressee (intended).'

Finally, as we have discussed, *sur*- is also used in the periphrastic object-honorific construction. An example is given in (183)a. This *sur*- 'do' can also be replaced with *itas*-, as shown in (183)b.

(183) a. *Sensei-ni* *kono* *koto-o* ***o-****tutae* ***si****-mas-u.*
teacher-DAT this thing-ACC HON-telling do-HON$_A$-PRS
'(i) I will tell the teacher about this;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the speaker respects the teacher (< *o-... sur-*).'

b. *Sensei-ni* *kono* *koto-o* ***o-****tutae* ***itasi****-mas-u.*
teacher-DAT this thing-ACC HON-telling do.HON$_U$-HON$_A$-PRS
'(i) I will tell the teacher about this;
(ii) the speaker respects the addressee;
(iii) the speaker respects the teacher (< *o-... sur-*);
(iv) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *itas-*).'

AH-upgrader 4: *mair-* 'go/come.HON$_U$'. Although the verb *mair-* was used as an object-honorific marker, it is nowadays used as the suppletive AH-upgrader for *ik-* 'go' and *kur-* 'come'; cf., in contemporary Japanese, the object-honorific marker is *ukagaw-* 'go/come.HON$_O$.'[42] The contrast in (184) shows that, unlike object-honorific markers, *mair-* has nothing to do with the referent of the *ni*-marked noun phrase (and/or the possessor of the place).

(184) a. # *Watasi-wa* *hannin-no* *ie-ni* ***ukagai****-masi-ta.*
I-TOP culprit-GEN house-DAT come.HON$_O$-HON$_A$-PST
'(i) I went to the house of the culprit;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the speaker respects the culprit's house (< *uakagaw-*).'

b. *Watasi-wa* *hannin-no* *ie-ni* ***mairi****-masi-ta.*
I-TOP culprit-GEN house-DAT come.HON$_U$-HON$_A$-PST
'(i) I went to the house of the culprit;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *mair-*).'

[42] **Object-honorific *ma(w)ir-*:** The object-honorific use of *mair-* 'come.HON$_O$' developed into *-mas*. See Section 2.4.

The deictic difference between *ik-* 'go' and *kur-* 'come' is neutralized in the AH-upgrader. For example, the *mair-* in (185)b is the suppletive form for *ik-* 'go' but *mair-* 'come.HON$_U$' in (185)b is the suppletive for *kur-* (*ki* is its allomorph), as clearly seen from their corresponding non-honorific sentences.

(185) *ik-* 'go' and *ik-* 'go.HON$_U$'

a. *Watasi-wa gakko-ni* {***iki/*ki***}*-mas-u.*
I-TOP school-DAT go/come-HON$_A$-PRS
'(i) I will go to school;
(ii) the speaker respects the addressee.'

b. *Watasi-wa gakko-ni* ***mairi****-mas-u.*
I-TOP school-DAT go.HON$_U$-HON$_A$-PRS
'(i) I will go to school;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *mair-*).'

(186) *kur-* 'come' and *mair-* 'come.HON$_U$'

a. *Densya-ga* {***iki/ki***}*-mas-u.*
train-NOM go/come-HON$_A$-PRS
'(i) A train is coming;
(ii) the speaker respects the addressee.'

b. *Densya-ga* ***mairi****-mas-u.*
train-NOM go/come.HON$_U$-HON$_A$-PRS
'(i) A train is coming;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *mair-*).'

The referent of the subject should belong to the speaker's territory. For example, the sentence in (186)b is typically used by station attendants speaking to passengers. In contrast, the sentence cannot be felicitously uttered if the speaker is just a passenger who is informing another passenger of the arrival of the train,

because this speaker has nothing to do with the train; i.e., the train is outside the territory of the speaker.

AH-upgrader 5: *or-*. The AH-marker for *i-* 'be/exist' is *or-* 'be/exist.HON$_U$.' An example is given below.

(187) a. *Watasi-wa koko-ni **i**-mas-u.*
I-TOP here-at be-HON$_A$-PRS
'(i) I am here;
(ii) the speaker respects the addressee.'

b. *Watasi-wa koko-ni **ori**-mas-u.*
I-TOP here-at be-HON$_A$-PRS
'(i) I am here;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *or-*).'

The referent of the subject must be the speaker's associate and be considered to have a social status lower than the addressee. Thus, the following sentence sounds unacceptable (under the context where the speaker respects the teacher).

(188) # *Sensei-wa koko-ni **ori**-mas-u.*
teacher-TOP here-at be.HON$_U$-HON$_A$-PRS
'(i) The teacher is here;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *-or*).'

AH-upgrader 6: *gozar-*. We saw that a plain form for the copula element is *da* 'COP' and, by replacing this *da* with *des-*, we can encode the speaker's deference to the addressee. For example, observe the following sentences:

(189) a. with *da*

*Kono koto-wa yurusi-gatai koto **da**.*
this thing-TOP forgive-hard thing COP-PRS
'This event is an event hard to forgive.'

b. with *des-*

*Kono koto-wa yurusi-gatai koto **des**-u.*
this thing-TOP forgive-hard thing COP.HON$_{A}$-PRS
'(i) This event is an event hard to forgive;
(ii) the speaker respects the addressee.'

But in fact, there is another copula construction in contemporary Japanese, i.e., *de ar-* 'COP be' as shown in (195)a. By replacing *de ar-* with *de gozai-mas-*, we can also encode the speaker's respect for the addressee but the politeness degree in (190)b is much higher than the level in (189)b.[43]

(190) a. with *de ar-*

*Kono koto-wa yurusi-gatai koto **de** **ar**-u.*
this thing-TOP forgive-hard thing COP be-PRS
'This event is an event hard to forgive.'

b. with *gozai-mas-*

*Kono koto-wa yurusi-gatai koto **de** **gozai**-mas-u.*
this thing-TOP forgive-hard thing COP be.HON$_{U}$-HON$_{A}$-PRS
'(i) This event is an event hard to forgive;
(ii) the speaker respects the addressee;
(iii) the respect is very high.'

First, as in the case of other AH-upgraders, *gozar-* cannot be used alone without *-mas*. Not only does *gozar-* require *-mas* to be within the same clause but it must also be linearly adjacent to *-mas*. That is, it cannot be separated from the addressee-honorific marker.

[43] ***Gozari-mas-*:** Given morphphonological rules in contemporary Japanese, it is predicted that a consonant-stem verb/auxiliary must retain its stem-ending consonant. Thus, *gozari-mas-* is the predicted form and, indeed, this form was grammatical in Edo-period Japanese. However, for unknown reasons, *gozai-mas-* is the correct form in contemporary Japanese (Tsujimura 1968: 53; Fukushima 2016).

(191) Without an AH-upgrader

a. *Kawat-ta* *hito-mo* *i-mas-u.*
strange-PRF person-also be-HON$_A$-PRS
'(i) A strange man also exists;
(ii) the speaker respects the addressee.'

b. *Kawat-ta* *hito-mo* *i-wa* *si-mas-u.*
strange-PRF person-also be-FOC do-HON$_A$-PRS
'(i) A strange man also does exist;
(ii) the speaker respects the addressee.'

(192) With *gozar-*

a. *Kawat-ta* *hito-mo* ***gozai**-mas-u.*
strange-PRF person-also be.HON$_U$-HON$_A$-PRS
'(i) A strange man also exists;
(ii) the speaker respects the addressee;
(iii) the respect is very high.'

b. * *Kawat-ta* *hito-mo* ***gozai**-wa* *si-mas-u.*
strange-PRF person-also be.HON$_U$-FOC do-HON$_A$-PRS
'(i) A strange man also does exist;
(ii) the speaker respects the addressee;
(iii) the respect is very high (intended).'

Second, unlike other AH-upgraders, there is no restriction on the subject. As a result, *gozar-* can be used with a subject-honorific marking. Observe the following example below.

(193) *Sensei-wa* *o-tukare* *de* ***gozai**-mas-u.*
teacher-TOP HON-being tired COP be.HON$_U$-HON$_A$-PRS
'(i) The teacher is tired;
(ii) the speaker respects the referent of the subject (= the teacher);
(iii) the speaker respects the addressee;
(iv) the respect for the addressee is very high.'

For these reasons, *gozar-* should not be treated in exactly the same way as other AH-upgraders. One important commonality, however, is its close rela-

tion with addressee-honorific markers. As demonstrated by the contrast between (190)b and (194), *-mas* is a necessary condition for the use of *gozar-* (at least, in contemporary Japanese). Thus, I take *gozar-* as a member of AH-upgraders, assuming that the way politeness is upgraded differs among AH-upgraders.

(194) * *Kono koto-wa yurusi-gatai koto* ***de*** ***gozar****-u.*
this thing-TOP forgive-hard thing COP be.HON$_U$-PRS
'(i) This event is an event hard to forgive;
(ii) the speaker respects the addressee is very high (intended).'

AH-upgrader 7: *ar-*. In place of *gozar-*, *ar-* is also used to affect the politeness meaning associated with addressee-honorification (Miyachi 1980: 701-727). For example, the pair of the sentences in (195) is exactly the same as the pair in (190) except that *gozai-* in the b-sentence is replaced with *ar-*. The sentence in (190)b is commonly used in a very formal situation, such as in a speech in the Diet or in very prestigious ceremonies.[44]

(195) a. with *-de ar-*

Kono koto-wa yurusi-gatai koto ***de*** ***ar****-u.*
this thing-TOP forgive-hard thing COP be-PRS
'This event is an event hard to forgive.'

b. with *ari-mas-*

Kono koto-wa yurusi-gatai koto ***de*** ***ari****-mas-u.*
this thing-TOP forgive-hard thing COP be.HON$_U$-HON$_A$-PRS
'(i) This event is an event hard to forgive;
(ii) the speaker respects the addressee;
(iii) the situation is formal.'

[44] **Marginal status:** There are few studies discussing this *-de ar-* construction. Its frequency is very low, so previous studies have not included this marker as a member of AH-UPGRADERS. Moreover, it is not clear whether it contributes to enhance the politeness level; some might argue that it rather indicates that the register is formal.

2.3.1.2.2 Position 2: Tier of *v*P-periphery

AH-upgrader 8: *-te mair-* '-CV .HONU'. Both *ik-* 'go' and *kur-* 'come' are used in the idiomatic, periphrastic constructions *-te ik-* and *-te kur-* (Kubota 2010). There are several related, yet distinct meanings encoded by these constructions. Here we will examine the aspectual *-te ik-/kur-*, which are used to refer to an ongoing event that at least holds at the reference time.

(196) a. *-te ik-*

{**Kore made/kore kara*} *itigakki* *nihongo-o* *osie-**te***
this until/this from one semester Japanese-o teach-CV
***iki**-mas-u.*
come-HONA-PST

'(i) From now, I am going to teach Japanese for one semester;
(ii) the speaker respects the addressee.'

b. *-te kur-*

{*Kore made/*kore kara*} *itigakki* *nihongo-o* *osie-**te***
this until/this from one semester Japanese-o teach-CV
***ki**-masi-ta.*
come-HONA-PST

'(i) Up until now, I have been teaching Japanese for one semester;
(ii) the speaker respects the addressee.'

These constructions differ in deixis. The *-te ik-* construction has a look-ahead perspective; the event holds at the reference time as well as in the interval that follows this reference time (provided that no unexpected thing happens). For example, in (196)a, the *teaching* event lasts for one semester from now (= the reference time). Adverbs that highlight the prior event time are not compatible with this construction. In contrast, *-te kur-* is associated with a look-back perspective; the event must hold not only at the reference time but also in the interval that precedes the reference time. In (196)b, there has been an teaching event up until the reference time. Look-ahead time adverbs are incompatible wiht the *-te kur-* used in this sentence.

In both cases, we can replace *ik-/kur* with *mair-* 'go/come.HONU' as shown

in (197). Just as with the lexical use in (185) and (186), the difference in deixis is neutralized.

(197) a. {**Kore made/kore kara*} *itigakki* *nihongo-o* *osie-**te***
this until/this from one semester Japanese-o teach-CV
***mairi**-mas-u.*
come.HON$_U$-HON$_A$-PST
'(i) From now, I am going to teach Japanese for one semester;
(ii) the speaker respects the addressee;
(iii) the respect is very high.'

b. {*Kore made/*kore kara*} *itigakki* *nihongo-o* *osie-**te***
this until/this from one semester Japanese-o teach-CV
***mairi**-masi-ta.*
come.HON$_U$-HON$_A$-PST
'(i) Until now, I have been teaching Japanese for one semester;
(ii) the speaker respects the addressee;
(iii) the respect is very high.'

Unlike lexical uses as we saw in (186)b, *mair-* in *-te mair-* does not have a restriction on the subject. For example, the sentence in (198) can be felicitously uttered even when the speaker has no special relation with the sky. Here, the AH-upgrader just enhances the politeness level of the entire sentence.

(198) a. ***Sora**-ga* *kuraku* *nat-**te*** *__ki__-masi-ta.*
sky-NOM dark become-CV come-HON$_A$-PST
'(i) The sky has come to get dark;
(ii) the speaker respects the addressee (< *-mas*).'

b. ***Sora**-ga* *kuraku* *nat-**te*** ***mairi**-masi-ta.*
sky-NOM dark become-CV come.HON$_U$-HON$_A$-PST
'(i) The sky has come to get dark;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the respect is very high (< *-te mair-*).'

AH-upgrader 9: *-te or-* '-CV PRG/PRF.HON$_U$'. The AH-upgrader *or-* can also be used in the tier of *v*P-periphery.

(199) a. *Mizukasa-ga* *masi-**te*** ***i**-mas-u*
volume of the water-NOM increase-CV PRF-HON$_A$-PRS
'(i) The volume of the water has increased;
(ii) the speaker respects the addressee.'

b. *Mizukasa-ga* *masi-**te*** ***ori**-mas-u*
volume of the water-NOM increase-CV PRF.HON$_U$-HON$_A$-PRS
'(i) The volume of the water has increased;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the respect is very high (< *-te or-*).'

Unlike the use in the tier of argument structure (e.g., (188)), there is no requirement that the subject of the sentence have a social status lower than the addressee. For example, it does not make sense to compare the social status of *the volume of the water* with the addressee. Beside, the sentence in (200) is acceptable, even in the situation where the speaker is clearly respecting the teacher.

(200) *Sensei-wa* *sudeni* *irassyat-**te*** ***ori**-mas-u.*
teacher-TOP already come.HON$_S$-CV PRF.HON$_U$-HON$_A$-PRS
'(i) The teacher has already arrived;
(ii) the speaker respects the referent of the subject (< *irassyar-*);
(iii) the speaker respects the addressee (< *-mas*);
(iv) the respect is very high (< *-te or-*).'

AH-upgrader 10: *-te gozai-* '-CV HON$_U$'. Another AH-upgrader that appears in Position C is *-te gozar-*, the upgrader for a periphrastic progressive/perfective construction *-te i-* '-CV PRG/PRF.' Observe the sentences in (201).

(201) a. *Mizukasa-ga* *masi-**te*** ***i**-mas-u*
volume of the water-NOM increase-CV PRF-HON$_U$-PRS
'(i) The volume of the water has increased;
(ii) the speaker respects the addressee.'

b. (?) *Mizukasa-ga* *masi-**te*** ***gozai**-mas-u*
volume of the water-NOM increase-CV PRF.HON$_U$-HON$_U$-PRS
'(i) The volume of the water has increased;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the respect is very high (< *-te gozar-*).'

While *-te or-* is productively used, this *-te gozar-* form is quite rare in contemporary Japanese; this is why I put a (?) as the acceptability judgment in (201)b.[45]

Just as (198)b and (200), there is no person requirement that the referent of the subject should be someone close to the speaker; it does not make any sense to say that the volume of the water belongs to the speaker's territory.

HISTORICAL ORIGIN. Previous studies have revealed how *gozar-* was grammaticalized into an AH-upgrader (Han 1994; Kawahara 1995; Kinsui 2004, 2005, 2011; Mihara 2010, 2012, 2016; Yi 2011; Fukuzawa 2012; Fukushima 2016). First, this expression originated as a combination of *go-za ar-* 'HON-seat exist,' which became a subject-honorific marker, as shown in (202) (Yuzawa 1959: 113-114; Kinsui 2004, 2005, 2011):

(202) Subject-honorific use (Position A)
. . . nyooboo-wa *hitori-mo* ***goza**-nak* *at-ta.*
noble woman-TOP one-even exist.HON$_S$-NEG be-PST
'(i) There were no women at all (who . . .);
(ii) the speaker respects the referent of the subject (= *women*).' (Kinsui 2011: 169)

[45] **Register:** Unlike the use in the tier of argument structure, *gozar-* in the tier of aspectual expressions sounds rather strange for the speech of ordinary people, if not ungrammatical. Some people find that sentences like (201)b are restricted to conversation between housemaids and servants.

Just as *irassyar-* in contemporary Japanese, *gozar-* can also be placed in the tier of aspectual expressions, as illustrated below.

(203) Subject-honorific (Position C)

*vokonai sumai-**te*** ***gozat**-ta.*
practice Buddhism-CV PRG.HON$_S$-PST
'(i) (he) was practicing Buddhism;
(ii) the speaker respects the referent of the subject.' (Kinsui 2005: 24)

Kinsui (2004, 2005, 2011) reports that the addressee-honorific use developed out of this subject-honorific *gozar-*. The following examples are taken from his studies.

(204) a. Addressee-honorific use (Position A)

... *namidagum-u-mono-mo* ***gozar**-u.*
have tears-PRS-people-also exist.HON$_A$-PRS
'(i) there were also some people who had tears in their eyes;
(ii) the speaker respects the addressee.' (Kinsui 2005: 23)

b. Addressee-honorific use (Position C)

... *mizukasa-ga* *harukani* *masi-**te***
volume of the water-NOM to a great extent increase-CV
***gozar**-u* ...
PRF(PRG).HON$_A$-PRS
'(i) ... the volume of the water has increased (is increasing) to a great extent ...;
(ii) the speaker respects the addressee.' (Kinsui 2005: 23)

Notice that, in these examples, *gozar-* is used without *-mas*. In contemporary Japanese, this is not allowed, as illustrated by the ungrammaticality of the following sentences.

(205) Contemporary Japanese

a. * *namidagum-u-mono-mo* ***gozar**-u.*
have tears-PRS-people-also exist.HON$_U$-PRS
'(i) there were also some people who had tears in their eyes;
(ii) the speaker respects the addressee (intended).'

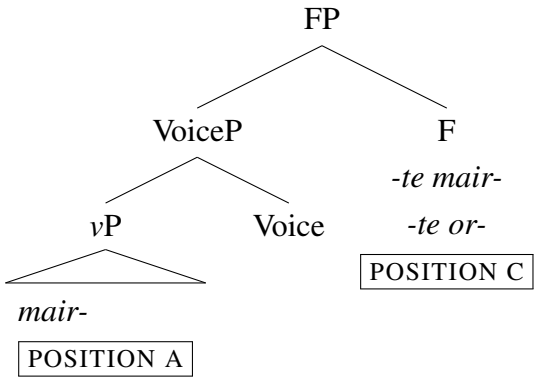
b. * *mizukasa-ga* *harukani* *masi-**te***
volume of the water-NOM to a great extent increase-CV
***gozar**-u*
PRF(PRG).HON$_U$-PRS
'(i) The volume of the water has increased (is increasing) to a great extent;
(ii) the speaker respects the addressee (intended).'

Another important difference lies in morphology. When *gozar-* is followed by *-mas*, the stem-ending consonant *r* is dropped in contemporary Japanese for an unknown reason; *gozai-mas-* is the licit form, not **gozari-mas-* (cf., (51)).[46] But in the past, *gozari-mas-* was a licit form.

2.3.1.2.3 Relation between the tiers

We have seen two distinct positions for AH-markers — the boxed positions in (206) (= (170)); (i) in the tier of argument structure (Position A) and (ii) the tier of *v*P-periphery/aspectual layer (Position C).

(206)



In some cases, AH-markers are used more than once within one single sentence.

[46] **Position of *-mas*:** As we see in Chapter 3, *-mas* is located in a position higher than AspP.

Observe the sentences in (207). The sentence in (207)a is the baseline sentence with no AH-upgraders. We can replace *i-* with *or-* and/or *sir-* with *zonsur-*, as shown through (207)b to d. All these sentences are acceptable (though, to my ear, (207)b and (207)c slightly marked).

(207) *zonzur-* 'come to know.HON$_U$' + *-te or-* 'PRF.HON$_U$'

a. *Sono koto-wa **sit**-te **i**-mas-u.*
that thing-TOP come to know-CV PRF-HON$_A$-PRS
'(i) I know (= have come to know) that;
(ii) the speaker respects the addressee.'

b. ? *Sono koto-wa **sit**-te **ori**-mas-u.*
that thing-TOP come to know-CV PRF.HON$_U$-HON$_A$-PRS
'(i) I know (= have come to know) that;
(ii) the speaker respects the addressee (< *-mas*)';
(iii) the respect is very high (< *-te or-*).'

c. ? *Sono koto-wa **zonzi**-te i-mas-u.*
that thing-TOP come to know.HON$_U$-CV PRF-HON$_A$-PRS
'(i) I know that;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *zonzi-*).'

d. *Sono koto-wa **zonzi**-te **ori**-mas-u.*
that thing-TOP come to know.HON$_U$-CV PRF.HON$_U$-HON$_A$-PRS
'(i) I know that;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *zonzi-*);
((iv) the respect is very high (< *-te or-*)).'

Unlike addressee-honorific markers (= (158)b), the multiple occurrence of AH-upgraders has an effect of enhancing the politeness level. Note that repetition of addressee-honorific markers does not show a similar effect. For example, observe the two sentences in (208). The first sentence has one addressee-honorific marker *-mas*, while the second sentence contains two, i.e., *-mas* and *des-*. Even

though the second sentence contains one more addressee-honorific marker, the tone of politeness is consistent and the same.

(208) *Asita-wa* *hasiri-**mas**-en.* *Soreni,* *kinoo-mo*
tomorrow-TOP run-HON$_A$-NEG in addition yesterday-also
*hasiri-**mas**-en* ***desi**-ta.*
run-HON$_A$-NEG COP.HON$_A$-PST
'Tomorrow, I won't run. In addition, I did not run yesterday, either.'

In contrast, multiple AH-markers result in a change in the politeness degree. For example, the sentence in (209) is inconsistent in politeness (if not impossible), which gives an impression that the speaker is not fluent in hyperpolite register.

(209) # *Kare-wa* *watasi-ni* *soo* ***moosi**-te* *i-masi-ta.* *Soreni,*
he-TOP I-DAT so say.HON$_U$-CV PRF-HON$_A$-PST in addition
kanozyo-ni-mo *soo* ***moosi**-te* ***ori**-masi-ta.*
she-DAT-also so say.HON$_U$-CV PRF.HON$_U$-HON$_A$-PST
'He had told me that. In addition, he had told her that, too.'

INTERACTION WITH OTHER AH-UPGRADERS. From the sentences in (207), we saw that *zonzur-* and *-te or-* can be used together within one single sentence.

However, *mair-* is reluctant to co-occur with the same perfective/progressive *-te or-* construction. First, the non-honorific form *kur-* 'come' (*ki* is its allomorph) can be used with both *-te i-* and *-te or-* as shown in (210)a and (210)b. In contrast, when *kur-* is replaced with *mair-* 'come.HON$_U$,' neither *-te i-* nor *-te or-* is licit as shown in (210)c and (210)d. This suggests that, if *come* is used, we need to encode the AH-upgrader only in the higher position (= Position C).

(210) *mair-* 'come.HON$_U$' + *-te or-* 'PRF.HON$_U$'

a. *Itido Kyoto-ni **ki**-te **i**-mas-u.*
once Kyoto-LOC come PRF-HON$_A$-PRS
'(i) I once came to Kyoto;
(ii) the speaker respects the addressee.'

b. *Itido Kyoto-ni **ki**-te **ori**-mas-u.*
once Kyoto-LOC come PRF.HON$_U$-HON$_A$-PRS
'(i) I once came to Kyoto;
(ii) the speaker respects the addressee;
(iii) the degree of respect is enhanced.'

c. * *Itido Kyoto-ni **mait**-te i-mas-u.*
once Kyoto-LOC come.HON$_U$ PRF-HON$_A$-PRS
'(i) I once came to Kyoto;
(ii) the speaker respects the addressee;
(iii) the degree of respect is enhanced.'

d. *? *Itido Kyoto-ni **mait**-te **ori**-mas-u.*
once Kyoto-LOC come.HON$_U$ PRF.HON$_U$-HON$_A$-PRS
'(i) I once came to Kyoto;
(ii) the speaker respects the addressee;
(iii) the degree of respect is enhanced.'

Second, *-te kur-* (*ki-*; allomorph) 'almost turning to the last stage of' and *-te i-* 'PRG' both have their corresponding AH-upgraded constructions, as shown in (211) and (212).

(211) *-te i-/-te or-* alternation

a. *Sora-ga kuraku nat-**te** **i**-masi-ta.*
sky-NOM dark become-CV PRF-HON$_A$-PST
'(i) The sky had turned dark;
(ii) the speaker respects the addressee.'

b. *Sora-ga kuraku nat-**te** **ori**-masi-ta.*
sky-NOM dark become-CV PRF.HON$_U$-HON$_A$-PST
'(i) The sky had turned dark (by then);
(ii) the speaker respects the addressee.'

(212) *-te kur-/-te mair-* alternation

a. *Sora-ga* *kuraku* *nat-**te*** ***ki**-masi-ta.*
sky-NOM dark become-CV PRF-HON$_A$-PST
'(i) The sky has almost had turned dark;
(ii) the speaker respects the addressee.'

b. *Sora-ga* *kuraku* *nat-**te*** ***mairi**-masi-ta.*
sky-NOM dark become-CV PRF.HON$_U$-HON$_A$-PST
'(i) The sky has almost had turned dark;
(ii) the speaker respects the addressee.'

In theory, there are three possible ways of upgrading the *-mas* in (213)a; namely, (213)b-d. In reality, however, the data suggests that the only acceptable sentence is (213)b. Unlike the combination of lexical and grammatical AH-markers as we saw in (207) (Position A + Position C), the combination of multiple grammatical AH-markers are prohibited (Position C + Position C).

(213) Grammatical AH-upgrader + grammatical AH-upgrader

a. *Sora-ga* *kuraku* *nat-**te*** ***ki-te***
sky-NOM dark become-CV almost come to-CV
***i**-masi-ta.*
PRF-HON$_A$-PST
'(i) The sky had almost turned dark;
(ii) the speaker respects the addressee.'

b. *Sora-ga* *kuraku* *nat-**te*** ***ki-te***
sky-NOM dark become-CV almost come to-CV
***ori**-masi-ta.*
PRF.HON$_U$-HON$_A$-PST
'(i) The sky had almost turned dark;
(ii) the speaker respects the addressee;
(iii) the respect is very high.'

c. * *Sora-ga* *kuraku* *nat-**te*** ***mait-te***
sky-NOM dark become-CV almost come to.HON$_U$-CV
***i**-masi-ta.*
PRF-HON$_A$-PST
'(i) The sky had almost turned dark;
(ii) the speaker respects the addressee;
(iii) the respect is very high (intended).'

d. * *Sora-ga* *kuraku* *nat-**te*** ***mait-te***
sky-NOM dark become-CV almost come to.HON$_U$-CV
***ori**-masi-ta.*
PRF.HON$_U$-HON$_A$-PST
'(i) The sky had almost turned dark;
(ii) the speaker respects the addressee;
(iii) the respect is very high (intended).'

2.3.2 Beautification (Bika-go)

2.3.2.1 Overview

As we saw earlier in Section 2.2.1.2, the prefix *o-/go-* is attached to a noun to encode the speaker's deference to the referent of the noun or the possessor of the

noun. For example, observe the sentence in (214)b (= (10)b). Unlike (214)a, this sentence has a secondary message that the speaker respects the *helper*.

(214) a. *Anata-no tasuke-ga nakere-ba taihen desi-ta.*
you-GEN helping-NOM absent-if trouble COP.HON$_{A}$-PST
'(i) Without your help, I was in trouble;
(ii) the speaker respects the addressee (< *desi-*).'

b. *Anata-no* ***o-****tasuke-ga nakere-ba taihen desi-ta.*
you-GEN HON-helping-NOM absent-if trouble COP.HON$_{A}$-PST
'(i) Without your help, I was in trouble;
(ii) the speaker respects the addressee (< *desi-*);
(iii) the speaker respects the possessor/agent of the helping (= you) (< *o-*).'

The prefix *o-/go-* has, however, another use, which Tsujimura (1963) named BEAUTIFICATION 'bika-go/bisyo' (Miyaji 1971a: 400; Kikuchi 1997 [1994]: 354, 372; Inoue 2010; Takishima 2018; cf., Harada (1976: 542) calls it beautifactive honorifics). For example, compare the two sentences in (215). The minimal difference is that the sentence in (215)b has the prefix *o-*.

(215) a. *Kyoo-wa hana-o kat-ta.*
today-TOP flowers-ACC buy-PST
'Today, I bought flowers.'

b. *Kyoo-wa* ***o-****hana-o kat-ta.*
today-TOP HON$_{B}$-flowers-ACC buy-PST
'(i) Today, I bought flowers;
(ii) the register of this sentence is sophisticated/the speaker is a noble person.'

Unlike the sentence in (214)b, this sentence can be used without any respect at all. If the speaker had respect for flowers, s/he would use the object-honorific, as in (216). But this sentence is almost impossible (unless one has an extraordinary/religious respect for flowers) while the sentence in (215)b is licit.

(216) ?* *Kyoo-wa* ***o-****hana-o* ***o-****kai* ***si****-ta.*
today-TOP HON_B-flower-ACC HON-buying do-PST
'(i) Today, I bought flowers;
(ii) the speaker respects flowers (intended).'

Rather, the existence of *o-* in (215)b is sensitive to the register or the speaker's self-image. The register in which *o-hana* occurs is more sophisticated than the register of *hana*. By choosing a word that suggests a more noble register, the speaker makes his or her speech more 'beautiful' or elegant/noble/sophisticated.[47]

The degree of lexicalization varies from noun to noun and from speaker to speaker. Typically, *o-hana* 'HON-flower' is used by female speakers. It is not as common for male speakers to use *o-hana* as in the sentence in (215)b. But this is not an absolute rule; there are some female speakers who do not use *o-hana* and there are a few male speakers who use *o-hana*. In addition, other beautified words do not behave in a monolitic manner. For example, *susi* 'sushi' can be prefixed by *o-*, *o-susi*. But the sentence in (217)b would be more commonly used by male speakers than the sentence in (215)b.

(217) a. *Kyoo-wa* *susi-o* *kat-ta.*
today-TOP flowers-ACC buy-PST
'Today, I bought sushi.'

b. *Kyoo-wa* ***o-****susi-o* *kat-ta.*
today-TOP HON_B-sushi-ACC buy-PST
'(i) Today, I bought sushi;
(ii) the register of this sentence is sophisticated.'

[47] **Honorifics vs. non-honorifics.** As Kikuchi (1997 [1994]: 354-355) notes, beautification falls between honorific expressions and non-honorific expressions. In the narrowest sense, it is not an honorific expression, because of the lack of a target of honorification. Thus, the beautification would be better studied from a historical perspective — it is quite intriguing to analyze to see the feature/construction on the register has developed from the honorification (or vice versa). It is also beneficial to discuss how the speaker construes him- or herself in online speech activities from the viewpoint of sociolinguistics.

2.3.2.2 Examples

2.3.2.2.1 Beautification. Kikuchi (1997 [1994]) proposes that beautified words are classified into subgroups. I will review his classification here. But it should be noted that inter-speaker variations are very large, so not all native speakers agree with what is reported below. In fact, it is more appropriate to think that the words listed below are on a continuous scale. Words in Class A are much more likely to be used with the prefix and, as we go A through E, the likelihood is lowered.

Class A: Kikuchi (1997 [1994]: 375) observes that the following list of words are typically used with the prefix irrespective of the gender of the speaker.

(218) *o-iwai* 'celebration,' *o-tya* 'green tea,' *o-turi* 'change, surplus,' *o-tera* 'temple,' *o-bon* 'tray, Bon,' *o-wan* 'bowl,' *go-syuugi* 'congratulatory gift'

Class B: Kikuchi (1997 [1994]: 375) observes that the following words are used with the prefix by female speakers but not by male speakers. As I mentioned, this is rather a simplistic approximation and some native speakers may not follow this tendency.[48]

(219) *o-kasi* 'candy,' *o-kane* 'money,' *o-kome* 'rice,' *o-sasimi* 'sashimi,' *o-senbei* 'rice cracker,' *o-miyage* 'souvenir,' *go-nensi* 'the beginning of a new year'

Class C: Below are words that are used both with and without the prefix. According to Kikuchi (1997 [1994]: 375), the speaker's gender is not a crucial factor.

(220) *o-azi* 'taste,' *o-tyawan* 'bowl,' *o-hana* 'flower,' *o-mizu* 'water,' *go-kinzyo* 'neighborhood'

[48] **Inter-speaker variation:** I, who am a male speaker, usually say *o-kasi* 'candy,' *o-kane* 'money,' *o-kome* 'rice,' and *o-miyage* 'souvenir' while I do not use *go-nensi* (I use *nensi*) as a beautification. As for the other two, *o-sasimi* 'sashimi' and *o-senbei* 'rice cracker,' I use both forms more or less interchangeably (as far as I am aware).

Class D: Kikuchi (1997 [1994]: 375) reports that some female speakers use the following words with the prefix but male speakers typically do not.

(221) *o-saihu* 'wallet,' *o-syooyu* 'soy sauce,' *o-soosu* 'sauce,' *o-zookin* 'cleaning rag,' *o-daikon* 'white radish,' *o-hasi* 'chopsticks'

Class E: The words in (222) are not commonly used with the prefix and presence of the prefix gives the audience an impression that the speaker overuses beautified words (Kikuchi 1997 [1994]: 375).

(222) *o-siken* 'exam,' *o-biiru* 'beer,' *o-zyuusu* 'juice'

2.3.2.2.2 Related fossilized expressions

There are other expressions with the prefix *o-/go-* that do not have the respect meaning available to them, nor give rise to an impression of nobleness of the speaker. In this sense, these words are not the honorific expressions or beautification at all. But for reference's sake, we look at these non-honorific expressions which are etymologically related with the honorific suffix.

Fossilized expressions 1: without no baseline counterpart. In some expressions, the prefix is so integrated and entrenched that existence of the prefix has becomes obligatory. Such fossilized beautifications are given below:

(223) *o-kazu* 'side dish,' *o-zigi* 'bow,' *o-sime* 'diaper,' *o-temba* 'tomboyishness,' *o-naka* 'belly,' *o-bake* 'ghost,' *go-han* 'food, rice,' *o-mamori* 'good-luck charm'

(224) a. * *Watasi-wa* ***kazu**-o* *kat-ta.*
I-TOP side dish-ACC buy-PST
'I bought a side dish.'

b. *Watasi-wa* ***o-kazu**-o* *kat-ta.*
I-TOP side dish-ACC buy-PST
'I bought a side dish.'

Fossilized expressions 2: expressions with an extra nuance. In some expressions, presence of *o-/go-* triggers an extra nuance. As a result, the meaning of these expressions is less easy to be predicted by their corresponding prefixless expressions. For example, *medetai* 'auspicious' can be prefixed by *o-*, as in (225)b. In many cases (by no means always), there is a sarcastic nuance triggered regarding the situation; e.g., the speaker thinks it is an awful day by uttering the sentence in (225).

(225) a. *Kyoo-wa* ***medetai*** *hi* *da.*
today-TOP auspicious day COP
'Today is an auspicious day.'

b. *Kyoo-wa* ***o-medetai*** *hi* *da.*
today-TOP HON-auspicious day COP
'(i) Today is an auspicious day;
(ii) the speaker says it sarcastically.'

Other examples are as follows (Kikuchi 1997 [1994]: 374):

(226) *o-kawari* 'a second helping' (*kawari* 'alternative'), *o-sibori* 'a damp washcloth' (*sobori* 'an act of wringing'), *o-syare* 'fashionable' (*share* 'joke, humor'), *o-somatu* 'second-rate, terrible' (*somatu* 'simple, plain'), o-medetai '(sarcastically) auspicious' (*medetai* 'auspicious'), *o-yasui* 'easy' (*yasui* 'cheap')

2.3.3 Formalization (Aratamari-go)

2.3.3.1 Overview

In Japanese, there are competing expressions which are truth-conditionally equivalent but differ in formality. For example, the two sentences in (227) are truth-conditionally equivalent and grammatical. The only difference is the word choice for the meaning of 'just now.' *Sakki* is considered casual while *sakihodo* is formal. Thus, in a formal context (e.g., as a word for a TV-newscaster), the sentence in (227)a is considered inappropriate, while the sentence in (227)b is expected.

(227) a. # ***Sakki*** *roketto-ga* *utiage-rare-masi-ta.*
just now rocket-NOM launch-PASS-HON$_A$-PST
'(i) Just now, the rocket was launched;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the speaker thinks that the context is casual (< *sakki*).'

b. ***Sakihodo*** *roketto-ga* *utiage-rare-masi-ta.*
just now.FML rocket-NOM launch-PASS-HON$_A$-PST
'(i) Just now, the rocket was launched;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the speaker thinks that the context is formal (< *sakihodo*).'

Traditionally, words that have a competing alternative expression which encodes formality is called *aratamari-go* in Japanese linguistics. Unfortunately, there seems to be no fixed, entrenched translation in English. This study will call it FORMALIZATION (and will use FML for the gloss). As in the case of beautification, this may not be an honorific element in the narrowest sense. It is not so much about respect, but rather property of the context that matters.

2.3.3.2 Examples

Unfortunately, the formality-encoding is not productive and only a limited expressions show the alternation (Kikuchi 1997 [1994]).

Formalization 1: Time-frame setters. Adverbs that identify the reference time show distinction in formality. Examples are given below in (228).

(228) Time-frame setters

a. Not formal
kyoo 'today,' *kinoo* 'yesterday,' *ototoi* 'the day before yesterday,' *asita* 'tomorrow,' *asatte* 'the day after tomorrow,' *kinoo no yoru* 'last night,' *asita no yoru* 'tomorrow night,' *asita no asa* 'tomorrow morning'

b. Formal
honzitu 'today,' *sakuzitu* 'yesterday,' *issakuzitu* 'the day before yesterday,' *myooniti* 'tomorrow,' *myoogoniti* 'the day after tomorrow,' *sakuban* 'last night,' *myooban* 'tomorrow night,' *myootyoo* 'tomorrow morning'

Formalization 2: Difference in origin. Even in English, distinctions similar to formalization are easily found; e.g., *speed* vs. *rapidity* and *go forward* vs. *proceed*. Just as words of Greek/Latin origin tend to have a formal nuance, words of Chinese origin sound more formal in Japanese. For example, *motteik-* 'take/bring' (Yamato origin) sounds more casual than *keekoo sur-* 'take/bring' (Chinese origin) (Kikuchi 1997 [1994]: 377).

Formalization 3: Others. We can find different nuances in formality in other categories as well. The postposition *-yori* 'from' is considered more formal than *-kara*. As opposed to *dandan* 'gradually,' *yooyaku* 'gradually' is more formal (Kikuchi 1997 [1994]: 377).

Formalization 4(?): Interrogative expressions. *Wh*-expressions also encode honorific information or semi-honorific information. For example, *how* in English has two translations in Japanese; i.e., *doo* and *ikaga* as in (229)a and (229)b.

(229) Interrogative adverbs

a. i. ***Doo*** *si-mas-yoo-ka?*
how do-HON$_A$-will-Q
'(i) How shall I do it?;
(ii) the speaker respects the addressee (< *-mas*).'

ii. ?***Doo*** *itasi-mas-yoo-ka?*
how do.HON$_U$-HON$_A$-will-Q
'(i) How shall I do it?;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the respect is very high (< *itas-*).'

b. i. ??***Ikaga*** *si-mas-yoo-ka?*
how.HON do-HON$_A$-will-Q
'(i) How shall I do it?;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the speaker respects the addressee/the speaker thinks that this is a formal situation (< *ikaga*).'

ii. ***Ikaga*** *itasi-mas-yoo-ka?*
how.HON do.HON$_U$-HON$_A$-will-Q
'(i) How shall I do it?;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the respect is very high (< *itas-*);
(iv) the speaker respects the addressee/the speaker thinks that this is a formal situation (< *ikaga*).'

Since *ikaga* is used only in a formal context, previous studies have treated this as a formalization (Kikuchi 1997 [1994]: 377).

Following such a tradition in Japanese linguistics, I have introduced these words in this subsection but perhaps they are more akin to AH-upgraders. Such a choice in *wh*-words is not restricted to interrogative manner adverbs (*ikaga* 'how,' *ika-hodo* 'to what extent,' *ika-yoo-ni* 'in what manner' and *ika-bakari* 'to what degree'). For example, *dare* 'who' can be replaced with *donata*, which is used when the speaker tries to be as polite as possible to the stranger or the person who he is talking to (for example, on the phone). In this case, the honorific meaning

to the addressee is clear.

(230) Interrogative pronouns

a. ***Dare*** *des-u-ka?*
who COP.HON$_A$-PRS-Q
'(i) Who are (you)?;
(ii) the speaker respects the addressee (< *-des-*).'

b. ***Donata*** *des-u-ka?*
who.HON COP.HON$_A$-PRS-Q
'(i) Who are (you)?;
(ii) the speaker respects the addressee (< *-des-*);
(iii) the speaker respects the referent of the answer for this question.'

These expressions, e.g, *ikaga* 'how.HON' and *donata* 'who.HON,' cannot be used without addressee-honorific markers.

(231) Interrogative adverbs (in the plain form)

a. ***Doo*** *si-yoo?*
how do-will
'How shall I do it?

b. ?? ***Ikaga*** *si-yoo?*
how.HON do-will
'How shall I do it? (intended)'

(232) Interrogative pronouns (in the plain form)

a. ***Dare*** *da?*
who COP
'(i) Who are (you)?;
(ii) the speaker respects the addressee (< *-des-*).'

b. ?? ***Donata*** *da?*
who.HON COP
'Who are (you)? (intended)'

Since presence of an addressee-honorific marker is the requirement for the AH-upgrader, these words seem similar to the expressions in Section 2.3.1 even

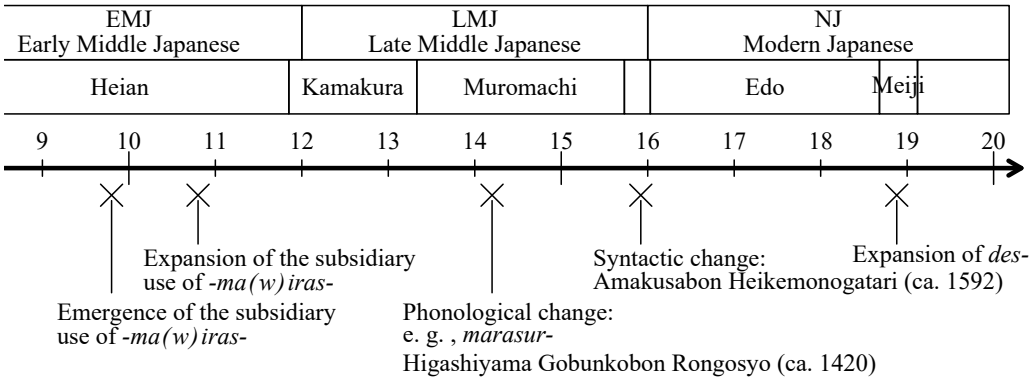


Figure 2.3: Historical development of addressee-honorific markers

though the honorific meaning is encoded in the nominal domain.

2.4 Historical development of addressee-honorific markers

In the previous sections, we examined the honorific system in contemporary Japanese, in which addressee-honorific markers, the main focus of this dissertation, are identified as a unique category distinct from the other honorific (and semi-honorific) elements.

Addressee-honorific markers did not appear in the language system out of the blue. Traditional Japanese linguists have revealed that *-mas* was developed out of an object-honorific marker *-ma(w)iras*, which was originally a combination of two independent morphemes, *ma(w)ir-* 'come' and *-as* 'make (a causative marker).' Due to phonological reduction, *maw(w)iras-* became *-mas* — *mawir-as- > mawir-asur- > marasur- > massur- > masur- > mas-* (Tsujimura 1968, 1971; Yasuda 1968, 1977, 1980; Miyazaki 1988: 63; Dasher 1995: 215; Ohori 2005; Narrog 2005: 116; Mihara 2016). The target of honorification also changed from the referent of the object to the addressee. This subsection explains how these changes occurred, the knowledge of which becomes important when we discuss the syntax of addressee-honorific markers in Chapter 3. The gist of the changes is summarized in Figure 2.3.

2.4.1 Object-honorific *ma(w)iras-*

Low-applicative use. The ancestor of *-mas* 'HONA' is *ma(w)iras-* 'give.HONO,' an object-honorific marker. Historically and morphologically, this *ma(w)iras-* can be further divided into two independent morphemes: a deictic object-honorific verb *ma(w)ir-* 'come.HONO' and a causative marker *-as*. Let us examine each in turn.

First, the first component of this construction, *ma(w)ir-*, was a suppletive object-honorific marker for the deictic motion predicate, meaning 'come' and its GOAL argument is respected.[49] For instance, observe the example in (233), which is taken from a text written around the beginning of the 11th century. The object of the verb *mawir-* is *uti* 'the palace,' to which the writer of this text pays her respect.

(233) *mawir-* 'come.HONO'

Kimi-pa *putu-ka* *mi-ka* *uti-pe-mo*
noble person-TOP two-days three-days palace-to-even
***mawiri**-tamap-ade*
come.HONO-HONS-NEG.and
'(i) The noble person (= Genji) did not come to the palace and ... ;
(ii) the speaker respects the referent of the subject (= Genji) (< *tamap-*);
(iii) the speaker respects the referent of the GOAL argument (= the palace)
(< *mawiri*).' (Genji Monogatari, Wakamurasaki; Yamagishi 1958: 229)

Second, when the causative marker *-as* 'CAUS' is attached to *mawir-*, the entire sequence *ma(w)ir-as-* acts as a low-applicative ditransitive verb, the meaning of which is approximated by *give* in English. Observe the example in (234). When Genji, the prince, was suffering from a disease, he made shamans cast spells and people pray in order to treat his illness. Here, the subject (CAUSER) and the indirect object (GOAL) are both Genji.

[49] ***mair-* in contemporary Japanese:** *mair-* has lost its use of object-honorification and, as we saw in Section 2.3.1, it is used as an AH-upgrader.

(234) Stage I: Main predicate use

yorodu-ni [*mazinapi kadi nado*]
all-ADV spell prayer et cetra
mawir-ase*-tamap-edo*
come.HONo-CAUS-HONs-though
'(i) (Genji) had all sorts of spells and prayers come to him (= Genji gave all sorts of spells and prayers to himself).
(ii) the speaker respects the referent of the subject (= Genji) (< *-tamap*);
(iii) the speaker respects the referent of the object (= Genji) (< *mawir-*).'
(Genji Monogatari, Wakamurasaki; Yamagishi 1958: 177)

With or without the causative marker, the theta role relation of *mawir-* does not change, and the GOAL noun is the target of the honorification. The subject honorific marker *tamap-* targets the subject (= Genji) and the object honorific marker *mawir-* agrees with the object (= Genji). Although the CAUSER and the AGENT are different, this is a kind of giving event in the sense that the subject causes a transition of the direct object to the possession of the indirect object; that is, he gave spells and prayers to him(self) (using shamans and prayers). In this sense, the combination of *mawir-*'come.HONo' and *-as* 'CAUS' is regarded as a ditransitive verb *mawiras-* 'give.HONo.'

High-applicative use. Recall that some low-applicative markers can also be used as high-applicative markers in contemporary Japanese (Position C; see Table 2.12, as well as Table 2.9 and Table 2.10). Likewise, *ma(w)iras-* can also appear in a higher position (Position C). For example, observe the sentence in (235) from Sanukinosuke Nikki (Miyakoshi 1971: 34):

	itadak- 'be given'		*sasiage-* 'give'		*ma(w)iras-* 'give'	
	low	high	low	high	low	high
non-obj. hon	*moraw-* Ex: (130)	*-te moraw-* Ex: (132)	*age-* Ex: (126)	*-te age-* Ex: (128)		
obj.hon	*itadak-* Ex: (131)	*-te itadak-* Ex: (133)	*sasiage-* Ex: (127)	*-te sasiage-* Ex: (129)	*ma(w)iras-* Ex: (234)	*-ma(w)iras-* Ex: (235)

Table 2.12: Applicatives and object-honorifics III.

(235) Context: *Ex-emperor Sirakawa asked Sanukinosuke, who is a woman, to serve for Emperor Toba. Her brother, who is the speaker of the sentence, expresses his counterfactive wish that she was asked the same favor not as a female servant but as a male servant because, at that time, if a man is asked to serve to an emperor, that would be an incredible promotion.*

*Apare, otoko-no mi-nite kaku ip-are-**mawirase**-baya*
alas man-GEN body-as so ask-PASS-HONo-EXCL
'(i) Alas, I wish (you/my sister) were asked the same favor (by the ex-emperor) as a male servant;
(ii) the speaker respects the referent of the implied oblique noun (= the ex-emperor) (< *-mawirase*).'

Unlike the example in (234), *ma(w)iras-* is not used as a main verb. The main verb in this sentence is *ip-* 'say/ask,' whereas *-ma(w)iras-* is used as a suffix attached after the passive morpheme *(r)ar-* in order to encode the respect for the referent of the oblique noun, the individual by whom she was asked a favor (= the ex-emperor).

The 10th to the early 11th century. The high-applicative use of *-ma(w)iras* emerged around the late 10th century (Akita 1966: 7; Miyachi and Miyakoshi 1971; Miyakoshi 1971; Miyakoshi 1974).[50] As for these earliest examples found around the late 10th century through the early 11th century (e.g., Otikubo

[50] **Other object-honorific markers in EMJ:** There were several other subsidiary object-honorific markers when the subsidiary use of *-ma(w)iras* was established. For example, *(-)tatematur*, another object-honorific marker, had already developed both the main predicate use and the subsidiary predicate use, by the time the secondary use of *-ma(w)iras* came into fashion. When used as a main predicate verb, *tatematur-* is an object-honorific marker, which also means 'give.HONo,' honoring the indirect object. Given the proximity in meaning, it is not difficult to hypothesize that *mawiras-* extended its usage by analogy with the extant productive schema of

Monogatari in the late 10th century, Makura-no Soosi ca. 1001), previous studies have discovered the following three tendencies. First, *-ma(w)iras* shows a collocational restriction; it is typically attached to emotion and perception predicates, such as *omop-* 'think' and *mamor-* 'watch' (Miyachi 1960: 101; Akita 1966: 7-8). Second, the target of the honorification is restricted to people in the supreme social class (e.g., the emperor). There was an established division of labor with other object-honorific markers. For example, *-kikoy*, another object-honorific marker, was restricted to people in the middle social class (Miyachi and Miyakoshi 1971: 160-161). Third, all the examples are used in the main body of the text, but not in the quoted conversation (Miyakoshi 1971: 31).

The late 11th century. However, some of the restrictions on *-ma(w)iras* were loosened, and it became quite frequently used around the late 11th century, (the Insei Period) (Miyakoshi 1971). First, *-ma(w)iras-* started being used in quoted conversations, as well as in main texts, which suggests its expansion in register. Miyakoshi (1971: 32), for instance, reports that 32 out of 110 examples in Sanukinosuke Nikki (after ca. 1108) are found in a conversation. Second, the selectional restriction of the main predicate was loosened. Predicates other than emotion and perception predicates became able to be used with *-ma(w)iras*. According to Akita (1966: 8), out of the 36 tokens in Kohon Setsuwashu (ca. 1126-1131?), 31 instances are not accompanied by predicates of thinking or looking. Miyachi and Miyakoshi (1971: 173) also report that, of all 55 tokens in Tamakiparu (before ca. 1219?), as many as 31 different verbs are used with *-ma(w)iras*. This type of generalization/bleaching in restriction and expansion in type frequency is regarded as a salient property of grammaticalization (Bybee 2003: 605). The historical development of *-ma(w)iras* accelerated in the early LMJ period.

2.4.2 From an object-honorific marker to an addressee-honorific marker

In the latter half of the LMJ period, (aka., the Muromachi period), high-applicative *-ma(w)iras* developed into an addressee-honorific marker, accompa-

(-)tatematur and acquired the subsidiary predicate use around the late 11th century (for analogy-based extensions, see, for example, Fischer 2007; Bybee 2010; Traugott and Trousdale 2013).

nied with morphophonological and syntactic changes.

Phonological change. In the Muromachi period, *ma(w)iras-* and *-ma(w)iras* underwent a phonological reduction, resulting in several new variants, such as *(-)marasur(-)*, *(-)maisur(-)*, and *(-)marusur(-)*, both in the main predicate use (Position A) and the high-applicative use (Position C). As for the main predicate use, Toyama (1977: 152) observes that the earliest instance of *marasur-* 'give.HONo' is found in Higashiyama Gobunkobon Rongosyo (ca. 1420).

However, it seems that people had not yet pronounced it *-mas* during the 16th century. The phonological reduction continued to proceed after the 16th century (aka., in the Edo Period; 1603-1867), when *-maras* finally became *-mas* (*-maras* > *-mass* > *-mas*; Yasuda 1977: 188; Miyachi 1971, 1980: 197).

Syntactic change. The high-applicative predicate use of *-marasur* developed into an addressee-honorific marker in the Muromachi period (Miyachi 1971, 1980; Sakurai 1971: 281-282; Toyama 1977: 152-153; Moriyama 1996). Crucially, the syntactic position of the new addressee-honorific marker is distinct from the position for the object-honorific *-marasur*. In examining instances from Amakusaban Heike Monogatari (ca. 1592), Miyachi (1980) makes the following important generalizations.

First, the addressee-honorific *-marasur* is higher in its syntactic position than the subject-honorific marker, which is again higher than the object-honorific *-ma(w)iras*. For example, observe the sentence in (236)a, taken from Amakusaban Heike Monogatari. Here, *-ma(w)iras* 'HONo' precedes the subject-honorific marker *-rare*. In contrast, consider the example in (236)b. The same subject-honorific marker *-rare* is now followed by the addressee-honorific marker *-maras*. This data clearly shows that the position of object-honorific *-ma(w)iras* is different from that of *-maras*.

(236) a. Object-honorific marker < Subject-honorific marker

[$_{TP}$[$_{SubjHonP}$[$_{ObjHonP}$[$_{vP}$ *miya-o*
Imperial prince-ACC
susume]-***mawirase***]-*rare*]-*ta*]
incite-HON$_O$-HON$_S$-PST
'(i) (Yorimasa) incited Prince (Takakura to rebellion);
(ii) the speaker respects the referent of the object (the prince)
(< *-mawirase*);
(iii) the speaker respects the referent of the subject (*Yorimasa*)
(<*-rare*).' (Amakusaban Heike Monogatari 2-2, 117; Miyachi 1980: 164)

b. Subject-honorific marker < Addressee-honorific marker

namida-o *nagas-are-****marasi****-ta.*
tears-ACC spill-HON$_S$-HON$_A$-PST
'(i) (People) spilled tears;
(ii) the speaker respects the referent of the subject (< *-are*);
(iii) the speaker respects the addressee (< *-marasi*).' (Amakusaban Heike Monogatari 3-4, 173; Miyachi 1980: 166)'

Second, object-honorific *ma(w)ir-* and addressee-honorific *-marasur* can be used together within a single clause, as illustrated in (237) (Miyachi 1980: 167). This also suggests that the position of *-marasur* is syntactically different from the position of an object-honorific marker.

(237) *Miyako-kara* *opoidono-no* *o-kata-pe* *ma(w)iri-****marasur****-u.*
capital-from court nobleGEN HON-house-to come.HON$_O$-HON$_A$-PRS
'(i) I am coming from the capital city to the house of the court noble;
(ii) the speaker respects the court noble (*Munemori*) (< *ma(w)iri-*) ;
(iii) the speaker respects the addressee (< *-marasur*).' (Amakusaban Heike Monogatari, 4-16: 330; Miyachi 1980: 167)

Note that these generalizations are also obtained in contemporary Japanese. Observe the sentences in (238). The addressee-honorific marker *-mas* is also preceded by the subject-honorific marker and is followed by the tense

morpheme, and the addressee-honorific marker can be used with its *mairi-*. We will elucidate its syntactic position in the next chapter.

(238) Contemporary Japanese

a. *namida-o nagas-**are**-**masi**-ta.*
tears-ACC spill-HON$_S$-HON$_A$-PST
'(i) (People) spilled tears;
(ii) the speaker respects the referent of the subject (< *-are*);
(iii) the speaker respects the addressee (< *-masi*).'

b. *Miyako-kara kuge-no o-yasiki-e*
capital-from court noble-GEN HON-house-to
***mairi-mas**-u.*
come.HON$_O$-HON$_A$-PRS
'(i) I am coming from the capital city to the house of the court noble;
(ii) the speaker respects the addressee;
(iii) the referent of the subject, who belongs to the speaker's territory, is not as highly respected as the addressee (< *mairi-*).'

2.4.3 Emergence of the peculiar properties of *-mas*

As the similarity between the (236)b and (238) suggests, the basic syntactic position of *-mas* was established at least as early as the 16th century. However, the addressee-honorific use of *-maras/mas* in the Edo period exhibits a sharp contrast with that of contemporary Japanese in two regards: its interaction (i) with negations and (ii) with clause types.

Observation I (Interaction with Neg). Recall from Section 2.2.3.2 that *-mas* affects the morphological realization of Neg. In the plain form, the negation marker gets realized as *-(a)nak* (= (239)a), whereas it becomes *-en* if it is adjacent to *-mas* (= (239)b).

(239) a. Non-polite
hasir-{*anai/*en*}.
run-NEG
'I don't run.'

b. Polite
hasiri-mas-{**anai/en*}.
run-HON$_A$-NEG
'(i) I don't run;
(ii) the speaker respects the addressee.'

However, Edo-period Japanese did not show the same contrast between *-anai* and *-en*. Observe the following examples (Miyachi 1977: 73-74; 1980: 216, 321, 267-268, 377-378, 418, 438, 465, 488-491, 660-665).

(240) No morphological change in Neg

a. Present tense
*Kono ame-zyaa ik-are-masi-**nai**.*
this rain-with leave-can-HON$_A$-NEG
'(i) With this rain, you cannot leave;
(ii) the speaker respects the addressee.'
(Tookaidoochuu Hizakurige 3 Joo, 137)' (Miyachi 1977: 73)

b. Past tense
*Mosi koko-he uma-wa ki-masi-**nan**-da-kae?*
perhaps here-to horse-TOP come-HON$_A$-NEG-PST-Q
'(i) By any chance, didn't a horse come to this place?;
(ii) the speaker respects the addressee.'

Just like the plain form, *-nai* is used with the polite form as well. These data teach us two lessons. First, the morphological change at Neg is not an inevitable consequence of the addressee-honorific marker. Second, whereas concord-less constructions were admitted in the Edo period, Japanese developed the morphological change in its later stages.

Observation II (Interaction with do-support at T). On page 118, we saw that *-mas* triggers a morphological change of the be-support (see also Section 3.2.2). As illustrated in (241), the presence of *-mas* affects the form of the copula (Yamada 2017, 2018c, 2019b).

(241) a. [$_{TP}$[$_{NegP}$ *Hasir-anak*] [$_{T}$ ***at**-ta*]].
run-NEG COP-PST
'(I) did not run.'

b. [$_{TP}$[$_{NegP}$ *Hasiri-**mas**-en*] [$_{T}$ ***desi**-ta*]].
run-HON$_{A}$-NEG COP.HON$_{A}$-PST
'(i) (I) did not run;
(ii) the speaker respects the addressee.'

This concord is a recent development in the 19th century. When this *mas-des* construction appeared in Japanese, it competed with two other variants in (242)a and (242)b (Miyachi 1980: 660-665).

(242) Variants in the 19th century

a.	[$_{vP}$ ...]	*-mas-en*	***kat***	*-ta*
		HON$_{A}$-NEG	COP	-PST
b.	[$_{vP}$ ...]	*-mas-en*	***dat***	*-ta*
		HON$_{A}$-NEG	COP	-PST
c.	[$_{vP}$ ...]	*-mas-en*	***des***	*-ita*
		HON$_{A}$-NEG	COP.HON$_{A}$	-PST

'(I) did not ... '

First, the variant in (242)a contains a do-support element *kat-* at T (Miyachi 1980: 663). The earliest example reported and discussed in previous literature is the one in (243), taken from Shunsui Tamenaga's Harutsugedori (Yasuda 2008; Ho 2014, 2015, 2018).

(243) [*Ano ban-no yooni uresii zirettee ban*]-*wa*
that night-GEN like delightful tantalizing night-TOP
*ari-**mas**-en* ***kat**-ta-yo.*
be-HON$_{A}$-NEG be-PST-SFP
'There was not such a delightful and tantalizing night as that night.'
(Shunsui Tamenaga, Harutugedori 1836)

Second, the variant in (242)b uses *dat-* in place of *kat-* (Tsujimura 1965: 360, 1968; Miyachi 1980: 662; Kaneda 1985; Kanazawa 1996: 199, 1999). An example is given in (244).

(244) [*Anata-ni odorokas-are-ru-to*]-*wa* *sukosimo* *ki-ga*
you-DAT surprise-PASS-PRS-C-TOP at all awareness-NOM
*tuki-**mas**-en* ***dat**-ta-yo.*
attach-HON$_A$-NEG COP-PST-SFP
'(i) I did not notice/expect that I was surprised by you;
(ii) the speaker respects the addressee.' (Kokuga Umebori, Shunshoku Renrino Ume 1852)

The component common to *kat-* and *dat-* is *at-* (the allomorph of *ar-* 'be'), which is a copula in the plain form. In this respect, the variants in (242)a and (242)b present a contrast to (242)c in that the inserted copula does not show any concord with *-mas*.

The last variant in (242)c is the only variant that has a concord with the addressee-honorific marker and the only one that has survived until the 21st century. For example, the following sentence is taken from Ukigumo written by Shimei Futabatei in the late 19th century.

(245) *Dokozo* *itame-wa* *si-**mas**-en* ***desi**-ta-ka.*
anywhere hurt-TOP do-HON$_A$-NEG COP.HON$_A$-PST-Q
'(i) Didn't you hurt yourself anywhere?;
(ii) the speaker respects the addressee.' (Shimei Futabatei, Ukigumo 1888)

Unlike the previous two variants, the be-support element is not an *ar*-based copula. Matsumura (1957) observes that *des-* was not used widely in the Edo period, and it was restricted to the Tokyo dialect. He also points out that it became prevalent after the 1880s (Matsumura 1957; Ho 2014: 8, 2015, 2018). Because the addressee-honorific use of *-mas* was attested in the Edo period, there is a time lag between the time *-mas* became an addressee-honorific marker and the time it triggered the change in Neg and in T.

Concord in other addressee-honorific markers. Interestingly, the emergence of concord between a low addressee-honorific marker and T is also attested in a different addressee-honorific construction. In EMJ, when *-mas (-marasur)* had not developed the addressee-honorific use, *-sooroo* was used to encode the

speaker's respect for the addressee. This *-sooroo* also developed a concord in the head of TP (Yamada 1924: 298; Ito 1999: 52; Someya 2001; Yada 2011: 90; Yamada 2018c). Observe the sentence in (246)a. In this sentence, there are two distinct *sooroo*'s; one right after the verb and another right before the past tense marker. (246)b is the translation in contemporary Japanese. We can easily see that these two positions of *(-)sooroo* correspond to *-mas* and *des-* in contemporary Japanese.

(246) Multiple addressee-honorific markers (*-sooroo*)

a. *pitobito motii-**sooraw**-azu **sooraw**-iki*
people use-HON$_A$-NEG HON$_A$-PST
'(i) people did not use (it);
(ii) the speaker respects the addressee.' (Tooyoo Bunko Benkan Honin Urabunsyo 1223; from Kamakura Ibun #3078)

b. *hitobito-wa motii-**mas**-en **desi**-ta*
people-TOP use-HON$_A$-NEG COP.HON$_A$-PST
'(i) people did not use (it);
(ii) the speaker respects the addressee.'

The double-*sooroo* construction is different from the *mas-des* construction in two regards. First, the higher phonological exponent is exactly the same as the lower one. Second, not only does the negation marker *-az* 'not' trigger the be-support but *-bek* 'must' and other modals do as well (i.e., the higher exponent). However, except for these two differences, the *sooroo* construction is exactly the same as the modern addressee-honorific concord, suggesting a tight connection between an unexpectedly low pronunciation site and a be-support element at T.

Observation III (Interaction with suppletive subject-honorific markers). In contemporary Japanese, some suppletive honorifics exhibit morphophonological interaction with the addressee-honorific marker *-mas* (Miyachi 1980: 565; Fukushima 2015); for a comparable phenomenon, see the discussion on page 55 and Yamada (2019g).

When *-mas* is preceded by a verb whose stem ends with *r*, *i* is attached to make a permissible mora structure. For example, consider the sentences in (247).

(247) a. *Watasi-wa* ***hasir****-u.*
I-TOP run-PRS
'I run.'

b. * *Watasi-wa* ***hasir****-mas-u.*
I-TOP run-HON$_A$-PRS
'I run.'

c. *Watasi-wa* ***hasiri****-mas-u.*
I-TOP run-HON$_A$-PRS
'I run.'

The verb *hasir-* 'run' ends with *r*. So the present tense marker *-u* is attached, and we obtain a CV.CV.CV mora structure (*ha.si.r-u.*). This is grammatical, as shown in (247)a. However, when *-mas* intervenes between *hasir-* and *-u*, two consonants are next to each other (i.e., *r* and *m*) which is unacceptable in Japanese, as in (247)b. As a remedy, *i* is inserted between the two consonants, as illustrated in (247)c, to make a permissible mora structure.

The following suppletive predicates do not obey this rule. Because they all end with *r*, it is predicted that *i* is inserted between *r* and *m* when *-mas* is preceded by these predicates.

(248) a. *irassar-* 'be/go/come.HON$_S$'

b. *ossyar-* 'say.HON$_S$'

c. *kudasar-* 'give.HON$_S$'

d. *nasar-* 'do.HON$_S$'

e. *gozor-* 'be.HON$_U$,' ('be.HON$_S$')

However, neither of the forms in (249)a is acceptable in contemporary Japanese.

(249) a. * *Sensei-ga* {***irassyar/irassyari***}*-masi-ta.*
teacher-NOM come.HONs-HONA-PST
'(i) The teacher came;
(ii) the speaker respects the teacher (< *irassyar-*);
(iii) the speaker respects the addressee (< *-mas*) (intended).'

b. *Sensei-ga* ***irassyai****-masi-ta.*
teacher-NOM come.HONs-HONA-PST
'(i) The teacher came;
(ii) the speaker respects the teacher (< *irassyar-*);
(iii) the speaker respects the addressee (< *-mas*).'

The right form is *irassyai-mas*, as in (249)b. The stem-ending consonant *r* must be replaced with *i* (or one could say that *r* is deleted after *i* is inserted).[51]

However, in Edo-period Japanese, the expected form (i.e., *irassyari-mas*) was grammatical, as illustrated in (250), which is taken from a text written in the 18th century (Miyachi 1980). This suggests that the Japanese honorific system changed so that, for some unknown reasons, the pronunciation of *r* is avoided under *-mas*.

[51] ***Mesiagar-*:** Not all suppletive forms exhibit this exceptional morphophonological property. Another suppletive subject-honorific marker *mesiagar-* 'eat/drink.HONs' retains the final *r*, just as we do in (247); **mesiagai-masi-ta*.

(i) *Sensei-ga* ***mesiagari****-masi-ta.*
teacher-NOM eat.HONs-HONA-PST.
'(i) The teacher ate;
(ii) the speaker respects the teacher (< *mesiagar-*);
(iii) the speaker respects the addressee (< *-mas*).'

(250) *yookoso* ***irassyari****-masi-ta.*
welcome come.HONs-HONA-PST
'(i) Welcome, you have arrived;
(ii) the speaker respects the referent of the subject (= the addressee) (< *irassyari*);
(iii) the speaker respects the addressee (< *-mas*).' (Wato Chinkai, San'na Toorai 1791; Miyachi 1980: 610).

Observation IV (Interaction with a sentence mood). On page 116, we saw that addressee-honorific markers in contemporary Japanese interact with sentence moods. For example, addressee-honorific markers are not common in imperatives. When used, the sentence comes with an archaic nuance. In fact, this archaic nuance reflects an earlier stage of Japanese. In the Edo period, an expression such as that in (154) was not illicit at all (Yoshida 1971: 269; Miyachi 1976: 49, 1977: 249). Observe the example below.

(251) *Tito* *o-mati-nasare-****mas****-****e****.*
little HON-wait-HONs-HONA-IMP
'(i) Wait a minute;
(ii) the speaker respects the referent of the subject (< *-nasar*);
(iii) the speaker respects the addressee (< *-mas*).' (Shinhanashi Warai Mayu, author is unidentified, 1712; Miyachi 1977: 250)

This suggests that an interaction with imperative markers emerged only after the establishment of addressee-honorific use in the Edo period. In fact, three imperative markings were present in the Edo period; (i) *-mas-e*, (ii) *-mas-i* and (iii) *-mas-ei*. Examples of the other two are given below.

(252) a. *Issun ki-te kudasai-**mas-i**.*
little come-CV APPL$_{H}$.HON$_{S}$-HON$_{A}$-IMP
'(i) Come (for me);
(ii) the speaker respects the referent of the subject (< *-te kudasar*);
(iii) the speaker respects the addressee (< *-mas*).' (Dekiaki Hachiman Matsuri, Namboku Tsuruya, 1810; Miyachi 1976: 51)

b. *Sasaki-sama-no o-yakata-e o-kosi-nasare-**mas-ei**.*
Sasaki-Mr.-GEN HON-house-to HON-come-HON$_{S}$-HON$_{A}$-IMP
'(i) Come to Mr. Sasaki's house;
(ii) the speaker respects the referent of the subject (< *-nasar*);
(iii) the speaker respects the addressee (< *-mas*).' (Otoko Date Hatsugai Soga, Tobun Fujimoto, 1753; Miyachi 1976: 49)

According to Miyachi (1976: 48, 1977: 249), the oldest form was *-mas-ei*, which gradually changed to *-mas-e*, which then competed with *-mas-i*. He also reports that, compared to *-mas-e*, *-mas-e-i* has a formal nuance (ibid.: 249).

2.4.4 Development of *des-*

In Section 2.2.3, we observed how addressee-honorific markers are used in the 'prescriptive grammar.' However, a new paradigm is now emerging in the colloquial register. The essence of the new system is a replacement of the *mas*-based system with the *des*-based system. That is, the new addressee-honorific marker *des-*, which came into use in the late 19th century, has been expanding its use and is now taking over the *mas*-based system.

Compare the two variants below. In (253)a, the addressee-honorific marker is *-mas*, preceded by a verb *ar-* 'COP.' In this sentence, the negation marker, *-en* appears after the addressee-honorific marker. In contrast, in (253)b, the addressee-honorific marker is *des-*. The negation marker is *nai*, not *-en*, and it is followed by the addressee-honorific marker. Table 2.13 summarizes the difference between the two variants.

	prescriptive form	new variant
addressee-honorific marker	*-mas*	*des-*
negation marker	*-en*	*nai*
order of morphemes	HON$_A$≺ NEG	NEG≺ HON$_A$

Table 2.13: Prescriptive form and the new variant

(253) a. Prescriptive form
*Ookiku ari-**mas**-en.*
big COP-HON$_A$-NEG

b. New variant
*Ookiku nai **des**-u.*
big NEG COP.HON$_A$-PRS

'(i) (It) is not big;
(ii) the speaker respects the addressee.'

This shift from the *mas*-based prescriptive system to the *des*-based new grammar system has not been completed yet. In contemporary Japanese, these grammatical patterns are in free variation. There are many linguistic and extra-linguistic factors that affect the choice of these forms.[52]

Factor 1: Register. Not surprisingly, the new variant is more favored in casual registers (Tanomura 1994; Noda 2004; Ochiai 2012; Banno 2012; Yamada 2019e). For example, Yamada (2019e) reports that, among the registers annotated in Balanced Corpus of Contemporary Written Japanese (BCCWJ), the non-prescriptive form is found more in blogs and magazines and less often in PR brochures and textbooks.

Factor 2: Part-of-speech. The part-of-speech of what is negated is also considered an indispensable factor. Previous studies have agreed that adjectives and nouns are used more easily with the new variant, whereas verbs are conservative and tend to take the prescriptive form (Tanomura 1994; Noda 2004; Kawaguchi

[52] **Affirmative sentences:** In the affirmative sentence, the competition is not observed for some parts-of-speech. For example, unlike (253)a above, *i*-adjectives cannot be used with *-mas* and the new variant is the only option.

(i) a. Prescriptive form
Ookiku ari-mas**-u.*
big COP-HON$_A$-PRS

b. New variant
*Ookii **des**-u.*
big COP.HON$_A$-PRS

'(i) (It) is big;
(ii) the speaker respects the addressee.'

2010, 2014; Yamada 2019e). For example, unlike the sentence in (253)b, in which an adjective is used, (254)b sounds less acceptable, in which a verb phrase is negated.

(254) a. Prescriptive form
*Hasiri-**mas**-en.*
run-HON$_A$-NEG
'(i) (I) will not run;
(ii) the speaker respects the addressee.'

b. New variant
Hasir-*anai* ***des**-u.*
run-NEG COP.HON$_A$-PRS

Factor 3: Epistemic marker *-(y)oo*. Among the factors I have surveyed, the presence of *-(y)oo* shows the greatest effect size (Yamada 2019e). Just like the English *will*, this morpheme has a volitional reading and an epistemic modal reading. First, the sentences in (255) show how the volitional (proposative) reading is expressed with or without an addressee-honorific marker.

(255) Volitional *-(y)oo*

a. *Ik-u.*
go-PRS
'(I) will go.

b. *Iki-mas-u.*
go-HON$_A$-VOL
(i) (I) will go
(ii) the speaker respects the addressee.'

c. *Ik-**oo**.*
go-PRS
'Let (us) go.'

d. *Iki-mas-**yoo**.*
go-HON$_A$-VOL
'(i) Let (us) go.
(ii) the speaker respects the addressee.'

Second, the sentences in (256) and (257) show how the epistemic modal reading is encoded in Japanese. Unlike (255)c and (255)d, the epistemic *-(y)oo* cannot be directly preceded by the verb (= (256)c and (256)d).

(256) Epistemic *-(y)oo*

a. *Ik-u.*
go-PRS
'(I) will go.

b. *Iki-mas-u.*
go-EPI
(i) (I) will go
(ii) the speaker respects the addressee.'

c. **Ik-**oo**.*
go-HON$_A$-PRS
'(He) is likely to go.'

d. **Iki-mas-**yoo**.*
go-HON$_A$-EPI
'(i) (He) is likely to go.
(ii) the speaker respects the addressee.'

In order for the sentences to be acceptable in contemporary Japanese, we need to insert copula elements right before *-(y)oo* (i.e., *dar-* 'COP' for the plain form, as in (257)a, and *des-* 'COP.HON$_A$' for the polite form, as in (257)b).

(257) Epistemic *-yoo*

a. *Ik-u* *dar-**oo**.*
go-PRS COP-PRS
'(He) is likely to go.'

b. *Ik-u* *des-**yoo**.*
go-PRS COP.HON$_A$-EPI
'(i) (He) is likely to go.
(ii) the speaker respects the addressee.'

Historically speaking, however, the forms in (256)c and (256)d used to be grammatical in the early 20th century. For example, the guidebook for NHK newscasters published in 1958 includes the following example as a recommended form (= (258)) and Saneatsu Musyano's Wakaki Hi no Omoide, published in 1947, has an example of an epistemic use of *-mas-yoo* (Tanaka 2008: 327-329).

(258) Prescriptive forms in the past

a. *Asu-no* *ban-wa* *kumori-de* *itizi*
tomorrow-GEN evening-TOP cloudy-and temporarily
ame-ga *huri-**mas**-yoo.*
rain-NOM fall-HON$_A$-EPI
'(i) Tomorrow night will be cloudy and we will have some chances for showers;
(ii) the speaker respects the addressee.'

b. *mooziki* *kaet-te* *mairi-**mas**-yoo.*
soon return-CV HON$_U$-HON$_A$-EPI
'(i) (he) will come back soon;
(ii) the speaker respects the addressee;
(iii) the degree of respect is quite high.'

These examples show that contemporary Japanese underwent a change in such a way that epistemic *-(y)oo* selects the new variant. It is likely that the syntactic positions of the two *-(y)oo*'s are different and, for morpho-syntactic reasons, *-(y)oo* needs be-support. The fact that the change has also happened in the plain form suggests that the entire be-support system had to change, resulting in the expansion of the *des*-based honorific system.

Factor 4: Sentence-final particles. The presence of a sentence-final particle (SFP) makes the new variant more likely to be produced (Tanomura 1994; Noda 2004; Ozaki 2004; Kawaguchi 2010, 2014; Yamada 2019e). Sentence-final particles are suffixes that appear at the end of the sentence and contribute to discourse management. For example, the sentences in (259)a (= the prescriptive form) and (259)b (= the new variant) can take a sentence-final particle at the end of the sentence, resulting in the sentences in (259)c and (259)d. A finding of previous studies is that the acceptability of (259)d is ameliorated despite the fact that (259)b is less preferred.

(259) Sentence-final particles

a. *Hasiri-**mas**-en.*
I-HON$_A$-NEG
'(i) (I) will not run;
(ii) the speaker respects the addressee.'

b. *Hasir-anai* ***des**-u.*
I-NEG COP.HON$_A$-PRS

c. *Hasiri-**mas**-en-yo.*
I-HON$_A$-NEG-SFP
'(i) (I) will not run;
(ii) the speaker respects the addressee.
(iii) the expressive meaning of YO.'

d. *Hasir-anai* ***des**-u-yo.*
I-NEG COP.HON$_A$-PRS-SFP

2.4.5 Interim summary and a question

In this descriptive section, we saw how *-mas* was born and developed into an addressee-honorific marker, and we saw how it is being replaced by the *des*-based honorific system. The gist of the change is summarized as follows:

(260) Development of -mas

a. Stage 1: Object-honorific marker
   i. come 'object-honorific' + causative
   ii. give 'object-honorific'

b. Stage 2: Addressee-honorific marker
   i. *mase-nan-da* (in the Edo period)
   ii. *mas-en kat-ta/mas-en dat-ta* (in the 19th century)
   iii. *mas-en desi-ta* (the prescriptive grammar)
   iv. *nak-at-ta des-u* (new variants)

Summary. Descriptively, *-mas* illustrates a clear case of intersubjectification (Brinton 1995; Traugott 1995, 2003), as well as grammaticalization (Greenberg 1978; Lehmann 1995 [1982]; Hopper and Traugott 2003 [1993]; Bybee, Perkins and Pagliuca 1994; Traugott and Dasher 2002; Traugott and Trousdale 2013). This morpheme originated as a combination of two distinct morphemes (i.e., an

object-honorific verb and a causative marker). Later, it became a single unit and gained a discourse-oriented honorific meaning in the Muromachi period. Around that same time, its syntactic position changed from a position below the subject-honorific marker to a position above the subject-honorific marker. Along with this syntactic change, *ma(w)iras-* underwent phonological reductions and eventually became *-mas*; phonological reduction and decrease in analyzability are typical symptoms of grammaticalization. After it became an addressee-honorific marker, the negation marker and the be-support element started being affected and, in contemporary prescriptive Japanese, *-mas-en desi-ta* 'HON$_A$-NEG COP.HON$_A$-PST' is the only accepted form. However, a new variant, *nak-at-ta des-u/desi-ta* 'NEG-be-PST COP.HON$_A$-PRS/PST,' is now growing in popularity. The prescriptive form and the new form now alternate probabilistically.

Implication. This historical survey sheds new light on the syntax of addressee-honorific markers. First, the fact that an object-honorific marker is the historical source for *-mas* makes the hypothesis that *-mas* is involved with a grammatical system common to content-honorific markers more plausible (although they differ in their syntactic positions and in the target of respect).

Second, the fact that the concord between *-mas* and *des-* was optional in the 19th century also deserves our attention, although the concord became obligatory in the 20th century. Because the I-language of the native speakers in the 19th century forms no less a self-contained, well-formed language system than the I-language of people in the 21st century, the theory of addressee-honorific markers should explain the fact that *-mas-en kat-ta* is also an outcome of a possible grammar, and it should explain why *-mas-en desi-ta* was favored over *-mas-en kat-ta*.

Finally, the emergence of new variants suggests that Japanese is now changing into a language in which a discourse-oriented element is pronounced at the CP-level, which makes this language look akin to Korean and Thai in which addressee-honorific markers are sentence-final particles.

Chapter 3

Syntax

3.1 Overview

The syntax of Japanese addressee-honorific markers and related addressee-oriented suffixes has not been discussed until very recently. But they have started playing an important role in the study of syntax-discourse interface. First, due to their close relation with the second person (and the first person), Japanese addressee-honorific markers have been taken as a reflex of agreement in the CP-layer, which is most clearly articulated in Miyagawa's work (2012, 2017). Together with other CP-oriented examples of agreement — e.g., agreement in imperatives, promissives, and exhortatives (Zanuttini 2008; Zanuttini et al. 2012; Kaur 2017, 2018, 2019), vocatives (Haegeman and Hill 2013; Hill 2007, 2014; Slocum 2016), conjoint/disjoint phenomena in Newari (Zu 2015, 2018; Wechsler

and Hargreaves 2018), agreement in speaker/hearer's social hierarchy (Portner et at. 2019) and agreement based on bonding (Zu 2015, 2018) — studies have been carried out with the hope that we can better understand the way linguistic items agree with discourse participants, which in most cases have no phonological exponents.

Second, identification of the fine-grained structure of CP-syntax is another guiding research question for the syntax-discourse interface. This theoretical interest has been sharpened especially within the tradition of cartography (Rizzi 1997, 2018; Cinque 1999; Cinque and Rizzi 2008; Rizzi and Cinque 2016). Taking into account Ross's (1970) arguments for the performative hypothesis, Speas and Tenny (2003) proposed speech act layers above CP by analogy with the *v*P-shell structure in the *v*P-domain. Since then, syntacticization of discourse participants has become an important assumption in the CP syntax. If addressee-honorific markers are linked to the speech act projections, as assumed in previous studies (Miyagawa 2012, 2017; Slocum 2016), we can approach the projections with tangle grammatical morphemes, which are less easy to detect otherwise.

However, there is an important caveat to the 'CP-syntax' of Japanese honorific markers: in contemporary Japanese, addressee-honorific markers DO NOT appear in the CP layer. Observe the following sentence in (1).[1]

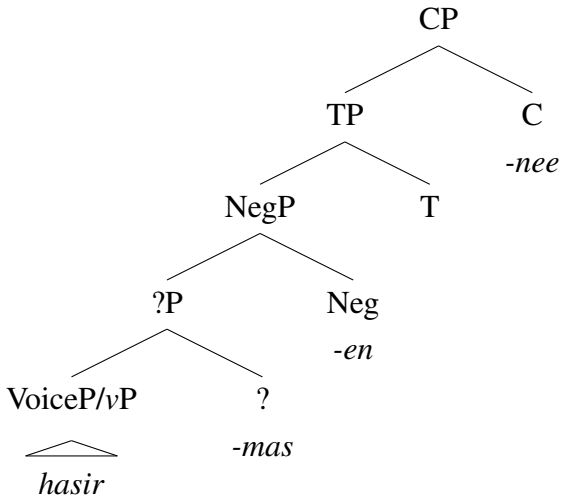
(1) [$_{CP}$ [$_{NegP}$ *hasiri-**mas**-en*]-*nee*].
run-HON$_A$-NEG-SFP
'(i) (He) does not run, doesn't he?;
(ii) the speaker respects the addressee.'

Given its highly discourse-oriented meaning, we would expect *-mas* to appear around/above CP, which is considered a 'window' to the discourse (Rizzi 1997; Speas and Tenny 2003; Sigurðsson 2004; Zanuttini 2008; Haegeman and Hill 2013; Hill 2014; Miyagawa 2017; Slocum 2016; Thoma 2016). But if the order of

[1] **Position of the sentence-final particle:** for simplicity, I put the sentence-final particle in C. But it is also possible to identify its own functional projection (Portner et al. forthcoming; Endo 2010).

the morphemes is maximally respected, we may want to draw a tree like the one in (2), where the position of the addressee-honorific marker is located between the VoiceP/*v*P and the NegP. Simply put, it is too low.

(2)



Organization of this chapter. This is the first puzzle we discuss in this chapter. But this is just the tip of the iceberg of a set of intriguing properties of Japanese addressee-honorific markers. The main goal of this chapter is to propose an empirically adequate analysis which solves these puzzles and can reconcile the data with the literature which for the most part convincingly argues that the interface between syntax and pragmatics is situated above/around CP (i.e., left periphery). In so doing, as a secondary goal, I also try to minimize the role of syntax, making (i) morphology and (ii) pragmatics play a greater role than we have traditionally assumed. More specifically, I analyze the data adopting assumptions from Distributed Morphology (Halle and Marantz 1993; Embick and Noyer 2001) and Dynamic Pragmatics (Stalnaker 1974, 1978, 2002; Gazdar 1981; Lewis 1979; Roberts 2012 [1996]; Portner 2004, 2018a, b).

Aside from Section 3.2, which provides readers with the fundamental data, and Section 3.5, which summarizes the discussion with some concluding remarks and a prelude to the next chapter, the main body of this chapter is split into two parts.

First, Section 3.3 discusses the syntax-morphology interface. I show that *-mas* is better-understood as a consequence of an agreement process that takes place postsyntactically in morphology, not as an immediate result of the syntactic structure/operations. After confirming that *-mas* cannot be recognized as a realization of a feature at VoiceP, *v*P, High-Appl(icative)P, Aff(ect)P or AspP, we compare two hypotheses. Hypothesis I is a syntactic approach where it is assumed that *-mas* projects its own projection in *v*P-periphery. This is indeed the analysis in my earlier studies (Yamada 2017, 2018c, 2019b). However, it is shown that this analysis runs into some empirical problems. So, as an alternative, I put forth a morphological approach, Hypothesis II, which analyzes *-mas* as the realization of an honorific feature sprouted at Neg resulting from a postsyntactic morphological rule. It is also proposed that this honorific feature enters into an agreement relation with the HEARER in a speech act projection (AddrP). By assuming that an interpretable feature is in HEARER (not in NegP), I propose a unified view that addressee-related features are always interpreted in a speech act projection, despite the variation of their pronunciation site.

Second, Section 3.4 concerns the syntax-pragmatics interface. I examine an interaction between an addressee-honorific marker and a sentence mood. Again, the role of syntax is reduced. Unlike Miyagawa (2012, 2017), who argues that this interaction is understood as a syntactic problem, I propose an alternative view that it is a consequence of pragmatic principles.

3.2 Addressee-honorific markers and puzzles

To begin with, let us see four intriguing puzzles concerning *-mas* and *des-*, two commonly used addressee-honorific markers in contemporary Japanese. The outline of the puzzles is given in (3).

(3) Puzzles

a. Puzzle 1 (Pronunciation site): Section 3.2.1
Addressee-honorific markers are pronounced in unexpectedly low syntactic positions.

b. Puzzle 2 (Morphological influence): Section 3.2.2
Presence of *-mas* causes a morphological change to T and Neg.

c. Puzzle 3 (Compositionality): Section 3.2.3
Scope interaction with Neg and T is absent.

d. Puzzle 4 (Relation with a sentence mood): Section 3.2.4
Addressee-honorific markers have an interaction with a sentence mood.

3.2.1 Puzzle 1: Pronunciation site

The first research question is already alluded in the above discussion. Despite our expectation that discourse-oriented elements should appear above/around the CP region, *-mas* is pronounced below T.

(4) **Question 1:** Where is *-mas* pronounced and how does the grammar sanction such an unexpectedly low discourse-oriented element?

Japanese is a head-final agglutinative language. A verb is followed by suffixes in a fixed order, which is, for the most part, in agreement with Baker's Mirror Principle (Baker 1985). For example, the English sentence 'I was not being recognized' is translated as in (5).[2]

(5) Plain form

[$_{CP}$[$_{TP}$[$_{NegP}$[$_{AspP}$[$_{VoiceP}$[$_{vP}$ *mitome*]-*rare*]-*te*	*i*]-*nak*]	*at-ta*]-*yo*]
	recognize-PASS-CV	PRG-NEG	COP-PST-SFP

'(I) was not being recognized.'

[2] **Morphological changes in** NEG **and** T: readers should have realized that the forms of NEG and T change concomitantly in (5). We examine these changes in Section 3.2.2.

The order of these suffixes should not be surprising; the verb is followed by a voice suffix, an aspectual suffix, a negation suffix, a tense suffix and, then, a sentence-final particle.

However, if we locate *-mas* in this sentence, it should be placed between PRG and NEG. This is demonstrated in (6). This position is fixed, and it cannot appear around/above the sentence-final particle *-yo*.

(6) Polite from

Mitome-rare-te	*i-**mas**-en*	*desi-ta-yo*
recognize-PASS-CV	PRG-HON$_A$-NEG	COP.HON$_A$-PST-SFP

'(i) (I) was not being recognized;
(ii) the speaker respects the addressee.'

a. * *mitome-rare-te i-en desi-ta-**mas**-yo*

b. **mitome-rare-te i-en desi-ta-yo-**mas***

An explanation from a historical point of view. As we saw in Section 2.4, philologists and historical linguists have revealed that the historical ancestor of *-mas* is an object-honorific marker *ma(w)iras-* 'give.HON$_O$,' which is a ditransitive verb used when the speaker has respect for the referent of the object (Akita 1966; Yasuda 1977: 188; Miyachi 1971, 1980; Miyachi and Miyakoshi 1971; Miyakoshi 1971, 1974; Honda 1984). The scheme in (7) illustrates a naïve syntatic analysis of this ditransitive predicate (for simplicity's sake, the external argument is omitted); in Chapter 2, this position is referred to as Position A. This ditransitive verb was grammaticalized into an object-honorific suffix (Position C in Chapter 2). For example, suppose that the speaker wants to say *(I) teach him a lesson* and wants to encode his respects to the referent of the indirect object. The object-honorific *ma(w)iras-* becomes a suffix and attaches to the verb *teach*. The quasi-sentence in (8) depicts this configuration. The original meaning of 'give' has bleached out and this *ma(w)iras-* exists only to honorify the indirect object of the verb *teach*.

(7) [$_{TP}$ [$_{vP}$ $\overset{\downarrow}{\text{IO}}$ DO *ma(w)iras*] T]

(8) $[_{TP}\ [\ [_{vP}\ \overset{\downarrow}{\text{IO}}\ \text{DO teach}]\text{-}\overbrace{ma(w)iras}]\ \text{T}]$

Due to a phonological reduction, *-ma(w)iras* changed to *-mas* (Tsujimura 1968, 1971; Yasuda 1968, 1977, 1980; Miyazaki 1988: 63; Dasher 1995: 215; Ohori 2005; Narrog 2005: 116; Mihara 2016) and it has acquired the use of addressee-honorification. Though it is not clear why an object-honorific marker became an addressee-honorific marker, this may provide an answer to the question in (4) from the perspective of the historical/functional linguistics; it is pronounced in a low position because it inherits the position of its historical ancestor.

However, this is not a satisfactory answer from a syntactic and a synchronic point of view. We need to ask how *-mas* is syntactically sanctioned by the grammar of native speakers of contemporary Japanese, who have no knowledge of its historical development whatsoever.

Other languages. At this point, readers may be wondering if other languages also put an addressee-honorific marker in such a low position. Interestingly, the answer is both. First, the answer is No; there are some languages that do put an addressee-honorific marker in CP-periphery. Let us see some examples.

KOREAN. In Korean, an addressee-honorific marker is preceded by the past tense marker *-ass*, as shown in (9)a. In addition, it cannot be embedded in a *ko*-clause, which provides an indirect speech context (= (9)b).

(9) Korean — Portner et al. (2019: 3)

a. *Ecey* *pi-ka* *o-ass-**supnita**.*
yesterday rain-NOM come-PST-DECL.HON$_A$
'(i) It rained yesterday;
(ii) the speaker respects the addressee.'

b. * *Inho-ka* [*ecey* *pi-ka* *o-ass-**supnita**-ko*]
Inho-NOM yesterday rain-NOM come-PST-DECL.HON$_A$-C
malhayss-supnita.
said-DECL.HON$_A$
'(i) Inho said [that it rained yesterday];
(ii) the speaker respects the addressee (intended).'

THAI. In Thai, an addressee-honorific marker must be preceded by a pragmatic marker and an interrogative particle as shown in (10)a (Iwasaki and Ingkaphirom 2005: 207). In addition, they cannot be embedded, as shown in (10)b.

(10) Thai

a. *lian* *yêɛ* *ləy* *lə̌* ***khráp***.
study problematic PP Q HON$_A$.MASC
'(i) She studies so badly?;
(ii) the speaker respects the addressee, who is a male.'

b. * *Sakol* *bɔ̀ɔk* [*waaa* *kháw* *maa* ***khráp***] *khráp*.
Sakol say that he come HON$_A$.MASC HON$_A$.MASC
'(i) Sakol says [that he comes];
(ii) the speaker respects the addressee, who is a male (intended).'

TAMIL. In Tamil, an allocutive marking appears in a position which is, at least, higher than T, as illustrated by the sentence in (11)a, in which the allocutive marker -*ŋæ* is preceded by the past tense marker -*in* (McFadden 2017, 2018). So, in the broadest sense, it is encoded around C. However, the allocutive suffix in question differs from Korean and Thai addressee-honorific markers in that it is not the outermost element in the clause. This is suggested by the fact that (i) an interrogative particle can be preceded by this morpheme (= (11)b) and (ii) it can be embedded with a complementizer *nnŭ* (= (11)c).

(11) Tamil (McFadden 2017, 2018)

a. *Naan jaangiri vaang-in-een-ŋæ.*
I Jangri buy-PST-1.SG.SUBJ-ALLOC
'(i) I bought Jangri; (ii) the speaker respects the addressee(s).'

b. *indæ biitʃǔ peerǔ Marina, illæ-ŋæɭ-aa?*
this beach name Marina no-ALLOC-Q
'(i) This beach's name is Marina, isn't it?;
(ii) the speaker respects the addressee.'

c. *Maya* [*avæ pooʈʈi-le ʤejkkæ-poo-r-aaɭ-ŋæ-nnǔ*]
Maya she contest-LOC win-PST-1.SG-ALLOC-C
so-nn-aa
say-PST-3.SG.FEM.SUBJ
'(i) Maya said that she would win the contest;
(ii) the speaker of the utterance context respects the addressee of the utterance context.'

MAGAHI. In Magahi, allocutive markings appear after a subject-agreement marking *-i* and a past/perfect marker *-l*, as shown in (12)a (Verma 1991). Though this data suggests that an allocutive marking is involved with a layer around CP, it is also pointed out that they can be embedded in a complement clause, as illustrated in (12)b; Alok and Baker propose that allocutive markings are realization of the head of FinP, which is distinct from and higher than T (Alok and Baker 2018; Baker and Alok 2019).

(12) Magahi

a. *ham ai-l-i-**o**.*
I come-PST-1-ALLOC
'(i) I came;
(ii) the speaker respects the addressee.' (Verma 1991: 127)

b. *Santeeaa sochk-o* [*ki Banteeaa bhag ge-l-**o***].
Santee thought-HONA that Bantee run go-PRF-ALLOC
'(i) Santee thought that Bantee went to run;
(ii) the speaker respects the addressee.' (Alok and Baker 2018)

Second, the answer is also Yes, because, in addition to such 'well-behaved' CP-periphery languages, non-CP periphery positions are also attested in languages other than contemporary Japanese. Let us see some examples.

BASQUE. Basque is equipped with allocutive markers agreeing with masculine and feminine addressees encoding familiarity; as in (13)a, in eastern dialects, another allocutive morpheme *-zu* is used to express the speaker's respect for the addressee, which is similar to Japanese addressee-honorific markers in function (Oyharçabal 1993; De Rijk and Coene 2007; Adaskina and Grashchenkov 2009; Haddican 2015, 2018; Antonov 2015; Zu 2015, 2018).[3] Consider examples below.[4] Though they are illicit in embedded contexts (= (13)b) — in this regard, Basque is akin to Korean and Thai — there is evidence to show that allocutive markers are not realized in the CP region. First, allocutive marking appears to the left of the first person ergative morpheme (e.g., *-gu*).[5] Second, when used with a past tense marker *-(e)n*, the allocutive marking must be followed by this tense morpheme (= (13)d) (Laka 1993; Haddican 2015: 296, 2018).

[3] **A dialectal difference:** The non-familiar allocutive marking is optional except in the Low Navarrese and Souletin (and Roncalese) dialects (De Rijk and Coene 2007: 823).

[4] **Non-familiar forms:** De Rijk and Coene (2007: 823) says that "[t]he forms have not yet been standardized by the Basque Academy, but the most straightforward approach would be to adopt the system used for the "familiar" forms and simply replace all allocutive person markers *-ga* or *-na* with *-zu*."

[5] **Two positions for allocutive markings in Basque:** There are two slots for Basque allocutive morphemes; either to the right of the ergative morpheme (if it is a third person plural ergative marker; *-te*) as in (i) below, or to the left of the ergative morpheme (if it is a first person ergative marker; e.g., *-gu*) (= (13)c) (Haddican 2015: 295).

(i) *Egin-go d-i-**a**-gu.*
do-FUT EPENTH-ROOT-ALLOC:MASC-1.PL.ERG
'(i) We will do it;
(ii) the speaker is talking to a familiar, male speaker.'

(13) Basque

a. *Pette-k lan egin d-i-**zii**.*
Peter-ERG work done EXPL-ROOT-ALLOC:RESP
'(i) Peter worked;
(ii) the speaker uses neutral/polite form to the addressee (vouvoiement).' (Oyharçabal 1993: 93; Haddican 2018)

b. *Jon-ek esa-n d-i-k* [*etorri-ko*
Jon-ERG say-PRF EXPL-ROOT-ALLOC:MASC come-IRREAL
*d-u-(%**k**)-ela*].
EXPL-ROOT-ALLOC:MASC-C
'(i) Jon has said that he will come;
(ii) the speaker is talking to a familiar, male speaker.'

c. *Egin-go d-i-te-**k**.*
do-FUT EPENTH-ROOT-ERG.PL-ALLOC:MASC
'(i) They will do it;
(ii) the speaker is talking to a familiar, male speaker.'

d. *Egin-go z-i-te-**a**-n.*
do-FUT EPENTH-ROOT-ERG.PL-2.SG.MASC-PST
'(i) They were going to do it;
(ii) the speaker is talking to a familiar, male speaker.'

As Haddican (2015) puts, "[f]rom the perspective of Speas and Tenny's (2003) proposal, whereby morphemes marking nonthematic addressees are merged high in a C-field position, and if, indeed, the [allocutive] morpheme truly corresponds to a T head, then placement of the vocative clitic in past tense contexts is surprising in that it suggests a merged position below T (Haddican 2015: 296)."

BURMESE. Burmese is also equipped with an addressee-honorific marker and exemplifies a similar pattern. Observe the sentences in (14).[6] The addressee-

[6] **A different position of *-pa*:** In addition to this low position, *-pa* can also appear at a high position above the realis marker. However, this higher position is only attested, when the sentence has a special speech act; the higher *-pa* is observed when speakers "add emphasis or insistence to a statement which is produced when speakers want to correct their hearer's mistaken or false opinions, a statement which is structurally marked by the operator" *-ta* 'REALIS' (Romeo 2008: 80). This could also count as another example of an interaction between an addressee-honorific marker in a low functional projection and element in CP-periphery as will be discussed in Section

honorific marker *-pà/-bà* is not as high as the realis marker, let alone the position of the question particle. If the position of the realis marker is the same or close to the head of TP, the morpheme order in (14)a is exactly the same as that of contemporary Japanese. In general, Burmese addressee-honorific markers cannot be embedded, as illustrated by the contrast between (14)b and (14)c, but they can appear in embedded contexts if produced in the literary style (p.c., Atsuhiko Kato 07/04/2018).[7] As shown in (14)e, a conditional clause of the literary style can accommodate addressee-honorific markers.[8] The sentence is also licit without an addressee-honorific marker, as in (14)d.[9]

3.2.4.

(i) *da-ʧa̋umo* *mə-mè-ta-pa*
that-because NEG-ask-REAL-HONA
'That's why I did not ask.' (Okell 1969: 375; Romeo 2008: 80)

[7] **Acknowledgments:** I am grateful to Atsuhiko Kato for kindly providing the examples in (14)b through (14)e.

[8] **Conditionals in Japanese:** In Japanese, addressee-honorific markers are ruled out in a conditional clause, as we shall see in Section 5.2.3.4.

[9] **Styles in Burmese:** In Burmese, there are two styles as known as the colloquial style and the literary style. The conditional marker changes between the two styles. In colloquial style, the clause is headed by *-yìɴ* and, in the literary style, it is headed by either *-hlyìɴ* or *-kâ/-gâ*. Among these, *-kâ/-gâ* is compatible with embedded addressee-honorific markers (p.c., Atsuhiko Kato 07/04/2018). However, not all subordination markers can accommodate addressee-honorific markers even in the literary style. According to Kato, *-kâ/-gâ* and *-lyɛʔ* 'despite the fact that' are the only two subordination markers that can be potentially used with *-pà/-bà*. For subordination markers in Burmese, see Kato (2018).

(14) Burmese

a. *nəmɛ bɛlo k^hɔ-**pa**-θə-lɛ́.*
name how call-HON$_A$-REAL-Q
'What would your name be?' (Okell and Allott 2001: 114; Romeo 2008: 80)

b. [*t̪ù kâ-lô*] *cănò-lɛ́ kâ-dɛ̀*
3.SG dance-because 1.SG-also dance-REAL
'Because he danced, I also danced.' (Kato 2018: 576)

c. * [*t̪ù kâ-**bà**-lô*] *cănò-lɛ́ kâ-dɛ̀*
3.SG dance-HON$_A$-because 1.SG-also dance-REAL
'(i) Because he danced, I also danced;
(ii) the speaker respects the addressee.'

d. [*ʔălò ɕî-gâ*] *hmà-bà*
need exist-if order-HON$_A$
'(i) If necessary, order (me)/let me know;
(ii) the speaker respects the addressee.'

e. [*ʔălò ɕî-**bà**-gâ*] *hmà-bà*
need exist-HON$_A$-if order-HON$_A$
'(i) If necessary, order (me)/let me know;
(ii) the speaker respects the addressee.'

EARLY MIDDLE JAPANESE (*-pab(y)er*). In Early Middle Japanese (EMJ), there used to exist addressee-honorific markers which occupy an unexpectedly low pronunciation site and one of them is *-pab(y)er*. This morpheme has no etymological relation with *-mas* or *ma(w)iras*. The example in (15)a shows that it is at least lower than NegP; and the sentence in (15)b illustrates that it can appear in an embedded context.

(15) Early Middle Japanese: *-pab(y)er*

a. *mi-kokoro-pa* [$_{TP}$[$_{NegP}$[[$_{vP}$ *siri-*]-***pab(y)er***]-*azari*]-*keri*].
HON-heart-TOP know-HON$_A$-NEG-PST
'(i) I did not know your idea/thoughts;
(ii) the speaker respects the addressee.' (Genji Monogatari, Azumaya; Yamagishi 1963: 139)

b. [*tamakura-no* *sode* *wasure-**pab(y)eru***] *ori-ya*
hand pillow-GEN sleeve forget-HON$_A$.ADN time-FOC.Q
pab(y)eru.
exist.HON$_A$.ADN
'(i) Is there a time when I forget the sleeve of your hand pillow? (a rhetorical question);
(ii) the speaker respects the addressee.' (Izumishikibu Nikki 1010)

EARLY MIDDLE JAPANESE (*-saburap/-sooraw*). In Early Middle Japanese, another addressee-honorific marker *saburap-* (*sooraw-*) came into use taking over the function of *pab(y)er-*. This morpheme does not appear in CP-periphery, either; again, it has no etymological relation with *-mas* or *-pab(y)er*. For example, in the sentence in (16)a — a sentence written in the 13th century — *saburap-* (*sooraw-*) is followed by the negation marker *-az*, showing that it appears below NegP (Yada 1993, 2011; Yamada 2018b).[10] The example in (16)b shows that this morpheme can be embedded.

[10] **The position of *saburap-*:** The sentence in (16)a shows that *saburap-* is lower than NegP. Furthermore, it also seems lower than the aspect marker *-turu* 'PRF.ADN' The morpheme *ar-*, preceding *-turu*, is a *be*-support (an *ar*-support) to the head of the projection where *-turu* appears, though this order does not follow a common assumption that the negation phrase usually appears above AspP. We do not explore this puzzle in the remainder of the dissertation. What is important here is that the addressee-honorific marker appears below NegP, as in the case of *-mas* in contemporary Japanese. Another notable fact about the position of *saburaw-* is that it changed its pronunciation site (Yada 1993, 2011; Yamada 2018b). Though *saburaw-* precedes Neg in the EMJ (Early Middle Japanese) period, as schematically illustrated in (i)a, in later stage, *sooroo* (< *saburaw-*) became preceded by the negation marker as in (i)b.

(i) a. … ***-saburaw****-az* EMJ b. … *-az-**sooroo*** LMJ
-HON$_A$-NEG -NEG-HON$_A$

(16) Early Middle Japanese: *-saburaw*

a. *tikara* [[$_{\text{NegP}}$[*oyobi-**saburaw***]-*az*] *ari-turu*]
power reach out-HON$_{\text{A}}$-NEG COP-PRF.ADN
'(i) (My) power did not reach out (= I could not help it);
(ii) the speaker respects the addressee.' (Ujishuui Monogatari 1220; from Watanabe and Nishio 1960: 125; Yamada 2018b)

b. [[... *kaeri-gataki* *hongoku-pe* *kaeri-**saburawu*** *koto*]-*o* ...
return-hard real world-to return-HON$_{\text{A}}$.ADN C-ACC
*e-siri-**saburaw**-ade*] ...
cannot-know-HON$_{\text{A}}$-without
'(i) ...[without being able to understand [the fact that (I) go back to the real life, to which people cannot go back this easily] (as ...)];
(ii) the speaker respects the addressee.' (Ujishuui Monogatari 1220)

Two remarks are in order. First, *saburaw-* is followed by an aspectual marker, as shown in (17).

(17) *Kyoo-simo* *kasikoku* *mawiri-**saburapi**-ni-keri*
today-FOC timely come.HON$_{\text{O}}$-HON$_{\text{A}}$-PRF-PST
'(i) I came (to your place) timely;
(ii) the speaker respects the referent of the goal argument (< *paber-*);
(iii) the speaker respects the addressee (< *saburapi*).' (Ujishuui Monogatari 1220)

Second, examples are reported in which *sooraw-* is pronounced in two distinct positions. Observe the following sentence.

(18) *pitobito* [[$_{\text{NegP}}$[*motii-**sooraw***]-*azu*] ***sooraw**-iki*]
people use-HON$_{\text{A}}$-NEG HON$_{\text{A}}$-PST
'(i) people did not use (it);
(ii) the speaker respects the addressee.' (Tooyoo Bunko Benkan Honin Urabunsyo 1223; Kamakura Ibun #3078)

EARLY MIDDLE JAPANESE (*-tamap*, lower bigrade). Another suffix *-tamap* (that takes a lower bigrade conjugation) is also used to express the speaker's respect for

the addressee. This morpheme is observed in a prose in the Heian period and is known to have a very strong selectional restriction that the preceding verb be *mi-* 'see,' *kik-* 'hear' or *omomp-* 'think/feel.'[11] What is peculiar about this marker is that it appears inside a lexical compound verb; in this sense, it is located in a position much lower than *-mas*, *-pab(y)er* and *-sooraw*. Consider the example below.

(19) Early Middle Japanese: *-tamap*

[[*setini* *mir-u-beki*] *koto-no* *paber-u*]-*o*
immediately cope with-PRS-must thing-GEN exist.HONA.ADN-ACC
*omopi-**tamape**-ide-te-namu*
think-HONA-come-CV-FOC

'(i) (I came to this place) remembering that there is a thing I must do immediately;
(ii) the speaker respects the addressee (< *paber*);
(iii) the speaker respects the addressee (< *-tamape*)'

The combination of two verbs *omop-* 'think' and *id-* 'come' form a compound verb *omopiid-* meaning 'to remember.' The example in (19) suggests that an addressee-honorific marker appears inside this lexical compound, i.e., between *omop-* and *id-*.

PUNJABI. Punjabi (Kanpur dialect) has a morpheme encoding the speaker's respect for the addressee which does not appear in a CP-periphery (Kaur 2017, 2018, 2019; Kaur and Yamada 2019). The sentence in (20)a shows that the allocutive marker *je* is followed by the polar interrogative particle *kii*. The sentence in (20)b illustrates that *je* can be embedded and can cooccur with a complementizer *ki* 'that'; Kaur proposes that this marker is a realization of the head of TP (Kaur 2018).[12]

[11] **Status of *-tamap*:** There has been a debate concerning the status of this *-tamap*. Some argue that it should be better seen as an object-honorific marker or an addressee-honorific upgrader.

[12] **Punjabi *je*:** The sentences in (20) have another reading that the speaker is talking to more than one addressees. That is, the sentence can be used when (i) talking to a singular honorific addressee, (ii) talking to a plural honorific addressee and (iii) talking to a plural non-honorific addressee. In other words, *je* is the elsewhere-form; i.e., not 'singular and non-honorific.' For this reason, Kaur (2019) puts ALLOC.PL in the gloss of *je*. But, here, for simplicity's sake, I just put

(20) Punjabi (Kaur 2019)

a. *karan* *aayaa* ***je*** *kii?*
Karan.NOM come.PRF.MASC.SG ALLOC Q
'(i) Has Karan come?;
(ii) the speaker is talking to an honorific hearer.'

b. *karan-ne* *keyaa* [*ki* *raam*
Karan-ERG.PL say.PRF.MASC.SG that Ram
aayaa ***je***].
come.PRF.MASC.SG ALLOC
'(i) Karan said that Mira has come home;
(ii) the speaker is talking to an honorific hearer.'

Given the fact that a few languages utilize non-CP-periphery positions to encode addressee-honorific meanings, the position of addressee-honorific markers should not be treated as an idiosyncratic property of contemporary Japanese and needs a systematic morphosyntactic explanation.

3.2.2 Puzzle 2: Morphological changes in T and Neg

The second puzzle is that addressee-honorific markers affect the form of other morphemes in neighboring heads. First, the presence of *-mas* changes the morphological realization of the negation marker. Second, the existence of *-mas* also triggers a change of the *be*-support element in T. In what follows, we examine the way a negation and a *be*-support are realized in the plain form and how they change in the polite sentence.

PLAIN FORM. The sentences in (21) demonstrate how the negation and the past tense are expressed in the plain form (= without an addressee-honorific marker).

ALLOC. I thank Gurmeet Kaur for her insightful comments.

(21) Without addressee-honorific markers (contemporary Japanese)

a. Present

(i) [$_{TP}$[$_{vP}$ *Hasir*]-*u*].
run-PRS
'(I) run.'

(ii) [$_{NegP}$[$_{vP}$ *Hasir*]-*anai*].
run-NEG
'(I) do not run.'

b. Past

(i) [$_{TP}$ [$_{vP}$ *Hasit*]-*ta*].
run-PST
'(I) ran.'

(ii) [$_{TP}$[$_{NegP}$[$_{vP}$ *Hasir*]-*anak*] *at-ta*].
run-NEG COP-PST
'(I) did not run.'

The contrast between (21)a-i and (21)b-i is easy to understand; they are minimally different in tense morphology. Complexities appear in the negative sentences. First, the present tense marker *-u* is omitted when there is a negation marker *-(a)nak*, as in (21)a-ii. The sentence in (22) is not permitted.

(22) * [$_{TP}$[$_{NegP}$[$_{vP}$ *Hasir*]-*anak*]-*u*].
run-NEG-PRS
'(I) do not run (intended).'

Second, if a negative sentence is used in the past tense, the negation marker cannot be directly followed by the past tense morpheme, as in (23).

(23) * [$_{TP}$[$_{NegP}$[$_{vP}$ *Hasir*]-*anak*]-*ta*].
run-NEG-PST
'(I) did not run (intended).'

Instead, what looks like a semantically vacuous copula verb *ar-* 'COP' is inserted to T, as in (21)b-ii, just as English inserts a semantically meaningless light verb *do* in T when there is a negation within the same clause: i.e., **I not know* but *I do not know*.[13]

[13] **The *ar*-support in the present tense:** The only difference between the English do-support and the Japanese be-support is that the be-support does not take place in the present tense, presumably correlated with the fact that the tense marker *-u* does not exist in (21)a-ii.

(i) *[$_{tp}$[$_{NegP}$[$_{P}$ *Hasir*]-*anak*] ***ar***-*u*].
run-NEG be-PRS
'(I) do not run (intended).'

POLITE FORM. Now observe the sentences in (24), which display how a negation marker and a past tense are encoded with an addressee-honorific marker.

(24) With addressee-honorific markers

a. Present

(i) [[*Hasiri*]-***mas***-*u*].
run-HON$_A$-PRS
'(I) run.'

(ii) [[*Hasiri-**mas***]-*en*].
run-HON$_A$-NEG
'(I) do not run.'

b. Past

(i) [$_{TP}$[$_{NegP}$ *Hasiri*]-***masi***-*ta*].
run-HON$_A$-PST
'(I) ran.'

(ii) [$_{TP}$[$_{NegP}$[*Hasiri*]-***mas***-*en*] [*desi-ta*]].
run-HON$_A$-NEG COP.HON$_A$-PST
'(I) did not run.'

First, the addressee-honorific *-mas* appears between the verb and the negation, not in the CP region, as we discussed above. Second, the *be*-support element (*at/ar-*) 'be' must be replaced by *des-* 'COP.HON$_A$,' as in (24)b-ii. This *des-* is considered the addressee-honorific form of the copula morpheme. In contemporary Japanese, (25) is illicit, where the *be*-support does not have a concord with *-mas*.[14] Notice that, even though the sentence in (24)b-ii contains two phonological exponents *-mas* and *des-*, neither appears in the CP-field.

(25) * [$_{TP}$[$_{NegP}$[*Hasiri*]-***mas***-*en*] [***(k)at***-*ta*]
run-HON$_A$-NEG COP-PST
'(i) (I) did not run;
(ii) the speaker respects the addressee (intended).'

Third, despite the multiple occurrences of *-mas* and *des-*, the sentence in (24)b-ii is no more polite than the other examples; thus, (at least) one of them must not have a semantic contribution. Finally, the negation marker *-anak*, sandwiched between *-mas* and *des-*, changes its form to *-en*. The mere existence of an addressee-honorific marker triggers concomitant changes in neighboring heads. This is another puzzle that an adequate theory on Japanese addressee-honorific markers should explain.

[14] **Historical development:** This sentence was accepted in the past. We will come back to this point later.

(26) **Question 2:** Why does *-mas* cause morphological changes in (some) neighboring heads?

3.2.3 Puzzle 3: Scope relations

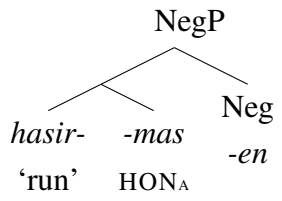
Related to the first puzzle, it is also mysterious why Japanese addressee-honorific markers lack an interaction with other semantic operators:

(27) **Question 3:** Why do *-mas* and *des-* have no interaction with other operators?

If an addressee-honorific marker is interpreted where it is pronounced, we cannot get the intended reading. To see this, consider the sentence in (28)a once again. The tree in (28)b schematizes the way they are related.

(28) a. [$_{\text{NegP}}$[*Hasiri-mas*]-*en*].
run-HON$_{\text{A}}$-NEG
'(I) do not run (polite).'

b.

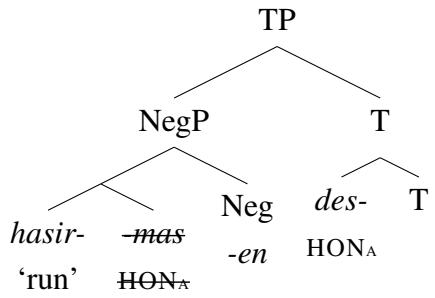


What if we naïvely interpret the morphemes in the order in which they appear? If we assume that the tree in (28)b represents the logical form and if HON$_{\text{A}}$ is an ordinary semantic operator, contributing to at-issue meaning, we would predict that the morphemes are interpreted in the order such that verb $\prec$ HON$_{\text{A}}$ $\prec$ NEG. Under this assumption, the predicted meaning is 'it is NOT the case [that I run AND I respect you],' e.g., (29)a or (29)b. However, neither is true. What we want, instead, is the semantics in (29)c, in which the scope of the honorific meaning is outside the scope of the negation.

(29) a. $\neg[\exists e.[run(e) \wedge \text{AG}(I, e) \wedge respect(I, you, e)]]$
b. $\neg[\exists e.\exists e'.[run(e) \wedge \text{AG}(I, e) \wedge respect(I, you, e')]]$
c. $[\neg\exists e.[run(e) \wedge \text{AG}(I, e)]] \wedge \exists e'.respect(I, you, e')$

One might pay attention to the fact that *des-* appears in a higher position than NEG, as in (24)b-ii, and might propose that there are two copies (Nunes 1995, 2004) or feature-sharing (Pesetsky and Torrego 2007) in such a way that the higher feature is interpreted. If we assume the LF tree in (30) in place of (28), we can derive the meaning in (29)c.

(30)

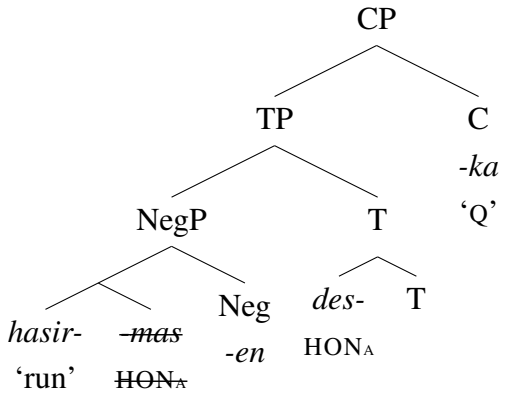


Certainly, this analysis can circumvent the problem of the scope relation between NEG and HONA. But we still encounter a problem if we take into account the issue of the scope relation with respect to an interrogative particle. For example, observe the sentence in (31).

(31) [$_{CP}$[$_{TP}$[$_{NegP}$[*Hasir-imas*]-*en*] *desi-ta*]-***ka***]*?*
run-HONA-NEG HONA.COP-PST-Q
‘(i) Did you not run?;
(ii) the speaker respects the addressee.’

Under the analysis above, the tree in (32) is assumed. If this tree is right and the honorific feature is interpreted at T, then it is predicted that *des-* falls under the scope of an interrogative particle.

(32)



This predicts that the question is created based on the partition given in (33)a or (33)b. But this prediction contradicts the data. The speaker does not pose any question whether he has respect for the addressee. The honorific meaning is independent of the partition creating process.

(33) a. $\{\{w : \exists e.[run(e,w) \wedge \text{AG}(I,e,w) \wedge respect(I,you,e,w)]\},$
$\{w : \neg\exists e.[run(e,w) \wedge \text{AG}(I,e,w) \wedge respect(I,you,e,w)]\}\}$

b. $\{\{w : \exists e.\exists e'.[run(e,w) \wedge \text{AG}(I,e,w) \wedge respect(I,you,e',w)]\},$
$\{w : \neg\exists e.\exists e'.[run(e,w) \wedge \text{AG}(I,e,w) \wedge respect(I,you,e',w)]\}\}$

c. $\{\{w : \exists e.\exists e'.[run(e,w) \wedge \text{AG}(I,e,w)]\}, \{w : \neg\exists e.[run(e,w) \wedge \text{AG}(I,e,w)]\}\}$

Instead, the semantics in (33)c is the expected prejacent meaning for the interrogative particle. Therefore, the idea that it is interpreted at T also runs into a problem. But if so, where is the addressee-honorific feature interpreted?

3.2.4 Puzzle 4: Interaction with a sentence mood

Addressee-honorific markers in contemporary Japanese exhibit an interaction with a sentence mood. A *ka*-marked interrogative clause cannot be used as a response-seeking question unless it is accompanied with an addressee-honorific marker (Miyagawa 1987, 2012, 2017). To see this, observe the contrast in (34).

(34) Response-seeking questions

a. * *Hasir-u-ka?*
run-PRS-Q
'Will you run ? (intended)'

b. *Hasiri-**mas**-u-ka?*
run-HON$_A$-PRS-Q
'(i) Will you run?;
(ii) the speaker respects the addressee.'

Making a response-seeking question without having respect is conceivable. Conceptually, expressing one's deference and making a response-seeking question have two different communicative goals. If so, it is not easy to provide a semantic explanation as to why an addressee-honorific marker is a prerequisite for a response-seeking question. If we resort to a syntactic explanation, we need to consider how *-mas* interacts with a clause-typing C-element, because, as mentioned above, it is not located inside the CP-layer.

(35) **Question 4:** Despite its low pronunciation site, why do Japanese addressee-honorific markers have an interaction with a sentence mood/clause-type?

Types of quetions. By the term RESPONSE-SEEKING QUESTION, this study refers to a prototypical question, in which the speaker, who does not know the answer, asks the addressee to provide the answer; once a response-seeking question has been asked to the addressee, a turn-taking is expected to happen and, as a consequence, an adjacency pair is created in the discourse (Sacks et al. 1974). Of course, not all questions are produced to seek information and the requirement is only applicable to response-seeking questions.

First, EMBEDDED INTERROGATIVES are created without an addressee-honorific marker, as illustrated in (36)a. In fact, if *-mas* is used inside an embedded *ka*-clause, the sentence becomes ungrammatical, as shown in (36)b.

(36) Embedded interrogatives

a. [$_{CP}$ *hasir-u-ka*] *tazune(-masi)-ta.*
run-PRS-Q ask(-HON$_A$)-PST
'(I) asked whether (they) were not being recognized.'

b. * [$_{CP}$ *hasiri-**mas**-u-ka*] *tazune(-masi)-ta.*
run-HON$_A$-PRS-Q ask(-HON$_A$)-PST
'(I) asked whether (they) were not being recognized.'

Second, RHETORICAL QUESTIONS are licit with or without an addressee-honorific marker, as in (37).

(37) Rhetorical questions

a. *Nanika-no* *yaku-ni* *tat-u-ka?* *Iya,* *tat-anai.*
anything-GEN serve-DAT stand-PRS-Q no stand-NEG
'Will this be serviceable to anything? No, it won't.'
(BCCWJ; PB1n_00048)

b. *Nanika-no* *yaku-ni* *tati-mas-u-ka?* *Iie,*
anything-GEN serve-DAT stand-HON$_A$-PRS-Q no
tati-mas-en.
stand-HON$_A$-NEG
'(i) Will this be serviceable to anything? No, it won't;
(ii) the speaker respects the addressee.'

Third, SELF-ORIENTED QUESTIONS can be used without an addressee-honorific marker.

(38) *Sorosoro* *ik-u-ka.*
soon go-PRS-Q
'Shall I go now, won't I?'

Fourth, TOPIC-SETTING QUESTIONS do not require an addressee-honorific marker. The sentence in (39) is taken from a chapter title, which is used to set up a discourse topic. An addressee-honorific marker is not necessary.

(39) topic-setting question (chapter title)

54 Ankooruwatto-wa tikaru-o sinog-u-ka?
54 Angkor Wat-TOP Tikal-ACC surpass-PRS-Q
'Chapter 54: Does Angkor Wat surpass Tikal?' (BCCWJ; LBr2_00066)

Finally, as in the case of the response-seeking question, the DISPLAY QUESTION, which is a question asking the respondent to provide information already known by the questioner (= ask the addressee to display his or her knowledge), requires an addressee-honorific marker.[15] For example, in a quiz show, (40)a is felicitous but (40)b is not.

[15] **Display questions in a paper-based exam:** Unlike in a quiz show, display questions in a paper-based exam can be used without *des-*, as shown in (i)a; the sentence in (i)a cannot be accepted in a class room or in a quiz show, where the addressee(s) is/are physically present.

(i) a. *Tokugawa Ieyasu-ga hiraita bakuhu-wa nani-ka?*
Tokugawa Ieyasu-NOM initiate regime-TOP what-Q
'What is the regime initiated by Ieyasu Tokugawa?'

b. *Tokugawa Ieyasu-ga hiraita bakuhu-wa nan des-u-ka?*
Tokugawa Ieyasu-NOM initiate regime-TOP what COP.HONA-PRS-Q
'(i) What is the regime initiated by Ieyasu Tokugawa?;
(ii) the speaker respects the addressee.'

A *mas*-less display question is still odd. Some respondents would find that the sentence in (ii)a is a fragment of a sentence where the main clause is truncated; e.g., *-ka* (*kotae-ro*) 'Q (answer-IMP').

(ii) a. ? *Tokugawa Ieyasu-no hiraita bakuhu-o nan-to i-u-ka?*
Tokugawa Ieyasu-GEN initiate regime-ACC what-as say-HONA-Q
'What do you call the regime initiated by Ieyasu Tokugawa?'

b. *Tokugawa Ieyasu-no hiraita bakuhu-o nan-to ii-mas-u-ka?*
Tokugawa Ieyasu-GEN initiate regime-ACC what-as say-HONA-PRS-Q
'(i) What do you call the regime initiated by Ieyasu Tokugawa?;
(ii) the speaker respects the addressee.'

(40) a. * *Mondai. Tokugawa Ieyasu-no hiraita bakuhu-o*
question Tokugawa Ieyasu-GEN initiate regime-ACC
nan-to i-u-ka?
what-as say-PRS-Q
'Question. What do you call the regime initiated by Ieyasu Tokugawa?'

b. *Mondai des-u. Tokugawa Ieyasu-no hiraita*
question COP.HON$_A$-PRS Tokugawa Ieyasu-GEN initiate
bakuhu-o nan-to ii-mas-u-ka?
regime-ACC what-as say-HON$_A$-PRS-Q
'(i) Question. What do you call the regime initiated by Ieyasu Tokugawa?;
(ii) the speaker respects the addressee.'

What is common to the response-seeking question and the display question is that there exists an addressee who is different of the speaker. In contrast, in the other questions, this requirement does not hold. As for the rhetorical question, the self-oriented question, and the topic-setting question, the speaker him- or herself is the response-provider. In other words, the addressee and the speaker are conflated. As for the embedded interrogative, no illocutionary force is involved; hence, there is no addressee. Addressee-honorific markers are necessary only when an answer is expected to given by the addressee who is clearly distinguished from the speaker.

Related issues. Though this chapter only discusses an interaction between an addressee-honorific marker and a response-seeking question in contemporary Japanese, it is important to note that addressee-honorific markers/allocutive markings show many other kinds of interaction with clause-typing and/or sentence mood. First, one famous example is Souletin Basque (Oyharçabal 1993: 107-108; Miyagawa 2017: 24; Zu 2018: 52). In this dialect, unlike Japanese, presence of allocutive marking in a question makes the sentence unacceptable — or, to be more precise, an allocutive marker is prohibited if the verb is inflected to indicate the interrogative sentence type. For example, consider the sentence in (41).

(41) Souletin Basque (Oyharçabal 1993: 107-108)

Lan egiten	{***duia/*dina***}	*hire*	*lagunak?*
work	AUX.3.ERG.Q/AUX.3.ERG.ALLOC:FEM.Q	your	friend

'Does your friend work?'

Here, the main verb is inflected to show that this is a question. The allocutive marking in Souletin Basque cannot coexist with such a question marking; therefore, the allocutive marking must be omitted.

In Batua Basque, where the question particle is expressed as a single morpheme, distinguished from the inflection of the verb, allocutive markings can appear in an interrogative clause, as illustrated in (42). This suggests that (i) it is not the illocutionary act of asking a response-seeking question that precludes an allocutive marking in Basque dialects but (ii) allocutive markings exhibit an interaction with the syntactic position of the question-particle (Miyagawa 2017: 24; Zu 2018: 53).

(42) Batua Basque (Zu 2018: 52)

Lan egiten	***al***	*di-∅-**n***	*hire*	*lagunak?*
work	Q	AUX-3.ERG-ALLOC:FEM	your	friend.ERG

'Does your friend work?'

Second, in Burmese, addressee-honorific markers have an interaction with the imperative. When people are conversing with friends, *-pà/bà* is not used in a declarative clause. However, an addressee-honorific marker is commonly used (despite interpersonal closeness) in imperative sentences (n.b., the sentence in (43)a is grammatically sound; p.c., with Atsuhiko Kato on 07/04/2018). Wheatley states that Burmese imperatives "can be softened by the addition of polite particle the 'polite' Pv, /-pa/, or 'tags', such as /-no/ or /-la/ 'won't you' (Wheatley 1982: 292)" (see also Allott 1965: 306).

(43) Burmese imperatives (Kato 2018: 574)

a. *ʔèiɴ-hmà kâ.*
house-at dance
'Dance at home!'

b. *ʔèiɴ-hmà kâ-**bà**.*
house-at dance-HON$_A$
'Dance at home!'

In contrast, Japanese addressee-honorific markers do not show this softening effect; but see the discussion on page 176 for Edo-period Japanese.[16]

(44) Japanese imperatives

a. *Ie-de odor-e!*
house-at dance-IMP
'Dance at home!' (a strong imperative)

b. * *Ie-de odori-**mas**-e!*
house-at dance-HON$_A$-IMP
'Dance at home!' (a weak imperative reading is intended).

3.2.5 Interim Summary

In this section, we have seen four puzzles and have set up four research questions, repeated in (45). The goal of this chapter is to build a syntactic theory of sentences containing addressee-honorific markers that provides an answer to these questions.

[16] **Weak imperatives in Japanese:** In order to make a weak imperative, Japanese must use a high-applicative/subject-honorific marking, not an addressee-honorific marker (see also Section 2.2.1.2.3; Yamada 2019g).

(i) *Ie-de odot-te kur-e.*
house-at dance-CV APPL$_H$-IMP
'Please dance at home!'

(ii) *Ie-de odot-te kudasai.*
house-at dance-CV APPL$_H$.HON$_S$
'(i) Please dance at home!;
(ii) the speaker respects the referent of the subject (= the addressee).'

(45) Research questions

a. **Question 1:** Where is *-mas* pronounced and how does the grammar sanction such an unexpectedly low discourse-oriented element? (= (4))

b. **Question 2:** Why does *-mas* cause morphological changes in (some) neighboring heads? (= (26))

c. **Question 3:** Why do *-mas* and *des-* have no interaction with other operators? (= (27))

d. **Question 4:** Despite its low pronunciation site, why do Japanese addressee-honorific markers have an interaction with a sentence mood/clause-type? (= (35))

3.3 From syntax to morphology

3.3.1 Previous studies

The syntax of Japanese addressee-honorific markers has not been seriously examined but there is one important exception — Miyagawa (2012, 2017), who proposes a concrete syntactic analysis of *-mas*. Here, let us take a look at the way he analyzes the data to see to what extent the above puzzles are solved.

Speech act projections. Recently, we can find several improvements of Ross's (1970) performative hypothesis — an attempt to syntacticize Austin's (1962) speech act theory by proposing a silent superordinate structure that embeds a main sentence. One influential work is Speas and Tenny (2003), who propose two distinct functional projections for discourse participants above CP (in their terminology, sa*P and saP). The lower sa*P is responsible for the hearer, and the upper saP is used to encode the speaker, as in (46)a. Just as with the *v*P-VP shell structure, the external argument position, the specifier position of saP is designed for the position of the 'agent' of the speech event, namely the speaker. The 'theme' is the utterance content and the 'recipient' is the hearer. By analogy of theta-roles in the V-domain, they propose P(ragmatic)-roles for the C-domain.

Recent researchers have proposed similar structures with different notations and refinements as illustrated in (46).

(46) Speech act functional projections

a. Ross (1970)
[$_{S}$ NP (speaker) [$_{VP}$ V NP (hearer) [$_{NP\ (S)}$ . . .]]]

b. Speas and Tenny (2003)
[$_{saP}$ SPEAKER [$_{sa'}$ sa [$_{sa*P}$ HEARER [$_{sa*'}$ sa* CONTENT]]]]

c. Haegeman and Hill (2013)
[$_{saP}$ SPEAKER [$_{sa'}$ sa [$_{SAP}$ HEARER [$_{SA'}$ SA [$_{ForceP}$ ...]]]]]

d. Hill (2014: 147)
[$_{SAsP}$ SPEAKER [$_{SAs'}$ SA$_{s}$ [$_{SAhP}$ HEARER [$_{SAh'}$ SA$_{h}$ [$_{ForceP}$ ...]]]]

e. Miyagawa (2017: 29)
[$_{SAP}$ SPEAKER [$_{SA'}$ SA [$_{saP}$ HEARER [$_{sa'}$ sa [$_{CP}$ ...]]]]]

f. Zu (2018: 73)
[$_{SpP}$ SPEAKER Sp [$_{AdrP}$ ADDRESSEE Adr [$_{senP}$ Perspective Sen . . .]]]

g. Portner et al. (2019: 10, 25)
[$_{cP}$ SPEAKER [$_{c'}$ INTERLOCUTOR *c* [$_{SentMoodP}$ SentM [$_{TP}$ . . .]]]]

Miyagawa (2012, 2017). Originally, the speech act shell analysis was considered useful in analyzing vocatives (Haegeman and Hill 2013; Hill 2007, 2014), but more recently researchers have extended this view to the syntax of addressee-honorific markers (Miyagawa 2012, 2017; Kaur 2017, 2018, 2019; Kaur and Yamada 2019; Portner et al. 2019). In accord with the Uniformity Principle (Chomsky 2001: 2) and its extended version of Strong Uniformity given in (47), Miyagawa (2012, 2017) proposes that the addressee-honorification is the phi-feature agreement taking place inside the CP-domain.

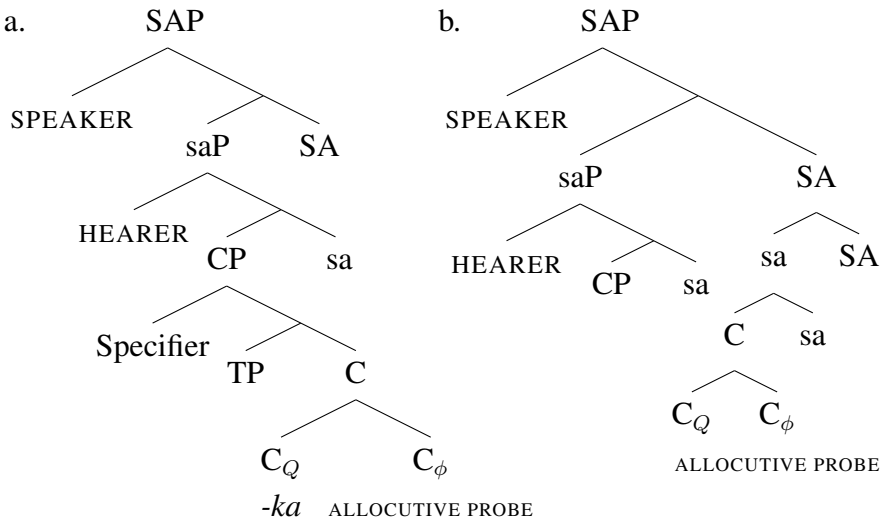
(47) **Uniformity Principle and Strong Uniformity**

a. **Uniformity Principle** (Chomsky 2001: 2): In the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances.

b. **Strong Uniformity** (Miyagawa 2017: 2): Every language shares the same set of grammatical features, and every language overtly manifests these features.

The gist of his reasoning is as follows. First, if Strong Uniformity is on the right track, it is predicted that a well-known feature set, such as the phi-feature set, should be found even in languages, for example, in Japanese, which are known for its apparent lack of phi-feature agreement in TP. Second, he tries to nullify this apparent counterexample by proposing a parametrization of possible places/heads where phi-features distribute; i.e. phi-features are introduced at C in every language but the variation appears as to whether phi-features are lowered to T. In some languages, the phi-feature agreement is inherited by T (e.g., English and Spanish), while it stays in C in other languages (e.g., Japanese and Dinka). He hypothesizes that an addressee-honorific marker, as its name suggests, is agreement with a second person nominal element which appears in CP-periphery. If so, Japanese supports the idea that phi-features are borne out in C. By adopting the speech act shell analysis, he proposes the following configuration in (48)a for phi-feature agreement.

(48) Miyagawa (2012: 85, 88)



What is unique to Miyagawa's analysis is his assumption that the phi-feature probe undergoes head-movement, before it starts probing. As a result, the structure in (48)a is updated to (48)b. This step is indispensable because he wants to (i) make the phi-feature originate in C (Strong Uniformity) and (ii) make the phi-feature (= Probe) c-command the Spec of saP to enter an agreement relation with the HEARER (= Goal; (48)b). For convenience's sake, I refer to this analysis as the CP AGREE-ANALYSIS.

This CP Agree Analysis is, however, not without problems. First, it remains unclear why GOAL (= HEARER) is active. Although Miyagawa does not say anything about the activity condition, one might try to defend his proposal by proposing that the Probe (= the moved C) fills out the [CASE: __] in Spec of saP with vocative (cf., Moro 2003, Hill 2007, 2014; Haegeman and Hill 2013) and that this lack of Case feature makes the goal active. However, if so, English and other languages also need the same Agree operation in CP (since they also have vocatives), which contradicts Miyagawa's important assumption that English only entertains the phi-feature agreement at T.

Second, Probe-movement poses a look-ahead problem. If the phi-feature set starts probing downward, right after it is introduced at C, it cannot find any

active candidate in its c-commanding domain. Therefore, the CP Agree Analysis proposes that the Probe waits for a future step in the derivation to proceed and undergoes head-movement to the head of SAP. The only motivation for this movement seems to be that the probe 'knows' that it can find a goal if it head-moves to SA.[17]

Third, it is not clear how the CP Agree Analysis treats the difference between CP-periphery languages (e.g., Korean) and non-CP-periphery languages (e.g., Japanese). According to this analysis, languages with addressee-honorific markers should uniformly have the phi-feature agreement inside the CP domain. One could say that non-CP-periphery languages are indeed involved with feature-inheritance from C to T, which is followed by another inheritance from T to a head in one of the projections where *-mas* is pronounced. But the analysis with multiple feature inheritances has the same predictive power of the theory which assumes no restriction on phi-feature distribution, which may diminish the attractiveness of two-by-two parameterization of the CP Agree Analysis.

Finally, a construction with multiple phonological exponents such as the one in (24) is also a challenge to this analysis. When forming an addressee-honorific construction, we not only have to change the form of the addressee-honorific marker, but also have to change the adjacent heads, as we saw in Section 3.2.2. If we assume that Japanese has a phi-feature agreement taking place between C and the specifier of saP, it remains unanswered why this language causes morphological changes in Neg and T.

Related studies. Other researchers do not assume a strict parallelism between the *v*P-shell and the Speech Act Shell. For example, Slocum (2016) claims that the position dedicated to vocatives and allocutivity is not above ForceP but below it, proposing the order of functional projections in (49) and, thus, standing in sharp contrast with Haegeman and Hill (2013) and Hill (2014), who posit SAP higher than ForceP.

[17] **Solutions?:** This problem can be circumvented if we assume that the hearer is the probe and the goal is C, or if we propose an upward-agree (Bjorkman 2011; Zeijlstra 2012; Wurmbrand 2014).

(49) ForceP > TopP1 > AddrP > FocP > TopP2 > FinP

Analyzing addressee-honorific markers in Korean (cP stands for the 'context phrase'), Portner et al. (2019) propose the structure in (50). They assume that clause typing features in Mood and features in *c* are spelled out as a single particle, resulting in *-supnita* and other speech style particles. The relevant honorifics-related features [status] and [formal] are introduced in the head of *c*P. This structure is suitable for Korean data — with which they are concerned — but the same analysis cannot be directly applied to Japanese, because, again, *-mas* is not pronounced above TP.

(50) $[_{cP}\ c_{[\text{status:Sp<Addr][formal:+}]}\ [_{\text{MoodP}}\ \text{Mood}_{[\text{s-mood:}dec]}\ [_{\text{TP}}\ \text{T}\ [_{v\text{P}}\ v\ \ldots\ ]\ ]\ ]\ ]$

Since Japanese data are not the main data they were analyzing, it is unfair to say that these approaches had a problem based solely on the fact that their analysis cannot capture the Japanese data. But it remains true that we need an improvement to explain the distribution of addressee-honorific markers/allocutive markings in non-CP-periphery languages.

3.3.2 Functional projections between *v*P and NegP

The area between *v*P and NegP has been discussed in the syntax literature. In this section, we examine such projections to see if they can be the right pronunciation site for *-mas*. Specifically, here we discuss *v*P, VoiceP, High-ApplicativeP, AffP and AspP. It is, however, shown that none of these projections can be identified as the position of *-mas*. Then, in the following two sections, we seek better accounts.

3.3.2.1 *v*P/VoiceP

Attention to functional projections above *v*P has been a major research field in the recent syntax since around the turn of the 1990s (Marantz 1984, 1997; Pesetsky 1989; Johnson 1991; Hale and Keyser 1993; Travis 1991; Koizumi 1993; Noonan 1993, 1995; Bowers 1993; Collins and Thráinsson 1993, 1996; Kratzer 1996; Borer 1994; Chomsky 1995; Harley 1995) and such a functional projection is

called *v*P (Chomsky 1995) and/or VoiceP (Kratzer 1996). Nowadays researchers are more or less convinced that *v*P and VoiceP are distinct functional projections (Alexiadou et al. 2006; Marantz 2008; Pylkkänen 2008; Harley 2009; Marantz 2013; Legate 2014), though these functional projections were sometimes used interchangeably.

The question is whether they are a good candidate for the pronunciation position of *-mas*. I conclude that they cannot be the position for *-mas*, because *-mas* does not show any of the following properties that have been assumed for these projections (Legate 2014).

(51) Characterization of *v*P/VoiceP

a. Theta-role: Introducing the external theta-role (Bower 1993; Chomsky 1995; Harley 1995; Kratzer 1996)

b. Case:

i. Assigning an accusative case to the object (Chomsky 1995; Kratzer 1996; Wurmbrand 2001; Fukuda 2013)

ii. Assigning an ergative case to the subject (Ura 2001; Legate 2002, 2008; Massam 2006; Woolford 2006)

c. Agree: a site for object-agreement (Chomsky 1995)

d. Phase: a substantial domain for the cycle of syntactic operations

e. Event structure: Eventivity (Harley 1995; Embcik 2004)

f. Causation (Harley 1995, 2008; Harley and Noyer 2000; Travis 2000; Folli and Harley 2007)

First, *-mas* has nothing to do with the theta-role. Certainly, an addressee-honorific marker is tied to the addressee, which is the respect-'recipient.' For this reason, we may propose that a particular semantic role is assigned to the addressee. However, this role is not so much as a theta-role — a role assigned to an EVENT PARTICIPANT — as a p(ragmatic)-role in the sense of Speas and Tenny (2003) — that is, a role assigned to a DISCOURSE PARTICIPANT. If the *v*P and/or VoiceP are the functional projections dedicated only to manipulate the

event structure and specify the relationship among the event participants, they are not the right functional projection for an addressee-honorific marker.

Second, there is no empirical support to argue that addressee-honorific markers are associated with a case. Or more precisely, since the addressee never gets realized as a pronounceable noun phrase, it is more accurate to say that this is not a testable hypothesis. Perhaps, one might argue that the vocative is the realization of the case of the addressee but the connection between the vocative and *-mas* seems less direct for the following reasons: (a) with or without an addressee-honorific marker, one can use a vocative. If the vocative is only sanctioned by *-mas*, it would be predicted that one cannot use a vocative without *-mas*, contrary to the fact. (b) Vocatives typically appear at the beginning (or the end) of the sentence. If *-mas* is a realization of the head that assigns a case to a vocative between *v*P and NegP, it is predicted that vocatives should appear in the mid-sentential region. Given the dominant view that vocatives are related to a projection above CP (Hill 2014), this is a strange assumption (but see also Slocum 2016). (c) The Cases assumed to be associated with the *v*P/VoiceP are the accusative and the ergative, not the vocative.

Finally, an addressee-honorific marker appears in a position distinct from the causative marker *-(a)sase* and the voice marker *-rare*, as in (52). None of the considerations supports the view that *-mas* appears in *v*P or VoiceP.

(52) [$_{\text{TP}}$[[$_{\text{VoiceP}}$[$_{v\text{P}}$ *Utaw-asase*]-*rare*]-*mas*]-*ita*].
sing-CAUS-PASS-HON$_{\text{A}}$-PST
'(i) (I) was made to sing;
(ii) the speaker respects the addressee.'

3.3.2.2 High-ApplicativeP/AffP

The second candidate for the pronunciation site of *-mas* is what is called the high-applicative phrase. Bantu languages are by far the most famous for this kind of construction. The example in (53) is taken from Chaga, in which a non-selected argument is introduced by an applicative suffix. In her influential work, Pylkkänen (2008: 14) proposes a special functional projection for these elements, which

she calls the High-ApplP, and claims that it is located between *v*P and VoiceP, as in (54) (for other approaches on (high)-applicatives, see for example Cuervo 2003; McGinnis 2001a,b, 2002; McGinnis and Gerdts 2004; Legate 2002; Jeong 2006; Lee 2012; Bosse et al. 2012).

(53) Chaga

N-á-í-lyì-í-à ***m-kà*** *k-élyá.*
FOC-1.SG-PRS-eat-APPL$_{H}$-FV 1-wife 7-food
'He is eating food for his wife.' (Pylkkänen 2008: 11)

(54) High-applicative analysis I (Pylkkänen's 2008)
[$_{\text{VoiceP}}$ he [$_{\text{Voice'}}$ Voice [$_{\text{HighApplP}}$ wife [$_{\text{HighAppl'}}$ High-Appl [$_{\text{VP}}$ eat food]]]]]

Relying on the observations of Kubo (1992), she proposes that the Japanese gapless indirect/adversity passive is an instance of high-applicative construction (ibid.: 64). For example, the presence of a 'passive' morpheme *-rare* changes the valency of the sentence and an affectee (= Taro) is introduced, as in (55)b (see also Section 2.2.1.2.2 for a more detailed description of this morpheme).

(55) Japanese (aka., the gapless indirect passive)

a. *Hanako-ga* *shinkoushukyo-o* *hazime-ta.*
Hanako-NOM new.religion-ACC begin-PST
'Hanako started a new religion.'

b. *Taroo-ga* *Hanako-ni* *shinkoushukyo-o* *hazime-**rare**-ta.*
Taro-NOM Hanako-DAT new.religion-ACC begin-PASS-PST
'Taro was adversely affected by Hanako starting a new religion on him.'

In some sense, addressee (i.e., an individual not represented in the argument structure) can be understood as a non-selected applied argument. Indeed, researchers studying Basque have pointed out the possibility that Basque allocutivity has developed out of some kinds of non-selected datives, called the 'ethical dative' and the 'dative of interest' (Schuchardt 1893; Gavel and Lacombe 1933-36;

Lafon 1980 [1944]; Altube 1934; Alberdi 1995: 281; Antonov 2015: 60). Likewise, in Levantine Arabic (Jordanian, Lebanese, Palestinian, and Syrian), some datives have developed a hearer-oriented attitude use as well as other uses that have a pragmatic contribution (Haddad to appear). Furthermore, a construction with an implied non-argument noun phrase developed into an addressee-honorific marker in Japanese, namely *-pab(y)er* (Ishizaka 1944). Given these similarities, it is of great importance to ask whether *-mas* in contemporary Japanese is also a special type of high-applicative construction (Yamada 2018b).

However, in this dissertation, I take the view that the pronunciation site for *-mas* should be clearly distinguished from such applicative projections. Below, I firstly show that the original analysis of Pylkkänen fails to explain some important properties of *-mas* and, then, I point out that a modified version of applicative approach is also inadequate for the syntactic analysis of *-mas*.

First, Pylkkänen's (2008) original proposal cannot be applied to *-mas*. As in (56)b, a gapless indirect passive and *-mas* can co-occur within the same sentence and *-mas* is preceded by *-rare*. If *-mas* appears in the head of HighApplP in (54), we predict that *-mas* and *-rare* compete for the same position, contrary to the fact.

(56) Gapless indirect passive

a. *Hanako-ga shinkoushukyo-o hazime-**masi**-ta.*
Hanako-NOM new.religion-ACC begin-HON$_A$-PST
'(i) Hanako started a new religion;
(ii) the speaker respects the addressee.'

b. *Taroo-ga Hanako-ni shinkoushukyo-o*
Taro-NOM Hanako-DAT new.religion-ACC
*hazime-**rare**-**masi**-ta.*
begin-PASS-HON$_A$-PST
'(i) Taro was adversely affected by Hanako starting a new religion on him;
(ii) the speaker respects the addressee.'

In Chapter 2, we also saw that there are a couple of high-applicative, content-

honorific expressions; e.g., *-te kudasar/itadak-* '-CV APPL$_{H}$.HON$_{S}$/HON$_{O}$.' All of these are felicitously followed by *-mas*, also suggesting that the position for *-mas* must be distinguished from the high-applicative position.

Second, one might argue that the problem to the applicative approach is overcome if we loosen her assumption and admit many more applicative introducing heads than she originally envisioned; however, I would like to point that such a modification still runs into a problem. Bosse et al. (2012) criticize Pylkkänen's proposal on the ground that her version of High-ApplicativeP inevitably embraces miscellaneous constructions — benefactive constructions, external possessor constructions, attitude holder constructions and affected experiencer constructions, which they claim to be differentiated for empirical reasons (see Bosse et al. 2012 for the details). Among these constructions, they especially examine affected experiencer constructions, as exemplified in (57), and conclude that there are two distinct positions for such affected experiencers, as in (58), which could have been conflated as a High-applicative phrase under Pylkkänen's (2008) framework (in their notation, they use Aff(ect)P, instead of High-ApplicativeP). In other words, what they propose is a split High-ApplP analysis, allowing more functional projections around VoiceP.

(57) Affected experiencer constructions (Bosse et al. 2012)

a. German

*Alex zerbrach **Chris** Bens Case.*
Alex broke Chris.DAT Ben's vase

'Alex broke Ben's vase on Chris (= Alex broke Ben's vase, and this matter to Chris).'

b. Albanian

*Agim-i **i**-a theu vazon e Ben-it*
Agim-NOM 3.SG.ACC broke vase.ACC AD Ben-GEN
Dritan-it.
Dritan-DAT

'Agim broke Ben's vase on Dritan (= Agim broke Ben's vase, and this matters to Dritan).'

c. Hebrew

*Hem kol ha-zman mitxatnim **li**.*
they all the-time marry to-me.

'They are getting married on me all the time (and it bothers me).' (Borer and Grodzinsky 1986)

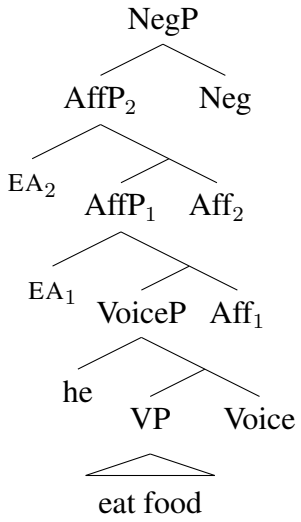
(58) High-applicative analysis II (AffP analysis; Bosse et al. 2012)

a. [$_{\text{VoiceP}}$ he [$_{\text{Voice'}}$ Voice [$_{\text{AffP}}$ wife [$_{\text{Aff'}}$ Aff [$_{\text{VP}}$ eat food]]]]]

b. [$_{\text{AffP}}$ wife [$_{\text{Aff'}}$ Aff [$_{\text{VoiceP}}$ he [$_{\text{Voice'}}$ Voice [$_{\text{VP}}$ eat food]]]]]

If we follow such a split-HighApplP approach, one could propose that Japanese has another layer of an applicative/affect phrase above VoiceP for *-mas*, i.e., AffP_2, as illustrated in (59). With this revision, this first problem is not as challenging as it first appears.

(59)



Yet, there is another problem harder to solve; the main job of *-mas* cannot be an introduction of a new individual to the event structure, which is assumed to be the semantic contribution of High-Applicative phrases (Pylkkänen 2008: 12; Bosse et al. 2012). For example, in the case of the indirect passive in (55)b, the thematic role of the additional event participant *Taroo* (t) is defined based on the event *e*, with respect to which *Hanako* (h) and *the new religion* (r) are given their thematic roles. The job of the High-ApplicativeP is to extend the semantics in (60)a to (60)b.

(60) a. $\lambda e \in D_s.\ begin(e) \wedge \text{AG}\ (e, h) \wedge \text{PAT}\ (e, r)$.

b. $\lambda e \in D_s.\ begin(e) \wedge \text{AG}\ (e, h) \wedge \text{PAT}\ (e, r) \wedge \text{AFF}\ (e, t)$.

If *-mas* is to be analogized with such applicative elements, we predict that the sentence in (61)b is given the semantics in (62)b, which is minimally different from the semantics for (61)a, i.e., (62)a, in that it has an additional theta-role.

(61) a. *Kare-wa gohan-o tabe-ta.*
he-TOP food-ACC eat-PST
'He ate the food.'

b. *Kare-wa gohan-o tabe-**masi**-ta.*
he-TOP food-ACC eat-HON$_A$-PST
'(i) He ate the food;
(ii) the speaker respects the addressee.'

(62) a. $\lambda e \in D_s.\ begin(e) \wedge \text{AG}\ (e, h) \wedge \text{PAT}\ (e, r).$

b. $\lambda e \in D_s.\ begin(e) \wedge \text{AG}\ (e, h) \wedge \text{PAT}\ (e, r) \wedge \text{BEN}\ (e, Addr).$

However, the respect-giving has nothing to do with the food-eating event. The addressee is admired not with respect to the event of his eating food, but with respect to the utterance event. It should be, therefore, concluded that the hypothesis that the *-mas* is the head of High-ApplicativeP is difficult to maintain.

3.3.2.3 AspP

In Chapter 2, we saw that aspectual expressions encode honorific meanings. Since we have seen that VoiceP/*v*P and High-ApplP are not the candidate for the position for *-mas*, it is reasonable to ask whether AspP is the relevant position.

The answer seems to be negative again; the head of AspP must be lower than the position of *-mas*. First, aspectual expressions *-te i-* '-CV PRG/PRF' can be used independently from an addressee-honorific marker. The sentences in (63) clearly show that *-mas* appears in a position preceded by an aspectual marker.

(63) a. *Sensei-wa sudeni tootyaku si-te **i**-ru.*
teacher-TOP already arrival do-CV PRF-PRS.
'The teacher has already arrived.'

b. *Sensei-wa sudeni tootyaku si-te **i-mas**-u.*
teacher-TOP already arrival do-CV PRF-HON$_A$-PRS.
'(i) The teacher has already arrived;
(ii) the speaker respects the addressee.'

Aspectual expressions also have suppletive forms for subject-honorific marking and addressee-honorific upgrader (Chapter 2) — (i) *-te irassyar-* '-CV PRG/PRF.HONS' (cf., p. 67) and (ii) *-te or-* '-CV PRG/PRF.HONU' (p. 142). These aspectual honorific expressions are also followed by *-mas* as shown below.

(64) Aspectual expressions (with content honorific markings)

a. *Sensei-wa sudeni tootyaku s-are-te*
teacher-TOP already arrival do-HONS-CV
irassyai-mas-u.
PRF.HONS-HONA-PRS.
'(i) The teacher has already arrived;
(ii) the speaker respects the teacher;
(iii) the speaker respects the addressee.'

b. *Kare-wa sudeni tootyaku si-te* ***ori-mas-u.***
he-TOP already arrival do-CV PRF.HONU-HONA-PRS.
'(i) He has already arrived;
(ii) the speaker respects the addressee;
(iii) the respect is very high.'

Second, the central semantic contribution of such aspectual expressions is to situate the event with another reference event; inchoative, progressive, and perfective. Addressee-honorification is orthogonal to this kind of event-manipulation. Semantically and conceptually, it is quite difficult to equate the position for *-mas* with Asp.

Third, an AspP can be preposed and be separated from *-mas*. For example, compare the two sentences in (65). The aspectual phrase *ason-de i-* 'play-CV PRG' is marked by a focus particle *-wa* and then gets preposed. As a result, a do-support (*si*-support) appears in front of *-mas*, suggesting that the position of *-mas* is distinct from Asp.

(65) a. *Kare-wa ason-de i-mas-u.*
he-TOP play-CV PRG-HON$_A$-PRS
'(i) He is playing;
(ii) the speaker respects the addressee.'

b. *Kare-wa* [*ason-de i*]*-wa si-mas-u.*
he-TOP play-CV PRG-FOC do-HON$_A$-PRS
'(i) (It is true that) he is playing;
(ii) the speaker respects the addressee.'

Finally, a coordination data also illustrates that an AspP can be separated from *-mas*. As shown below, if two AspPs (headded by *ori-* 'PRF.HON$_U$') are coordinated, *-mas* must not be attached to the first conjunct. If *-mas* is in AspP, this kind of data is hard to explain.

(66) a. *Watasi-wa* [*sudeni tootyaku si-te* ***ori***], [*heya-ni*
he-TOP already arrival do-CV PRF.HON$_U$ room-to
ki-te ***ori-mas***]*-u.*
come-CV PRF.HON$_U$-HON$_A$-PRS.
'(i) I [have already arrived] and [have come to the room];
(ii) the speaker respects the addressee;
(iii) the respect is very high.'

b. * *Watasi-wa* [*sudeni tootyaku si-te* ***ori-masi***],
he-TOP already arrival do-CV PRF.HON$_U$-HON$_A$
[*heya-ni ki-te* ***ori-mas***]*-u.*
room-to come-CV PRF.HON$_U$-HON$_A$-PRS.
'(i) I [have already arrived] and [have come to the room];
(ii) the speaker respects the addressee;
(iii) the respect is very high (intended).'

3.3.3 Hypothesis I: A syntactic account

The results so far have been primarily negative. None of the familiar functional projections can be a good pronunciation site for *-mas*. As remaining possibilities, we examine two different hypotheses below.

The first is to propose its own functional projection in the *v*P-periphery (hereafter Hypothesis I). The second is to argue that it appears in Neg (hereafter Hypothesis II). In my earlier studies, I advocated the first approach (Yamada 2017, 2018c, 2019b), which is outlined in this section (Section 3.3.3).

However, this hypothesis has some unsatisfying limitations. As an alternative, in the next section, I propose a different analysis, Hypothesis II, and show that this approach can solve the puzzles and overcome the limitations of Hypothesis I, as well as being congenial to our recent understanding that agreement is a morphological operation (Section 3.3.4).

3.3.3.1 Outline

A driving idea of Hypothesis I is to assume (i) a discourse-oriented functional projection in the *v*P-periphery (hereafter, I call it low-Addr(essee)P for the sake of convenience) and (ii) agreement between a feature in low-Addr and a feature in the Spec of AddrP (which has been called HEARER by previous studies cited in (46)). If we further assume that (iii) only the higher feature in the CP-periphery is interpretable at LF, we can reconcile the data with the traditional view that discourse-oriented expressions are distributed above/around the CP-region. Let us examine each of these three assumptions in turn.

Assumption 1: A functional projection in the *v*P-periphery. The proposal that there exists a discourse-oriented functional projection in the *v*P-periphery comes from the tradition of cartographic approaches. Since the influential studies of Rizzi (1997) and Cinque (1999), the clause external area, traditionally called CP, has been analyzed as a region with a rich, articulated cascade of functional projections (Cinque and Rizzi 2004). The attractiveness of such a cartographic approach is its simplicity in the syntax-semantics interface. As Belletti (2004: 17) puts, "[t]he relation between syntax and the interpretative interface (LF) is expressed in an optimally simple way" because the interpretation is directly read off from the syntactic configuration. A group of researchers within this framework have also pointed out a significant resemblance between the CP-periphery and the *v*P-periphery; that is, the two areas peripheral to the phase-head (in the

sense of Chomsky 2000, 2001) both possess topic and focus positions (Belletti 2001, 2004; Jayaseelan 2001, 2010; Aelbrecht and Haegeman 2012; Funakoshi 2014; Rizzi and Cinque 2016; Rizzi 2018).

An example that Belletti (2004) offers an example from Italian. Italian (as well as many Romance languages) allows two different subject positions — the pre-verbal subject position and the post-verbal subject position. NPI items can be licensed by the negation marker *non* if they appear in the post-verbal position, whereas they cannot be sanctioned if they appear in the pre-verbal position, as the contrast in (67) shows. In addition, nouns in the post-verbal position are interpreted as a focus (or a topic). From these observations, Belletti (2004) argues that there is a focus position in the *v*P-periphery, not in the CP-periphery, as in (68).

(67) Two subject positions in Italian

a. [$_{\text{NegP}}$ *Non* [*parlerà* [*alcun* *linguista*]].
NEG speak.3.SG.FUT any linguist
'(...) will not speak any linguist.'

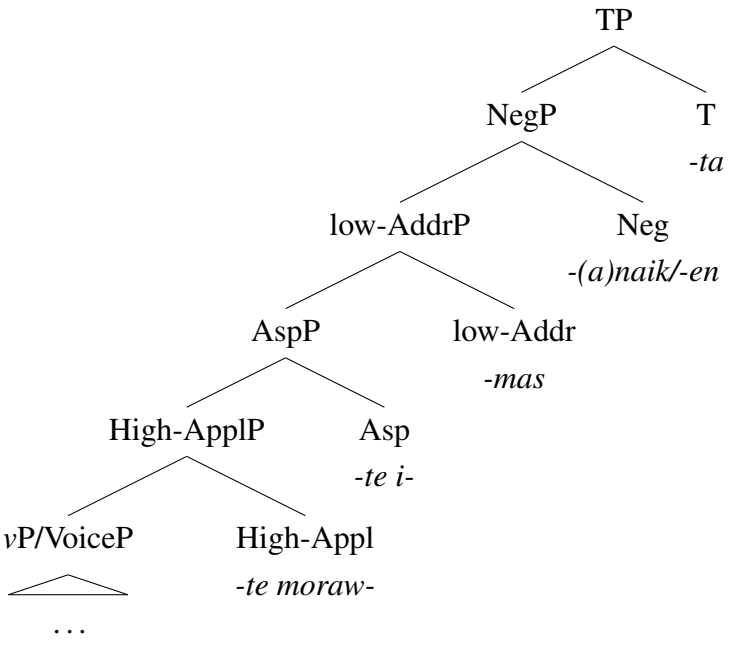
b. * [[*Alcun* *linguista*] [$_{\text{NegP}}$ *non* *parlerà*]].
any linguist NEG speak.3.SG.FUT
'Any linguist will not speak (intended).'

(68) [$_{\text{TP}}$ [$_{\textbf{NegP}}$ [$_{\textbf{TopP}}$ [$_{\textbf{FocP}}$ [$_{\text{TopP}}$ [$_{v\text{P}}$ ...]]]]]]

Though this proposal resembles Bosse's et al. (2012) analysis in that a non-selected argument appears above *v*/VoiceP, there is a crucial design difference: FocP and TopP are discourse-oriented projections. As discussed above, semantically, the job of ApplicativeP or AffP is to add an additional individual to the event structure, so this is an expansion of the theta-role grid and related to the event semantics. In contrast, the primary effect of having FocP and/or TopP is an influence on the information structure and it has nothing to do with the Event-Identification. If natural languages provide functional projections designed for discourse-oriented expressions in a region lower than TP, we may extend this analysis to Japanese and propose that a low-AddrP (or a Hon$_{\text{A}}$P) is present between AspP and NegP. In Yamada (2017, 2018c, 2019b), I pursued this direction

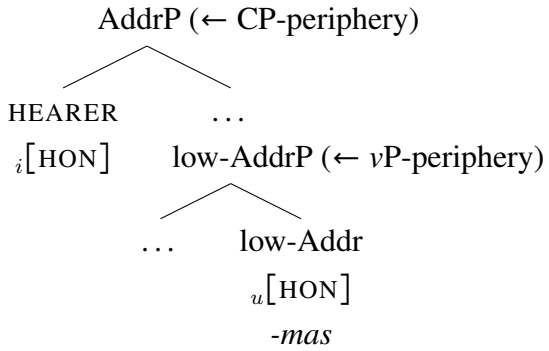
and proposed the following structure.

(69)



Assumption 2: Agreement is involved. The second assumption is that the feature in low-Addr agrees with the corresponding feature in AddrP, as shown below.

(70)



A conceptual motivation for this agreement analysis comes from its historical origin. As we saw, *-mas* developed out of an object-honorific construction, which is also analyzed as a construction involved with agreement (Suzuki 1988; Tribio 1990; Sells and Iida 1991; Ura 1996, 1999, 2000; Namai 2000; Niinuma 2003; Boeckx and Niinuma 2004; Hasegawa 2017 [2006]; Boeckx 2006; Ivana

and Sakai 2007; Kishimoto 2010, 2012; Oseki and Tagawa 2019). If so, it is not surprising that *-mas* is also an expression that triggers agreement, which is also reflected in Miyagawa's studies (2012, 2017).

Assumption 3: The feature on *-mas* is uninterpretable. The last assumption of Hypothesis I is that the upper feature (the one in AddrP) is interpretable and the lower feature (the one in low-AddrP) is uninterpretable. As we saw, languages are classified depending on whether an addressee-honorific marker/allocutive marking appears in CP-periphery. But if this assumption is correct, then despite this apparent divide in pronunciation site we can uniformly understand all languages to employ interpretable addressee-oriented features in a speech act projection (= CP-periphery).

3.3.3.2 Solutions to the puzzles

Under these assumptions, Hypothesis I gives a solution to the puzzles in the following way. First, though *-mas* is a discourse-oriented expression and is pronounced in an unexpectedly low position — identified as low-Addr — this is not a counterexample to our common understanding that CP-layer and/or layers around CP are designed for discourse-participants, because the interpretation is involved with an AddrP (Puzzle 1: the puzzle of the pronunciation site).

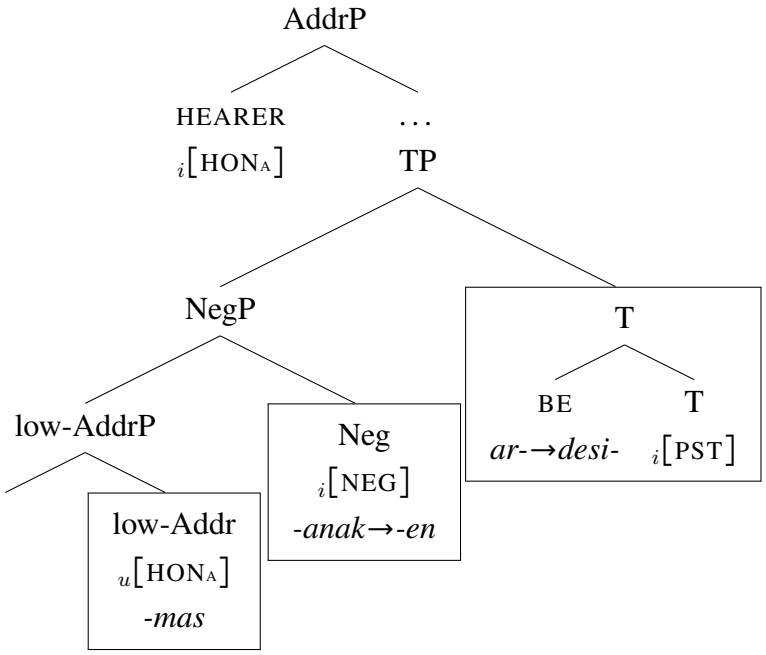
Second, scope relations are also not a problem, because C and T are lower than AddrP (Puzzle 3: the puzzle of compositionality).[18] The position of the relevant interpretable feature is assumed to be the same as in Korean and Thai. So this language-specific puzzle does not cause any trouble.

Third, Yamada (2018c) proposes that Puzzle 2 (the puzzle of the morphosyntactic effects on its neighboring heads) is to be solved by two economy principles. In what follows, let us examine these economy principles in depth.

As we saw, presence of *-mas* causes a morphological change in neighboring heads, i.e., the boxed regions depicted in (71).

[18] **Multidimensional semantics:** In Yamada (2017), it is also assumed that the feature on the HEARER triggers a multidimensional semantics. In this dissertation, I also inherit this assumption and give a detailed analysis, in Chapter 4 and Chapter 5.

(71)



The point of departure is the observation that (i) the affected positions are all heads, (ii) the heads all c-command *-mas*, in other words, the morphological changes happens in the upward direction, and (iii) the changes stop at T and no higher heads are affected. For these reasons, in Yamada (2018c, 2019b), I proposed that 'defective' movement takes place from low-Addr to T.

Defective movement. In prototypical head movements, one of the copies must not be pronounced. For example, consider the following sentences (Pollock 1989: 367).

(72) French

a. *Jean* ***embrasse***$_i$ *souvent* t_i *Marie.*
John kisses often Mary
'John often kisses Mary.'

b. * *Jean* ***embrasse***$_i$ *souvent* ***embrasse***$_i$ *Marie.*
John kisses often kisses Mary
'John often kisses Mary (intended).'

Here, the pronunciation of the lower copy *embrasse* 'kisses' is ruled out, as (72)b shows. The movement in (90) differs from the head movement in this regard,

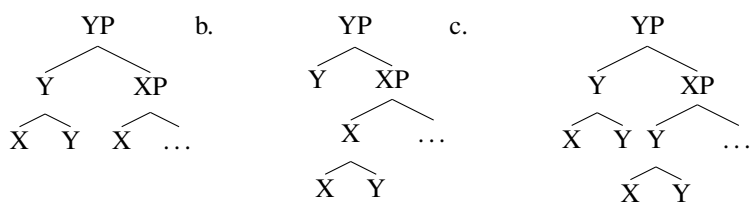
because the higher copy and the lower copy, i.e., Neg (*-mas*) and T (*des-*), are both pronounced. To highlight the difference, I call it 'defective' movement.

I would like to leave the technical characterization of this 'defective' movement to future studies (see also Yamada 2019b).[19] The discussion in the remainder of this paper does not hinge upon the choice of these theories, as long as it is assumed that the honorific feature from the lower head moves to T through the intervening heads.

Support for this movement analysis comes from EMJ Japanese. As seen above, before *-mas* gained the addressee-honorific meaning, *-sooraw* was used

[19] **Generalized Head Movement:** One promising framework worth mentioning is the theory of Generalized Head Movement, proposed by Arregi and Pietraszko (2018). While it has been argued that head movement and Lowering are two different operations (Halle and Marantz 1993; Bobaljik 1995; Embick and Noyer 2001), they draw our attention to the fact that these operations are both "cyclic, resulting in complex heads with the same type of internal structure, and both can feed further instances of head movement (*ibid.*: 2)" and unify these operations by proposing that what looks like Lowering is the pronunciation of the lower copy. To see this, compare the structures in (i). Traditionally, it has been argued that head movements result in the structure in (i)a, where the lower head (X) adjoins the higher head (Y). In contrast, Lowering results in the structure in (i)b. What they propose is that the two heads are related, as a result of which the same complex head is present in both positions, as in (i)c.

(i) a. b. c.



If we adopt Arregi and Pietraszko's theory, the "defective" movement in (71) is seen as a case where we pronounce a subset of the features in T (= *do*) and realize the rest in V (= *eat*). Under this model, the problem is attributed to the decision about which copy to pronounce, a problem already familiar in the discussion of multiple spellout, as in (ii)a, and scattered deletion, as in (ii)b.

(ii) a. ***Ké(ek)***, *áa-cḭ̤i* *Áyèn* [***ké(ek)*** *tḭ̤iŋ*].
them 3P-PRF.OV Ayen.GEN them see.NF
'Them, Ayen has seen.' (Dinka, Van Urk 2015: 195)

b. [***Mit*** ***was*** ~~*für*~~ ~~*Frauen*~~] *hast* *du* [~~*mit*~~ ~~*was*~~ ***für*** ***Frauen***] *gesprochen?*
with what for women have you with what for women spoken
'With what kind of women did you speak?' (German, Faneselow and Ćavar 2002: 66)

to encode the speaker's respect for the addressee. This marker occupies different syntactic positions. Since it was grammaticalized from a verb, it was originally pronounced at a very low position, as shown in (73)a (Yamada 2018c).

(73) Multiple addressee-honorific markers (*-sooroo*)

a. *tikara* [[$_{\text{NegP}}$[*oyobi-**saburaw***]*-az*] *ari-turu*]
power reach out-HON$_{\text{A}}$-NEG COP-PRF.ADN
'(i) (My) power did not reach out (= I could not help it);
(ii) the speaker respects the addressee.' (Ujishuui Monogatari 1220; from Watanabe and Nishio 1960: 125; Yamada 2018c)

b. *pitobito* [[$_{\text{NegP}}$[*motii-**sooraw***]*-azu*] ***sooraw**-iki*]
people use-HON$_{\text{A}}$-NEG HON$_{\text{A}}$-PST
'(i) people did not use (it);
(ii) the speaker respects the addressee.' (Tooyoo Bunko Benkan Honin Urabunsyo 1223; from Kamakura Ibun #3078)

However, as the grammaticalization proceeded, this *sooraw-* came to be pronounced in two distinct positions, as illustrated in (73)b, which resembles the *mas-des* correspondence in contemporary Japanese. Unlike the concord between *-mas* and *des-*, the same phonological exponents are used in these two distinct positions.

This observation is easily explained, once we adopt the idea that the lower head moves to T; the lower copy and the higher copy are pronounced.[20]

Historical change. If the idea of 'defective' movement is on the right track, we must ask what triggers this movement. Here the following historical fact deserves our attention. First, recall from Chapter 2 that I-languages of Japanese native speakers in the past allowed, at least, three different constructions in (74)

[20] **Copy deletion:** If this is on the right track, it must be considered how the multiple spellouts of *sooraw-* are licensed. Nunes (1995, 2004; cf., Fox and Pesetsky 2005; Johnson 2012) provides an influential account of copy deletion which proposes that deletion is triggered so that conflicts in the linearization algorithm at PF are avoided. Another approach to copy deletion is to see it as a result of economy principles (Fanselow and Ćavar 2002; Landau 2006; Van Urk 2018). I would like to leave the issue to future studies.

(Section 2.4.4). In the Edo period, neither *ar*-support nor morphological change was observed. As in (74)a, the negation marker (*-nak/nai/nan*) is directly followed by the past tense marker *-ta/da*, i.e., *masi-nan-da* 'HON$_A$-NEG-PST,' and it does not change to *-en* (though the final consonant assimilates in its articulation position to the following consonant *-k* > *-n*).

(74) a. *-masi-nan-da* Edo-period Japanese

[$_{TP}$[$_{NegP}$ *Hasiri-mas-nan*] *-da*].
run-HON$_A$-NEG -PST

'(i) I did not run;
(ii) the speaker respects the addressee.'

b. *-mas-en kat-ta* Meiji-period Japanese

[$_{TP}$[$_{NegP}$ *Hasiri-mas-en*] {***kat/dat***}*-ta*].
run-HON$_A$-NEG COP-PST

'(i) I did not run;
(ii) the speaker respects the addressee.'

c. *-mas-en desi-ta* Contemporary Japanese

[$_{TP}$[$_{NegP}$ *Hasiri-mas-en*] ***desi****-ta*].
run-HON$_A$-NEG COP.HON$_A$-PST

'(i) I did not run;
(ii) the speaker respects the addressee.'

Then, in the 19th century, there emerged a relation between low-AddrP and T, seen in the variants in (74)b and (74)c. In (74)b, *kar-* and *dar-* the allomorphs of *ar-* 'COP,' appeared at T. This inserted element is a copula with no addressee-honorific meaning. Finally, in the 19th to 20th century, this inserted element is replaced with *des-* 'COP.HON$_A$,' which is an addressee-honorific form of the copula element. This is illustrated in (74)c, and this is the only pattern that survived until the 21st century; the other two have become obsolete.

Thus a theory needs to be generous enough to admit all the variants as a possible outcome of the grammar of the human language but at the same time it must be able to explain why the pattern in (74)c is the only option in the grammar of contemporary Japanese.

Economy principles. If movement is triggered from low-Addr to T through Neg and this movement was optional in the past, it is likely that the movement in contemporary Japanese is triggered due to economy principles. In Yamada (2018c), I developed this idea by proposing two economy principles — (i) the preference for agreement within a short-er distance and (ii) the idea of multitasking, defined in the spirit of Pesetsky and Torrego (2001), Van Urk and Richards (2015) and Richards (2016).[21]

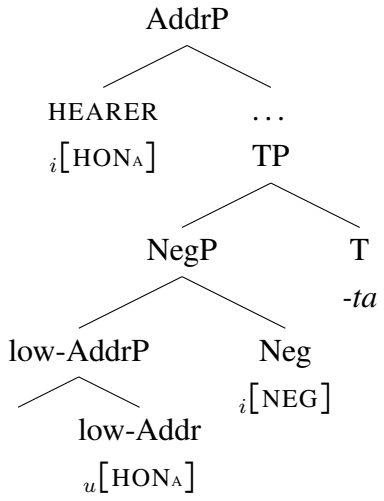
(75) a. **Economy principle I (Agreement within a short-er distance):** Suppose that X and Y have an agree-link. The shorter the distance between X and Y, the more favorable the conditions for an agree-copy to take place.

b. **Economy principle II (Multitasking):** When there are more than two problems to solve during the derivation, the most economical solution is to fix all of the problems at once, rather than solving these problems one by one using different solutions.

Suppose we are in the midst of the syntactic derivation when a HEARER is externally-merged, as in (76). At this moment, we have two problems to solve. Our first problem is the valuation/agree-copy of the honorific feature and our second problem is the stranded affix at T. It is proposed that the variations in (74) reflect different strategies to solve these problems, with the most economical solution being the one in (74)c.

[21] **Original definition:** The definition in Van Urk and Richards (2015: 132) is slightly different but the basic philosophy is the same.

(76)



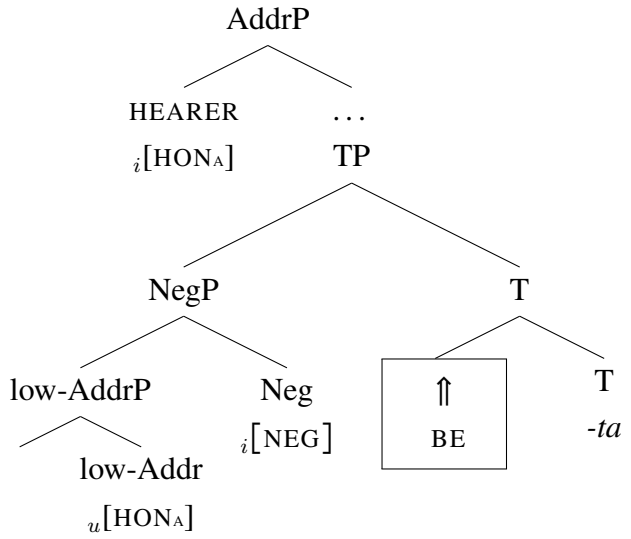
The first solution, which results in the grammatical pattern in Edo-period Japanese as in (74)a, is (i) to make the stranded affix *-ta* 'PST' postsyntactically move down to Neg (i.e., Lowering in Distributed Morphology, Embick and Noyer 2001; for the analysis of *ta*-lowering, see Yamada 2018d) and (ii) to make a valuation between this HEARER and low-Addr as an independent process (Solution I). The bracketed structure in (77) represents this morphological operation.

(77) Solution I

[$_{\text{AddrP}}$ HEARER ... [$_{\text{TP}}$[$_{\text{NegP}}$ ... verb-HON$_A$-NEG-PST] [$_T$ -PST]] ...]

The second solution, which reflects the stage of Meiji Japanese (= (74)b), is the derivation where (i) we insert *ar-* 'be,' (ii) after we make the valuation between the HEARER and the head of low-AddrP (Solution II). The tree in (78) illustrates how this derivation proceeds. Since this *be*-support happens as a process independently of the Agree operation, no honorific feature is involved with the supporting element. This strategy results in (74)b.

(78) Solution II



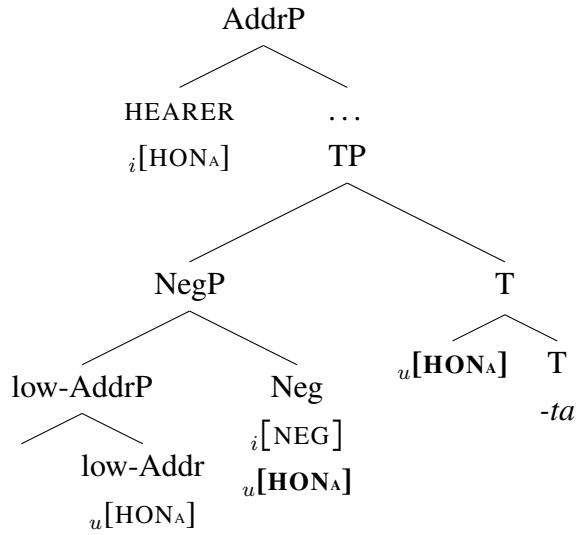
This is also the strategy taken in contemporary English. When there is a negation, a *do*-support is triggered (= (79)b), instead of Lowering (= (79)a).

(79) a. *[$_{TP}$ I [$_{T'}$ -PST [$_{NegP}$ not know-PST] (*I not knew) Solution I

b. [$_{TP}$ I [$_{T'}$ DO-PST [$_{NegP}$ not know] (I do not know) Solution II

The third solution is the one in contemporary Japanese, in which (i) movement is triggered through heads from low-Addr to T, before (ii) the agree-copy (Solution III). This is what is shown in (80). Since the copy of the addressee-honorific feature appears in T (which is pronounced as *desi-*), contemporary Japanese exhibits a concord relation between low-Addr and T. Due to the locality condition, the intermediate head, Neg, also has a copy of the honorific feature. This is why we have a morphological change not only in T but also in Neg.

(80) Solution III



As a result, the terminal nodes end up being equipped with the following features, as shown in (81) and (82):

(81) Plain form

a.	low-Addr:	$_u$[HON : −]	↔	*-∅*
b.	Neg:	$_i$[NEG : +]	↔	*-nai*
c.	T:	$_i$[PST : +]	↔	*at-ta*

(82) Polite form

a.	low-Addr:	$_u$[HON : +]	↔	*-mas*
b.	Neg:	$_i$[NEG : +], $_u$[HON : +]	↔	*-en*
c.	T:	$_i$[PST : +], $_u$[HON : +]	↔	*desi-ta*

Since Solutions I/II were also grammatical in the past, we do not want to say that they are incompatible with the principles of human grammar. Rather, it is more intuitive to consider that the language system has changed because children in later generations found Solution III to be more economical than Solution II (Lightfoot 2006; Roberts 2007). Compare Solutions II and III. Both solutions are licit. But Solution III is more economical, because the movement (i) ameliorates the problem of long-distance agree-copy and (ii) solves the stranded affix problem at the same time, conforming to the above multitasking principle. Solution II, on the other hand, does not ameliorate the long distance agree-copy and just

copes with the stranded affix problem as an independent problem. Being less economical, the derivation in (74)b is abandoned, despite the fact it was an accepted variant for some speakers in the 19th century.

(83) **Answer 2 (Under Hypothesis I)**: Economy principles favor the derivation with movement to T. Due to its Head-to-Head constraint, this results in the change of the intervening heads.

Another benefit of the idea of multitasking is that it gives us an answer as to why the morphological change starts upwards from low-AddrP but stops at T, not extending to higher positions, for example, to sentence-final particles or clause typing elements. Since the trigger is the stranded affix at T, we lose the motivation for further movement. Movement is triggered as long as we have two problems to solve. But once one of the problems has been solved, we stop the movement. Hence, no elements above T are affected by an addressee-honorific marker.

3.3.3.3 Limitations

While Hypothesis I seems to not only successfully explain the syntax of the addressee-honorific marker in contemporary Japanese but also give an account of its historical development, there are some empirical problems. First, it becomes a puzzle why there are addressee-honorific markers that appear in a position different from where *-mas* is located. Second, when we consider the data about preposing, low-AddrP analysis becomes less appealing.

Limitation 1: Addressee-honorific markers in different positions. Certainly, the assumption that there exists a hearer-oriented functional projection above AspP can explain the position of *-mas*. However, positions of addressee-honorific markers and/or comparable allocutive markings in other languages are not necessarily between AspP and NegP. First, in Punjabi, allocutive marking is considered to appear in T (= (20)). Second, the position of *-saburap* seems to be distributed in a position lower than AspP (= (16)). Finally, *-tamap* even appears within a lexical V-V compound (= (19), repeated here as (84)).

(84) [[*setini* *mir-u-beki*] *koto-no* *paber-u*]-*o*
immediately cope with-PRS-must thing-GEN exist.HON$_A$.ADN-ACC
*omopi-**tamape**-ide-te-namu*
think-HON$_A$-come-CV-FOC
'(i) (I) remember that there is a thing I must do immediately;
(ii) the speaker respects the addressee (< *paber*);
(iii) the speaker respects the addressee (< *-tamape*)'

Given these languages, it is not easy to maintain that there is a particular position between AspP and NegP dedicated for the hearer. The position of an addressee-honorific marking is rather flexible, not restricted to one single position.

Limitation 2: Preposing. The other empirical challenge to Hypothesis I is preposing. Remember from Section 3.3.2.3 that one of the reasons why we conclude that *-mas* is not in Asp is because AspP can be preposed and separated from *-mas*. If *-mas* projects its own functional projection, it is likely that a low-AddrP can be preposed as in the case of AspP. However, this prediction is not supported by the data, as shown in (85)b.

(85) a. *Kare-wa* *ason-de* *i-mas-en.*
he-TOP play-CV PRG-HON$_A$-NEG
'(i) He is not playing;
(ii) the speaker respects the addressee.'

b. * *Kare-wa* [*ason-de* *i-mas*]-*wa* *s-en.*
he-TOP play-CV PRG-FOC do-HON$_A$-PRS
'(i) (It is true that) he is not playing;
(ii) the speaker respects the addressee (intended).'

Of course, these observations may stem from language-specific properties. But since we do not have any concrete explanation for why such language-specific peculiarities show up, it is constructive to reconsider the three assumptions in Section 3.3.3.1 and seek an alternative account.

3.3.4 Hypothesis II: A morpohological account

The two limitations we have just seen are both concerned with the first assumption in Section 3.3.3.1 — that there is a special functional projection in the *v*P-periphery. It is therefore natural to ask whether we can propose an alternative view that jettisons this assumption. Since, as we saw, *v*P, VoiceP, HighApplicativeP, AffP, and AspP are not suitable for the projection, the only adjacent and plausible position is NegP. The purpose of this subsection is to show that this alternative approach, which I refer to as Hypothesis II, makes it possible for us to overcome the limitations of Hypothesis I as well as give a reasonable explanation of the aforementioned puzzles.

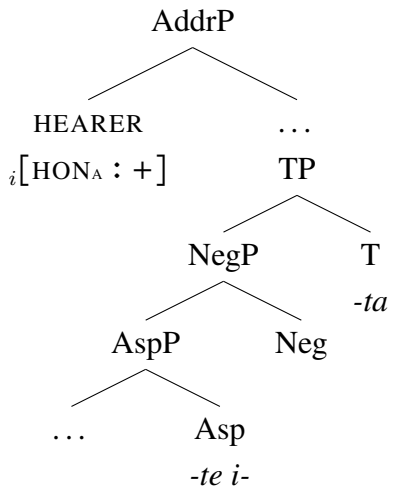
At this point, one might find it strange to assume that a negation phrase is involved with an honorific feature. Certainly, a negation phrase is designed for the polarity, not the politeness of a sentence. Moreover, we do not know any other languages that have an honorific feature in Neg, so the proposal that Neg in Japanese consists of a negation feature and an honorific feature seems to lack a conceptual justification. However, we do not necessarily see this honorific feature as being provided in the narrow syntax. Rather, we can suppose that the morphology acts to make an honorific feature appear in Neg. Morphological rules are considered language-specific and, indeed, the addressee-honorific system is a language-specific phenomenon.

This decision of eliminating low-AddrP may remind readers of the transition from an AgrP-based agreement analysis (Pollock 1989; Chomsky 1989; Ahn and Yoon 1989; Yoon 1990) to an agreement-as-a-postsyntactic-operation approach nowadays widely accepted in the framework of Distributed Morphology (Halle and Marantz 1993; Bobaljik 2008). Following the hints of such a postsyntactic approach to agreement, here I would like to propose that, in much the same way as the frequently discussed agreements in natural languages, the Japanese *-mas* is best viewed as a postsyntactic agreement.

3.3.4.1 Outline

Maintaining Assumptions 2 and 3 in Section 3.3.3.1, let us assume that the relevant syntactic structure is much simpler, as shown in (86). In other words, in the narrow syntax, there is no agreement taking place. In the narrow syntax (and therefore at LF), the head of NegP consists only of the node Neg (as in other languages).

(86) Syntactic structure



After the Spell-Out, the morphology modifies the structure based on language-specific rules and, in contemporary Japanese, an honorific node appears as an adjunction to Neg as a dissociated morpheme (Embick 1997; Choi and Harley 2019; Oseki and Tagawa 2019). Let us examine some detailed assumptions of this node-sprouting analysis.

Assumption 1 Node-sprouting at Neg. In Distributed Morphology, agreement morphemes are conceived as a reflex of postsyntactic language-specific well-formedness constraints (Halle and Marantz 1993). When appropriate configurational requirements are satisfied, agreement is triggered postsyntactically (before Vocabulary Insertion and Linearization). This idea is most clearly seen in Embick's definition of dissociated morphemes:

(87) **Dissociated morpheme:** a morpheme will be called *dissociated* when the morphosyntactic position/features it instantiates are not features fig-

> uring in the syntactic computation, but are instead added in the Morphological component under particular structural conditions (Embick 1997: 8).

Agreement morphemes are dissociated in that they do not exist before the Spell-Out but are added postsyntactically under a particular structural condition. As a way of instantiating this agreement process, previous studies have proposed the node-sprouting/Agr-insertion rule, which provides a dissociated agreement node at the relevant node position (Kramer 2009, 2010: 229; Norris 2012, 2014: 152; Baier 2015; Choi and Harley 2019; Oseki and Tagawa 2019; Winchester 2019). The general scheme for the rule is given in (88)a, by which we adjoin an agreement node to a head. For example, in Kramer (2010), it is proposed that Amharic is equipped with a morphological rule that can introduce an Agr-node to A, as in (88)b.

(88) a. $X \rightarrow [_X\ X\ Agr]$

b. $A \rightarrow [_A\ A\ Agr]$ Kramer (2010: 229)

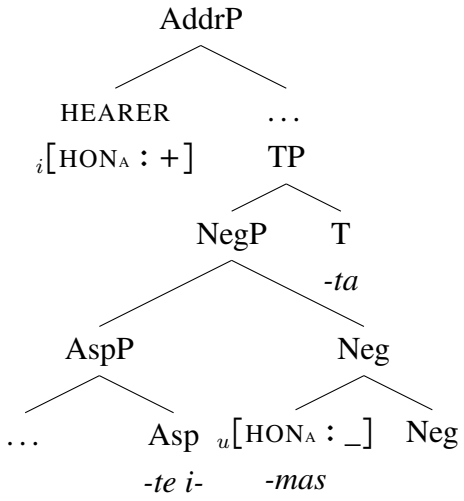
Based on this tradition, I propose that contemporary Japanese is equipped with the following postsyntactic morphological operation before Vocabulary Insertion:

(89) HON_A-sprouting rule

$Neg \rightarrow [_{Neg\ u}[HON_A : \_]\ Neg\ ]\ /\ [\ HEARER_{[HONA:\ +\ ]} \ldots [\ \ldots\ \_\_\ \ldots\ ]\ ]$

This says that when Neg is c-commanded by a HEARER in a higher position, we replace Neg with another Neg to which an honorific node/feature is adjoined. This is what is shown in (90).

(90) Morphological structure I



Recently a node-sprouting approach to honorific agreement has been proposed for (i) the Korean subject-honorific system (Choi and Harley 2019) and (ii) the Japanese content-honorific system (Oseki and Tagawa 2019). First, Choi and Harley (2019) propose that Korean subject-honorific agreement suffix is subject to the rule in (91); here it is assumed that the subject-honorific suffix in Korean appears in v^0.

(91) $v^0 \rightarrow [\ v^0\ \text{Hon}^0] / [\ \text{NP}_{[+\text{hon}]} \ldots [\ \ldots \_\_ \ldots\ ]]$ (Choi and Harley 2019)

Second, examining the Japanese content-honorific system, Oseki and Tagawa (2019) propose that the honorific prefix *o/go-* is inserted postsyntactically via the following morphological rule; here it is assumed that the honorific suffix in Japanese is attached to a root.

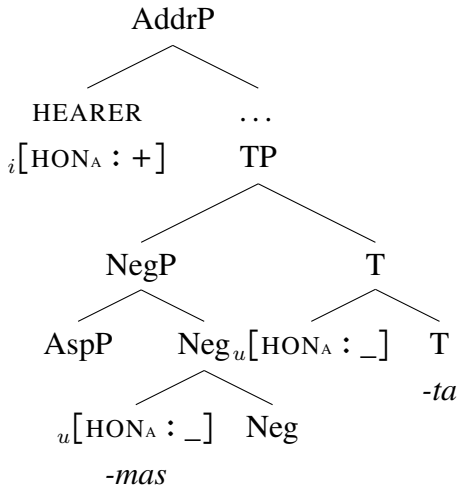
(92) $\surd \rightarrow [\ \text{Hon}\ \surd] / [_{X^0} \ldots \_\_ \ldots [+\ \text{Hon}] \ldots\ ]$ (Oseki and Tagawa 2019)

This convergence in opinion suggests a possibility that content-honorifics and utterance-oriented honorifics across different languages are unified by a single mechanism proposed for the agreement/concord system in general.

Assumption 2: Agree-link/Agree-copy and defective movement. Though the idea of node-sprouting makes it possible to dispense with an unmotivated low-AddrP, this assumption alone does not explain the morphological effect at T. To

this end, I also takes it for granted that what has been called Agree proceeds in a two-step fashion, Agree-link and Agree-copy (Arregi and Nevins 2012; Bhatt and Walkow 2013; Marušič et al. 2015), and the node-sprouting is involved with the former operation.[22] Since the sprouted node is involved with an uninterpretable, unvalued feature, we need to establish an Agree-link via upward-agreement (Bjorkman 2011; Zeijlstra 2012; Wurmbrand 2014). However, due to the economy principles — the preference for a short-er agreement and multitasking — we make 'defective' movement, as illustrated in (93). The unvalued HON$_A$ feature moves to adjoin T to solve the stranded affix problem and comes closer to the valued feature of the HEARER. Then an Agree-copy is triggered and the value is transmitted to the adjoined nodes.

(93) Morphological structure II



3.3.4.2 Solutions to the puzzles

Now let us ask how Hypothesis II solves the puzzles in Section 3.2. First, as for Puzzle 1, Hypothesis II explains that, as in the case of other agreement morphemes, *-mas* is at NegP due to a language-specific node-sprouting rule.

[22] **Agree-link formation after Spell-out:** Here I loosen the original proposal of Arregi and Nevins (2012) and assume that there is a variation as to when an Agree-link is established (some are before the Spell-Out and others are after the Spell-Out) and *-mas* is involved with a postsyntactic Agree-link formation.

(94) **Answer 1:** *-mas* is postsyntactically sprouted at NegP.

Second, as for Puzzle 3, the scope relation is not a problem because all the morphological operations are considered to take place after Spell-Out. At LF, there is no interpretable feature at NegP, and hence no interaction with scope operators.

(95) **Answer 3:** the feature in AddrP is interpreted, not the feature in Neg.

Third, Puzzle 2 (the morphological effect on Neg and T) results from a contextual allomorphy and the 'defective' movement. As for the change from *-anak* to *-en*, the following Vocabulary Insertion rules are assumed (= (96)a and (96)b):

(96) Vocabulary Insertion Rule

a. $[\text{NEG} : +] \leftrightarrow$ *-en* / $[_{\text{Neg}} [\text{HON}_{\text{A}} : +] \_\_]$
b. $[\text{NEG} : +] \leftrightarrow$ *-anak*
c. $[\text{NEG} : -] \leftrightarrow$ *-∅*
d. $[\text{PST} : +] \leftrightarrow$ *-ta*
e. $[\text{HON}_{\text{A}} : +] \leftrightarrow$ *-mas* / $[_{\text{Neg}} \_\_ \text{Neg}]$
f. $[\text{HON}_{\text{A}} : +] \leftrightarrow$ *des-*

As for the change from *ar-* to *desi-*, it is considered that the honorific feature gets realized differently based on its local context. When it appears in Neg, it gets realized as *-mas* (= (96)e) and *des(i/u)-* is the elsewhere form.[23] Thus, *des-*

[23] **Elsewhereness of *des-*:** Though I did not explain addressee-honorific markings in the nominal domain in Chapter 2, *des-* can appear in a nominal periphery, as shown below. Hence I assume that this is the form used elsewhere. I also assume that *-i* in *des-i-ta* is a postsyntactically-inserted vowel to maintain a good mora structure. It gets realized as *-i* before the past tense but becomes *-u* otherwise.

(i) *Watasi-wa-**desu**-ne, gakkoo-ni-**desu**-ne, kinoo-**desu**-ne, it-ta-n*
I-TOP-HON$_{\text{A}}$-SFP school-to-HON$_{\text{A}}$-SFP yesterday-HON$_{\text{A}}$-SFP go-PST-NMLZ
***des**-u-yo.*
HON$_{\text{A}}$-PRS-SFP
'(i) I went to school;
(ii) the speaker respects the addressee (< multiple *-des(u)*.'

is selected for the honorific feature resulting from the 'defective' movement (= (96)f).

(97) **Answer 2:** First, the change in Neg results from a contextual allomorphy. Second, the change in the *be*-support is a consequence of 'defective' movement.

The limitations for Hypothesis I are now no longer a headache for our analysis. First, the language variation is attributed to the node-sprouting rule. As is widely assumed, morphological rules are language-specific. In contemporary Japanese, a dissociated morpheme is sprouted in Neg but this does not preclude the possibility of other languages having a comparable rule in a different node, e.g., Punjabi and those in Early Middle Japanese.[24] Second, the preposing problem is also circumvented. Since *-mas* does not have its own projection, it cannot be preposed and be separated from *-en*.

A note on the in-situ analysis. Now that the main proposal of this chapter has been outlined, let us consider a potential criticism of this Hypothesis II and defend our position.

One might argue against the agreement approach with an analysis of the honorific meaning as interpreted at NegP without an Agree-link/copy with the HEARER. In other words, could we propose that an interpretable honorific feature does exist in the narrow syntax at NegP and the morphemes get realized based on the rules in (98)? This would mean either that speech act layers are dispensed with or that speech act layers are assumed to exist with no interaction with the feature or the node of *-mas*. Let us refer to this analysis as the IN-SITU ANALYSIS.

(98) a. $[\text{NEG} : +], {}_i[\text{HON} : +] \leftrightarrow$ *-masen*
b. $[\text{NEG} : +], {}_i[\text{HON} : -] \leftrightarrow$ *-anak*

One motivation for this in-situ analysis might come from a comparison with other

[24] **English interjections:** A similar idea can be applied even to English, where an interjection changes its form based on the speaker's construal of the speaker/hearer-relation or of the formality of the given register; e.g., *no-nope* and *yes-yeah*. Note that these interjections are also polarity expressions, though in English they are adverbs unlike in Japanese.

expressive elements (Potts and Kawahara 2004; Potts 2007a, b; Kim and Sells 2007; McCready 2014, 2018, 2019; Bosse et al. 2012; Sawada 2017, among many others; for detailed discussions of multidimensional semantics, see Chapter 4). For example, the *damn* in (99) is analyzed to have a multidimensional meaning in-situ, which triggers a semantic object in the expressive dimension that is assumed to be independent of the at-issue meaning. If so, Puzzle 3 seems to be solved without assuming that there exists an interpretable honorific feature in the HEARER which is in agreement with *-mas*.

(99) The **damn** teacher did not come.

The question is whether we can assume such a multidimensional semantics (something like that in (100)) and give an equally plausible explanation of the other data.[25]

(100) $[\![\text{HON}_\text{A}]\!] = \lambda P.P \bullet \text{RESPECT}(I, you)$.
(or, $[\![\text{ Neg }_{[\text{HONA:+}]}]\!] = \lambda P.\neg P \bullet \text{RESPECT}(I, you)$.)

Although I do argue in the next two chapters that the multidimensional semantics is indispensable when we scrutinize the semantics of addressee-honorific markers, it is unlikely that this honorific meaning can be read off the feature at NegP and I would like to defend the view that the honorific feature is interpreted in a speech act projection. The reason comes from the prediction that would follow for the embedded use of addressee-honorific markers. If the feature in Neg receives the denotation in (100), it is predicted that *-mas* would distribute in embedded clauses with no trouble, as in the case of the conventional implicature, and that the presupposition triggers can survive in embedded environments (under the hole predicate). But notice that despite the fact that *sir-* 'know' in (101)

[25] **Multidimensional semantics:** In (100), the left-hand side of the black circle is used to refer to the at-issue meaning and the right-hand side expresses the non-at-issue meaning (for multidimensional semantics, see also Potts 2003, 2005; Potts 2007a, b; Portner 2007; Sawada 2017; McCready 2014, 2018, 2019; as well as the discussion in Chapter 4 and 5 of this dissertation). With respect to the at-issue meaning, this is an identity function but it adds the 'respect' meaning orthogonal to the at-issue meaning.

is a hole predicate (Karttunen 1973), embedded addressee-honorific markers are (generally) ruled out.[26]

(101) * *Watasi-wa* [*kare-ga* *ki-**masi**-ta-to*] *sit-te*
I-TOP he-NOM come-HON$_A$-PST-C know-CV
odoroi-ta.
be surprised-PST
'(i) I was surprised to know that he came;
(ii) The speaker of the utterance context (UC) respects the addressee of the UC (< *-mas*) (intended).'

Notice that embedded content-honorific markers (= (102)) and polite pronouns (= (103)) are both licit in an embedded context (Harada 1976; Miyagawa 2012, 2017). The analysis in (100) fails to capture the addressee-honorific maker's main clause orientation.

(102) *Watasi-wa* [*sensei-ga* ***irassyat**-ta-to*] *sit-te* *odoroi-ta.*
I-TOP he-NOM come.HON$_S$-PST-C know-CV be surprised-PST
'(i) I was surprised to know that the teacher came;
(ii) The speaker of the utterance context (UC) respects the referent of the noun *sensei* (< *irassyar-*).'

(103) Je sais [que **vous** parlez français].
'(i) I know that you (second person singular) speak French;
(ii) the speaker respects the referent of the pronoun *vous*.'

In contrast, the agreement analysis as assumed in this chapter is capable of explaining the data in (101). The indirect speech *to*-clause does not have an embedded speech act layer (unlike the direct speech use, in which *-mas* can appear). Additionally, *-mas* cannot be related to the HEARER of matrix speech act projections, because of a phase-boundary. Hence, this sentence is illicit. For this reason, I conclude that the agreement analysis together with the rules in (96) is superior to the in-situ analysis.

[26] **Embedded addressee-honorific markers**: Under certain conditions, addressee-honorific markers are licit in embedded contexts. See Chapter 5.

3.4 From syntax to pragmatics

Of all the four puzzles, there remains one puzzle which has not been discussed in this previous section, i.e., Puzzle 4: addressee-honorific markers show an interaction with an interrogative clause.

The relevant data is repeated here as (104)a. It has been pointed out that a *ka*-marked interrogative clause cannot be used as a response-seeking question if there is no addressee-honorific marker (Miyagawa 1987, 2012, 2017).

(104) Response-seeking questions

a. * *Hasir-u-ka?*
run-PRS-C
'Will you run ? (intended)'

b. *Hasiri-**mas**-u-ka?*
run-HON$_A$-PRS-C
'(i) Will you run?;
(ii) the speaker respects the addressee.'

Conceptually, an illocutionary act of response-seeking is one thing and an act of respect-paying is another. So it is mysterious why the presence of an addressee-honorific marker is a prerequisite for a response-seeking question.

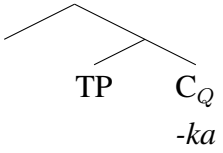
In the previous section, it was proposed that we can better analyze the peculiarities of *-mas* and *des-* as a consequence of morphological operations, rather than as a consequence of syntactic operations. In this section, we zoom in on the last puzzle and, in so doing, just as we did in the previous section, we try to minimize the role of syntax. But this time, it is not morphological rules but pragmatic rules that take action.

In what follows, we first look at the syntactic approach proposed by Miyagawa (2012, 2017) (Section 3.4.1). I then propose an alternative pragmatic account within the framework of Dynamic Pragmatics (Stalnaker 1974, 1978, 2002; Gazdar 1981; Lewis 1979; Roberts 2012 [1996]; Portner 2004, 2018a, b) (Section 3.4.2).

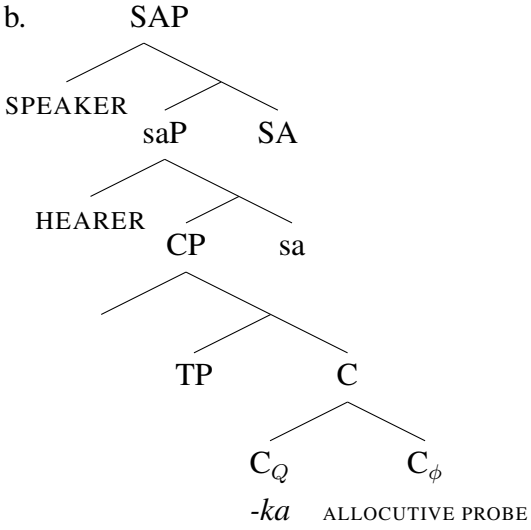
3.4.1 A syntactic approach

Miyagawa (2012, 2017) tries to answer this question by stipulating that *-ka* has a special syntactic requirement that it must be selected by a head (Jiménez-Fernández and İşsever (2019) also adopt his assumption). First, he assumes that "in the absence of the politeness marker, the Speech Act structure is not projected (Miyagawa 2012: 89)." He proposes that, in (104)a, CP is the outermost projection as in (105)a, while (104)b has speech act projections as in (105)b.

(105) a.



b.



The ALLOCUTIVE PROBE in C is supposed to be a reflex of a linguistic expression that agrees with the HEARER in the specifier position of saP.[27]

Second, in order to explain the ungrammaticality in (104)a, Miyagawa proposes the following (syntactic) constraint (ibid.: 27):

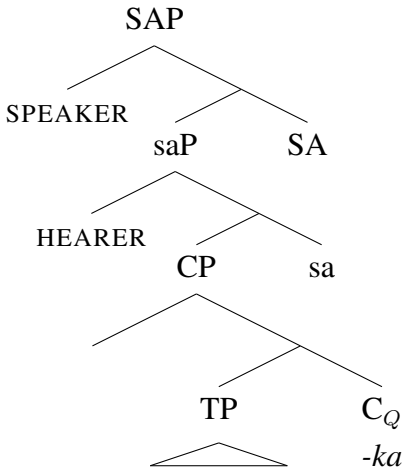
(106) *Ka* must be selected by a head.

[27] **Allocutive probe:** The ALLOCUTIVE PROBE should not be *-mas* or *des-* because, as we have seen in previous sections, they are not distributed around/above CP. So this is something different from the HEARER as well as the morphological realization of addressee-honorific markers. But he does not give us a clear explanation of how this ALLOCUTIVE PROBE and *-mas/des-* are related. It seems to me that the existence of such a null probe is only detectable by stipulating its existence and does not seem to be supported by any empirical data.

In (104)b, sa selects *-ka*; hence, the sentence is licit. On the other hand, *-ka* is not selected in (104)a; hence, it is illicit.

What is crucial in this proposal is the assumption that "in the absence of the politeness marker, the Speech Act structure is not projected." It seems that he assumes that (i) the absence of addressee-honorific markers makes the ALLOCUTIVE PROBE absent in C and (ii) the absence of an ALLOCUTIVE PROBE automatically disallows saP and SAP. In other words, the structure in (107) is ill-formed in Japanese and this is not the right structure for the sentence in (104)a.

(107)



Certainly, his explanation can distinguish the contrast in (104). But there are a few unclear assumptions in this analysis. First, we do not know why the generalization in (106) holds. This generalization is tantamount to saying that the absence of ALLOCUTIVE PROBE makes an external merge of sa impossible. But we do not have any conceptual justification for this. The data in (104)a remain mysterious until we can justify how the presence of the addressee-honorific marker (which — if our above discussion is right — appears in the NegP) disallows the future external-merge of sa above CP. Second, we saw in Section 3.2.4 that we can make an illocutionary act of a non-response-seeking question without an addressee-honorific marker. The generalization in (106) cannot be straightforwardly applied to these cases. Indeed, Miyagawa (2017) does provide an explanation for why rhetorical questions can lack *-mas*. According to him, in rhetorical

questions, there is a covert functional projection above CP that encodes a mood (force) designed for exclamatives. But this explanation does not seem to apply to self-oriented questions or topic-setting questions as we saw in (38) and (39) because they are not involved with any exclamative nuance at all.

3.4.2 A pragmatic approach

3.4.2.1 Dynamic pragmatics

Given these limitations, it is appropriate for us to seek an alternative answer. Based on the assumptions in DYNAMIC PRAGMATICS (Stalnaker 1974, 1978, 2002; Gazdar 1981; Lewis 1979; Roberts 2012 [1996]; Portner 2004, 2018a, b, among many others), let us examine a pragmatic analysis here.

Terminology. To this end, it is useful to provide some basic terminologies. First, it is important to distinguish the ILLOCUTIONARY FORCE (which is a communicative-intentional concept) and a particular form of the sentence. For example, in (108)a, Y, the addressee, takes the communicative effect of X's utterance as expressing a wish; i.e., the illocutionary force of X's utterance is the force of expressing a wish, not a command or a request (Chierchia and McConnell-Ginet 1990; Reis 1999; Portner 2004, 2018b; among many others).

(108) a. X: Have a wonderful time!
Y: I wish you also have a great vacation!

b. X: Help yourself to whatever you want!
Y: Thank you very much for your kind offer!

In contrast, in (108)b, from Y's reply, we can see that the addressee takes the communicative effect of X's utterance as an act of making an offer, not an order or a request. The illocutionary forces of these sentences are very different.

Second, despite their difference in illocutionary force, these two sentences have the same sentence form, or SENTENCE MOOD (for alternative terminologies, see Portner 2018b: 124). The sentence mood of these sentences in (108) is imperative. The examples demonstrate that there is no one-to-one correspondence be-

tween the sentence mood (the grammatical category) and the illocutionary force (the communicative effect). In studies of the interface between syntax and pragmatics, their relation has been an important question (Yamada 2019g).

Dynamic pragmatics. One way to approach the problem is (i) to consider that each sentence mood (the grammatical category) has a unique semantics and (ii) to propose a set of pragmatic rules that elucidate and determine a specific illocutionary force (the communicative effect) of a given sentence.

For example, one can explain the relation in the following way. The sentence moods of the underlined sentences in (108) are both imperatives. Imperative sentence moods always provide a property, not a proposition (Portner 2004). Irrespective of their ultimate difference in illocutionary force, these sentences have the same semantic type. We independently set up some pragmatic rules. For example, we can assume that, (i) if the meaning of a sentence is a property, then we should take it as a command. We can also make another pragmatic rule by assuming that (ii) if the semantic interpretation of the sentence is a property and has the form of *have a* . . . , then we take it as a wish. Due to a subset principle, the more specific rule wins and is applied in interpretation.

This approach that makes the pragmatics play an important role in determining the communicative effect is called DYNAMIC PRAGMATICS. The main characteristics of this approach are summarized as follows:

(109) **Dynamic pragmatics** (Portner 2018a)

a. Sentences have standard static semantic values.

b. The communicative effect of utterances in discourse is modelled as the effect they have on the discourse context.

c. The effect of a particular sentence is determined by pragmatic principles on the basis of the sentence's form or semantics.

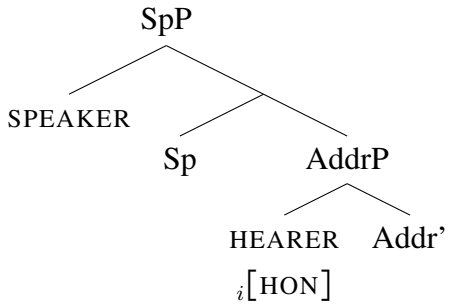
3.4.2.2 Proposal

Adopting this basic research agenda of dynamic pragmatics, I propose that the interaction between *-ka* and addressee-honorific markers should rather be explained

via pragmatic principles.

First, the addressee-honorific feature represents the (non-)respect relation between the speaker and the addressee. Here it is analyzed as a non-at-issue meaning (Potts and Kawahara 2004; Potts 2007b; Kim and Sells 2007; McCready 2014, 2018, 2019; Yamada 2019a; Portner et al. 2019); the semantics of an addressee-honorific feature will be more carefully discussed and a more precise denotation will be provided in Chapter 4. As a first approximation, we can use the semantics in (110), where $< x, z, y >$ means that (i) x is the feeling holder; (ii) y is the target of the feeling; and (iii) z represents whether the feeling is respect or non-respect.[28] Assuming the structure in (110), the lambda-bound variable is designed to be saturated by the SPEAKER.

(110)



a. $[\![\ _i[\text{HON: +}]\ ]\!]^c = \lambda p.\ \lambda x.\ p \bullet\ < x, \text{respect}, addr(c) >$.

b. $[\![\ _i[\text{HON: }-]\ ]\!]^c = \lambda p.\lambda x.\ p \bullet\ < x, \text{non respect}, addr(c) >$.

After the derivation, the meanings of the SpP are as follows:

(111) a. $[\![$ SpP of (104)a $]\!]^c = p \bullet\ < sp(c), \text{respect}, addr(c) >$.

b. $[\![$ SpP of (104)b $]\!]^c = p \bullet\ < sp(c), \text{non respect}, addr(c) >$.

Second, I propose the following pragmatic principle of Japanese interrogatives:

[28] **At-issue meaning:** p is the meaning of $[\![\ Addr'\ ]\!]^c$. In (110), multidimensional semantics is assumed and the black circle connects one at-issue meaning p and two non-at-issue meanings: the 'respect' meaning and the information that the speaker is different from the addressee. In Chapter 4, we will develop this semantics in depth.

(112) **Pragmatic principle about Japanese interrogatives:**
The utterance effect of the *ka*-marked interrogative clause is a response-seeking question (= it can update the QUD) iff it is guaranteed that the addressee is different from the speaker.

It is inferred from the use of addressee-honorifics that the speaker of an utterance is different from the target of the honorification, i.e., the addressee. This is a robust constraint in the Japanese honorific system in (at least) contemporary Japanese (Kikuchi 1997 [1994]: 120).[29] This is also evident in content-honorifications. As illustrated in (113), a speaker cannot use an honorific marker to himself however narcissistically he respects himself.

(113) Context: *The speaker is the president of the school. He is now talking in front of the students and the teachers, who are supposed to respect the speaker. In addition, the speaker is very proud of himself and considers that he deserves the respect.*

a. *Watasi-wa kyoo roku-zi-ni koko-ni **ki**-ta.*
I-TOP today six-o'clock-at here-at come-PST
'I came here at six o' clock.'

b. * *Watasi-wa kyoo roku-zi-ni koko-ni **irassyat**-ta.*
I-TOP today six-o'clock-at here-at come.HONs-PST
'(i) I came here at six o' clock;
(ii) the speaker respects the referent of the subject (= the speaker himself)'

More formally, I propose that the context update consists of two steps. The first step is the non-at-issue adjustment and the second step is the QUD-update (cf., Murray's (2017) treatment of evidential expressions). We first check the non-at-issue meaning (= the 'respect' dimension) to see if the semantics guarantee that the speaker assumes the existence of a particular addressee who is different from the speaker him- or herself.

[29] **Self-oriented honorification:** Unlike contemporary Japanese, Old Japanese and Middle Japanese had a different honorific system, where the self-oriented honorification was allowed (Kikuchi 1997 [1994]: 132). But nowadays, such a self-oriented respect is prohibited.

If an addressee-honorific marker is present and ${}_i[\text{HON}_\text{A} : +]$ is provided, it is inferred that such an individual is taken for granted by the speaker; if the speaker respects somebody, this 'somebody' must not be the speaker him- or herself. Once the existence of an addressee has been guaranteed, we take the sentence as a response-seeking question — which inevitably needs an addressee different from the speaker, from whom the speaker acquires new information — based on the pragmatic rule in (112).

In contrast, when the addressee-honorific feature is set to negative ${}_i[\text{HON}_\text{A} : -]$, it is not automatically inferred that the addressee is distinct from the speaker. This is because ${}_i[\text{HON}_\text{A} : -]$ is compatible with the following two scenarios: that the speaker is talking to someone to whom respect-encoding is not necessary, for example, to his or her friend; or that the speaker is talking to him- or herself, for example, in a diary, or in a soliloquy. This means that ${}_i[\text{HON}_\text{A} : -]$ does not entail the presence of an addressee distinct from the speaker; cf., Kim's (2018) distinction between saying and thinking.

In this two-step context update model, it is explained that the unacceptability comes from the second update process. Since ${}_i[\text{HON}_\text{A} : -]$ does not guarantee that the addressee is different from the speaker, the interrogative sentence cannot be used as a response-seeking question. As a result, (104)a is illicit as a response-seeking question.

Benefits. This analysis gives us three desirable predictions. First, it is predicted that the sentence in (104)a is a syntactically well-formed sentence and does have a denotation; i.e., it has a partition of the worlds as its at-issue meaning. Under this analysis, it is predicted that, if an embedding predicate s-selects a clause that denotes a partition of worlds, then (104)a is embeddable. This prediction is borne out, as illustrated in (114) (Section 3.2.4).

(114) Embedded interrogatives

[*Hasir-u-**ka***]-*wa* *wakari-mas-en.*
run-PRS-Q-TOP know-NEG
'(i) I do not know whether (s/he) runs; (ii) the speaker respects the addressee.'

Second, since the sentence in (104)a itself is grammatical, we can also predict that a *ka*-marked interrogative is allowed even in a main clause as long as the associated communicative effect is not the illocutionary force of seeking a response. This prediction is borne out. Unlike the response-seeking question, no addressee is required for a rhetorical question or a topic-setting sentence as in (37) and (39) (repeated here in (115)). The analysis predicts that they do not violate the principle in (112) and thus are acceptable, which is exactly the case.

(115) a. Rhetorical questions

Nanika-no yaku-ni tat-u-ka? Iya, tat-tei-nai.
anything-GEN serve-DAT stand-PRS-Q no stand-PRF-NEG
'...Is this serviceable to anything? No, it isn't.'(BCCWJ; PB1n_00048)

b. Chapter titles

54 Ankooruwatto-wa tikaru-o sinog-u-ka?
54 Angkor Wat-TOP Tikal-ACC surpass-PRS-Q
'Chapter 54: Does Angkor Wat surpass Tikal?' (BCCWJ; LBr2_00066)

Under the syntactic approach, it is predicted that these sentences are 'syntactically' ruled out, because the absence of *-mas* disallows the speech act layers above CP. This is contrary to the fact that they can be used felicitously. Of course, it is not impossible for this approach to give an account of the data. For example, one could recognize a polysemous meaning of *-ka* and say that *-ka*$_1$ involves a speech act projection while *-ka*$_2$ does not. But such a claim does not receive any further empirical support and seems to make the theory more complicated than necessary; there is no independent empirical evidence to support the idea that *-ka* is involved with such an upward selection. Notice that the analysis proposed in this study does not assume any polysemy for *-ka*, making the semantics as simple as possible.

Third, it also predicts that *ka*-marked sentences will be used as a response-seeking question if the sentence expresses an appropriate form or meaning that guarantees that the speaker and the addressee must be different. This prediction

is also supported by two independent pieces of language data — (i) the rising intonation and (ii) the propositive construction. As in the case of the English rising intonation, the rising intonation in Japanese is used when the speaker wants the addressee to take a turn (Sacks et al. 1974). It is thus reasonable to assume that the rising intonation is a prosodic device that makes us infer that there is an addressee different from the speaker. If so, we predict that *ka*-marked interrogatives should be felicitously used as a response-seeking question if they have the rising intonation. This prediction is borne out, as illustrated in (116).

(116) Rising intonation
Hasir-u ↑
run-PRS RISING INTONATION
'Will you run?'

The propositive construction created by the volitional morpheme *-(y)oo* with the second-person subject also highlights the same point. Consider the sentence in (117). The utterance effect of this sentence is to make a proposal to the addressee. Since people make a proposal in order to jointly make a decision with the addressee, this construction is inevitably involved with the presence of an addressee distinct from the speaker.

(117) a. *Ik-oo!*
go-VOL
'Let's go!'

b. *Iki-mas-yoo!*
go-HON$_A$-VOL
'Let's go!'

The pragmatic rule in (112) predicts that this construction can be used with a *ka*-interrogative to make a licit response-seeking question. This prediction is borne out, as shown below. Not only the sentence in (118)b but also the one in (118)a is felicitously used as a response-seeking question.

(118) a. *Ik-**oo**-ka?*
go-VOL-Q
'Shall we go?'

b. *Iki-mas-yoo-ka?*
go-HON$_A$-VOL-Q
'(i) Shall we go!;
(ii) the speaker respects the addressee.'

These data elucidate that it is not the respect meaning of *-mas* per se that is required by the response-seeking question. Rather, what is relevant is the availability of an inference that the speaker and the addressee must not be the same. The three linguistic forms — (i) the rising intonation, (ii) the propositive construction and (iii) the addressee-honorific marker — all guarantee that the speaker and the addressee are different. By assuming that the pragmatics checks the prerequisite for such an inference before the QUD-update, we can give an answer to our last research question.

(119) **Answer 4:** In Japanese, prior to QUD-update, the pragmatics has to check whether the speaker assumes that there exists a particular addressee different from the speaker. Since from the non-at-issue respect meaning of *-mas* we can infer that the speaker and the addressee are different, *ka*-marked interrogative sentences are felicitously used to update QUD; i.e., used as a response-seeking question.

Related work. Importance of the speaker's awareness of a particular addressee has also been pointed out in previous studies. First, Portner et al. (2019) raise this issue in discussing imperative constructions. Compare the sentences in (120).

(120) a. Do not feed the monkeys!

b. No feeding the monkeys!

This sentence in (120)a can be used with and without a particular addressee. The speaker may be giving a prohibition to a visitor who is about to feed the monkeys. But if the sentence in (120)a is found on a sign at a zoo, it is directed

to a generic addressee. In contrast, the sentence in (120)b is typically used in a context where no specific addressee is assumed. In this way, choice of negative imperative constructions is sensitive to the specificity of the addressee.

Second, the issue of specificity/definiteness has been recognized in the study of vocatives (Hill 2014). For example, when countable common nouns refer to a definite referent, the determiner *the* is required; the sentence in (121)a is ungrammatical.

(121) a. *(The) waiter comes here.
b. Hey (*the) waiter, come here!

Nevertheless, when used as a vocative, the determiner must be omitted, as clearly demonstrated in (121)b.[30]

Certainly, it is not clear whether what we call the specificity/definiteness in these examples refers to the same thing. But these constructions — imperatives, vocatives and addressee-honorific markers — are all involved with the problem of identification/specificity/definiteness of the second-person referent (the addressee), at least suggesting the importance of this issue in future studies.

Lastly, it is important to note the relation between a person feature and an honorific feature. If the principle in (112) is on the right track, one may wonder if the person feature valued as second (e.g., [PN : 2]) makes it possible for a *ka*-marked sentence to be used as a response-seeking question under an assumption that the presence of a second person feature also guarantees an addressee different from the speaker. However, as the sentence in (122) shows, this prediction does not hold.

(122) * ***Kimi****-wa kur-u-ka?*
you-TOP come-PRS-Q
'Will you come? (intended)'

[30] **Variation:** A variation among languages (Hill 2014: 62) has been observed. While such a determiner suppression is obligatory in English and Greek, some languages allow it in some cases (French and Romanian).

At this moment, I do not have a definite answer to this sentence. As is known, the Japanese so-called 'pronominal' system is by no means the same as those in well-studied European languages (see for example Barke and Uehara 2005). For instance, (i) they do not form a closed class; (ii) they do not show agreement with a verb ending; and (iii) their selection reflects many intricate sociolinguistic factors. So it is likely that Japanese 'pronominal' system is involved with a set of more complicated pragmatic constraints, which makes the sentence in (122) unacceptable as a response-seeking question. However, a thorough answer would require more detailed examination. So I leave this issue to future studies by noting that there seems to exist an unexplained relation between an addressee-honorific feature and a (second-)person feature.

3.5 Chapter summary

Researchers have often sought to understand honorifics by comparing them with a well-studied and clearer language phenomenon. First, in the earliest systematized Japanese linguistics in the early twentieth century, researchers contrasted the subject-predicate concord in honorification with the subject-predicate person agreement in well-studied Western languages, aka., the Person View of honorification (Matsushita 1923; Yamada 1924; Kindaichi 1992 [1941]; see Takiura to appear for the review). Second, since around the 1970s, when the Japanese honorific system was introduced to theoretical linguistics (especially, Harada 1976; but also see Prideaux 1970; Kuno 1983 [1973], 1987; Shibatani 1977, 1978, 1985; Gunji 1987), syntacticians have been inspired to discuss the honorification as a type of agreement in a superficially agreement-free language (Suzuki 1988; Tribio 1990; Sells and Iida 1991; Ura 1996, 1999, 2000; Namai 2000; Niinuma 2003; Boeckx and Niinuma 2004; Hasegawa 2017 [2006]; Boeckx 2006; Ivana and Sakai 2007; Kishimoto 2010, 2012; Oseki and Tagawa 2019; see, also some counterarguments, e.g., from Matsumoto 1997; Bobaljik and Yatsushiro 2006; Kim and Sells 2007).

However, the primary interest of these studies has been concerned with the content-honorific system that appears around the V-domain, and the syn-

tax of addressee-honorific markers has left unstudied. By examining addressee-honorific markers, the recent syntax literature (Miyagawa 2012, 2017; Slocum 2016; Jiménez-Fernández and İşsever 2019) has presented the view that it is associated with agreement above/around C-domain, and this chapter advances this direction. In tandem with a growing amount of literature exploring the agreement in functional projections around CP — imperatives (for the JussiveP analysis; Zanuttini 2008; Zanuttini et al. 2012; but see also Kaur 2017, 2018, 2019), vocatives (Haegeman and Hill 2013; Hill 2014; Slocum 2016), egophoricity (i.e., conjoint vs. disjoint agreement; Wechsler and Hargreaves 2018), agreement in speaker/hearer's social hierarchy (Portner et at. 2019) and speaker agreement in bonding (Zu 2015, 2018) — addressee-honorific markers are considered important language phenomena that indicate the existence of syntacticized discourse-participants around/above CP. The analysis of this chapter supports this insight of previous studies.

However, this present study differs from the precursors in that it highlights the roles of morphology and pragmatics. The observations introduced in Section 3.2 are explained either as a consequence of morphological operations (under the assumptions of Distributed Morphology; Section 3.3) or as a result of pragmatic constraints (under the assumptions of Dynamic Pragmatics; Section 3.4), which are both considered language-specific. The research questions presented in Section 3.2 and their corresponding answers are given in (123).

(123) Research questions and answers

a. **Question 1:** Where is *-mas* pronounced and how does the grammar sanction such an unexpectedly low discourse-oriented element?
Answer 1: *-mas* is postsyntactically sprouted at NegP.

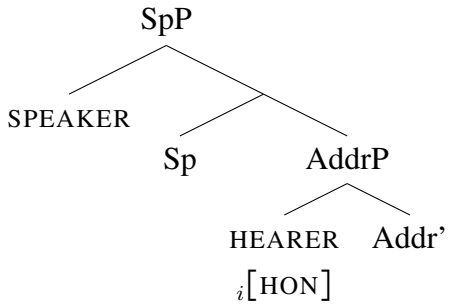
b. **Question 2:** Why does *-mas* cause morphological changes in (some) neighboring heads?
Answer 2: First, the change in Neg results from a contextual allomorphy. Second, the change in the *be*-support is a consequence of 'defective' movement.

c. **Question 3:** Why do *-mas* and *des-* have no interaction with other operators?
Answer 3: The feature in AddrP is interpreted, not the feature in Neg.

d. **Question 4:** Despite its low pronunciation site, why do Japanese addressee-honorific markers have an interaction with a sentence mood/clause-type?
Answer 4: In Japanese, prior to QUD-update, the pragmatics has to check whether the speaker assumes that there exists a particular addressee different from the speaker. Since from the non-at-issue respect meaning of *-mas* we can infer that the speaker and the addressee are different, *ka*-marked interrogative sentences are felicitously used to update QUD; i.e., used as a response-seeking questions.

Prelude to the next chapter. In the last section, we have touched the issue of semantics of addressee-honorific markers and a structure higher than AddrP, i.e., SpP (the speaker projection). With the tree in (124), it was proposed that the semantics of feature HON_{A} is approximated by the meanings in (125).

(124)



(125) a. $[\![$ SpP of (104)a $]\!]^c$ = p • the speaker in context c has expressed his or her respect for the addressee in context c.

b. $[\![$ SpP of (104)b $]\!]^c$ = p • the speaker in context c has expressed his or her respect for the addressee in context c • the speaker in context c is not the addressee in c.

Here, the respect encoded in the addressee-honorific feature is analyzed as a non-at-issue meaning of the sentence; *the speaker in context c has expressed his or her respect for the addressee in context c.* But in what way does this static meaning affects the discourse context? In the next chapter, we will elaborate the analysis from the perspective of dynamic pragmatics and elucidate a novel pragmatic rules concerning the way this respect meaning is related to the context update.

Chapter 4

Semantics and pragmatics

4.1 Overview

This chapter explores the semantics and pragmatics of addressee-honorific markers. So far, for simplicity's sake, we have been using independent translations for the meaning of honorifics. For example, the sentence in (1) has two independent meaning strata.

(1) *Watasi-wa* *anata-o* *sonkei* *si-**mas**-en.*
I-TOP you-ACC respect do-HON$_A$-NEG
'(i) I do not respect you;
(ii) the speaker respects the addressee.'

On one hand, we have the main message (aka., the at-issue meaning) of the sen-

tence, as given in the first line of the translation; that is, 'I do not respect you.' The existence of an addressee-honorific marker, on the other hand, delivers the secondary message (aka., the expressive meaning), as illustrated in the second line; the speaker does respect the addressee. If we take them literally, the two messages appear to contradict to each other. Yet this sentence can be felicitously uttered, in contrast to an example like (2).[1] This shows that the meaning of 'respect' in the expressive dimension is different from the lexical meaning of the verb *sonkei sur-* 'respect (lit., respect do/pay)' —— but, if so, how should we capture the semantic/pragmatic contribution of addressee-honorific markers?

(2) * *Watasi-wa* *anata-o* ***sonkei*** ***si****-nai-ga*
I-TOP you-ACC respect do-NEG-but
watasi-wa *anata-o* ***sonkei*** ***sur****-u.*
I-TOP you-ACC respect do-PRS
'I do not respect you but I respect you.' (a contradiction)

Standard treatment of expressiveness. In his influential studies on expressive elements, Potts and those who have further developed his ideas have proposed that the expressive dimension is best-modeled via REAL NUMBERS (Potts and Kawahara 2004; Potts 2007b; Kim and Sells 2007; McCready 2014, 2018, 2019). Indeed, in their theories, real numbers are playing two pivotal roles. First, the denotation of the expressive element is associated with a real number, which is used to refer to the degree of expressivity. For example, in analyzing honorific meanings, McCready (2019; Section 4.2) proposes *des-* is given the range of $[.5, .9]$, which suggests that its honorific intensity is intermediately high but not maximally high.

Second, researchers have modeled expressive information in the structured discourse context using real numbers. As in the tradition of dynamic semantics/pragmatics, the context is modeled as a tuple of discourse components, which are used to approximate the knowledge of discourse participants, such as the context set (*cs*), the question set (*qs*) and the to-do list (*tdl*). In addition to

[1] **Choice of the verb:** One may wonder if *sonkei sur-* is not the best translation for *-mas* but, whatever verb we may replace the verb with, we cannot make the sentence in (1) a contradiction.

these familiar discourse components, previous studies have added an additional storage for the expressive dimension *h*, resulting in the scheme in (3)a. For example, we can use a real number interval for the representation of *h*. Since intervals are uniquely identified as a pair of its lower bound and its upper bound, the contextual expressiveness can be represented as a pair of real numbers, as illustrated in (3)b.[2] In such a framework, the contribution of expressive elements is modeled as a replacement of an old state $h_{previous}$ with a new interval h_{new} (Potts 2007b; McCready 2014, 2018, 2019).

(3) a. $c =< cs, qs, tdl, ..., h >$

b. $h = [\alpha, \beta]$

Such real-number based approaches have opened many intriguing new directions for semantics and pragmatics. For one thing, they can easily capture what is called the DESCRIPTIVE INEFFABILITY property of the expressive meaning; that is, the expressive meaning cannot be paraphrased. The answer from these previous approaches is very simple. We cannot paraphrase the expressive meaning into the at-issue meaning, because the ontology is different. In *cs*, we discuss the worlds (or the set of worlds) but, in the expressive dimension, we are looking at real numbers. Since the baseline ontologies are different, expressive meanings cannot be translated into the at-issue meaning. By citing the following quote from Cruse (1986), Potts and Kawahara (2004) highlight the importance of non-world semantic objects for expressive meanings.

> *presented [regular] meaning is for the most part coded digitally — that is to say, it can vary only in discrete jumps; expressive meaning, on the other hand, at least in respect of intensity, can be varied continuously, and is therefore analogically coded* (Cruse 1986: 272).

While such a difference between *cs* and *h* is an important topic when we discuss the semantics and pragmatics of expressiveness, their similarities are also of great importance. In the tradition of dynamic approaches to discourse, the

[2] **Tracking individuals:** The model in (3)b assumes that the addressee is always the same. If one wishes to track the honorific relation for each pair of individuals, h should be written as $h = \{< i, I, j >: i \in D_e \wedge I \sqsubseteq [0,1] \wedge j \in D_e\}$.

utterance is seen as a context change potential (Heim 1992: 185) and the relation between the context c and the utterance u is schematically expressed as in (4); or (4)a if we look at the update of *cs*. The underlying relation between the context and the meaning of linguistic elements is considered the same; the expressive (honorific) state *h* is updated by the information from the utterance, leading to the formula in (4)b.

(4) $c + u = c'$

a. $cs + u = cs'$

b. $h + u = h'$

Gradualness in expressiveness. The real-based approach has succeeded in explaining important aspects of expressiveness and has become the standard theory in dynamic pragmatics/semantics. However, at the same time, the spread of such real-based approaches has made some researchers pose fundamental questions about the architecture of the semantics and pragmatics or, perhaps, something beyond (Portner et al. 2019; Yamada 2019a). As briefly summarized above, real numbers are not only used to model a component in the structured discourse context but also exploited to analyze the denotation of a lexical item. This means that real-number based gradualness is treated as a built-in property of some linguistic expressions.[3] However, not all researchers agree that the meaning denoted by such expressive elements is gradual. For example, Portner et al. (2019) state:

> *While actual human relations of hierarchy, intimacy, and formality are complex and perhaps infinitely varied, their grammatical marking appears to be discrete, distinguishing only a small number of levels. [...] In the Korean system, speech style particles distinguish only formality and binary hierarchical relations. [...] Of course, at the point where the semantic/pragmatic analysis of speech style markers is integrated into a broader theory of language where richer types of sociolinguistic and social information are described, we will need a theory of the re-*

[3] **Acknowledgments:** I would like to thank Kai von Fintel for insightful comments and suggestions.

	semantics (the denotation of an expressive element)	pragmatics (a component in the structured discourse context)
Potts and Kawahara (2004) Potts (2007b) McCready (2014, 2018, 2019)	gradual	gradual
Portner et al. (2019)	discrete	discrete
Yamada (2019a), this dissertation	discrete	gradual

Table 4.1: Gradualness in expressive elements

> *lation between the simple grammatically encoded oppositions and the complex social world* (Portner et al. 2019).

As we will see shortly, Portner et al. (2019) have managed to develop a theory in which the denotation (the semantics) and the context (the pragmatics; h in (3)) are both discrete, exhibiting a sharp contrast with the aforementioned real-based approaches, in which neither is discrete. Table 4.1 summarizes differences among important studies in their stance toward the gradualness in expressive meanings.

On one hand, Portner's et al. (2019) insight sounds like a natural assumption to adopt. Since the linguistic system is discrete, it seems reasonable to assume a discrete semantics. On the other hand, some pragmatic/contextual factors that affect the use of addressee-honorific markers are gradual in nature, as Cruse (1986) states. Certainly, social hierarchy, as is assumed in Portner et al. (2019), can be modeled in a discrete manner. But this is by no means the only factor that determines the honorific use (Brown and Levinson 1987 [1978]; Kikuchi 1997 [1994]; Shibatani 1998; McCready 2014, 2018, 2019; Yamada 2019a; among many others). Emotional intensity, intimacy between the speaker and the addressee, age difference, and many other circumstantial properties (e.g., how long each individual have belonged to the company/school/institution where the conversation takes place) are known to interactively contribute to the use of honorific markers. Most of them are gradable.

The goal of this chapter is to propose an eclectic approach to the expressiveness of addressee-honorification by reconciling these two directions. The

position of this chapter is given in the last row in Table 4.1. I will argue that we can build a theory in which expressive elements are given discrete denotations, while maintaining the idea that expressive (honorific) states in the structured discourse context are gradual. To this end, we need a pragmatic mechanism (or, an extralinguistic cognitive system) that mediates the contextual (emotional) gradualness and the discrete contrast in the language system. I will argue that we can easily build such an update system, which is interpreted as an extension of insights of Bayesian statistics.

Organization of this chapter. The organization of this chapter is as follows. In Section 4.2, we will review how discussions of expressiveness emerged and developed in the past 20 years or so. Then, in Section 4.3, we will see some issues that we must better handle. In Section 4.4, I will present my own model, which is built on some basic assumptions of Bayesian statistics and show that this model can overcome some limitations of previous approaches. This chapter concludes with a brief summary and comments on future studies in Section 4.5.

4.2 Previous approaches to expressiveness

In many recent studies, honorific expressions have been considered expressions with EXPRESSIVE MEANING. This way of understanding has been put forth by Potts's serial work on conventional implicatures (Potts 2003, 2005, 2007a, b, 2015).

Potts gave criticism what he calls "a definite trend in formal semantics towards treating all semantic content that is not, intuitively, part of the semantics proper as though it were presupposed," which made the term 'presupposition' "in danger of becoming a label for whatever part of the semantics eludes the analysis being offered — a new version of the old pragmatic wastebasket (ibid.: 25)." This is the reason why he enriches Grice's original taxonomy on meanings by giving a detailed analysis of the conventional implicature: the classification tree in Figure 4.1 reflects his treatment of meanings (Potts 2003: 26). Justification or evaluation of this taxonomy is not our main concern and beyond the scope of this study.

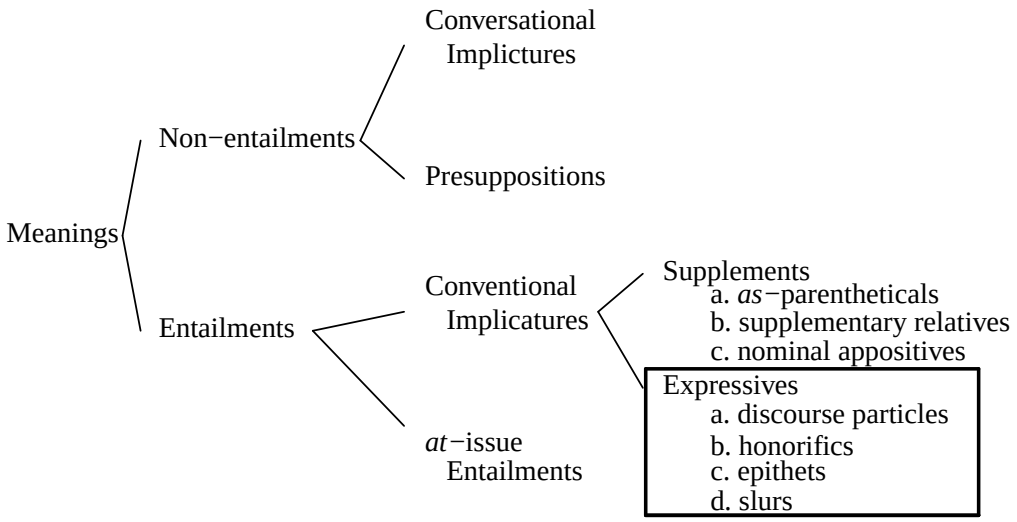


Figure 4.1: Classification of meanings proposed by Potts (2003, 2007a)

Rather, based on his classification tree, I would like to give a brief summary on how previous studies have characterized expressive expressions, with honorifics being an illustrative example.

Potts (2003) articulates the location of conventional implicatures (CIs) in this meaning tree by defining them as meanings (i) that are entailed by linguistic forms (lexical expressions and constructions) (ii) which are yet distinct from the regular at-issue content of the sentence. A representative example of conventional implicature is the analysis of *but*. The sentence in (5) is analyzed as having two meaning strata. The main message, the at-issue part of the meaning, is given in (5)a. In addition to this primary meaning, the lexical item *but* has an effect of conveying the secondary information in (5)b, which has been analyzed as a conventional implicature (Grice 1975; Bach 1999; Neale 1999; Potts 2007a, 2015; McCready 2009, 2010; Sawada 2017).

(5) Shaq is huge **but** agile.

a. At-issue: Shaq is huge and Shaq is agile.

b. Conventional implicature: (roughly) being huge normally precludes being agile.

In addition to such a textbook example, researchers have pointed out a considerable amount of lexical/constructional patterns with such secondary messages. For example, expressions in Table 4.2 are considered (a candidate for) the trigger of conventional implicature (most examples are cited from Potts 2015 but a few new examples and citations are added to the list). For morpho-syntactic reasons, Potts (2003) further divides conventional implicatures into supplements and expressives. SUPPLEMENTS are appositive elements, such as parenthetical *as*-clauses in English, supplementary (non-restrictive) relative clauses and nominal appositives; for examples, the boldface phrases in (6) (Potts 2003: 12). Supplements are syntactically not tightly integrated into the main material of the sentence, typically being separated by a prosodic boundary.

(6) Supplements

a. Ames was, **as the press reported**, a successful spy. [*as*-clause]

b. Ames, **who stole from the FBI**, is now behind bars. [supplementary relatives]

c. Ames, **the former spy**, is now behind bars. [nominal appositive]

EXPRESSIVES, on the other hand, occupy the very position where normal at-issue expressions would appear, while, nevertheless, having no interaction with other at-issue meanings. Some representative examples are given in (7).

(7) Expressives

a. Referent honorifics (Japanese)

Tomioka-sensei-ga ***irassyar****-u.*
Tomioka-teacher-NOM come.HONs-PRS
'(i) Prof. Tomioka will come;
(ii) The speaker respects Prof. Tomioka.'

b. Expressive attributive adjectives (Cruse 1986:272; Potts 2003: 205)

Shut that **blasted** window!

c. Particles (German; Kratzer 2004)

Du hast ***ja*** *'n Loch im Armel.*
You have PRT a hole in.DET sleeve
'(i) There is a hole in your sleeve;
(ii) The proposition in (i) is well-known.'

d. Epithets (Lebanese Arabic; Aoun et al. 2001:385; Potts 2003: 3)

saami ha-l-maʒduub nəse l-mawʕad
Sami 3-the-idiot.SM forgot.3.SM the-appointment
'Sami, this idiot, forgot the appointment.'

e. Slurs (Cepollaro 2015: 36)

Bianca is a **wop**.

f. Diminutives (Italian; Fortin 2011: 39)

*Poterei aver-ne una fett-****ina****?*
could.1.SG have of.it a slice-DIM
'Could I have a little piece of it, please?'

Certainly, future studies may improve the map of meaning with new findings or arguments. But this meaning tree suffices to clarify what aspect of meanings we are about to discuss. First, honorific meanings are a piece of information entailed by a particular linguistic expression (i.e., this is a subclass of entailments, not presuppositions or conversational implicature). Second, they do not contribute to the main content of the sentence (i.e., this is a subclass of conventional implicature, not at-issue entailments). For example, they do not interact with the partition-creating process of interrogative elements. Third, unlike supplements, honorific elements are not appositives (i.e., this is a subclass of expressives, not

supplements). For example, there is no salient pause around honorific elements. In Japanese, they have been analyzed as suffixes.

In the remainder of this section, we will trace the history and development of theories of expressiveness. It was around the turn of the 21st century that researchers with a background of formal linguistics started discussing the nature of expressive elements. During the decades of the 2000s and 2010s, a growing amount of literature has examined a wide range of phenomena to reveal the nature of expressive elements; in the domain of honorifics, for example, Potts and Kawahara (2004), Potts (2007b), Kims and Sells (2007), McCready (2014, 2018, 2019), Watanabe et al. (2014), Portner et al. (2019) and Yamada (2019a). Amongst these studies, we will zoom in on a few influential studies, which have made significant methodological contributions to the discussions on honorifics — Potts and Kawahara (2004), Potts (2007b), McCready (2014) and Portner et al. (2019).

4.2.1 A single-value approach: Potts and Kawahara (2004)

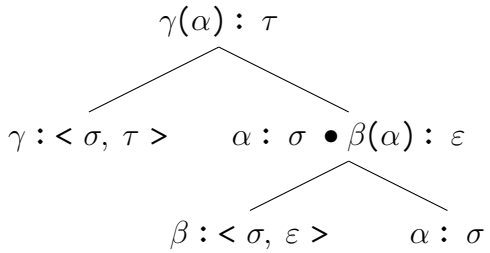
In each theory, it is of great importance to clarify (i) what kind of denotation is proposed for the expressive element and (ii) how the discourse information is updated.

The earliest attempt is found in Potts and Kawahara's (2004) work, in which it is proposed that (i) the denotation of honorific elements is gradual, approximated as a single real-value and (ii) the contextual information about the expressiveness is also represented as a gradual real-number. Below, let us take a closer look at their analysis in depth.

Semantics. First, they propose that sentences with an honorific marker manifest a special kind of MULTIDIMENSIONAL SEMANTIC CONTENT. Following the theory of expressiveness (Kratzer 1999; Potts 2003), they propose that honorific meanings are orthogonal to the at-issue propositional meaning and envision that the semantic composition proceeds multidimensionally. That is, some expressions trigger (more than) two independent meanings during the semantic composition, one for the at-issue content and another that involves an expressive

dimension of the meaning. The following tree in (8) illustrates how this works (Potts 2003: 57; Potts and Kawahara 2004: 263; Potts 2007a, b).

(8) Multidimensional semantics



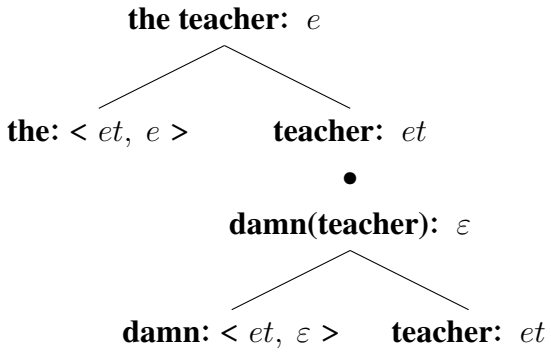
Here, β, which is the trigger of expressive meaning, takes α and returns two independent meanings — (i) it acts as an identity function with respect to the at-issue meaning and its mother node inherits the meaning of α and (ii) it gives a semantic object of type ε (an expressive meaning). The meaning α (the at-issue meaning) is the only content that is accessible from higher nodes, e.g., the node γ. When all the semantic calculation is over, we have one at-issue content and a set of expressive meanings.

Consider an example in (9). The boldface *damn* in this sentence introduces a conventional implicature that the speaker has a negative attitude towards the teacher (Potts 2003: 223).

(9) [The **damn** teacher] came in.

The semantic derivation for the bracketed phrase is shown below. When *damn* is applied to its sister *teacher*, the original at-issue meaning is preserved but as a secondary meaning *damn(teacher)* (e.g., 'the teacher is annoying/the speaker does not like the teacher') is added to the secondary layer during the derivation. This secondary meaning *damn(teacher)* is now separated from the main semantic composition. The determiner *the* ignores the expressive meaning and only takes the at-issue content of the sister node as its argument.

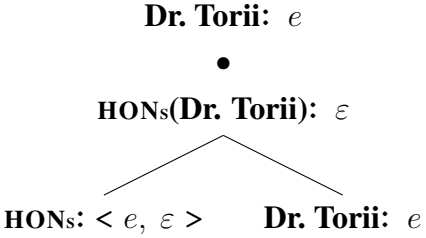
(10)



Potts and Kawahara (2004) treat honorific elements in the same way. Observe an example with a subject-honorific marker in (11). They (tacitly) assume that the subject-honorific meaning is interpretable in the DP/NP-periphery, though the morphological reflex appears as a verbal suffix (*-rare*). The honorific meaning is applied to a type e-element and the corresponding honorific meaning is triggered, as shown in (12).

(11) *Torii sensei-ga ko-**rare**-ta.*
Torii doctor-NOM come-HONs-PST
'(i) Dr. Torii came;
(ii) the speaker respects Dr. Torii.'

(12)



Second, type ε semantic objects are considered a triple of the three objects; (i) the feeling-bearer, (ii) the strength of that feeling and (ii) the person to whom the feeling is directed. For example, if x has a very high respect towards y, this expressive honorific meaning is denoted as something like $< x, .9, y > \in D_e \times [-1, 1] \times D_e$ (or, in their notation $x.9y$). Likewise, $< x, -.7, y >$ means that x has a relatively high disrespect towards y. The table in (13) summarizes their (practical) interpretation of real numbers (Potts and Kawahara 2004: 261).

(13) Intensity of feeling

a. Antihonorific forms (impolite speech): $-1 < r < -0.5$

b. No honorific marking: $-0.5 < r < 0.5$

c. Positive honorific forms: $0.5 < r < 1.0$

For example, HON$_S$(Dr. Torii) is interpreted as < The speaker, 0.756, Dr. Torii > (Potts and Kawahara 2004: 262).

Pragmatics. The guiding intuition of their analysis is that honorifics are a special kind of DEFINITE DESCRIPTION. In previous studies on definite description, researchers, such as Karttunen (1976) and Heim (1982), proposed a view that the referent of the definite description should have already been introduced in the previous discourse. In the same vein, Potts and Kawahara (2004) argue that the speaker's attitude to the addressee (in the case of utterance-honorific constructions) or to the individual referred to by the relevant argument (in the case of content-honorific constructions) must have been established in the prior context; in this regard, this is a presuppositional analysis. They hypothesize that the emotional value introduced by the new utterance should have already been familiar to the speaker and the addressee:

> *Just as a definite description is felicitous only in situations in which an entity with its descriptive content has already been introduced, so too an honorific is felicitous only in discourse situations in which it is already established that the speaker bears the appropriate relation to his addressee (in the case of performative honorifics) or to the denotation of the relevant argument (in the case of argument-oriented honorifics).* (ibid.: 261)

Thus, the expressive meaning serves as an input-condition to the prior context and it is treated as a kind of discourse anaphora. This idea is formalized in the following way. To begin with, they propose the structured discourse context, as in (14), which includes the set of expressive meanings (i.e., $c_{hon} \subset D_{\varepsilon}$).

(14) A context C is set of tuples $c =< c_a, c_p, c_t, c_w, c_{hon} >$,
where c_a is the agent (speaker) of c,
c_p is the place of c,
c_t is the time of c,
c_w is the world of c,
and c_{hon} is a subset of D_ε.

In order to capture the relationship between the context and the utterance, they propose that this c_{hon} must obey what they call the definedness condition (ibid.: 265) :

(15) Definedness condition:
$C + [\![\alpha : \varepsilon]\!]^C$ is defined only if $\forall c \in C.\ [\![\alpha : \varepsilon]\!]^C \in c_{hon}$.
Where defined, $C + [\![\alpha : \varepsilon]\!]^C = C$

Let us see how it works. Assume that the sentence tries to give an expressive denotation as in (16). For them, this denotation can be only defined when the context set C is consistent, e.g., something like C^1_{prior} in (17)a. But when our context set is C^2_{prior} in (17)b, it is undefined and a context update will never happen. In this sense, perhaps, their idea can be best-labeled as a context-checking approach, not a context-update approach, in the sense the already established emotional value will never be replaced with a new alternative value.

(16) $[\![\alpha : \varepsilon]\!]^C =< a, 0.3, b >$

(17) Examples:

a. $$C^1_{prior} = \left\{ \begin{array}{l} < c_{a^*}, c_{p^*}, c_{t^*}, c_{w^*}, \left\{ \begin{array}{c} < a, \mathbf{0.3}, b >, \\ < b, 0, a > \end{array} \right\} >, \\ \vdots \\ < c_{a^*}, c_{p^*}, c_{t^*}, c_{w^*}, \left\{ \begin{array}{c} < a, \mathbf{0.3}, b >, \\ < b, 0.1, a > \end{array} \right\} >, \\ \vdots \\ < c_{a^*}, c_{p^*}, c_{t^*}, c_{w^*}, \left\{ \begin{array}{c} < a, \mathbf{0.3}, b >, \\ < b, 1.0, a > \end{array} \right\} >, \end{array} \right\}$$

b. $$C^2_{prior} = \left\{ \begin{array}{l} < c_{a^*}, c_{p^*}, c_{t^*}, c_{w^*}, \left\{ \begin{array}{c} < a, \mathbf{0.1}, b >, \\ < b, 0, a > \end{array} \right\} >, \\ \vdots \\ < c_{a^*}, c_{p^*}, c_{t^*}, c_{w^*}, \left\{ \begin{array}{c} < a, \mathbf{0.2}, b >, \\ < b, 0.1, a > \end{array} \right\} >, \\ \vdots \\ < c_{a^*}, c_{p^*}, c_{t^*}, c_{w^*}, \left\{ \begin{array}{c} < a, \mathbf{0.3}, b >, \\ < b, 1.0, a > \end{array} \right\} >, \end{array} \right\}$$

4.2.2 Interval-based approaches

The idea that the emotion intensity or the degree of respect is represented as a single real number is, however, not inherited by later studies. Instead, intervals are widely used in the literature (Potts 2007b; Kims and Sells 2007; McCready 2014, 2018, 2019; Watanabe et al. 2014). Although, in this dissertation, I propose a model different from these interval-based approaches, my proposal also owes many insights to these analyses.

4.2.2.1 Potts (2007b)

Potts (2007b) improves the previous approach by changing (i) the semantics of expressive elements and (ii) the pragmatic principle of the way the c_{hon} (expressive state) is updated.

Semantics. First, Potts (2007b) abandons the idea that the emotive strength is modeled as a single value. Instead, he proposes that it is best modeled as an interval. Under the SINGLE-VALUE APPROACH, as envisioned by Potts and Kawahara (2004), the real number shows (i) the strength of the emotion and (ii) whether the emotion is positive or negative. On the other hand, under the INTERVAL-BASED APPROACH, the interval can be understood as a range which the emotional range of any future utterance fits into. For example, for Potts and Kawahara (2004), $< x, 0, y >$ represents a state where the person x does not have any particular emotion (respect or disrespect). The equivalent expressive state for Potts (2007b) is now $< x, [-1.0, 1.0], y >$, which is compatible with any future state, representing the speaker's ignorance of the correct emotional interval.

Second, although he does not directly define the appropriateness condition of an utterance given the context, he does define the appropriateness condition for the discourse context and, as a derivative corollary, we can tell appropriate utterances from infelicitous utterances. A condition imposed on the context is what he calls EXPRESSIVE CONSISTENCY, defined below:

(18) **Expressive consistency**: a context c is admissible only if c_{ε} contains at most one expressive object $< a, I, b >$ for every salient pair of entities a and b.

The following quotes from his work elucidates what he intends to capture. He writes:

> *when Tom utters the phrase that bastard Jerry, he replaces any expressive object of the form* $< [\![tom]\!] I [\![jerry]\!] >$ *in the input context with a new object [. . .]. Once the change occurs, it places restrictions on the kind of expressive language that Tom can use felicitously* (ibid.: 179).

> *[s]peakers must be consistent with their expressive morphemes, else their behavior is infelicitous* (ibid.: 184).

Context consistency defined in (18) determines the appropriateness of an utterance in the given context. It is not clear, however, whether this means that only the utterance that has exactly the same interval is judged appropriate, or utter-

ances with an interval included by the context interval are judged appropriate. Since the former interpretation is too strict and counterintuitive, I take the interpretation that Potts (2007b) proposes the latter view.

Third, the expressive dimension of the context MONOTONICALLY UPDATES, as expressed in the following scheme in (19) (Potts 2007b: 185).

(19) $C+ < a, I', b >= C'$
where c_ε and c'_ε differ at most in that

a. $< a, I', b > \in c'_\varepsilon$, and

b. if c_ε contains an expressive index $< a, I, b >$, where $I \neq I'$, then $< a, I, b > \notin c'_\varepsilon$ and $I' \sqsubseteq I$.
i.e., $(< a, I, b > \in c_\varepsilon \wedge I \neq I') \Rightarrow (< a, I, b > \notin c'_\varepsilon \wedge I' \sqsubseteq I)$

Just as information states shrink in a downward monotonic fashion (Stalnaker 1974, 1978, 2002), the interval only gets smaller and smaller. This is a crucial change from Potts and Kawahara (2004). Instead of checking the context information, this model dynamically updates the relevant information. For example, suppose that there are four salient participants a, b, c, and d in the immediate context and assume that c^0_{hon} in (20)a is our initial state. With an utterance interval of $< a, [-.3, .75], b >$, the corresponding context interval in c^0_{hon} is updated to c^1_{hon}.

(20) a. $c^0_{hon} = \left\{ \begin{array}{c} < a, [-1.0, 1.0], b >, \\ < a, [.6, .75], c >, \\ < a, [-1.0, 0], d >, \\ \vdots \end{array} \right\}$

b. $c^1_{hon} = \left\{ \begin{array}{c} < a, [-.3, .75], b > \\ < a, [.6, .75], c > \\ < a, [-1.0, 0], d > \\ \vdots \end{array} \right\}$

As a result, the new context interval must be identical to the proposed utterance interval, if there is an update.

4.2.2.2 McCready (2014, 2018, 2019)

More recently, a different real-number based approach to honorific meanings has been proposed by McCready (2014, 2018, 2019). Taking Thai honorification for her principal example, McCready (2014) seeks a better model for honorific expressions within the Interval-based framework. Following Potts (2007b), she assumes multidimensional semantics for semantic derivation but she departs from Potts (2007b) in several regards.

First, one (minor) change concerns the range of the real-number interval. She uses $[0, 1)$ instead of $[-1, 1]$ for the space of expressive meanings. As a practical estimate of ranges, she adopts the following correspondence between the magnitude in expressiveness and the interval:

(21) McCready (2014)
   a. High $\sqsubseteq [.6, 1)$
   b. Mid $\subseteq [.3, .7]$
   c. Low $\sqsubseteq [0, .4]$

Second, she explicitly distinguishes the semantics of the lexical element and the semantics of the sentence. She assumes that the utterance interval is the average of all the expressions with honorific meanings, as shown in (22)a (this is intended for Thai honorific systems and, as she acknowledges, arguably it may not be suitable for other languages, including Japanese). For example, if there are two (anti-)honorific elements within the same sentence, α and β with $[0, .3]$ and $[.7, 1]$, she calculates the average of the honorific level of the utterance and regards the interval $[.35, .65]$ as the interval of the whole sentence. According to the criterion in (21), this lies in a middle range. The honorific intensity in the immediate context, which she calls the global register $\mathcal{R}$, is also represented as an interval, as in (22)b.

(22) Utterance intervals and context intervals

a. Utterance interval

$$Hon(S) = \begin{cases} \left[\frac{\sum_{i=1}^{n} min(i)}{n}, \frac{\sum_{i=1}^{n} max(i)}{n}\right], & \text{if } Hon_1 \sqcap Hon_2 \sqcap \ldots \sqcap Hon_n \neq \phi \\ 0, & \text{otherwise} \end{cases}$$

b. Context interval

$\mathcal{R} = [\mathcal{R}_{lower}, \mathcal{R}_{upper}]$

Third, she defines the appropriateness of an utterance as the compatibility between the utterance honorific interval (= (22)a) and a context interval (= (22)b). If there is an overlapping region between the two, the utterance is appropriate, as formalized below in (23) (ibid.: 508). For example, if the utterance gives $[.3, .65]$ and the context interval is $[.0, .2]$, the sentence is inappropriate; e.g., if we are talking to our friend in a very casual manner, the intermediate honorific degree is not considered appropriate.

(23) Appropriateness for honorifics

$$Hon(S) \text{ in } C = \begin{cases} \text{appropriate}, & \text{if } Hon(S) \sqcap \mathcal{R} \neq \phi \\ \text{not appropriate}, & \text{otherwise} \end{cases}$$

Fourth, she adopts the context-update view, as opposed to the context-checking approach. But she also departs from Potts's (2007) attempt; she does allow a non-monotonic update, because "it certainly seems possible to indicate altered attitudes as opposed to simply further specifying existing ones (McCready 2014: 506)" and proposes the following algorithm.

(24) Context update

$C + Hon(S) = C'$

where

$$C' = \begin{cases} C, & \text{if } C \sqsubseteq Hon(S) \\ \left[\frac{3\times\mathcal{R}_{lower}+Hon(S)_{lower}}{4}, \frac{3\times\mathcal{R}_{upper}+Hon(S)_{upper}}{4}\right], & \text{otherwise} \end{cases}$$

Finally, she proposes an explicit link between extra-linguistic factors and the context interval. She identifies three important dimensions for honorific ex-

pressiveness — psychological distance, social distance and formality (for the sake of convenience she assumes that they are orthogonal to each other).[4] Let P_i, S_i, F_i be these three factors of the i-th utterance. She assumes that they also represent an interval between 0 and 1, and derives the honorific interval of the relevant context by the following formula, where min and max return the lower limit and the upper limit of the argument interval.

(25) a. $R_{lower,i} = \frac{1}{3}\left[min(P_i) + min(S_i) + min(F_i)\right]$
b. $R_{upper,i} = \frac{1}{3}\left[max(P_i) + max(S_i) + max(F_i)\right]$

For example, if we have $P_i = [.2, .5]$, $S_i = [.3, .8]$ and $F_i = [.9, 1.0]$, then $R_i = [.466, .766]$.

Notice that her appropriateness condition and her update condition are different. Inappropriate utterances always trigger a context update. But, appropriate utterances update the context only if the utterance is, so to speak, 'informative' — (i) either, it gives us a smaller range or (ii) it tells us a different range from the one previously assumed by interlocutors. In other words, if the utterance interval is less informative, i.e., wider than the context interval, then the context interval remains intact. Thus, her implementation is much more generous than the algorithm given by Potts (2007b), since Potts (2007b) only allows context updates that yield a smaller interval. If the previous interval I_1 is $[0.3, 0.75]$ and the new interval I_2 is $[0.25, 0.6125]$, Potts (2007b) analyzes this as an illegitimate move, while for McCready (2014, 2018, 2019) this is acceptable. It is also noted, for Potts (2007b), if there is an update, the new context interval and the proposed

[4] **Multiple factors in other studies:** The idea that the use of politeness marking depends on multiple factors has previously been pointed out. For example, Brown and Levinson's (1987 [1978]) proposes a linear combination of three factors to estimate the weightiness of the face threatening act (D: social distance; P: power relation; rating [ranking] of imposition).

(i) $w_x = D(S, H) + P(H, S) + R_x$
where w_x: weighiness of the FTA from the speaker's act x,
$D(S, H)$: an index for the social distance,
$P(H, S)$: an index for the hearer's power on the speaker,
R_x: rating of the imposition of the act *x* in the given culture.

Kikuchi (1997: 78) also elucidates many factors (which are grouped as social factors and psychological factors) that affect the use of honorifics in Japanese.

utterance interval are always the same. In the case where C is not a subset of $Hon(S)$, McCready (2014) picks an interval by assigning $3:1$ weights to the previous context interval and the utterance interval; i.e., the lower limit is the weighted average of the lower limits of these intervals and the same for the upper limit. Thus, the new context interval and the utterance interval take different values.

4.2.3 Portner et al. (2019)

So far, we have seen three approaches that use reals to model honorific intensity. A completely different proposal has been provided by Portner et al. (2019), which does not rely on any real number but tries to give an analysis of discourse effects associated with addressee-honorifics within the framework of dynamic pragmatics. The gist of their analysis is summarized below.

First, they inherit the idea that the meaning of the utterance is best-modeled as a pair of at-issue meaning and a 'politeness meaning.' As in (26), the denotation of an utterance ϕ is a tuple of $[\![\phi]\!]^p$ (the propositional content) and $[\![\phi]\!]^\pi$ (the politeness content).

(26) Meaning of an utterance ϕ
$[\![\phi]\!] =< [\![\phi]\!]^p, [\![\phi]\!]^\pi >$

Second, the main departure from the previous approaches lies in their structured discourse context. It contains what they call the PARTICIPANT STRUCTURE P, which represents the information of the hierarchical relations among participants.

(27) Structured discourse context
$c =< P, cs >$

This P is composed of three elements J, O and h.

(28) Participant structure

$P =< J, O, h >$

a. $J =< P_1, P_2, ..., P_n >$

b. $O =< N, <>$, where $N = \{N_1, N_2, ..., N_n\}$

c. $h : J \rightarrow M \subset \wp(N)$.

To see how this works, consider the following scenario. In a semantics reading group, three people are attending, James, Lucia and Elena. By collecting all these people, we can get a set $\{James,\ Lucia,\ Elena\}$. But we want to differentiate the speaker, the addressee and the other participants. So, instead of having a set, Portner et al. (2019) uses a tuple and interprets the first element of this tuple as the speaker and the second as the addressee. For example, if James is talking to Lucia, then the tuple is $< James,\ Lucia,\ Elena >$. This tuple is J. Next, since we have three people in this class room, we can consider possible hierarchical structures. For example, maybe, they are all students in the same year; or perhaps, one of them is a student and the other two are teachers. This is what O specifies. Since we have three people, we prepare three elements N_1, N_2 and N_3. Possible hierarchies among those elements are shown in (29); we ignore the difference in indices, e.g., $N_3 \prec N_2 \sim N_1$ is the same as $N_3 \prec N_1 \sim N_2$.

(29) a. $N_3 \sim N_2 \sim N_1$

b. $N_3 \prec N_2 \sim N_1$

c. $N_3 \sim N_2 \prec N_1$

d. $N_3 \prec N_2 \prec N_1$

Having an O means picking one of these. Let us pick (29)b for purposes of illustration. For example, one of them is a teacher and the other two are students. In this case, $\{N_3\}$ = TEACHERS and $\{N_2, N_1\}$ = STUDENTS. Maybe, one of them is a fifth-year PhD student and the other two are undergraduate students. In this case, $\{N_3\}$ = GRADS and $\{N_2, N_1\}$ = UNDERGRADS. Or perhaps, we cannot find any good labels and such an ordering has just been established in an adhoc way. In any case, by making a subset of N and introducing an order to these elements, we can represent a hierarchical structure. Finally, consider who

are in the first class and who are in the second class. This is what the function h does. If, for example, we assign Elena to the upper class, then we have the following mapping relations in (30). This kind of information is stored in the discourse context as well as the context set or other components.

(30) $h = \left\{ \begin{array}{c} < James, \{N_2, N_1\} >, \\ < Lucia, \{N_2, N_1\} >, \\ < Elena, \{N_3\} > \end{array} \right\}$

Third, the denotation of an addressee-honorific marker is a context change potential which is designed to change this h in the Participant Structure. Let us assume that the previous context had the h in (31). If Elena produces an utterance without an addressee-honorific marker, she tries to replace the old $h_{previous}$ with a new h_{new}: the one in (31) is replaced by (32)a, in which case she maintains the same hierarchical relation and it has no substantial change at all. But even in a context where Elena had been higher in the hierarchy, she would sometimes use an addressee-honorific marker to Lucia. Then, she replaces (31) with (32)b.

(31) $h_{previous} = \left\{ \begin{array}{c} < Lucia, \{N_1\} >, \\ < Elena, \{N_2\} > \end{array} \right\}$

(32) a. $h^{(1)}_{new} = \left\{ \begin{array}{c} < Lucia, \{N_1\} >, \\ < Elena, \{N_2\} > \end{array} \right\}$

b. $h^{(2)}_{new} = \left\{ \begin{array}{c} < Lucia, \{N_2\} >, \\ < Elena, \{N_1\} > \end{array} \right\}$

This idea is formalized in (33) and the semantics in (34) is an example of the meaning of addressee-honorific markers.

(33) For utterance u of a declarative cP ϕ,
$c + u =<< J_c, O_c, h_{c'} >, cs' >$,
where $h_{c'} = [\![\phi]\!]^{\pi}$ and $cs' = cs_c \cap [\![\phi]\!]^{p}$

(34) $[\![[\text{status} : S < A]]\!] = h : h(P_1) = \{N_1\} \wedge h(P_2) = \{N_2\}$

Notice that their analysis is similar to Potts (2007b) (but not to McCready 2014), in the sense that the proposed politeness information from an utterance directly

replaces the previously-established politeness information, though, for Potts, it is the interval that changes, while, for them, it is the hierarchy that keeps being replaced.[5]

Finally, one other thing that is unique to Portner et al. (2019) is their attempt to examine the relation among discourse components. As said above, the structured discourse context consists of P and cs. They claim the hierarchy in P should be consistent with cs, proposing the following ALIGNMENT PRINCIPLE:

(35) **Alignment principle**: For every context c such that cs_c entails that there is a unique most salient social relation H involving the participants in the conversation, the ordering assigned to the participants in the participant structure in c is compatible with H.

This is different from the expressive consistency proposed by Potts (2007b). For the expressive consistency, we check the consistency in c_{hon}, whereas this alignment principle is concerned with the relation between P and cs. Due to this principle, this model allows an interaction between P and cs. For example, suppose that, as the contextually most salient relation, cs contains the proposition that the speaker is the boss and the addressee is an employee. In such a scenario, P should be built in such a way that the speaker is higher than the addressee. This is the influence from cs to P. In addition, the change in P can concomitantly affect cs. For example, suppose that Elena, the boss, uses an addressee-honorific marker to an employee Lucia, when she does not have to. In this speech event, Elena replaces (31) with (32)b. Due to the alignment principle, cs (if it does not have such a proposition) accommodates the information that Elena establishes the relation Elena ≤ Lucia. This ostensibly contradicts our knowledge that she is the boss, suggesting that she flouts the maxim of Quality in the Gricean sense and making us infer that she wants to respect the positive face of Lucia or mitigate a

[5] **Dynamic semantics/pragmatics:** Although Portner et al. (2019) presents their analysis in the tradition of dynamic pragmatics, they also mention an analysis that, rather, is based on dynamic semantics:

(i) $[\![[\text{status}: S < A]]\!] = \lambda c. << J_c, O_c, \left\{ \begin{array}{c} < P_1, \{N_1\} >, \\ < P_2, \{N_2\} > \end{array} \right\} >, cs_c >$

face-threatening act of making a command and so on.

4.2.4 Interim summary

For comparison's sake, it is beneficial for us to make a summary to see important similarities and contrasts among the proposed theories (Table 4.3).

First, the proposals surveyed in this section all assume that a sentence with an expressive (honorific) meaning is equipped with a multidimensional semantic object. Second, the first three approaches use a real for the honorific meaning, whereas, for Portner et al. (2019), honorific expressions involve information about the hierarchy among individuals. Third, researchers propose different conditions for utterance appropriateness. For the first two, the influence of previous context is highlighted, while the latter two accentuate the performativity of expressiveness. Fourth, related to this third point, the initial attempt of Potts and Kawahara (2004) is best classified as a context-checking approach while the other three foreground the dynamicity of the context update mechanism, reflecting a transition and/or development in the study of expressiveness as well as dynamic semantics/pragmatics. Fifth, the future states are, thus, quite restricted in the first two approaches, whereas the latter two allow more flexible changes. Sixth, the theories differ depending upon whether the context-update in expressiveness is assumed to happen in every utterance. Portner et al. (2019) is the first proposal that claims that honorific updates always happen, though in practice some of them end up maintaining the previously established relation. Finally, it is important to consider the interface between pragmatics and sociolinguistics. McCready's (2014, 2018, 2019) proposal integrates some sociolinguistic factors into the model reflecting the view widely accepted in Japanese traditional/functional linguistics (Minami et al. 1974; Minami 1986; Kikuchi 1997 [1994]; Shibatani 1998) and/or politeness theory (Brown and Levinson 1987 [1978]).

Linguistic elements	Examples
Adverbs	*almost* (Horn 2002, 2011), *already*, *barely* (Horn 2002), *even* (Karttunen and Peters 1979; Horn 1979; Bennett 1982; Francescotti 1995), *only* (Horn 1979), *still*, *yet*, Japanese *motto* (Sawada 2010, 2017), *totally* (Beltrama 2015)
Additive particles	*too*, *also*, and *either* (Horn 2007)
Anaphoric epithets	*the jerk* (Corazza 2005; Potts et al. 2009)
Connectives	*but* (Rieber 1997), *nevertheless*, *so*, *therefore* (Grice 1975)
Diminutives	*doggy* (Fortin 2011), Japanese *chan* (Sawada 2010, 2013, 2017)
Discourse particles	German *ja* (Kratzer 1999, 2004; McCready 2009, 2010; Gutzmann 2012)
Exclamatives	Castroviejo (2010)
Honorifics and anti-honorifics	(Potts and Kawahara 2004; Potts 2007b; Kim and Sells 2007; Potts et al. 2009; McCready 2010, 2014, 2018, 2019; Davis and McCready 2016; J. Sawada 2016; O. Sawada 2010, 2017; Watanabe et al 2014; Portner et al. 2019; Yamada 2019a)
Implicative verbs	*bother*, *condescend*, *continue*, *deign*, *fail*, *manage*, *stop* (Karttunen 1971; Karttunen and Peters 1979)
Intonational contours	(Ward and Hirschberg 1985; Kratzer 2004; Constant 2012; Gutzmann and Castroviejo 2008)
Parentheticals and supplementary (nonrestrictive) relative clauses	Chierchia and McConnell-Ginet (2000 [1990]); Potts (2003, 2005)
nominal appositives	Potts (2007a), *as*-parentheticals (Potts 2003, 2005, 2007a)
Racial epithets/slurs	*hori*, *chink*, *wop*, *Boche* (Hom 2008; McCready 2010; Blakemore 2015; Cepollaro 2015)
Swears	Potts (2007b); Gutzmann (2008); Barker et al. (2010); Gutzmann (2011)
Subordinating conjunctions	*although* (Frege 1980 [1892]), *despite (the fact that)*, *even though*
Others	epistemic *would* (Ward et al. 2003), epistemic *must* (Salmon 2011), datives in English (Horn 2007, 2008) and German (Gutzmann 2007), Italian *-issimo* (Beltrama 2014), Japanese modal affective demonstratives (Sawada and Sawada 2013)

Table 4.2: Alleged conventional implicatures

	Potts and Kawahara (2004)	Potts (2007b)	McCready (2014, 2018, 2019)	Portner et al. (2019)
Multidimensional utterance meaning	$\surd$	$\surd$	$\surd$	$\surd$(see footnote)
Semantics (Denotation)	$< x, r, y >$	$< x, I, y >$	$< x, I, y >$	$< P_i, \{N_j, ..\} >$
Utterance appropriateness	iff i is in the previous context	derived from the context consistency	overlap between the context and the utterance	wrt the alignment principle
Context shift	context-checking	context-update	context-update	context-update
Future states	The same as the previous context value	The same as the proposal from the utterance	Weighted average between the proposal from the utterance and the previous context	The same as the proposal from the utterance
Context-update condition	iff it is identical to the previous context	iff it is smaller than the previous interval	iff it is not larger than the previous interval	always
Extralinguistic information			Linear predictors	Stored in cs

Table 4.3: Comparison of theories

4.3 Desiderata

In this section, we examine a few important desiderata for our semantic/pragmatic model for Japanese addressee-honorific markers. While some of them are common to other expressive elements or addressee-honorific markers in other languages, I will focus only on the use of Japanese addressee-honorific markers. Indeed, I will leave out other politeness encoding elements even if they are observed in Japanese, because politeness in the nominal domain and poiteness in the verbal domain (= *-mas/des-*) may be quite different in nature.

Politeness encoding in the verbal domain and in the nominal domain. Before looking at the desiderata, it is of great importance to highlight differences among politeness markings. Consider the following context.

> *Context: The speaker is a high school student in Japan. Mr. Tatsumi is his homeroom teacher, who is very friendly so his students are on terms of intimacy with him. In Japan, after school, students take turns to clean their classrooms, which is a school rule. One day, the speaker has to leave school early even though this is a day when he has cleaning duty. So, he asks his friend Yamada to take over his duty with a promise to take over her duty sometime next week. After she has agreed, he visits the staff room, finds Mr. Tatsumi and asks permission so that he would acknowledge the change.*

Under this context, not only the sentence in (36)a but also the sentence in (36)b is acceptable.[6] Notice that the sentence in (36)b does not contain an addressee-honorific marker.

[6] **Variation:** Native speakers who are brought up in a high-class residential area may not use the sentence in (36)b themselves. But they would not find it unacceptably infelicitous.

(36) a. Polite form

Tatsumi sensei, ore kyoo soozi Yamada-ni
Tatsumi teacher I today cleaning duty Yamada-DAT
kawat-te morat-te ii ***des****-u-ka?*
take over-CV APPL$_{H}$-CV okay HON$_{A}$-PRS-Q
'(i) Teacher Tatsumi, is it okay for me to have Yamada take over my cleaning duty today?;
(ii) the speaker respects the addressee (< *-mas*).'

b. Plain form

Tatsumi sensei, ore kyoo soozi Yamada-ni
Tatsumi teacher I today cleaning duty Yamada-DAT
kawat-te morat-te ii?
take over-CV APPL$_{H}$-CV okay
'Teacher Tatsumi, is it okay for me to have Yamada take over my cleaning duty today?'

Clearly, this is not a situation where the student temporarily looks down on the teacher, or where some adhoc contextual emergency makes the teacher-student role less salient. This is exactly the opposite. The student visited the staff room to get his homeroom teacher's permission. Nothing could make the student-teacher relation more salient than a situation like this. Nevertheless, absence of an addressee-honorific marker in (36)b does not make the utterance fatally inappropriate.[7] This is because Mr. Tatsumi has built a very close relationship with his students to the extent that his students feel a strong connection with him. The absence of an addressee-honorific marker in (36)b is taken as a reflex of the speaker's emotional proximity and does not perfectly correlate with the hierarchical relation. To elucidate this point, compare the above sentence with the following example in (37).

[7] **What is preferred and what is observed:** Of course, if the speaker is a diligent, obedient, polite, well-behaved person, he may use the sentence in (36)a. Prescriptively, this is preferred, of course. The production of such a sentence in (36)b puts the speaker at risk of being regarded as a rather mischievous student. Such a slightly deviated behavior is, however, sometimes observed, especially, with male students when they are of high-school age.

(37) * [*Tatsumi*], *ore* *kyoo* *soozi* *Yamada-ni* *kawat-te*
Tatsumi I today cleaning duty Yamada-DAT take over-CV
morat-te *ii* *des-u-ka?*
APPL$_{H}$-CV okay HON$_{A}$-PRS-Q
'(i) Hey Tatsumi, is it okay for me to have Yamada take over my cleaning duty today?;
(ii) the speaker respects Ms. Tatsumi (< *-mas*) (intended).'

In (37), the title noun *sensei* is omitted and this title suppression causes a fatal crash in conversation. If the speaker had said this, Mr. Tatsumi — however kind and generous he may be — would be offended by the fact that the student did not call him with a title suffix. Instead of talking about the student's cleaning duty, he would interrogate why the student did not call him *Tatsumi sensei*. This contrast between (36)b and (37) suggests that the politeness encoding in the verbal domain (*-mas/des*) and the politeness encoding in the nominal domain (e.g., title suffixes) are quite different in nature.[8] As said above, I will leave the examination of the issue of nominal politeness and politeness in other languages to future studies. Rather, this section zooms in on important properties of Japanese addressee-honorific markers (*-mas/des-*).

[8] ***du-Sie* distinction in German:** A German native speaker told me about his experience with the use of polite pronouns. When he was in school, there was an affable teacher who many students felt a strong bond with. However, in tradition of the German culture, students are not allowed to use the *du* (non-polite) form, however strong emotional intimacy they would feel. One day, however, he accidentally used the *du*-form to the teacher in front of all the other classmates. When he did that, everyone in the class room was so astonished as if he violated the taboo of the student-teacher relation, which embarrassed him so strongly that he remembers this moment quite vividly until now.

In contrast, absence of an addressee-honorific marker in Japanese does not cause such a catastrophic failure in communication. I did occasionally use some utterances without an addressee-honorific markers to teachers in my adolescence without having hilarious or serious troubles with the teachers and succeeded in indicating a friendship with (young) teachers. However, if I had used a sentence as in (37), I would have caused as terrible a situation as this German speaker encountered. Unfortunately (or fortunately), I never skipped politeness encoding nouns when I talked to teachers in my high school days, so I cannot provide a similar data point from my own Japanese experience. But I can easily imagine that the embarrassment would have been so strong that that experience would become one traumatic moment in my life.

In this dissertation, based on these above episodic data, I assume that the politeness in the nominal domain (both in Japanese and German) is more robustly determined and more closely related to the social hierarchy than the politeness encoded by Japanese addressee-honorific markers.

4.3.1 Desideratum 1: Independence

Expressive elements are orthogonal to the main message of the sentence. This property is called the INDEPENDENCE of expressive meaning.

(38) **Independence:** Expressive content contributes a dimension of meaning that is separate from the regular descriptive content (Potts 2007b: 166).

This means that we can remove the expressive content of a phrase without changing its descriptive content.

McCready (2019) concludes that "honorific content has the Independence property (ibid.: 16)." Consider the following example.

(39) Test 1 (anaphor)

A: *Ame-ga* *hut-te* *i-mas-u.*
rain-NOM fall-CV PRG-HON$_A$-PRS
'(i) It is raining;
(ii) the speaker respects the addressee.'

B: ***Sore**-wa* *nai-yo.*
that-TOP NEG-SFP
'That is not true.'

Just as in the case of English *that*, the boldface *sore* is considered a discourse anaphor. Since B's utterance cannot be construed as denying the honorific content of A's utterance, she infers that *-mas* has an expressive meaning independent of the main message. Likewise, honorific expressions lack an interaction with other semantic operators. For example, observe the following sentence in which an addressee-honorific marker appears in the scope of an attitude predicate.

(40) Test 2 (scope relation)

Kare-wa [*A-si-ga* *daitooryoo-ni* *nari-**mas**-u-koto*]-*o* ***nozon**-de*
he-TOP A-Ms.-NOM president-DAT become-PRS-C-ACC desire-CV
ori-mas-u.
PRS.HON$_U$-HON$_A$-PRS
'(i) He desires that Ms. A becomes the president;
(ii) the speaker respects the addressee;
(iii) the respect is very high.'

When embedded, the politeness level of the utterance is enhanced by the presence of the embedded *-mas*, showing that the embedded *-mas* has a semantic contribution (see Chapter 5 for the details of embedded addressee-honorific markers). Since this meaning cannot be affected by the meaning of the verb *nozom* 'desire' — this meaning always appears irrespective of our choice of the embedding predicate (see Appendix B of Chapter 5) — we can say that the meaning of *-mas* lacks an interaction with other semantic operators (for other tests, see McCready 2019: Section 2.2).[9]

Note on non-displaceability. A closely related property discussed in the previous literature is NON-DISPLACEABILITY: expressive meanings hold at the speech time, not at other 'displaced' temporal points, places or worlds.

(41) **Non-displaceability:** Expressives predicate something of the utterance situation. (Potts 2007b: 166).

[9] **What data suggests and multidimensional semantics:** Examples such as (39) and (40) have been taken as examples suggesting an importance of independence and multidimensional semantics. But, strictly speaking, what this data suggests is that addressee-honorific markers exhibit a property that would be predicted if they are expressive elements, and it does not prove that they are expressive elements. Since we saw in Chapter 3 that the interpretable honorific feature is provided in the speech act layer, the data might be explained from a syntactic point of view with no multidimensional semantics. For example, one might propose that what *sore* refers to is the sister node of Addr; this is why what *sore* refers to does not contain honorific meaning. Although I cannot provide good evidence that logically counterargues such a non-multidimensional approach, in what follows, I adopt multidimensional semantics as has been done in previous approaches (Potts and Kawahara 2004; Potts 2007a, b; McCready 2014, 2018, 2019), simply because, as far as I am aware, there has been no previous studies that propose such a non-multidimensional analysis, let alone proving that non-multidimensional analysis is superior to multidimensional analysis. I believe that this decision makes it easier for readers to compare my analysis with those of previous studies.

Although this is a well-known property of expressive elements, previous studies did not articulate a good criterion for differentiating non-displaceability from independence. Certaintly, Potts and Kawahara (2004: 255-256) use the following example to show the non-displaceability of the subject-honorific construction in Japanese and they claim that the periphrastic subject-honorific marking *o-...-ni nar-* exhibits non-displaceability, because the meaning projects despite it being under the scope of negation.

(42) *Jim-wa* [[[***o**-warai-**ni***] ***nar**-anak*] *at-ta*].
Jim-TOP HON-laughing-DAT become-NEG COP-PST
'(i) Jim did not laugh;
(ii) the speaker respects Jim.'

However, this data can also be explained if we assume independence: the honorific meaning is independent of the at-issue meaning, so it cannot interact with semantic operators.

Of course, it may be the case that addressee-honorific markers exhibit non-displaceability AND independence, and the honorific meaning in (42) must lack an scope interaction for both reasons. However, since there is no evidence to show that non-displaceability is indeed a distinct property clearly separated from independence, in what follows, I only consider the property of independence, along with McCraedy (2019), who claims that non-displaceability follows from independence.

4.3.2 Desideratum 2: Immediacy

Performative character has also been taken as an important property of expressive elements. This effect is called the IMMEDIACY.

(43) **Immediacy:** Like performatives, expressives achieve their intended act simply by being uttered; they do not offer content so much as inflict it (Potts 2007b: 167).

For example, Potts (2007b: 180) gives a comparison between performative predicates and epithets. Observe the pair in (44) and (45). It has been argued that the speaker's obligation to wash the dishes is not cancelable; its meaning is immediately shared by discourse participants. Likewise, the negative meaning from *bastard* is immediately accommodated in the discourse.

(44) I **promise** that I'll wash the dishes later.

a. #But I refuse to wash the dishes later.

b. #But I make no promises that I'll do it.

(45) That **bastard** Kresge was late for work yesterday. #But he's no bastard today, because today he was on time.

Portner et al. (2019) highlights the performative nature of addressee-honorific markers using Korean examples. Observe the conversation between a mother and her son.

(46) Mom: *Inho-ya, onul sihem cal poass-**ni**?*
Inho-VOC.INTIMATE, today test well done.int.intimate?

Inho: *Ney, emma. 100 cem pat-ass-**eyo**.*
Yes, mom. 100 point receive-PST-DECL.HONA

Mom*: Wa! Cengmal? Cham calhayss-**eyo**!*
Wow! Really? Indeed well.done-DECL.HONA

Mom: 'Inho, Did you do well on the test today?'

Inho: 'Yes, mom. I received 100.'

Mom: 'Wow! You did really well!'

In the first utterance, the mother chooses to talk to her son with an intimate form. However, after knowing her son received a good grade, she temporarily switches to a polite form. Their interpretation is that the son is understood to "be socially equal or superior to his mother and is respected as an individual, which in turn amplifies the effect of the compliment" and takes this example to be evidence for the performative character of addressee-honorific markers, exhibiting a sharp contrast with Potts and Kawahara's (2004) context-checking, presuppositional

analysis. If the respect meaning from addressee-honorific markers is presuppositional — a condition on the prior context — then the last utterance in (46) must be infelicitous, because that the information that his mom *eyo*-respects Inho is not what the discourse participants take for granted; what they normally assume is that his mom does not respect Inho with *-eyo*. In terms of what they presuppose, the use of *-eyo* must cause a problem. Nevertheless, this sentence is acceptable. They argue that the acceptability of the sentence is better understood if we model the use of *-eyo* as independent of the current honorific state; rather, it only updates the honorific state (or in their term, PARTICIPANT STRUCTURE) with a new state.

Another example they give is a conversation between a worker and her boss, as in (47). The boss uses the formal form, when he is talking about business. They explain that "[h]ere the boss moves to a non-formal speech style to indicate a closer, more personal relationship. This might be done, for example, because the boss is aiming to create an inappropriate level of intimacy, or for other reasons, such as because the boss is comforting a long-time employee in a difficult personal situation." For this reason, they claim that Korean addressee-honorific markers performatively create a new relation each time an utterance is produced.

(47) *B: Kim tayli, onul hoyuy ilceng-i ettehkhey*
Kim tayli.TITLE, today meeting schedule-NOM how
*toy-**pnika**?*
become-INT.FORMAL
'Miss Kim, what is today's meeting schedule?'

K: Ney, thimcangnim. onul 3 si-ey makheting
Yes, boss. today 3 o'clock-at marketing
*hoyuy-ka iss-**supnita**.*
meeting-NOM exist-DECL.FORMAL
'Yes, boss. Today there is a marketing meeting at 3 o'clock.'

*B: Alkeyss-**pnita**. kuntey onul cenyek-ey yaksok*
ok-DECL.FORMAL. by.the.way today evening-at plan
*iss-**e**?*
have-INT.INTIMATE
'Okay. By the way, do you have any plans for this evening?'

Similar conversations are observed in Japanese, as shown below. It is thus assumed that the performativity is also an important property of Japanese addressee-honorific markers.[10]

[10] **Fossilization:** In Japanese, a similar honorific shift can be observed in a similar context. For example, the following conversation is an acceptable sequence of utterances.

(i) *Mom:* *Kyoo* *tesuto* *umaku* *it-ta?*
today tesuto well goPST
Inho: *Hyaku* *ten* *morat-ta!*
100 point receive-pst
Mom: *Sugoi!* *hontoni?* *Yoku* *deki-**masi**-ta!*
wow really well can do-HONA-PST
Mom: 'Did you do well on the test today?'
Inho: 'I received 100!'
Mom: 'Wow! Really? You did really well. '

However, (at least) in Japanese, the expression *yoku deki-masi-ta* 'you did really well' has been so entrenched to the extent that it has become a single, unanalyzable construction. As a result, we cannot use the plain form as shown below. Thus, we cannot claim based solely on this example that the choice of *-mas* reflects the mother's will of acknowledgement of her son's social superiority. For example, we can explain the same sentence as follows; since its corresponding plain form is not acceptable, people have no choice other than saying *yoku deki-masi-ta.*

(ii) *? *Sugoi!* *Hontoni?* *Yoku* *deki-∅-ta!*
wow really well can do-∅-PST
'Wow! Really? You did really well. '

Since the Japanese form *yoku deki-masi-ta* is fossilized and the non-honorific form is unavailable, the conversation in (54) would be a better example. Yoshida (1971: 267), Cook (1998, 2002) and Brown (2010) also report comparable examples. See also Brown (2015a, b) for Korean data.

(48) *Yamada-san kyoo kaigi doo nat-te i-**mas**-u-ka?*
Yamada-Ms today meeting how become-CV PRF-HONA-PRS-Q
'Ms. Yamada, what is today's schedule?'

Hai, syatyoo. Kyoo-wa san zi-ni kaigi-ga
yes, president today-TOP three o'clock-at meeting-NOM
ari-mas-u.
exist-HONA-PRS
'Yes, President. Today there is a meeting at 3 o'clock.'

Wakari-masi-ta. Tokorode, kyoo yoru nanika
understand-HONA-PST by the way today evening something
ar-u?
exist-PRS
'Okay. By the way, do you have any plans for this evening?'

4.3.3 Desideratum 3: Descriptive ineffability

The expressive meaning cannot be satisfactorily paraphrased. This property is known as DESCRIPTIVE INEFFABILITY.

(49) **Descriptive ineffability:** Speakers are never fully satisfied when they paraphrase expressive content using descriptive, i.e., nonexpressive, terms.

At the beginning of this chapter we saw the following example in (1), repeated here as (50). The descriptive content of the message says that the speaker does not respect the addressee. However, presence of *-mas* somehow delivers the message that the speaker respects the addressee. Nevertheless, the sentence can be felicitously uttered.

(50) *Watasi-wa anata-o sonkei si-**mas**-en.*
I-TOP you-ACC respect do-HONA-NEG
'(i) I do not respect you;
(ii) the speaker respects the addressee.'

This sentence exhibits a sharp contrast with the following contradiction. This

shows that the information encoded by *-mas* cannot be translated into the descriptive, at-issue meaning.

(51) * *Watasi-wa anata-o sonkei si-nai-ga watasi-wa anata-o*
I-TOP you-ACC respect do-NEG-but I-TOP you-ACC
sonkei sur-u.
respect do-PRS
'I do not respect you but I respect you.'

Some might wonder if the sentence in (50) is acceptable only because *respect* is not the closest translation of *-mas*. For example, some would say that it encodes the social hierarchy or the psychological distance, wondering if *be higher than* or *feel a psychological closeness with* is the correct translation. However, the sentences in (52) are both acceptable.

(52) a. *Watasi-wa anata-yori syakai kaikyuu-ga ue*
I-TOP you-than social hierarchy-NOM upper
***des**-u.*
COP.HON$_A$-PRS
'(i) I am higher in social hierarchy than you;
(ii) the speaker respects the addressee.'

b. *Watasi-wa anata-ni sinriteki tikasisa-o*
I-TOP you-DAT psychological closeness-ACC
*kanzi-**mas**-u.*
feel-HON$_A$-PRS
'(i) I feel a psychological closeness with you;
(ii) the speaker respects the addressee.'

The failure of non-expressive translation suggests that the meaning that *-mas* encodes is fundamentally different from the at-issue meaning.

4.3.4 Desideratum 4: Cumulative effect

So far, we have seen that the four properties of expressive elements proposed by Potts (2007b) are applicable to Japanese addressee-honorific markers. However,

when we discuss Japanese addressee-honorific markers, there are other important aspects that we want to capture. One such property is what I call the CUMULATIVE EFFECT of addressee-honorific markers.

(53) **Cumulative effect:** The honorific attitude depends not only on the honorific meaning of the most recent utterance but also on the utterances produced in earlier contexts.

For example, imagine a context where a teacher has a meeting with a student who leads a dissolute life. Imagine that this student has produced the following sequence of utterances.[11]

(54) *Ore zyugyoo-nante de-taku nai-yo.*
I class-TOP attend-want NEG-SFP
'I do not want to attend the class.'

Kagaku-no sensei-no hanasi tumannai-si.
chemistry-NOM teacher-GEN speech boring-SFP
'What the chemistry teacher teaches us is boring.'

Geemu si-te r-u hoo-ga zutto masi.
game do-CV PRG-PRS way-NOM far better
'Playing video games is far better.'

*Ore ie-ni kaeri-**mas**-u.*
I home-to return-HON$_A$-PRS
'I will go home.'

This student of bad conduct uses an addressee-honorific marker only once in his last utterance. Suppose that, once he had said it, he stood up and returned home with no more conversation. The question is whether the teacher thinks he is respecting her. If we think that the use addressee-honorific marker in his last utterance dictates and determines the most recent honorific state, we would

[11] **Korean addressee-honorific markers:** Korean native speakers I consulted all told me that such a conversation is never allowed in Korean however dissolute the student is. This contrast between Japanese and Korean suggests that addressee-honorific markers are used in different pragmatic/sociolinguistic principles. In this dissertation, I only focus on Japanese data and leave the comparison to future studies. I would like to express my gratitude to Kim Amy, Hanwool Choe and Bokyung Mun for their judgments.

predict that he is respecting her. However, this is a counter-intuitive conclusion. Despite the fact that he uses an addressee-honorific marker in his last line, the politeness he has expressed to the teacher should not be so high because of the prior utterances.

Some may wonder if his disrespect comes from what he has said (the at-issue meanings or his discourse commitment). But comparison between (54) and (55) suggests that this is not the case. In the following conversation, the descriptive contents of his utterances are the same. The conversation minimally differs from the conversation in (54) in that the preceding three sentences also contain addressee-honorific markers. Certainly, it remains true that the student bothers the teacher. But in (55), the teacher would feel that the student at least respects her while he expresses a frustration about his school life.

(55) *Ore zyugyoo-nante de-taku nai **des**-u-yo.*
I class-TOP attend-want NEG COP.HON$_A$-PRS-SFP
'I do not want to attend the class.'

*Kagaku-no sensei-no hanasi tumannai **des**-u-si.*
chemistry-NOM teacher-GEN speech boring COP.HON$_A$-PRS-SFP
'What the chemistry teacher teaches us is boring.'

*Geemu si-te r-u hoo-ga zutto masi **des**-u.*
game do-CV PRG-PRS way-NOM far better COP.HON$_A$-PRS
'Playing video games is far better.'

*Ore ie-ni kaeri-**mas**-u.*
I home-to return-HON$_A$-PRS
'I will go home.'

This shows the sensitivity to past experience; the honorific state of the new context should depend not only on the honorific meaning of the most recent utterance but also on the utterances produced in the prior context. This is what I call the cumulative effect.

It is of relevance to consider the relation between the performative (immediacy) effect as we saw in Section 4.3.2 and the cumulative effect. The performative (immediacy) effect highlights, as it were, freedom from the past. Irrespective

of the past states, we can create a new relation with the addressee. For example, in (48), even though the president used an addressee-honorific marker in the prior context, he can switch to a different style. Likewise, in (54), the student shifted his speech style despite the fact he had used plain forms. We cannot uniquely identify what this shift implies. He may have done this because he wanted to highlight the psychological distance from the teacher and/or the school. Or, he may have wanted to express his gratitude to the teacher for the fact that she at least tried to listen to what he was thinking about. At any rate, the speaker can create a new relation by changing the speech style.

In contrast, the cumulative effect emphasizes the dependence on the past. Even though we can create a new relation, the fact remains that we have established a particular relation so far. Our present honorific state should, thus, be determined both by what kind of relation we had in the past and by what kind of relation we want to have in the future. We will start the next section with this intricate property of addressee-honorific markers.

Note on Repeatability. At this point, it is important to mention what Potts (2007b) calls REPEATABILITY, which may be better named as the enhancement effect or the reinforcement effect. The definition is given below:

(56) **Repeatability:** If a speaker repeatedly uses an expressive item, the effect is generally one of strengthening the emotive content, rather than one of redundancy.

For example, as shown in (57), repetition of expressive elements leads to strengthening rather than redundancy. The speaker in (57)c sounds more frustrated than the speaker in (57)a.

(57) a. **Damn**, I left my keys in the car.
b. **Damn**, I left my **damn** keys in the car.
c. **Damn**, I left my **damn** keys in the **damn** car.

In contrast, this repeatability effect is tricky when we discuss addressee-honorific markers. Certainly, repetition within a single sentence results in an

enhancement of the politeness level. This is what happens when an addressee-honorific marker is embedded. For example, the politeness level in (58)b is much higher than (58)a; we examine detailed properties of such embedded markers in Section 5.2.1.

(58) Embedded addressee-honorific markers

a. [$_{CP}$[$_{CP}$ *Kotosi-ga* *akarui* *itinen-ni* *nar-u*
this year-NOM happy year-DAT become-PRS
koto]-*o* *kokoro-yori* *o-inori-moosiage-mas-u*].
thing-ACC heart-from HON-pray-HON$_O$-HON$_A$-PRS
'I pray from my heart that this year will be a happy year.'

b. [$_{CP}$[$_{CP}$ *Kotosi-ga* *akarui* *itinen-ni* *nari-**mas**-u*
this year-NOM happy year-DAT become-HON$_A$-PRS
koto]-*o* *kokoro-yori* *o-inori-moosiage-mas-u*].
thing-ACC heart-from HON-pray-HON$_O$-HON$_A$-PRS
'I pray from my heart that this year will be a happy year.' (BCCWJ; OP87_00001)

However, multiple occurrence of addressee-honorific markers does not always bring about the repeatability effect. If we restrict ourselves to Japanese addressee-honorific markers, the repeatability effect is not an indispensible property. First, there is a case where multiple occurrence of addressee-honorific markers does not cause redundancy or reinforcement (cf., (24)). We saw in Chapter 3 that, when the sentence is negated in the past tense, two phonological exponents appear within the same sentence as shown below.

(59) *Hasiri-**mas**-en* ***desi**-ta.*
run-HON$_A$-NEG HON$_A$-PST
'(i) (I) did not run;
(ii) the speaker respects the addressee.'

Since the repeated addressee-honorific markers has no semantic effect and do not contribute to the repreatability effect, this should be better analyzed as a morpho-syntactic phenomenon. Indeed, we have already analyzed this as a bi-product of agreement.

Second, unlike (57), repetition of addressee-honorific markers within a single conversation does not reinforce the politeness level. For example, repetition of *-mas* in (60) does not make the whole conversation three times as polite as the first sentence. The speaker has just maintained the politeness level, without intensifying the respect for the addressee.

(60) *Kinoo-wa* *go-zi-ni* *oki-**masi**-ta.*
yesterday-TOP five-o'clock-at get up-HON$_A$-PST
'Yesterday, I got up at 5.'

Sorekara *siti-zi-ni* *asagohan-o* *tabe-**masi**-ta.*
then seven-o'clock-at breakfast-ACC eat-HON$_A$-PST
'Then, I ate my breakfast at 7.'

Sosite, *daigaku-ni-wa* *ku-zi-ni* *tuki-**masi**-ta.*
and university-at-TOP nine-o'clock-at arrive-HON$_A$-PST
'And I arrived at the university at 9.'

Many reference-oriented expressive elements, e.g., slurs, epithets, and diminutives, are not grammaticalized. Even though the speaker has a negative or positive feeling to the referent, that feeling never manifests itself unless the speaker has an opportunity to mention the referent. For example, suppose the speaker does not like Japanese people. But his feeling can never be verbally expressed if the speaker talks about the weather, animals or linguistics. It is only when he refers to Japanese people that he has a chance and is able to express his negative feeling by using the phrase *a Jap* in place of *a Japanese* though ethically and politically people should not make such hate speech. Moreover, he does not have to obligatorily use the phrase *a Jap*. So, not using the phrase *a Jap* does not automatically entail that he has no bad feeling toward Japanese people. Japanese addressee-honorific markers are, however, grammaticalized. Each sentence has to encode -∅ or *-mas/des-*. Presumably, lack of repeatability effect in (60) stems from the fact that absence of addressee-honorific markers indicates a lack of the respect which the speaker could have expressed otherwise.

To recapitulate, as a salient property of addressee-honorific markers, it is important to remember that accumulation of sentences with an addressee-

honorific marker results in the cumulative effect, not the repeatability effect unlike other expressive elements.

4.3.5 Desideratum 5: Learnablility

In order for the meaning to be acquired by a new born child, the meaning has to be learnable. In other words, the denotation should be uniquely identified. If we use real numbers in the semantics, we assume that children must be sensitive to an infinite number of possible denotations, because there are infinitely many real numbers. This seems to be too challenging a game to play, because this means that they have to differentiate the following objects:

(61) a. $< x, [.291382, .32771], y >$
b. $< x, [.291383, .32772], y >$
c. $< x, [.291383, .32771], y >$

This reflects the doubt of researchers who have reservations about real-number based semantics (Portner et al. 2019). If the language system is equipped with discrete grammatical forms, why do we assign a gradual denotation to their meaning? In order for the meaning to be learnable, we prefer a discrete semantics. LEARNABILITY is, thus, an important requirement for an ideal theory of expressiveness:

(62) **Learnability:** The denotation of addressee-honorific markers must be uniquely identified.

4.3.6 Desideratum 6: Correlating variables

Attempts in previous studies have raised the possibility that the boundary between pragmatics and sociolinguistics may not be as clear as we have traditionally assumed. For example, some may argue that the hierarchy among interlocutors, which Portner et al. (2019) integrates into the structured discourse context (i.e., participant structure), may as well be seen as a sociolinguistic factor. Psychological distance and formality, which McCready (2014, 2018, 2019) tries to relate

with the global register, are also important issues in sociolinguistics. An ideal theory of addressee-honorific markers must elucidate how these factors are related to each other and careful examination of addressee-honorific markers may contribute to reconsideration of the relation between the subfields of linguistics which have developed in independent research communities.

Nevertheless, in this dissertation, I would like to refrain from identifying the list of such sociolinguistic factors for the following practical reasons. First, it is not clear whether the sociolinguistic information is the target of pragmatic context update, or sociolinguistic factors are indirectly associated with pragmatics via general inference. One could pick one position based on their personal preference but, in my view, at least at this moment, it is difficult for one to convincingly prove other alternative positions wrong for empirical and conceptual grounds.

Second, previous studies have pointed out a wide range of relevant factors and many of them are interrelated (Minami et al. 1974; Brown and Levinson 1987 [1978]; Minami 1986; Kikuchi 1997 [1994]; Shibatani 1998; Shibamoto-Smith 2011; Brown 2015a, b; Takiura to appear, among many others); e.g., age-rank, solidarity (Hwang 1990), psychological distance, formality (Kikuchi 1997[1994]; Iwasaki and Ingkaphirom 1995; Takiura 2008, 2017; McCready 2014, 2018, 2019), sarcasm (Brown 2013), anger (Lee 1999), mitigating face-threat (Brown 2011a, b), and asserting power advantages (Lee 2001). For example, the hierarchy among interlocutors should have a correlation with the age-rank system. Age-rank may be associated with psychological distance. Psychological distance is also affected by, or affects, the formality of the discourse context. Perhaps, what one thinks of as a consequence of the effect of hierarchy turns out to be a spurious effect which is better explained by psychological difference and age-rank, or vice versa. Since they are correlated in a complicated manner, without a well-prepared experiment — which is beyond the scope of this study — it is difficult for us to identify the most important factors, their relations and their effect sizes.[12]

[12] **Causal relation vs. correlation:** I am not saying that these factors are the cause of addressee-honorific markers. Some of them are, perhaps, better seen as a correlation rather than a causal

For these reasons, I would like to take an agnostic position about the relation between sociolinguistics and pragmatics, and this chapter concentrates only on the other five desiderata, leaving this intriguing issue to future studies.

4.4 Proposal

Apparently, the performative (immediacy) effect and the cumulative effect seem to be two contradicting requirements. The former says that we can performatively create a new relation while the latter says that we are under the influence of past experience. To reconcile these two seemingly opposing requirements, I propose a dynamic pragmatic approach which incorporates some insights from Bayesian statistics. The main purpose of this section is to elucidate the basic attitude of this BAYESIAN DYNAMIC PRAGMATICS (BDP) and to argue that this approach sufficiently achieves the aforementioned desiderata.

Point-of-departure: the cumulative effect. In the previous approaches, once the context interval is updated at time t_i, the information about what level of expressiveness had been maintained before t_i becomes inaccessible. For example, let us follow McCready's (2014) implementation where the honorific state is modeled as an interval within the range of $[0, 1)$. Every time an utterance has been produced, this honorific state changes from one interval to another. This sounds good. But sometimes it fails to capture the difference between scenarios of the following kind (Yamada 2019a).

> Scenario A: *Previously, the speaker A had produced sentences with low range of intervals, such as* $[.2, .5]$, $[.3, .4]$, *. . ., and* $[.2, .3]$. *However, at one moment, he shifts to a high register and the context interval of the immediate context is set to* $[.75, .8]$, *for example. This*

relationship. If they have a causal relation, they are correlated but not vice versa; i.e., correlation is a relation — a tuple of two variables — that is seen as a superset of a causal relation. However, it is much more difficult to prove that a given factor has a causal relationship with addressee-honorific markers or is just correlated with addressee-honorific markers. So, this study is not committed to identification of such factors, leaving such investigations to future studies. But we will at least develop a model that can spell out the way addressee-honorific markers and possible correlated factors relate.

scenario mimics the situation where the speaker is a dissolute student and the addressee is his homeroom teacher. He usually does not use addressee-honorific markers. But one day, because he has a favor to ask, he is, temporarily, speaking in an intermediate level of politeness.

Scenario B: *Previously, the speaker A had produced sentences with a relatively high range of intervals, such as* $[.9, 1.0]$, $[.8, .9]$, *. . ., and* $[.7, 1.0]$. *And now the context interval is set to* $[.75, .8]$. *This mimics the situation where the speaker is a very diligent student who has shown very high respect for the addressee, his homeroom teacher. But one day, he slightly changed his respect-paying manner and shifted from a very high respect to a mode in which he mildly respects the teacher but not too high, for example, to show that he feels bonded with the teacher. Temporarily, speaker B is speaking in an intermediate level of politeness.*

In both scenarios, the context interval of the immediate context is the same. Suppose, however, that in the next utterance the same speaker A has produced a sentence with an interval of $[.3, .4]$. In her system, what we take into consideration is the relation between the immediate context interval $[.75, .8]$ and the utterance interval of the new sentence $[.3, .4]$. We would predict that the new sentence should be as surprising in both cases. But if we are in Scenario A, the new utterance range falls in a register already familiar to the discourse participants despite the fact that it is far from the context interval of the immediate context. In order for us to correctly predict that the sentence in Scenario B is more surprising, we somehow want to relativize the politeness level of the utterance to the honorific states of much earlier contexts.

Certainly, one might propose a discourse context such as in (63), where, in addition to our familiar components of the discourse context, we have h_n, which stores ALL the previous context intervals up to the current n-th utterance.

(63) a. $c_n =< cg, qs, tdl, \ldots, h_n >$

b. $h_n =< h^{(1)}, h^{(2)}, h^{(3)}, \ldots, h^{(n)} >$
where $h^{(i)} \in \{[\alpha, \beta] : 0 \leq \alpha \leq \beta \leq 1\}$.

It is true that this kind of structured discourse context allows us to be sensitive to the past states. But if our conversation continues, h becomes a lengthy list. Intuitively, this is too informative. If this structured discourse context approximates our knowledge, the following conversation would be predicted, contrary to the fast; *what was the politeness level right after the third utterance was produced — it was high, but not too much*. A discourse participant roughly remembers what the past states were like but does not remember the details. In place of this very detailed structured discourse context, we want to propose a different model.

Is there any better model in which the history of prior contexts sufficiently influences our decision in measuring the surprisingness or the appropriateness of the current utterance without such a memory overload?

4.4.1 Summary parameters

Structured discourse context with summary parameters. I inherit the assumption that the context is modeled as in (63)a, but instead of having a lengthy list of past expressive states as in (63)b, I propose a model in which this h consists of SUMMARY PARAMETERS that succinctly express what the past situations were like.[13] The nature of context updates in the expressive dimension is the changing of these parameters. For instance, let us consider a model with two parameters α and β with α indicating how many addressee-honorific markers we have heard from the speaker and with β expressing how many utterances have

[13] **Real numbers in h:** Some readers might wonder why we use $\mathbb{R}^+$ for the domain of α and β, in place of $\mathbb{N}$. The reason comes from the mathematical side and from the other interpretations that I shall introduce in 4.4.2. If readers have some reservations at this moment, they can use the definition in (i). Since $\mathbb{N} \subset \mathbb{R}^+$, our reasoning holds without losing generality until we reach Section 4.4.2.

(i) $h = (\alpha, \beta) \in \mathbb{N} \times \mathbb{N}$

been produced without an addressee-honorific marker. By looking at the magnitude of these parameters, we can easily reconstruct the past. If α is sufficiently larger than β, we can infer that the speaker has been polite to the addressee.

(64) a. $c =< cs, qs, tdl, h, \ldots >$ First version
b. $h = (\alpha, \beta) \in \mathbb{R}^+ \times \mathbb{R}^+$

Under this model, the context update is a function from $h^{(t-1)} = (\alpha^{(t-1)}, \beta^{(t-1)})$ to $h^{(t)} = (\alpha^{(t)}, \beta^{(t)})$. If the new utterance contains an addressee-honorific marker, we increment α by 1. If not, we add 1 to β. Notice that we do not have to store all the past states. The honorific state h is constituted by only two parameters. Since we do not remember what the third honorific state was, a discourse participant would answer *I do not remember that* when he/she is asked *what was the politeness level right after the third utterance was produced*.

Of course, the addressee does not always have to be the same person, so we should identify such a set of summary parameters for each pair of individuals. In place of (64), we can use the structured discourse context as given in (65).[14]

(65) a. $c =< cs, qs, tdl, h, \ldots >$ Final version
b. $h = \{h_{ij}\}$, $\forall i, j \in D_{disc}$ (where D_{disc} be the set of the relevant discourse individuals)
c. $h_{ij} =< i, (\alpha_{ij}, \beta_{ij}), j > \in D_e \times (\mathbb{R}^+ \times \mathbb{R}^+) \times D_e$ (where α_{ij} refers to the number of utterances with *-mas/des-* delivered from i to j and β_{ij} refers to the number of utterances without *-mas/des-* delivered from i to j)

Here in (65), h is constituted by all such respect relations. Each respect relation is a triple of three elements; (i) the honorific bearer i, (ii) the target of the honori-

[14] **Matrix notation:** We can alternatively express that h is a matrix. For example, if we have m discourse participants, h is defined as follows.

(i) $$h = \begin{bmatrix} (\alpha_{11}, \beta_{11}) & (\alpha_{12}, \beta_{12}) & \cdots & (\alpha_{1m}, \beta_{1m}) \\ (\alpha_{21}, \beta_{21}) & (\alpha_{22}, \beta_{22}) & \cdots & (\alpha_{2m}, \beta_{2m}) \\ \vdots & & \ddots & \vdots \\ (\alpha_{m1}, \beta_{m1}) & (\alpha_{m2}, \beta_{m2}) & \cdots & (\alpha_{mm}, \beta_{mm}) \end{bmatrix}$$

fication j and (iii) the parameters summarizing i's past honorific use to j.[15] For example, suppose that we have observed that a is talking to b and has produced 2 utterances with an addressee-honorific marker and 11 utterances without *-mas* or *des-*. In this case, h_{ab} is expressed as follows.

(66) $h_{ab} =< a,\ (2, 11),\ b >$

h is a collection of such triples. An example is given in (67).

(67) $h = \{< a,\ (2, 11),\ b >, < a,\ (1, 30),\ c >, \ldots, < d,\ (41, 2),\ e >, \ldots\}$

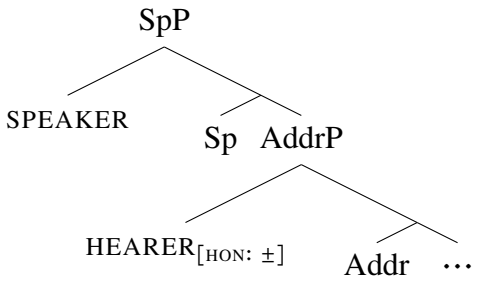
Denotation and a pragmatic rule. This summary-parameter approach makes the semantics of *-mas/des* much simpler than the real-based denotations proposed by previous studies. All that an addressee-honorific maker must do is to tell us which context parameter we should update, e.g., an instruction to add 1 to α. To this end, I propose the following denotations for the honorific features, assuming the tree in (69).

(68) **Denotation**

a. $[\![[\text{HON: } +]]\!]^c = \lambda p.\ \lambda x.\ [p \bullet < x, 1, addr(c) >]$.

b. $[\![[\text{HON: } -]]\!]^c = \lambda p.\ \lambda x.\ [p \bullet < x, 0, addr(c) >]$.

(69)



Reflecting the assumption from Chapter 3 that the speaker is provided by the SpP, the denotations in (68) have an unsaturated term for the respect bearer. The de-

[15] **Other honorific expressions:** For simplicity's sake, I assume that these h_{ij}'s are only sensitive to addressee-honorific markers, ignoring other honorific encoding expressions such as the politeness encoding in the nominal domain as we discussed earlier.

notation of SpP is either < $sp(c), 1, addr(c)$ > or < $sp(c), 0, addr(c)$ >, which are both a member of $D_e \times \{0, 1\} \times D_e$.

Based on this static semantics, I propose the following pragmatic rules:

(70) **Pragmatic rule for honorific updates**
For utterance u with x as speaker and y as addressee,

a. $h+ < x, 1, y >= h'$
where h' = $(h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy} + 1, \beta_{xy}), y >\}$

b. $h+ < x, 0, y >= h'$
where h' = $(h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy}, \beta_{xy} + 1), y >\}$

Notice that this analysis avoids the problems of the previous approaches. First, the state h is a set of summary parameters from which we can reconstruct some information about the past states; the cumulative effect is properly handled. Second, the denotation is not involved with any real values. While, as in the case of real-based approaches, this treatment maintains real-based gradualness in the structured discourse context (= h), the denotation is discrete, taking either 1 or 0. The continuity of the real is no longer a headache for this new approach. The problem of learnability is also taken care of.

Types of measurement scales. At this moment, a reader may wonder why we use 1 and 0 for the denotation in (68), given that our only purpose is to capture the distinction between the polite form and the plain form. For example, the following definition also works as well. We can use any symbols for the semantics as long as their distinction is categorical.

(71) a. $[\![$[HON: +]$]\!]$ = $\lambda x.\ < x, \clubsuit, addr(c) >$

b. $[\![$[HON: −]$]\!]$ = $\lambda x.\ < x, \heartsuit, addr(c) >$

(72) a. $h+ < x, \clubsuit, y >= h'$
where h' = $(h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy} + 1, \beta_{xy}), y >\}$

b. $h+ < x, \heartsuit, y >= h'$
where h' = $(h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy}, \beta_{xy} + 1), y >\}$

Yet, I would like to adopt the notation in (68). This is because using non-negative integers makes it possible for us to improve the model to cover a broad range of phenomena in future studies. For example, in Japanese, as we saw in Chapter 2, the politeness level can be enhanced by an addressee-honorific upgrader, e.g., *gozai-mas-* 'HON$_U$-HON$_A$' (see Section 2.3.1). Non-negative integers makes it possible for us to capture not only their categorical distinction but also the ranking in politeness; i.e., we just add < $sp(c), 2, addr(c)$ > to the list. In contrast, using different symbols such as ♠, ♡ and ♣ is short of referring to such an order.

Even still, this does not mean that this study allows gradable meaning in the semantics. In order to clarify this point, it is necessary for us to pay attention to the differences among data measurement scales. In statistics, the following types of data measurement are distinguished. First, variables with NOMINAL PROPERTY/SCALE are those that consist of different distinguished subclasses. For example, if languages are treated as a variable, e.g., Japanese, English, Swedish, Jingpo, Punjabi, ..., it has a nominal scale. Second, ORDINAL VARIABLES are those that are observed not on a measurable scale but have a transitive property. Social rankings are good examples. The president has a higher social rank than the vice-president, which has a higher status than an employee. Although there is an ordering, the difference is not measurable; e.g., we cannot say that the difference between the president and the vice-president is the same as the vice-president and the employee. Third, INTERVAL VARIABLES are those that have a ranking with a meaningful difference in scale. Temperature is often cited as an illustrative example. The difference between $74^{\circ}C$ and $75^{\circ}C$ is the same as $75^{\circ}C$ and $76^{\circ}C$. But the origin 0 is set to an arbitrary state. So, we cannot say $4^{\circ}C$ is twice as warm as $2^{\circ}C$. Finally, RATIO VARIABLES are those that have a meaningful difference in unit and enable us to calculate the ratio. For example. $100\ m$ is twice as long as $50\ m$.

Even though we use numbers in (68), they are treated as ordinal variables, not as ratio variables. As long as they indicate an order, numbers can be replaced by other objects; e.g., $\{A, B, C, ...\}$ and {LOW, INTERMEDIATE, HIGH, ... }. What a new-born child is supposed learn is the discrete levels (classes) and their

order. Since they do not have to learn the interval or the ratio among possible values, the problem of learnability is avoided.

4.4.2 Incorporating Bayesian statistics into dynamic pragmatics

While the idea of summary parameters successfully gives us a solution to the cumulative effect and the learnability problem, some may suspect that there is still a gap in our reasoning about the way these parameters are related to our impression on the speaker's politeness.

In Section 4.4.1, summary parameters are designed to reflect our past conversation in an 'objective' fashion. 'Objective' here means that they are associated with objective facts: interlocutors cannot change them based on their personal feelings. If we have observed one addressee-honorific marker, then discourse participants increment α by 1, not β, however inclined they may be to change it. Since the values of these parameters are automatically updated based solely on the presence or absence of an use of addressee-honorific marker, these parameters reflect objective facts. At the same time, as already alluded above, these parameters are related to interlocutors' 'subjective' emotional states. 'Subjective' here means that these parameters are associated with the addressee's subjective emotional state, i.e., the addressee's impression on the speaker's honorific attitude. Intuitively, the set of parameters $(900, 1)$ seems to represent a situation where the audience has an impression that the speaker has been very polite. However, no formal algorithm has been proposed concerning the mapping principle between these parameters and the addressee's emotional state.

The aim of this subsection is to propose a formal model that mediates between the summary parameters and the addressee's impression. I argue that by incorporating a statistical way of thinking, we can develop the aforementioned idea and give a better characterization of the relation between these parameters and the audience's subjective reasoning process. To this end, this subsection begins with a breif introduction of some fundamentals of inferential statistics and some important ideas/tenets of Bayesian statistics (Section 4.4.2.1). Then, it is shown that, if the analysis outlined in Section 4.4.1 is framed and re-interpreted un-

der this statistical paradigm, the relation between the use of addressee-honorific markers and the addressee's impression/inference is exmained in a formal fashion, useful in modeling the degree of cumulative effect and in approximating surprisingness/appropriateness of an utterance in a given context (Section 4.4.2.2).

4.4.2.1 Fundamentals in statistics

Inferential statistics. Putting aside our investigation of honorifics for the moment, let us start our discussion by asking what statistics is all about.

Statistics is a study (i) that quantitatively summarizes collected data and/or (ii) that makes a quantitative inference about the population from which data is supposed to be sampled. For example, suppose we have a coin and we have flipped this coin 100 times. By calculating the proportion of heads, we can get a quantitative summary about this coin. If the proportion is 0.02, we say that we did not get many heads. If the proportion is 0.48, we say that we almost have as many heads as tails. The statistics that we use to summarize the data is called DESCRIPTIVE STATISTICS.

But, in many cases, we may want to know something more than that. Based on the results, for example, we may want to know whether this coin is biased towards tails or not. We imagine a group of comparable events (= other flipping events using the same coin) and try to make an inference on this hypothetical group. Such a constructed set of comparable events is called the POPULATION. When we assume the existence of such a constructed group, our data is seen as a SAMPLE from the population. INFERENTIAL STATISTICS is an attempt to understand the nature of the population based on the sample we have by using some tools developed in the theory of probability and statistics.

But how do we investigate such an unseen, constructed group? Even though we measured 0.02, this does not mean that the proportion of having heads in the population is always 0.02. In order for us to discuss the nature of the population, we will make an assumption about the way our sample is related to the population, or how our sample is taken from the population. For example, we can assume that our trial is representative of the population; nothing special has

happened when we have observed the data. Or, if we have been informed that the outcome of the coin depends on who flips it (e.g., if a magician flips it, it becomes more likely that it lands on heads), we build a model that reflects our understanding.

In reality, models are proposed based on our knowledge and/or practical convenience.[16] Especially, for ease of practical implementation, it is a common practice to assume a statistical model that can be parametrized. Models that can be identified by a few parameters are called PARAMETERIC MODELS. The most basic parameteric model used to model a binary outcome is the one that assumes that the sample follows the Bernoulli distribution. This probability distribution has a single parameter π, which represents the proportion of the population. When an outcome d (which in this case is a binary variable; $d \in \{0$ (= tail), 1 (= head)$\}$) follows the Bernoulli distribution of parameter π, we write as follows.

(73) $d \sim Bern(\pi)$

The main interest of inferential statistics is to make inferences about the parameter(s) of the assumed statistical model from which our available data is supposed to be extracted.

Bayesian statistics. In the Bayesian paradigm, (i) probability is used to measure any subjective uncertainty we have and, thus, (ii) parameters of a statistical model are given a probability distribution if we have some uncertainty about them.[17]

Assuming that the data is generated by a Bernoulli distribution, we make

[16] **Model comparison:** Importantly, inference is not only based on the data, but it also depends on the hypothesis about the data generating model. In most cases, we do not know what assumption is the best assumption for the data generating process. In reality, we will build possible hypotheses and compare the models that reflect these hypotheses and pick the best one among those we have considered. However, in theory, there are infinitely many models we can assume and practically we cannot check all the models. Inferential statistics is, thus, regarded as an attempt to make an inference about the population by assuming particular models, while acknowledging the limitation of our not comparing all of them.

[17] **Modeling uncertainty:** Mathematical results of Cox (1946, 1961) and Savage (1972 [1954]) prove that if a prior and likelihood represent a rational person's beliefs, then Bayes' rule is an optimal method of updating this person's beliefs about the parameter given new data.

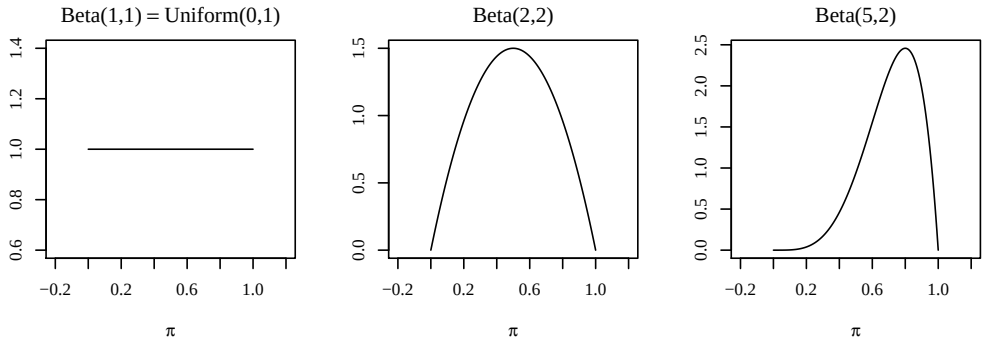


Figure 4.2: Probability distributions that represent uncertainty of π

an estimation of this parameter π. Since we are not sure what value is appropriate for π, we have uncertainty about it and so we use a probability distribution. For example, we may have no idea about the value of π. Or, we may want to say that π is likely to take a value around 0.5 and the values around 1 and 0 are least likely. Alternatively, if we have some prior information, we may say that π would take a value around 0.8. Such uncertainties are visually expressed in Figure 4.2. Such probability distributions are called Beta distributions, which are identified by two parameters α and β. When α and β are the same, the Beta distribution becomes symmetrical. When α and β get bigger, it is narrowly distributed. If α is bigger than β, it is skewed to the right.

The model and our uncertainty are now expressed as follows:

(74) $d \sim Bern(\pi)$
$\pi \sim Beta(\alpha, \beta)$
where $d \in \{0, 1\}$, $\pi \in [0, 1]$, $\alpha \in \mathbb{R}^+$ and $\beta \in \mathbb{R}^+$.

First, the outcome d follows the Bernoulli distribution of parameter π ($d \sim Bern(\pi)$). Second, since we cannot uniquely identify the value of π, we have some uncertainty. Third, in order to express our uncertainty, a Beta distribution is used ($\pi \sim Beta(\alpha, \beta)$).

We keep updating our estimation of these parameters every time we have seen a new outcome (= d). Since the uncertainty is captured in the form of probability distribution in this framework, the estimation process is understood as an

update of the probability distribution for π. Before we see the results, we might have been completely agnostic about the possible value for π, e.g., the leftmost panel of Figure 4.2. But after seeing some data, we update our uncertainty about π.[18] We may now have a new uncertainty which is best-represented as the rightmost panel of Figure 4.2. Even though we are more confident about possible values, we still have uncertainty about the true value of π because we never know the definite value.

Bayesian statistics as a dynamic approach to context. We can understand that this estimation process is a particular type of context update. Under the tradition of dynamic approaches, the meaning of a sentence is regarded as a context change potential; the new context C' is derived from the previous context C and the current utterance S. This process is expressed in (75)a. What we do in Bayesian statistics is update our uncertainty — which is expressed as a probability distribution as in Figure 4.2 — with our new data. If we refer to the previous uncertainty and the new uncertainty as U and U', and the data as D, the process of our estimation is expressed in (75)b.

(75) a. $C + S = C'$

b. $U + D = U'$

The similarity is evident. The difference lies in their ontology, i.e., the target of the update. In the former case, what we update is the set of worlds/propositions (if we talk about the informative aspect of the discourse context), while, in the latter case, the probability distribution is updated. Since the probability distribution is uniquely identified once we have specified the parameter(s) of that model, what we are updating are the values of these parameters. Since the distributions in Figure 4.2 are all Beta distributions, we can uniquely identify the shape of the distribution by specifying the parameters, i.e., the values for α and β. The nature of the update is a transition from the old parameter set (α, β) to a new one (α', β').

[18] **Other knowledge:** Other knowledge about the speaker may also affect the estimation. But for simplicity's sake, we will build a model where π is only estimated by occurrence of addressee-honorific markers.

4.4.2.2 Interpreting summary parameters from a Bayesian perspective

Audience's uncertainty. Now let us return to the pragmatics of addressee-honorific markers. In our earlier discussion, the following structured discourse context was proposed (= (65)) and it was claimed that the nature of context update is to add 1 to one of the summary parameters, i.e., α_{ij} or β_{ij}.

(76) a. $c =< cs, qs, tdl, h, \ldots >$
b. $h = \{h_{ij}\}$, $\forall i, j \in D_{disc}$
c. $h_{ij} =< i, (\alpha_{ij}, \beta_{ij}), j > \in D_e \times (\mathbb{R}^+ \times \mathbb{R}^+) \times D_e$

From the perspective of Bayesian statistics, it makes sense to offer a different interpretation of (76): α and β are considered the parameters of a Beta distribution. Let us explore the consequences here.[19]

As we saw above, a Beta distribution is used to model our uncertainty. In the aforementioned scenario, it describes our uncertainty about the true value of π (the true probability of having a head), i.e., the parameter of a Bernoulli distribution. Then, the question is whether an uncertainty is involved with our honorific use. Or, to be more specific, what kind of uncertainty are the summary parameters related to?

I propose that the answer is the AUDIENCE'S UNCERTAINTY about the probability of the speaker's using an addressee-honorific marker. Just as we estimate the true probability of the coin's landing on heads by observing heads and tails, we estimate the true probability of the speaker i's using an addressee-honorific marker when talking to the addressee j by observing utterances with and without an addressee-honorific marker. There is an asymmetry between the speaker's concealed true attitude and the addressee's estimation. Even though the speaker himself knows his own π, that is, the probability with which he/she uses an addressee-honorific marker to j, other discourse participants never know the true value of his or her π and they have to estimate what this π can be. Before

[19] **Mathematical justification:** I refrain from presenting the mathematical justification in the main body of this chapter. Interested readers are invited to see the argument in Appendix on page 341.

	trial	possible values	π	(α, β)
coin-toss	flip a coin	$\{head, tail\}$	prob. of having a head	our uncertainty about π
speech style	produce an utterance	$\{polite, plain\}$	prob. of having a polite form	our uncertainty about π

Table 4.4: Comparison between coin-toss and speech style.

observing any data, we may have no idea about the value; our uncertainty may be expressed as in the leftmost panel in Figure 4.2. If we have heard 2 addressee-honorific markers and 2 plain forms, we would infer that the probability is around 0.5 as shown in the center panel in Figure 4.2. If we have heard the speaker i produce 5 utterances with *-mas* and 2 utterances without an addressee-honorific marker, our uncertainty is approximated by the rightmost panel in Figure 4.2. In this way, we can interpret the pragmatics of addressee-honorification as an update of our uncertainty parameters.

Table 4.4 summarizes the similarity between our inference in the coin-tossing setting and the speech style selection. First, in place of flipping a coin, we observe our speaker produce an utterance. Second, just as each coin-flipping event results either in heads or in tails, the speaker has to pick either the plain form or the polite form. That is, the possible outcome is a set of two elements. Third, the outcome depends on the probability $\pi \in [0, 1]$, based on which the speaker produces the plain/polite form. This represents the true probability which will never be known to the audience (the discourse participants other than the speaker). So, what his or her interlocutors have to do is to estimate what this probability is. Finally, the audience of this speaker should estimate π; i.e., estimate α and β. In this way, with the aid of Bayesian statistics, we can characterize the set of parameters not only as summary parameters but also as uncertainty parameters.

Publicized expressiveness and the speaker's private 'true' feeling. It should be emphasized that this h is what discourse participants estimate based on the use of addressee-honorific markers and, thus, it is different from the 'true respect' of the respect-bearer. To see this point, consider the following example between a worker and his boss. Suppose this is a rather unfortunate situation where the

boss, taking advantage of his position, tries to indirectly force Mr. Yamada to go to a bar with him.

(77) Boss: *Yamada*, *kyoo* *nomi-ni* *ik-oo-yo*.
Yamada today drinking-to go-let-SFP
'Yamada, let us go for a drink today.'

Yamada: *Moosiwake* *ari-mas-en.* *Honzitu-wa*
excuse exist-HON$_A$-NEG today.HON$_F$-TOP
hazus-e-nai *yotei-ga* *ari-**mas**-u...*
cancel-can-NEG plan-NOM exist-HON$_A$-PRS
'I'm sorry. As for today, I have a plan that I cannot cancel...'

Although the worker politely refuses the invitation, he may be annoyed by his boss's power play and may have never respected his boss despite the fact that he has been using an addressee-honorific marker. In other words, this worker strategically uses addressee-honorific markers to make a nice PUBLICIZED SELF-IMAGE, which unfortunately contradicts how he really feels.

If the context is modeled as a body of information all the discourse participants are aware of, each other person's estimated self-image (= h) should be stored in the context, but the 'true' or 'concealed' respect of each individual must be outside the structured discourse context. First and foremost, the 'true' feeling cannot be shared by any discourse participants. What we can share is the estimated image constructed from the speaker's production of polite and/or plain forms. Second, our communication proceeds based on the publicized 'respect' not the private 'respect.' For example, as long as the worker's 'true' respect is concealed and has not been published, the boss in (77) would not be offended. Of course, he may be irritated by the worker's response. But this is because the at-issue meaning of the sentence (= that the worker has a plan that night) conflicts with what he wanted the worker to say, not because he found out the 'true' respect of the worker was not as high as he had expected.[20]

[20] **Scope of this dissertation:** Some may say that the boss can realize the worker's true respect and would be upset. But even in such a case, the boss infers and estimates what the worker is really thinking about, not by directly mind-reading the worker's 'true' respect. There should have

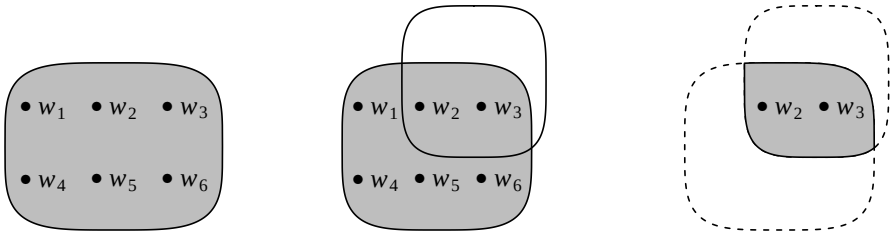


Figure 4.3: Update of the context set

Tasks in a communicative activity and board game pragmatics. The diverse functions of language lead us to conceptualize language communication as constituted by a variety of tasks. For example, discourse participants are modeled to be engaged in a conversation so that the context set becomes smaller and, thus, is more informative, i.e., they are trying to figure out what the world we live in is like. Venn Diagrams are an effective visual tool to assist our understanding (Figure 4.3).

As we saw in Section 4.2, the shrinkage-based view of expressiveness was indeed proposed and emphasized in the influential study of Potts (2007b). However, the analysis we developed so far stands in an instructive contrast with his approach. The transition from a Beta distribution to another distribution is not a shrinkage; it is just a reshaping of the distribution. However little it is, the probability that π falls between, for example, $[0.8, 1.0]$ still remains. This makes the model flexible enough to capture a change in the speaker's attitude.

What would be a geometrical interpretation of our model? Once α and β are specified, we can uniquely identify the corresponding Beta distribution. Since we can map the pair (α, β) to a location in the two dimensional space by relating α with the x-axis and β with the y-axis, each Beta distribution is related to a particular position in this two dimensional space. For example, imagine a chess board as in Figure 4.4 (left). $Beta(1, 1)$ corresponds to $(1, 1)$ and $Beta(2, 1)$ to

existed other update triggers, for example, the worker's facial expressions and/or other non-verbal cues. I do not discuss such factors in this dissertation.

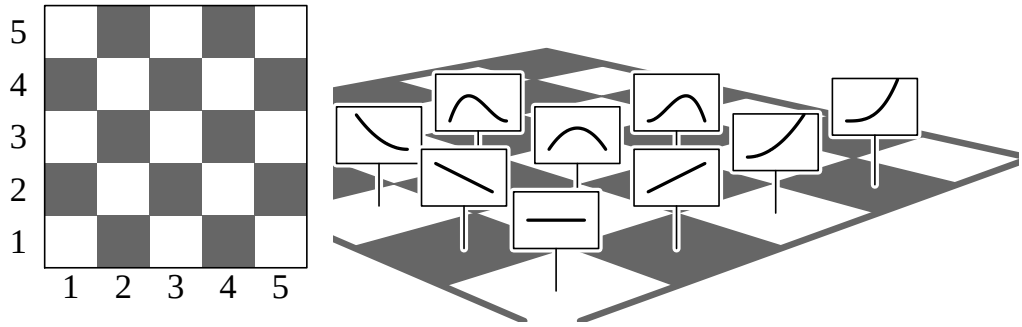
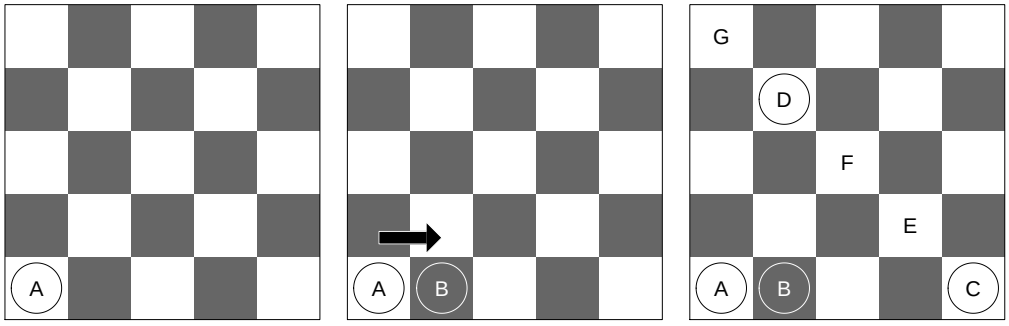


Figure 4.4: Board game



(a) (b) (c)

Figure 4.5: Movements on the board

$(2, 1)$ as illustrated in Figure 4.4 (right). If we update $Beta(1, 1)$ to $Beta(2, 1)$ by observing data, this context update is understood as a movement from one position (= $(1, 1)$) to another position (= $(2, 1)$) on the chess board. The task in the honorific (expressive) dimension has now been geometrically conceived of as a board game. The dynamic pragmatics proposed in this study is a BOARD GAME PRAGMATICS.

Let us see some useful interpretations based on this board game pragmatics. Observe Figure 4.5. First, each cell is a possible position that we can put our pawn on. This chess board represents a set of possible Beta distributions. Possible uncertainties form the set of the Beta distributions D_{Beta} and the elements in this set can have a one-to-one mapping with the elements in D_{hs}.

(78) a. $D_{Beta} = \{Beta(\alpha, \beta) : \alpha \in \mathbb{R}^+ \wedge \beta \in \mathbb{R}^+\}$.
b. $D_{hs} = \{(\alpha, \beta) : \alpha \in \mathbb{R}^+ \wedge \beta \in \mathbb{R}^+\}$.

Second, there should exist our initial position that represents our first uncertainty state. It does not have to be $Beta(1, 1)$. If the discourse participants are strongly confident that the speaker would use the polite form, for example, based on his prior behavior or some feature of the context, we would pick a point, for example, $Beta(100, 1)$. For example, if the addressee is the teacher of the speaker, the audience has a prior belief that the speaker would produce a polite form even though the speaker has not spoken to this addressee yet. Without losing the generality, let the initial state be Position A in Figure 4.5(a).

Third, in each turn, we move the pawn on the board using one of two legitimate moves in our game; after hearing someone produce an utterance, we relocate the position either to the East (when we hear an addressee-honorific marker) or to the North (when we do not hear any addressee-honorific marker).[21] Figure 4.5(b) demonstrates the move for when we have heard an addressee-honorific marker. If we keep hearing our discourse partner produce an addressee-honorific marker, we keep going to the East. For example, with three more steps, we will reach out Position C in Figure 4.5(c). But if the speaker has suddenly changed his attitude and has started choosing the plain form, we may be at Position D.

Shrinkage and future honorific states. The board game visualization makes it clear that the nature of the update in the honorific dimension is not a shrinkage; Position B is not a subset of Position A. Yet, some readers may ask if the shrinkage is completely irrelevant to the honorific dimension. The more honorific expressions the speaker uses, the more confident the addressee is about the speaker's honorific use. In this sense, future states seem more informative than past states, making us wonder if there is a kind of shrinkage in the honorific dimension.

In fact, the board game pragmatics does provide such an interpretation. To understand this, let us define the set of competing honorific states. Once

[21] **Characterization of the moving entity:** In this sense, it is not a pawn, since it is allowed to go to the East; it is kind of a very weakened rook.

again, consider the movement in Figure 4.5(c). Notice that if we have heard four utterances, we may also stay at three other states, i.e., E, F, and G, in addition to C and D. These five states are in competition. With four sentences, the audience has to pick one of these states. In general, the competing states after the i-th utterance is defined in (79), under the definition of l_1 in (4.4.2.2):

(79) **Set of competing honorific states**
The set of competing states of the i-th utterance given the initial uncertainty state (α, β) is a set of vectors $D_{hs}^{i,\alpha,\beta}$ s.t.,

$$D_{chs}^{i,\alpha,\beta} = \left\{ (\alpha', \beta') \in \mathbb{R}^+ \times \mathbb{R}^+ : \begin{array}{c} l_1\big((\alpha,\beta),(\alpha',\beta')\big) = i \\ \wedge \alpha' \geq \alpha \\ \wedge \beta' \geq \beta \end{array} \right\} \subset D_{hs}$$

(80) **Manhattan Distance**

$$l_1(\mathbf{x}, \mathbf{y}) = \textstyle\sum_i |x_i - y_i|$$

The function l_1, used in this definition, is the function that gives us the MANHATTAN DISTANCE; a function from two vectors to a value of non-negative real number.

Trivially, $D_{chs}^{3,\alpha,\beta} \cap D_{chs}^{4,\alpha,\beta} = \varnothing$. Likewise, $D_{chs}^{4,\alpha,\beta} \cap D_{chs}^{5,\alpha,\beta} = \varnothing$. Without losing generality, we can have the following theorem.

(81) $\forall i, j.\ D_{chs}^{i,\alpha,\beta} \cap D_{chs}^{j,\alpha,\beta} = \varnothing$, if $i \neq j$.

This shows that, when we have a new update, the new honorific state cannot be the same as the previous state. As seen above, the new honorific state is not a subset of the previous honorific state. It is not a shrinkage.

However, with respect to the future states, the idea of shrinkage works well. Notice that the Manhattan distance gives us a partition among possible states and by making a union of all the $D_{chs}^{i,\alpha,\beta}$, we can construct the set of our future states. If our current state is (α^i, β^i), the set of possible future states is defined as follows:

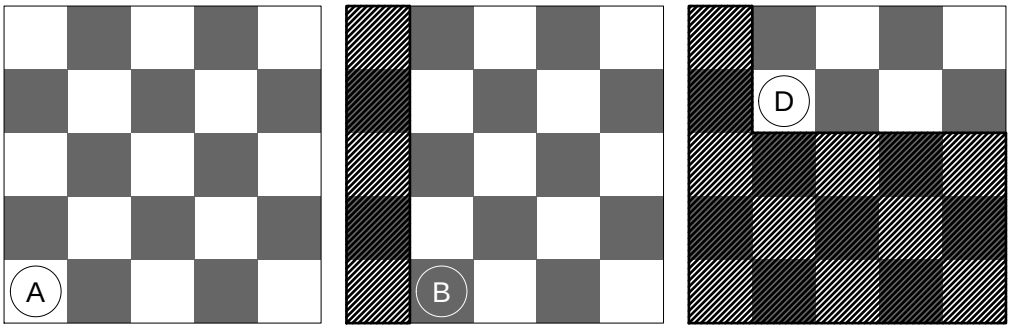


Figure 4.6: Possible future states

(82) **Set of possible future states at** (α, β)

$$D^{\alpha,\beta}_{fhs} = \sum_{i} D^{i,\alpha,\beta}_{chs}, i \in \mathbb{N}$$
$$= \{(\alpha', \beta') \in \mathbb{R}^+ \times \mathbb{R}^+ : \alpha' \geq \alpha \wedge \beta' \geq \beta\}$$

The set of future honorific states of (α', β') is a subset of the set of future honorific states of (α, β) if and only if (α', β') is accessible from (α, β) under the following definition.

(83) **Accessibility**
An honorific state (α', β') is accessible from (α, β) iff $\alpha' \geq \alpha \wedge \beta' \geq \beta$.

As our honorific state is updated, the set of future possible states shrinks in a downward monotonic fashion, yielding an analogue of the classical update property of dynamic semantics/pragmatics (Stalnaker 1974, 1978, 2002; Groenendijk 1999; Roberts 2012 [1996]; Ciardelli et al. 2019). Figure 4.6 visually demonstrates how this happens. The states in the shaded area are not accessible from the relevant position. When we were at A, we could move to B. But when we are at D, we cannot move back to B. The non-shaded area when we are at D is a subset of the non-shaded area when we are at A.

Cumulative effect. The Manhattan distance is useful to define the set of competing states, while some other measures of distance/dissimilarity/divergence are important for detecting the relations among different honorific states. For in-

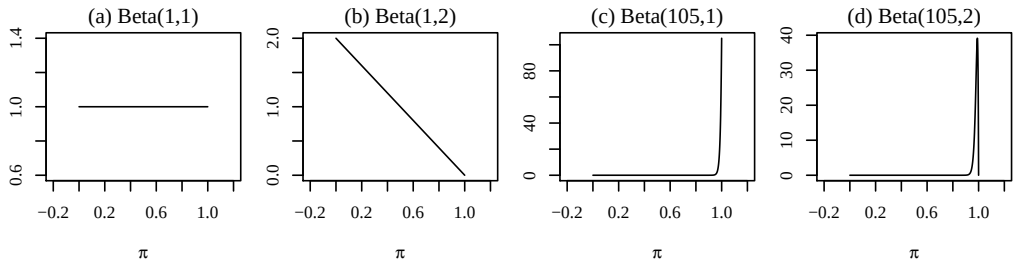


Figure 4.7: Influence on our uncertainty

stance, some are useful in analyzing cumulative effect.

Irrespective of where we are on this board, we go up when we see a plain form. But how influential/informative such an utterance is to our uncertainty depends on what kind of prior belief we had. For example, observe Figure 4.7. $Beta(1,1)$ is updated to $Beta(1,2)$ and likewise $Beta(105,1)$ is updated to $Beta(105,2)$. Intuitively, $Beta(1,1)$ is more different from $Beta(1,2)$ than $Beta(105,1)$ is from $Beta(105,2)$. Even though the observation is the same — in both cases, we have heard a plain form — the impact to our inference is very different. The data under the context of $Beta(1,1)$ is more surprising/informative than the other.

To measure the difference between two distributions, statisticians have examined different dissimilarity measures. For instance, Kullback-Leibler divergence and the Hellinger divergence are such examples.

(84) **Kullback-Leibler Divergence**

$$D_{KL}(f(\pi|d), f(\pi)) = \int f(\pi|d) \log \frac{f(\pi|d)}{f(\pi)} d\pi.$$

(85) **Hellinger Divergence**

$$D_H(f(\pi|d), f(\pi)) = \int \left(\sqrt{f(\pi)} - \sqrt{(f(\pi|d)} \right)^2 d\pi$$

The choice of such measures is not our concern. The point is that these measures enable us to model how surprising/informative each utterance is and provide us with a tool to analyze the cumulative effect. The two parameters of the Beta distribution capture what the past states were like — if we have a large α (or β), we have been exposed to many polite forms (or the plain form), on which

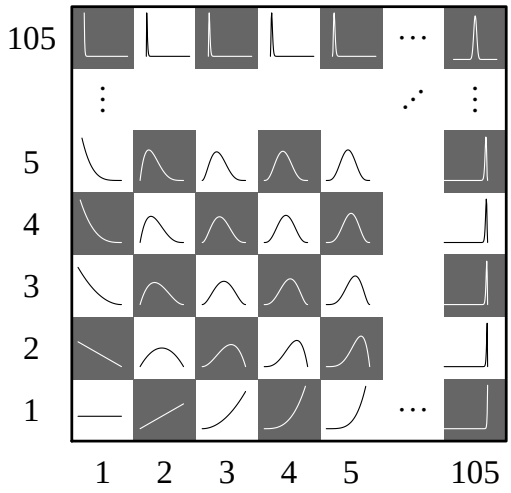


Figure 4.8: Beta distributions

our uncertainty state is determined. If the divergence between the prior and the posterior distribution is big, the cumulative effect is small; if the divergence is small, the cumulative effect is big.

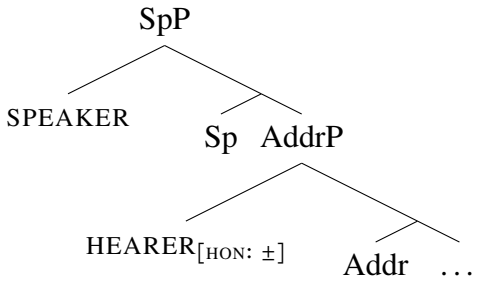
Figure 4.8 exhibits different Beta distributions. Beta distributions in adjacent cells look alike. But when the sum of α and β is small, e.g., $Beta(1, 2)$ and $Beta(1, 3)$, their difference is much bigger than the difference, e.g., between $Beta(105, 2)$ and $Beta(105, 3)$.

4.4.3 How the analysis achieves the desiderata

Let us wrap up our discussion by summarizing how the proposed model analyzes the desiderata in the previous section.

Desideratum 1: Independence. Previous studies have proposed multidimensional semantics to handle the independence of expressive elements. The analysis of this chapter inherits this assumption. In Chapter 3, we proposed the tree in (86) (= (69)). In this chapter, we have analyzed the semantics of an addressee-honorific feature as in (87).

(86)



(87) Denotation

a. $[\![[\text{HON: } +]]\!]^c = \lambda p.\ \lambda x.\ [p \bullet < x, 1, addr(c) >]$.

b. $[\![[\text{HON: } -]]\!]^c = \lambda p.\ \lambda x.\ [p \bullet < x, 0, addr(c) >]$.

This assures the denotation in (88) for SpP. The fact that expressive elements are related to discourse participants is captured by this tripartite denotation.

(88) Semantics: $[\![$ SpP $]\!] = p \bullet < sp(c), 1, addr(c) >$,
where p is the meaning of the sister node of Addr.

At this point, the semantics is static and Bayesianism, which is a property of pragmatics, has nothing to do with this.

Desideratum 2: Immediacy/performativity. The performativity of an addressee-honorific marker is derived from the following update principle in pragmatics:

(89) Context update in honorific states

a. $h+ < x, 1, y >= h'$
where $h' = (h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy} + 1, \beta_{xy}), y >\}$

b. $h+ < x, 0, y >= h'$
where $h' = (h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy}, \beta_{xy} + 1), y >\}$

Desideratum 3: Descriptive ineffability. The fact that respect-meaning cannot be translated into the at-issue meaning is explained by a difference in ontology. The object $< sp(c), 1, addr(c) >$ is not a (set of) worlds or entities.

Desideratum 4: Cumulative effect. The models in previous studies have not explicitly incorporated any mechanism that deals with this cumulative effect. In our model, the difference in past-states is captured by means of the prior distribution, i.e., the value of α and β.[22]

Desideratum 5: Learnability. Even though the 'board game' happens in the pragmatics, the semantic denotation is categorical $< x, z, y > \in D_e \times \{0, 1\} \times D_e$. No interval is assumed in the semantics. Hence, the denotation is learnable.

4.5 Chapter summary

This study is not the first attempt to incorporate insights from Bayesian statistics into pragmatics. Lassiter and Goodman have applied Bayesian analysis to the issue of the vagueness of the contextual threshold parameter of degree adjectives and modal adjectives (Lassiter and Goodman 2015, 2017). Conversational implicature has also been studied from a Bayesian perspective (Goodman and Stuhlmüller 2013; Goodman and Frank 2016). Language acquisition has been another important application area of Bayesian approaches; some have argued that the language acquisition of syntax-semantic interface fits into Bayesian reasoning (Niyogi 2002; Piantadosi et al. 2008) and another group of researchers propose that semantic types are learned via a Bayesian reasoning (Cooper et al. 2014; Cooper et al. 2015). What is common to these approaches is their realization that (i) human reasoning processes are inductive/probabilistic and (ii) that reasoning is based on some empirically accessible (linguistic) data.

What is new in this chapter is its assumption that such an inductive reasoning mediates the relation between an addressee-honorific marker and our inference. Previously, most researchers have used intervals to model the denotation of expressive elements as well as a component in the structured discourse con-

[22] **Repeatability:** As I explained, the repeatability does not show up in Japanese addressee-honorific markers (except for the embedded addressee-honorific markers which will be discussed in Chapter 5). By producing addressee-honorific markers, the speaker maintains his or her speech style. In our model, this is reflected by the fact that the meaning of addressee-honorific marker is always $< sp(c), 1, addr(c) >$, not $< sp(c), 3, addr(c) >$ or $< sp(c), 5.2, addr(c) >$.

text that stores the relevant expressive information. This real-based semantics is designed to meet the following desiderata; (i)independence, (ii) immediacy, and (iii) descriptive ineffability. However, there are two more desiderata that a better theory should taken into consideration.

The first is the learnability problem. Some cast doubt on the assumption that the denotation has a real-based semantics. In such a model, children can pick the denotation among an infinite number of possible candidates. Alternatively, the analysis of this chapter proposes a discrete semantics for Japanese addressee-honorific markers:

(90) a. $[\![[\text{HON: } +]]\!]^c = \lambda p.\ \lambda x.\ [p \bullet < x, 1, addr(c) >]$.
b. $[\![[\text{HON: } -]]\!]^c = \lambda p.\ \lambda x.\ [p \bullet < x, 0, addr(c) >]$.

The politeness degree is modeled as an ordinal variable. What we have to learn is the order in the linguistic system. In contrast, the structured discourse context is designed to incorporate real-based objects.

(91) a. $h+ < x, 1, y >= h'$
where $h' = (h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy} + 1, \beta_{xy}), y >\}$
b. $h+ < x, 0, y >= h'$
where $h' = (h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy}, \beta_{xy} + 1), y >\}$

The analysis of this chapter, thus, gives us an eclectic model for the relation between an addressee-honorific marker and the discourse context, reconciling an approach with a gradual semantics/pragmatics (Potts and Kawahara 2004; Potts 2007b; McCready 2014, 2018, 2019) and an approach with a discrete semantics/pragmatics (Portner et al. 2019).

The second is the cumulative effect. The assumption that the structured discourse context stores SUMMARY PARAMETERS makes the results of context update sensitive not only to the denotation of the current sentence but also to what the past conversation was like. By keeping track of the number of polite utterances and non-polite utterances, I have claimed that we can sufficiently reconstruct the past states.

Emphasis must be put on the fact that we can interpret the honorific state (= the role of the parameters) from different perspectives. Adopting insights from Bayesian statistics, we can give different characterizations to these parameters. The second interpretation discussed in this chapter is that they reflect the AUDIENCE'S UNCERTAINTY. Discourse participants are modeled to keep estimating each other's honorific attitudes. The parameters are understood as parameters for a Beta distribution. Each Beta distribution describes our uncertainty about the true parameter of the speaker's using an addressee-honorific marker to the addressee. The discourse update in the dimension of honorific expressiveness is now seen as an update of a probability distribution. Engaging in a communicative activity, discourse participants not only learn what the surrounding world is like but also learn what the surrounding people are like.

While this second interpretation is from the audience's perspective, we can also characterize the parameters from the speaker's perspective. That is, the third interpretation discussed in this section is that the parameters reflect the SPEAKER'S PUBLICIZED SELF-IMAGE. The use of an addressee-honorific marker does not have to be the same as the speaker's true feeling. Rather, the speaker strategically exploits addressee-honorific makers to make the audience estimate his or her persona/character.

The last interpretation is to conceive of the parameters as referring to a position on a chess board (BOARD GAME PRAGMATICS), which makes it possible for us to geometrically understand the nature of the context update. Every time an utterance has been produced, the position moves to an adjacent cell.

(92) **Characterization of** h

a. **Summary parameter**: α and β summarize our past exposure to polite and plain forms.

b. **Audience's uncertainty**: α and β are interpreted as parameters of a Beta distribution describing the audience's uncertainty about the speaker's using of an addressee-honorific marker.

c. **Speaker's publicized self-image**: α and β reflect how the speaker wants him-/herself to be recognized.

d. **Position on a chess board**: Geometrically speaking, α and β refer to a corresponding position in a two-dimensional space. The pragmatic update in expressiveness is seen as an exploration on this board game.

Appendix: Mathematical justification

What remains unanswered is why observing an addressee-honorific marker makes $Beta(\alpha, \beta)$ to $Beta(\alpha+1, \beta)$. Of course, we can replace the prior parameter vector with whatever new parameter vector we think is appropriate. But this plus-one-update has a particular mathematical justification. Here we see how the update is formally implemented under some mathematical background.[23]

We know that lines can be expressed in the form of functions. For example, the line in Figure 4.9(a) is identified by $f(\pi) = -2\pi + 3$. Likewise, the curves in Figure 4.9(b) and (c) can be explicitly written as functions. Functions that represent the shape of probability distributions are called DENSITY FUNCTIONS. The density function for a Beta distribution with parameters α and β is known to be as follows (where Γ is the gamma function, which is a generalization of factorial expressions):

(1)
$$f(\pi) = \frac{\Gamma(\alpha + \beta)}{\Gamma(\alpha)\Gamma(\beta)}\pi^{\alpha-1}(1-\pi)^{\beta-1}$$

where $\alpha > 0$, $\beta > 0$, $0 \leq \pi \leq 1$.

For example, the density function for the distribution in Figure 4.9(b) is written as:

(2)
$$f(\pi) = \frac{\Gamma(2 + 10)}{\Gamma(2)\Gamma(10)}\pi^{2-1}(1-\pi)^{10-1}$$

If we want to change the shape of the Beta distribution, we just change the parameters. The change in parameter, of course, results in the change in shape. If we increment α by one, the density function changes into:

[23] **References:** Much of the mathematical discussion in this chapter can be easily found in any textbook on Bayesian statistics. To name a few recent books, Albert (2009), Tan et al. (2009), Kruschke (2015 [2011]), Ghosal and Van der Vaart (2012) and Gelman et al. (2014).

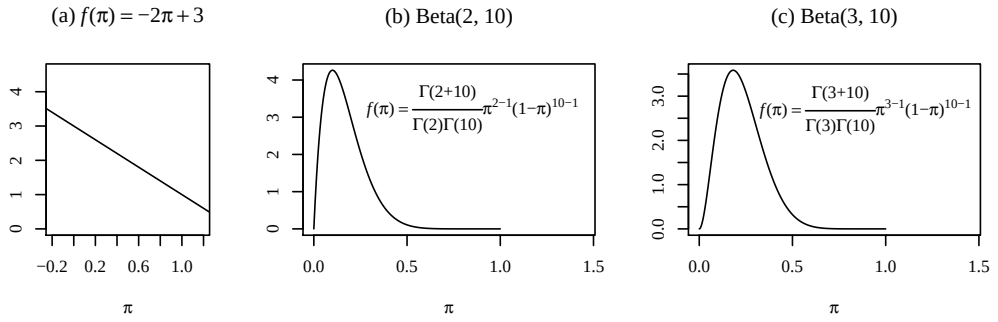


Figure 4.9: Functions

(3)
$$f(\pi) = \frac{\Gamma(3+10)}{\Gamma(3)\Gamma(10)}\pi^{3-1}(1-\pi)^{10-1}$$

This is the curve in Figure 4.9(c). The distribution that represents our uncertainty (= Figure 4.9(b)) is updated to another distribution (= Figure 4.9(c)).

In Bayesian statistics, the probability distribution that reflects our uncertainty before we observe the data is called the PRIOR DISTRIBUTION. In contrast, the distribution we have after the update is called the POSTERIOR DISTRIBUTION. The posterior distribution is the distribution given the data (= d). We use a vertical line to indicate that one variable depends on another variable. The prior and the posterior distribution are, thus, written as follows:

(4) Prior distribution: $f(\pi)$

(5) Posterior distribution: $f(\pi|d)$

Since $f(\pi, d) = f(d|\pi)f(\pi) = f(\pi|d)f(d)$, the relation between the two probabilities is expressed as follows (where $f(d) \neq 0$):

(6)
$$f(\pi|d) = \frac{f(d|\pi)f(\pi)}{f(d)}$$

This is known as BAYES' THEOREM (alternatively Bayes' law or Bayes' rule). Since the probability of having a data value (= $f(d)$) is typically unknown but is constant, for practical convenience, the above formula is sometimes reduced to:

(7) $f(\pi|d) = f(d|\pi)f(\pi) \times const.$

Since we are not interested in this constant and this makes the formula rather lengthy, $\propto$ is used to represent the same relation as below; this symbol is read as 'is proportional to.'

(8) $f(\pi|d) \propto f(d|\pi)f(\pi)$

The conditional probability of the data (= d) given the parameter of the model (= π) is called the LIKELIHOOD. The relation in (7) states that the posterior density is proportional to the product of the likelihood and the prior density.

Above, we assume that the data generating process is modeled as a Bernoulli trial. Under this assumption, the likelihood is expressed using the density function of the Bernoulli distribution. Hereafter, let our d be more specific; i.e., either 1 (when the addressee-honorific marker is present) or 0 (when the addressee-honorific marker is absent):

(9) Likelihood function:

$$f(d|\pi) = \pi^{d}(1-\pi)^{(1-d)}$$

Given (2), (4), (5), (7), and (9), the posterior density is written as:

(10)

$$\begin{aligned} f(\pi|d) &\propto f(d|\pi)f(\pi) \\ &\propto \pi^{d}(1-\pi)^{(1-d)} \times \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)}\pi^{\alpha-1}(1-\pi)^{\beta-1} \\ &= \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)}\pi^{\alpha+d-1}(1-\pi)^{\beta+(1-d)-1} \\ &\propto \frac{\Gamma(\alpha+d+\beta+(1-d))}{\Gamma(\alpha+d)\Gamma(\beta+(1-d))}\pi^{\alpha+d-1}(1-\pi)^{\beta+(1-d)-1} \end{aligned}$$

This is the density of another Beta distribution; $Beta(\alpha+d, \beta+(1-d))$. If $d = 1$, that is, if an addressee-honorific marker is observed, this is $Beta(\alpha+1, \beta)$ and, if $d = 0$, that is, if a plain form is observed, this is $Beta(\alpha, \beta+1)$. We begin with a Beta distribution (= our prior distribution) and we end with another Beta distribution (= our posterior distribution). The likelihood in this formula is seen as a function that maps one Beta distribution into another Beta distribution. A data point, thus, contributes to update the parameter by incrementing the relevant parameter by one. This is why we update $Beta(2, 10)$ either to $Beta(2, 11)$ or to $Beta(3, 10)$.

Interpretation. There are three important remarks on the interpretation of α and β. First, the ratio between α and β determines the center of this distribution. The expected value of a variable that follows $Beta(\alpha, \beta)$ is:

$$\begin{aligned}
E[\pi] &= \int_{-\infty}^{\infty} \pi \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)} \pi^{\alpha-1}(1-\pi)^{\beta-1} d\pi \\
&= \int_{-\infty}^{\infty} \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)} \pi^{(\alpha+1)-1}(1-\pi)^{\beta-1} d\pi \\
&= \frac{\alpha}{\alpha+\beta} \int_{-\infty}^{\infty} \frac{\Gamma((\alpha+1)+\beta)}{\Gamma(\alpha+1)\Gamma(\beta)} \pi^{(\alpha+1)-1}(1-\pi)^{\beta-1} d\pi \\
&= \frac{\alpha}{\alpha+\beta}
\end{aligned}$$

Thus, when $\alpha : \beta = r : 1$, $E[\pi] = r/(r+1)$. When we go back to Figure 4.10, the expectation of the Beta distributions of Figure 4.10(a) and 4.10(b) are exactly the same, i.e., $5 \,/\, (5+3) = 50 \,/\, (50+30) = .625$.

Second, the magnitude of α and β reflects how narrowly the distribution is centered. When we calculate the variance as below, we end up with the form of $\alpha\beta/((\alpha+\beta)^2(\alpha+\beta+1))$. When the magnitude of α and β gets bigger, the denominator increases in the third order, leading to a smaller variance. This is the difference between Figure 4.10(a) and (b). The variance of the Beta distribution in Figure 4.10(a) is .026 whereas the variance of $Beta(50, 30)$ is .003.

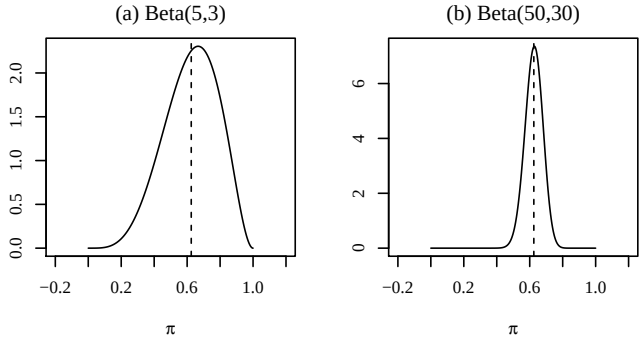


Figure 4.10: Caption

$$
\begin{aligned}
Var[\pi] &= \int_{-\infty}^{\infty} (\pi - E[\pi])^2 \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)} \pi^{\alpha-1}(1-\pi)^{\beta-1} d\pi \\
&= \int_{-\infty}^{\infty} (\pi^2 - 2E[\pi]\pi + E[\pi]^2) \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)} \pi^{\alpha-1}(1-\pi)^{\beta-1} d\pi \\
&= \int_{-\infty}^{\infty} \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)} \pi^{(\alpha+2)-1}(1-\pi)^{\beta-1} - 2E[\pi] \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)} \pi^{(\alpha_1+1)-1}(1-\pi)^{\beta-1} \\
&\quad + E[\pi]^2 \frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)} \pi^{\alpha-1}(1-\pi)^{\beta-1} d\pi \\
&= \frac{\alpha(\alpha+1)}{(\alpha+\beta)(\alpha+\beta+1)} - 2E[\pi] \frac{\alpha}{\alpha+\beta} + \left(\frac{\alpha}{\alpha+\beta}\right)^2 \\
&= \frac{\alpha\beta}{(\alpha+\beta)^2(\alpha+\beta+1)}
\end{aligned}
$$

Third, the nature of the update is to add one either to α or β. If $z_i = 1$, we increment α by one and, if $z_i = 0$, we increment β by one. If we have observed 20 addressee-honorific markers, we increment our original α by 20 and, if we have observed no addressee-honorific markers 30 times so far, we add 30 to β. With s addressee-honorific markers and f non addressee-honorific markers, the mean is update from (11)a to (11)c; the posterior mean is a compromise between the prior mean and the data (= the sample proportion).

(11) a. prior mean:

$$\frac{\alpha}{\alpha + \beta}$$

b. sample proportion:

$$\frac{s}{s + f}$$

c. posterior mean:

$$\frac{\alpha + s}{\alpha + s + \beta + f} = \frac{\alpha + s}{\alpha + \beta + s + f}$$

Combination of the first and the second remarks results in an intuitive conclusion. If we have observed more utterances with addressee-honorific markers than those without them, i.e., when α is larger than β, $E[\pi]$ leans to the right, meaning that we expect π to be greater than $.5$ (i.e., we expect to have an addressee-honorific marker under the current situation). Combination of the second and the third remarks also results in an intuitive conclusion. The more data we have, the larger $\alpha + \beta$ will be and thus the smaller the variance we will get. This means that if we have been exposed to a large amount of data, we are more certain about a possible range of π. In other words, if the influence of the data becomes dominant, the 'compromise' is dictated by the data.

Chapter 5

Embedded addressee-honorific markers

In Chapter 3, we discussed the syntax of the addressee-honorific marker. We saw that addressee-honorific markers are best-viewed as an instance of Agree operation between HR and Neg. In Chapter 4, we examined the semantics and pragmatics of the addressee-honorific marker. Their honorific meaning was analyzed as a tuple of $< x, z, y > \in D_e \times \mathbb{Z}^+ \times D_e$. Based on this static semantics, discourse participants are modeled as players in a language game, in which they keep estimating other people's personae dynamically and statistically.

In the preceding two chapters, we were only concerned with addressee-honorific markers in a main clause — those that appear in the position schematically illustrated as the shaded slot in (1)a.

(1) a. $[_{CP}[_{CP}$ subject object verb] verb AH]
b. $[_{CP}[_{CP}$ subject object verb AH] verb AH]

Given their highly discourse-oriented property, we may expect that they are only restricted to a main clause, aka., a main clause phenomenon (Emonds 1970; Hooper and Thompson 1973; Heycock 2006; Aelbrecht et al. 2012; Miyagawa 2012; among many others). However, addressee-honorific markers are sometimes observed in an embedded environment, challenging our widely accepted understanding that speech act layers are not embeddable (Zu 2018; Portner et al. 2019). In this chapter, we turn to the syntax and the semantics of embedded addressee-honorific markers, i.e., those that appear in the boxed position in (1)b.

Examples. Let us see some examples. First, *-mas* can appear in a direct speech embedded context. Observe the minimal pair in (2).

(2) Direct speech

a. *Kare$_i$-mo* [*watasi$_i$-no* *musuko-ga* *kabin-o* *kowasi-te* *simat-ta*
he-also I-GEN son-NOM vase-ACC break-CV MAL-PST
to] *it-te* *i-ta.*
C say-CV PRG-PST
'He$_i$ was also saying, "my$_i$ son broke the vase".'

b. *Kare$_i$-mo* [*watasi$_i$-no* *musuko-ga* *kabin-o* *kowasi-te*
he-also I-GEN son-NOM vase-ACC break-CV
*simai-**masi**-ta* *to*] *it-te* *i-ta.*
MAL-HON$_A$-PST C say-CV PRG-PST
'(i) He$_i$ was also saying, "my$_i$ son broke the vase";
(ii) the speaker of the REPORTED CONTEXT (RC) respects the addressee of the reported context (< *-mas* in the embedded clause)'

Since the embedded first person pronoun *watasi* is conindexed with the third person pronoun in the main clause (*kare* 'he'), the bracketed clauses in (2) are both considered direct speech contexts. The only difference is whether they contain an embedded addressee-honorific marker; only the sentence in (2)b contains an addressee-honorific marker, which encodes respect from *kare* 'he' to his addressee. In other words, the respect relation holds between the speaker of the

REPORTED CONTEXT and the addressee of the reported context.

Second, an embedded addressee-honorific marker is also found in an indirect speech context as illustrated in (3). The indirect speech status is verified by the coindexation between two *kare*'s 'he.' As shown in (3)b, an addressee-honorific marker can appear in an indirect speech context.

(3) Indirect speech

a. *Kare$_i$-mo* [*kare$_i$-no musuko-ga kabin-o kowasi-te simat-ta*
he-also he-GEN son-NOM vase-ACC break-CV MAL-PST
koto]*-o wabi-te ori-mas-u.*
C-ACC apologizing-CV PRG.HON$_U$-HON$_A$-PRS
'(i) He$_i$ is also apologizing for his$_i$ son having broken the vase;
(ii) the speaker respects the addressee very much.'

b. *Kare$_i$-mo* [*kare$_i$-no musuko-ga kabin-o kowasi-te*
he-also he-GEN son-NOM vase-ACC break-CV
*simai-**masi**-ta koto*]*-o wabi-te ori-mas-u.*
MAL-HON$_A$-PST C-ACC apologizing-CV PRG.HON$_U$-HON$_A$-PRS
'(i) He$_i$ is also apologizing for his$_i$ son having broken the vase;
(ii) the speaker of the utterance context respects the addressee of the utterance context very much (< *ori-mas* in the main clause);
(iii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the embedded clause).'

Unlike the case in (2)b, this embedded *-mas* does not encode a respect-giving relation between the speaker and the addressee of the reported context. In spite of the fact that it appears in an embedded clause, it is the speaker of the UTTERANCE CONTEXT that bears the respect and it is the addressee of the utterance context who is admired. As shown in the three-tiered translation in (3)b, the embedded *-mas* and the main clause *(ori)-mas* end up giving the same information that the speaker of the utterance context has respect for the addressee of the utterance context.

Of the two cases, the indirect speech context is more mysterious. A direct speech context has a 'root-like' status, so it is no wonder that what looks

like a main clause phenomenon appears in this environment. In contrast, an indirect speech context is usually not tied to the discourse context. Indeed, in some other languages, embedded addressee-honorific markers are never licensed in an indirect speech context. For example, in Korean, a direct speech context is morphologically distinguished from an indirect speech context, so it is easy to see whether an embedded addressee-honorific marker can survive in an indirect speech context; for a direct speech context, the complementizer is *-lako* while a different complementizer *-ko* is used for an indirect speech context. As shown below, while an embedded addressee-honorific marker is allowed in a direct speech context (under *-lako*), it is disallowed in an indirect speech context (under *-ko*).[1]

(4) Korean

a. *John$_i$-i* [*ku$_{*i}$-uy* *emeni-ka* *o-si-*{***pnita/s-eyo***}]*-lako*
John-NOM his mother-NOM come-HON$_S$-DECL.HON$_A$-C
malhay-ss-ta.
say-PST-DECL
'(i) John$_i$ said, "his$_{*i}$ mother comes";
(ii) the speaker of the RC respects the addressee of the UC.'

b. * *John$_i$-i* [*ku$_{i/j}$-uy* *emeni-ka* *o-si-*{***pnita/s-eyo***}]*-ko*
John-NOM his mother-NOM come-HON$_S$-DECL.HON$_A$-C
malhay-ss-ta.
say-PST-DECL
'(i) John$_i$ said that his$_{i/j}$ mother comes;
(ii) the speaker of the {RC/UC} respects the addressee of the {RC/UC} (intended).'

[1] **Acknowledgements:** I would like to thank Miok Pak, Young-Hoon Leo Kim, Eunsun Jou and Bokyung Mun for bringing my attention to this Korean data.

In Thai, an indirect speech context is introduced by *waaa* (Smyth 2002: 123). As in the case of Korean, an addressee-honorific marker is prohibited in such an indirect speech context as illustrated below.[2]

(5) Thai

a. *kháw maa* ***khráp***.
he come HONA.MASC
'(i) He comes;
(ii) the speaker is male;
(iii) the speaker respects the addressee.'

b. * *Sakol bɔ̀ɔk* [*waaa kháw maa* ***khráp***] *khráp.*
Sakol say that he come HONA.MASC HONA.MASC
'(i) Sakol says that he comes;
(ii) the speaker of the UC is male (< *khráp* in the main clause);
(iii) the speaker of the UC respects the addressee of the UC (< *khráp* in the main clause);
(iv) the speaker of the RC/UC is male (< *khráp* in the embedded clause);
(v) the speaker of the RC/UC respects the addressee of the RC/UC (< *khráp* in the embedded clause) (intended).'

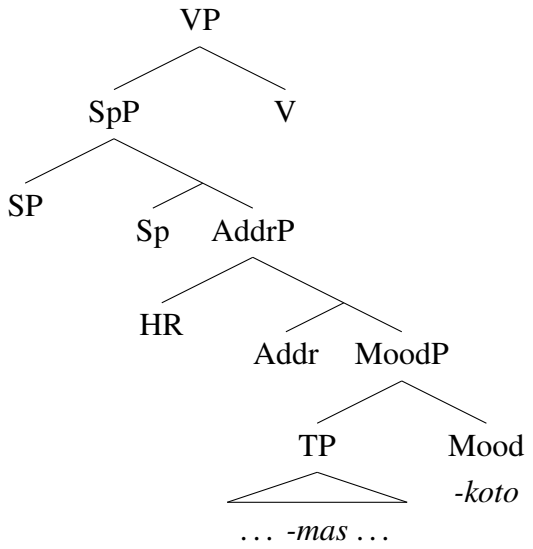
c. *Sakol bɔ̀ɔk* [*waaa kháw maa*] *khráp.*
Sakol say that he come HONA.MASC
'(i) Sakol says that it is raining;
(ii) the speaker of the UC is male;
(ii) the speaker of the UC respects the addressee of the UC.'

Under our common assumption that discourse-oriented elements are restricted to a root (and a root-like) environment and given the fact that Korean and Thai addressee-honorific markers are never licensed in an indirect speech context, the data in (3)b seems quite mysterious and deserves our attention.

[2] **Acknowledgements:** I would like to thank Sakol Suethanapornkul for the acceptability judgments.

Organization of this chapter. The main purpose of this chapter is to scrutinize addressee-honorific markers in these types of indirect speech context and propose an explanation for why they are allowed in Japanese. The organization of this chapter is as follows. We begin the discussion with description of the data in Section 5.1 and 5.2. In Section 5.1, we examine basic facts about Japanese embedded declarative complementizers. In Section 5.2, we see more examples of embedded addressee-honorific markers and investigate some peculiar properties of these expressions. In Section 5.3, I propose an analysis. The central claim is that in Japanese, despite our common assumptions, speech act layers (SpP-AddrP) are embeddable as illustrated in (6). In Section 5.4, this analysis is compared with related analyses proposed in recent studies. Some remaining puzzles are also clarified. Finally, Section 5.5 concludes the chapter.

(6)



5.1 Embedded declarative complementizers

Careful readers have already realized that the embedded clauses in (2) and (3) are introduced by different complementizers — *-to* and *-koto*.[3] Indeed, it has been

[3] **Another complementizer *-no*:** In addition to *-to* and *-koto*, contemporary Japanese is equipped with another C-element, i.e., *-no*. It looks similar to *-koto* in some respects (Kuno 1973) but is selected by verbs that would take a bare-infinitive in English (e.g., perception verbs and the verb

argued that the choice of an embedded complementizer affects the acceptability judgment of embedded addressee-honorific markers (Miyagawa 2012, 2017). This section takes a brief look at the Japanese complementizer system so that we have enough background in Japanese embedded speech contexts before we give close attention to embedded addressee-honorific markers in the next section.

There are three important descriptive differences between a *koto*-clause and a *to*-clause. First, the syntactic positions are different (Section 5.1.1). Second, a *koto*-clause is restricted to an indirect speech context, whereas a *to*-clause can be used both for an indirect speech context and for a direct speech context (Section 5.1.2). Third, they are selected by different embedding predicates. In general, verbs-of-saying/thinking take a *to*-clause whereas predicates with a modal meaning (e.g., epistemic predicates, bouletic predicates, teleological predicates, ...) take a *koto*-clause (Section 5.1.3).

5.1.1 Difference 1: Positions in the clause periphery.

Although I have so far put C in the gloss for both elements for the sake of simplicity, this does not mean that they appear in the same position. There is ample evidence to show that *-to* appears in a higher position than *-koto*.

Observation 1 (Sentence-final particles). Sentence-final particles can be embedded under *-to* but not under *-koto*.[4] As illustrated in (7)b, a *koto*-clause is illicit with the sentence-final particle *-yo*, whereas a *to*-clause can accommodate *-yo* as shown in (7)a.[5]

help) (Yamada 2018b). For the sake of simplicity, this dissertation only discusses the former two complementizers.

[4] **Difference in a direct and an indirect speech context:** The acceptability gets worse when the embedded pronoun is linked to the main clause *kare* 'he,' suggesting that it is only under the direct speech context that *-yo* can be embedded.

[5] **Meaning of *-yo*:** The very meaning of *-yo* is hard to translate and is not crucial. Thus, I simplify the meaning as YO. For an attempt to elucidate one aspect of its meaning, see Davis (2009).

(7) Sentence-final particle

a. *Kare$_i$-wa* [{??*kare$_i$/watasi$_i$*}*-no* *musuko-ga* *kekkon*
he-TOP he/I-GEN son-NOM marriage
*si-ta-**yo***]*-to* *it-te* *i-ta.*
do-PST-SFP-C say-CV PRG-PST
?? 'He$_i$ was saying that his$_i$ son got married + YO (indirect speech reading).'
'He$_i$ was saying, ' my$_i$ son got married + YO' (direct speech reading).'

b. * *Kare$_i$-wa* [{*kare$_i$/watasi$_i$*}*-no* *musuko-ga* *kekkon*
he-TOP he/I-GEN son-NOM marriage
*si-ta-**yo***]*-koto-o* *it-te* *i-ta.*
do-PST-SFP-C-ACC say-CV PRG-PST
'He$_i$ was saying, '{his$_i$/my$_i$} son got married + YO'.'

Observation 2 (Clause typing elements). A clause-type marker can be embedded under *-to*, but not under *-koto* (Kuno 1988; Oshima 2006:12; Kim 2018). For example, the interrogative marker *-ka* and the imperative morpheme *-e* can appear inside a *to*-clause (= (8)a and (9)a), but not inside a *koto*-clause (= (8)b and (9)b).

(8) Embedded interrogatives

a. *Kare$_i$-wa* [*kare$_i$-no* *musuko-ga* *gookaku* *deki-ru-**ka***]*-to*
he-TOP he-GEN son-NOM passing can-PRS-Q-C
kanozy-ni *tazune-ta.*
she-DAT ask-PST
'He$_i$ asked her whether his$_i$ son can pass (the exam).'

b. * *Kare$_i$-wa* [*kare$_i$-no* *musuko-ga* *gookaku* *deki-ru-**ka**-koto*]
he-TOP he-GEN son-NOM passing can-PRS-Q-C
kanozy-ni *tazune-ta.*
she-DAT ask-PST
'He$_i$ asked her whether his$_i$ son can pass (the exam).'

(9) Embedded imperatives

a. *Kare$_i$-wa* [*kare$_i$-no musuko-to eki-ni ik-e*]*-to kanozy-ni*
he-TOP he-GEN son-with station-to go-IMP-C she-DAT
meirei si-ta.
order do-PST
'He$_i$ ordered her to go to the station with his$_i$ son.'

b. * *Kare$_i$-wa* [*kare$_i$-no musuko-to eki-ni ik-e-koto*]
he-TOP he-GEN son-with station-to go-IMP-C
kanozy-ni meirei si-ta.
she-DAT order do-PST
'He$_i$ ordered her to go to the station with his$_i$ son (intended).'

Since a *koto*-clause always introduces an embedded declarative clause, it can be seen as a mood marker for an embedded declarative. Though I defer the detailed analysis in Section 5.3, here I would like to point out another piece of evidence that shows that *-koto* is associated with mood (in this case, the sentence mood). Consider the sentence in (10). When used in a main clause, a *koto*-clause triggers a directive speech act; it cannot be used, for example, to make an assertion or to make a response-seeking question.[6]

(10) *Kimi-wa ie-ni kaer-u-**koto**.*
you-TOP home-to return-PRS-C
'You should go home.'

This sentence is interpreted as a weak imperative (or, it is weaker than an imperative with the imperative suffix *kaer-e* 'return-IMP'). It is still a command, not a

[6] **English *-ing* form and *-koto*:** At this point, it is noteworthy to compare the *koto*-clause in Japanese with the gerund clause in English. Gerunds are similar in many respects to the *koto*-clause. First, both *koto*-clauses and gerund clauses have a nominal flavor. Notice that etymologically *koto* used to be a noun meaning 'event, word.' Second, when used in the main clause, both clauses are associated with the directive speech act, as illustrated below (Portner et al. 2019).

(i) No parking.

(ii) [*Kuruma-wa koko-ni-wa tome-nai-**koto***].
cars-TOP here-at-FOC park-NEG-C
'As for cars, do not park here (directive reading).'
*'As for cars, they are parked here (assertive reading).'

request but the speaker typically proposes a reasonable command, the observance of which is supposed to bring some benefits to the addressee (for weak imperatives, see Poletto and Zanuttini 2003; Portner 2018a). Admittedly, it is not clear why the same morpheme *-koto* is used as an imperative in a main clause but as a declarative in an embedded clause. But, at least, this observation supports the view that *-koto* is involved in clause-typing.

Observation 3 (Double complementizers). In some limited cases — which will turn to later — *-koto* and *-to* can co-occur within the same embedded environment. For example, observe the sentence in (11)a. This sentence is licit despite the fact that this sentence contains two C-elements. When multiple complementizers appear, *-koto* should always precede *-to*, as shown by the ungrammaticality of the sentence in (11)b.

(11) Combination of *-koto* and *-to*

a. [[*Minasan genki-de irassyai-mas-u-**koto***]*-**to***]
everyone healthy-COP be.HON$_S$-HON$_A$-C-C
zonzi-mas-u.
think.HON$_U$-PRS
'(i) I think that everyone is in good health;
(ii) the speaker respects *everyone*;
(iii) the speaker respects the addressee
(iv) the respect is very high.'

b. * [[*Minasan genki-de irassyai-mas-u-**to***]*-**koto***]
everyone healthy-COP be.HON$_S$-HON$_A$-C-C
zonzi-mas-u.
think.HON$_U$-PRS
'(i) I think that everyone is in good health;
(ii) the speaker respects *everyone*;
(iii) the speaker respects the addressee
(iv) the respect is very high.'

If we assume that *-to* and *-koto* compete for the same position, such structures would not be possible.

Observation 4 (Case particles). Only a *koto*-clause can be followed by a case particle (*-ga* '-NOM,' *-o* '-ACC,' *-ni* 'DAT,' ...). Consider the sentences in (12). Irrespective of the difference between the indirect speech reading and the direct speech reading, no case particle is allowed to be placed after *-to* whilst a *koto*-clause can be accompanied with a case particle.

(12) Compatibility with case particles

a. * *Kare$_i$-wa* [{*kare$_i$/watasi$_i$*}*-no* *tomodati-ga* *kur-u*]*-to-o*
he-TOP he-GEN friend-NOM come-PRS-C-ACC
kangae-ta.
think-PST
*'He$_i$ thought that his$_i$ friend would come (indirect speech reading; intended).'
*'He$_i$ thought, 'my$_i$ friend would come' (direct speech reading; intended).'

b. *Kare$_i$-wa* [{*kare$_i$/*watasi$_i$*}*-no* *tomodati-ga* *kur-u-koto*]*-o*
he-TOP he-GEN friend-NOM come-PRS-C-ACC
kangae-ta.
think-PST
'He$_i$ thought about the possibility that his$_i$ friend would come.'

Historical facts. The aforementioned distributional fact made researchers in the 1970s propose that the suffix *-to* is indeed a case particle (Okutsu 1974: 134-135). It is quite noteworthy that *-to* can also be preceded by a noun phrase and does have a postpositional use. The sentence in (13) is an example of such a postpositional use, where *-to* is roughly translated as English *as/with*.[7]

(13) *Ume-no* *hana-o* *yuki-to* *minas-u.*
plum-GEN flower-ACC snow-as regard-PRS
'(I) regard plum flowers as snow.'

In contrast, *-koto* is grammaticalized from the noun *koto* 'word, event'

[7] **Postpositional *-to*:** As is often with postpositions, it is polysemous and there many other possible translations. There are uses which should be translated as 'with.' Both the complementizer use and the postposition use are attested in Man'yoshu, one of the earliest texts in Japanese. For example, Wrona (2008: 295-296) cites the following examples.

(Kageyama 1977; Hara et al. 2013).[8] Typically, Japanese noun phrases are constituted by a content noun (NP) and a postpositional phrase or a Case Phrase (KP), as in (14)a. In this sense, the multiple complementizer system in (11) is reminiscent of their historical origins. Just as a noun phrase is constituted by a NP and a case layer (= (14)a), the two complementizers occupy different syntactic positions (= (14)b).[9]

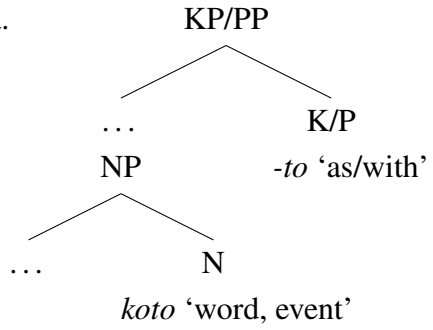
(i) a. Complementizer use
[*awo-uma kyepu mi-ru pito-pa kagiri nasi*]-***to*** *ip-u.*
white-horse today see-ADN people-TOP limit not exist-C say-PRS
'They say that people who see the white horse today live forever.' (Man'yoshu 20: 4495)

b. Postpositional use (*-to* 'as')
[*... pur-u yuki*]-***to*** *pito-no mi-ru made ume-no pana tir-u.*
fall-ADN snow-as people-GEN see-ADN ALL plum-GEN flower fall-PRS
'The plum-blossoms fall to the extent that people see them as falling snow.' (Man'yoshu 5: 839)

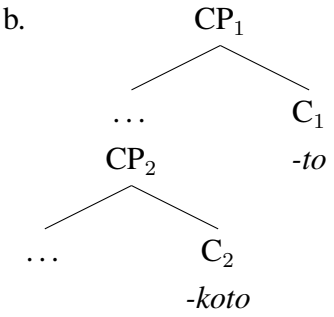
[8] **Is *-koto* a noun or a complementizer?:** A group of people have proposed that *-koto* is a noun and its sister node is a relative clause modifying *-koto* whose meaning is rather vacuous/abstract (Kageyama 1977). Under such approaches, we are assuming the tree in (14)a. Indeed, the subsequent discussion does not hinge on the choice between (14)a and (14)b. What is important is the position of *-koto* is lower than the position of *-to*. So, readers are allowed to translate the labels of the following trees as in (14)a if they want to. Yet, there are two conceptual/practical reasons why I use the analysis in (14)b and later I will call CP_2 MoodP. First, the influential studies on Japanese embedded addressee-honorific markers adopted the CP-analysis (Miyagawa 2012, 2017). For the sake of ease in comparison, I analyze both *koto* and *to* as complementizers, following the assumption of previous studies. Second, as we see in Section 5.3.1, by analyzing *koto* as a C-like element, the similarity with Balkan subjunctive mood particles is much clearly captured.

[9] **Position of *-to*:** There is no clear evidence for or against the view that the direct speech *-to* and the indirect speech *-to* are distributed in distinct positions. In this thesis, I assume that the position of the direct speech marker is the same as the indirect speech marker for the sake of simplicity. Future research may convince us of separate positions. Even so, it remains important that we need to propose a different position for *-koto*. As long as we separate the position of *-koto* from that of *-to*, the subsequent discussion remains effective.

(14) a.



b.



Comparable data. Researchers working on genealogically unrelated languages have noticed similar distributional facts. Examples (15) through (18) include both a clause-typing element and a quotative particle. In all cases, a quotative particle appears in a position higher than a clause-typing element.[10]

(15) Spanish (Suñer 1993: 53)

Sue	*preguntó*	[***que***	[*cuántas*	*charlas*	***planeaban***	*los*
Sue	asked	C	how many	talks	were planning	the
estudiantes]].						
students						

'Sue asked how many talks the students were planning.'

(16) Turkish (Özyıldız 2018)

Ali	[[*anne-si*	*gel-di*	***mi***]	***diye***]	*merak ediyor.*
Ali	mother-3.SG.POSS	arrive-PST.3.SG	Q	C	wonder

'Ali wonders whether his mother had arrived.

[10] **Similarities and differences between Japanese and Korean:** Among these, Korean is quite noteworthy. In addition to the interrogative particle (*-nya*), this language clearly shows that a quotative particle can also embed other clause typing elements — the imperative marker (*-la*), exhortative marker (*-ca*) and promissive marker *-ma* (Pak 2008: 150; Kim 2018: 22-24; for embedded clause types in Korean, see, e.g., Portner et al. 2019). One important difference between Korean *-ko* and Japanese *-to* is that Korean *-ko* is used only to mark the indirect speech context, while Japanese *-to* is ambiguous.

(17) Korean (Pak 2008: 150-151)

emma-ka [[*inho-ka* *cemsim-ul* *mek-ess-**nya***]-***ko***]
mother-NOM Inho-NOM lunch-ACC eat-PST-Q-C
mul-ess-ta.
ask-PST-DECL
'Mother asked if Inho ate lunch.'

(18) Magahi (Alok and Baker 2018)

Ram *hamraa-se* *puuchh-l-o* [***ki*** [***kaa*** *Santeeaa*
Ram me-INS ask-PRF-ALLOC.HON C Q Santee
jai-t-o]].
go-FUT-ALLOC.HON
'Ram asked me if Santee will go.'

Radford reports that a comparable data can be obtained even in (colloquial) English (Radford 1988: 585, 2018: 113).

(19) I'd just like to find out [**that** how **do** people on the continent remember Paul Scholes?] (Listener BBC Radio 5; Radford 2018: 113).

5.1.2 Difference 2: Grammatical positions and available readings

Koto-clauses and *to*-clauses are distributed in different grammatical environments. A *koto*-clause appears (i) in a subject position as well as (ii) in an object position. In contrast, a *to*-clause appears (i) in an object position and (ii) in an adjunct (oblique) position, but (iii) not in a subject position. Even though these two clauses can be used in an object position, the available readings are different (Yamada 2019c). Let us see these grammatical environments in turn.

Object position. In the object position, a *to*-clause has both a direct speech reading and an indirect speech reading, whereas a *koto*-clause is only restricted to an indirect speech reading. There are several tests that verify this conclusion. First, INDEXICAL ELEMENTS elucidate the difference. In direct speech, all the indexical elements in (20) are interpreted with respect to the reported context whereas those in (21) are anchored with respect to the utterance context. The

contrast below suggests that a *koto*-clause, unlike a *to*-clause, cannot be used in a direct speech context.

(20) Direct speech

a. [*Watasi$_i$-no musuko-wa asita koko-o hanarer-u*]-***to***
I-GEN son-TOP tomorrow here-ACC leave-PST-C
kinoo kare$_i$-wa kanozyo-ni tutae-ta.
yesterday he-TOP she-DAT tell-PST
'Yesterday, he$_i$ told her (said to her), "I$_i$ will leave here tomorrow".'
→ His son is supposed to leave *today*.

b. * [*Watasi$_i$-no musuko-wa asita koko-o*
I-GEN son-TOP tomorrow here-ACC
*hanarer-u-**koto***]-*o kare$_i$-wa kanozyo-ni tutae-ta.*
leave-PST-C-ACC yesterday he-TOP she-DAT tell-PST
'Yesterday, he$_i$ told her (said to her), "I$_i$ will leave here tomorrow" (intended).'

(21) Indirect speech

a. [*Kare$_i$-no musuko-ga asita koko-o hanarer-u-*]-***to***
he-GEN son-NOM tomorrow here-ACC leave-PST-C
kinoo kare$_i$-wa kanozyo-ni tutae-ta.
yesterday he-TOP she-DAT tell-PST
'Yesterday, he$_i$ told her that he$_i$ would leave here/*there tomorrow.'
→ His son is supposed to leave *tomorrow*.

b. [*Kare$_i$-no musuko-ga asita koko-o hanarer-u-**koto***]-*o*
hef-GEN son-NOM tomorrow here-ACC leave-PST-C-ACC
kare$_i$-wa kanozyo-ni tutae-ta.
yesterday he-TOP she-DAT tell-PST
'Yesterday, he$_i$ told her that he$_i$ would leave here/*there tomorrow.'
→ His son is supposed to leave *tomorrow*.

Second, SYNTACTIC WELL-FORMEDNESS is another good criterion to tease apart a direct speech context from an indirect speech context (Banfield 1973; Clark and Gerrig 1990; Oshima 2006). Observe the contrast below.

(22) a. He said, "I eated beans."

b. * He said that I eated beans.

A *koto*-clause, unlike a *to*-clause, cannot accommodate an ill-formed expression as shown below; n.b., the correct form for the past tense is *-ta* not *-sa*.

(23) a. *Kare-wa* [*mame-o tabe-sa*]*-to it-ta.*
he-TOP bean-ACC eat-PST-C say-PST
'He said, "mame-o tabe-sa".'

b. * *Kare-wa* [*mame-o tabe-sa*]*-koto it-ta.*
he-TOP bean-ACC eat-PST-C say-PST
'He said, "mame-o tabe-sa" (intended).'

Third, GRAMMATICAL DEPENDENCIES (e.g., *wh*-extraction) have been used as a test for the direct speech/indirect speech distinction (Kuno 1988; Anand and Nevins 2004; Oshima 2006; Crnič and Trinh 2009a, b).

(24) a. * What$_i$ did he say, "I read t_i?

b. What did he say that he had read t_i?

Wh-elements can stay in both clauses, suggesting that both clauses have an indirect speech reading.

(25) a. [***Nani****-o yon-da*]*-to kare-wa ziman si-ta-no?*
what-ACC read-PST-C he-TOP boasting do-PST-Q
'What did he proudly say that he had read?'

b. [***Nani****-o yon-da-koto*]*-o kare-wa ziman si-ta-no?*
what-ACC read-PST-C-ACC he-TOP boasting do-PST-Q
'What did he proudly say that he had read?'

Likewise, the pronoun *his* does not allow a bound reading with a quantifier in the main clause if it is a direct speech context.

(26) a. # Every professor$_i$ says, "students should buy his$_i$ book."

b. Every professor$_i$ says that students should buy his$_i$ book.

The same test can be applied to Japanese as demonstrated in (27).[11]

(27) a. ? *Subete-no* *kyoozyu-ga* [*seito-ga* *zibun-no*
every-GEN professor-NOM student-NOM self-GEN
hon-o *kat-te* *kure-ru*]*-to* *negat-te* *i-ru.*
book-ACC buy-CV APPL$_{H}$-PRS-C hope-CV PRG-PRS
'Every professor$_i$ hopes that students buy his$_i$ book.'

b. *Subete-no* *kyoozyu-ga* [*seito-ga* *zibun-no* *hon-o*
every-GEN professor-NOM student-NOM self-GEN book-ACC
kat-te *kure-ru-koto-o* *negat-te* *i-ru.*
buy-CV APPL$_{H}$-PRS-C-ACC hope-CV PRG-PRS
'Every professor$_i$ hopes that students buy his$_i$ book.'

Subject position. Unlike a *koto*-clause, a *to*-clause cannot stand in the subject position (Yamada 2019c). When they appear in this position, a *koto*-clause shows an indirect speech reading. For example, as illustrated in (28), the sentence *(the fact) that he got married surprised me* can be translated into Japanese with a *koto*-clause, but not with a *to*-clause.[12]

[11] **Acceptability:** However, the sentence in (27)a does not sound as good as (27)b presumably because of an intricate property of Japanese *zibun* 'self.'

[12] **All quotative *to*-clauses are adverbial in nature?:** One might wonder if the fact that *to*-clauses are rejected in the subject position is a consequence of their incompatibility with case particles. However, if absence of the case-particle is the reason, we should predict that *to*-clauses are banned in the object position as well, which appears to be inconsistent with the observation in (20). So, it is fair to say that this is not a derivative property of our earlier discussion. Yet, whether *to*-clauses appear in an argument position has been an issue over the past decades. For example, in his influential monograph, Fujita (2000) explictly takes the position that all quotative *to*-clauses are adverbial in nature (see also Yamada 2019c). This hypothesis can answer many questions at once. First, no case particle is attached to a *to*-clause, because a *to*-clause does not appear in a case-marked position. Second, they do not appear in the subject position, because they are adjuncts. Examples that appear to be selected by a verb (e.g., (21)) are analyzed as a bare quotative. Third, it can also account for the typological difference. Japanese has no restriction on the main clause predicate (i.e., both the standard quotative and the bare quotative), while English *that*-clause is only restricted to the verbs-of-saying/thinking. The analysis would explain that, unlike the *that*-clause, the *to*-clause is an adjunct, so there is no restriction on the main clause predicate. One serious drawback — or perhaps an intriguing challenge — that we must consider if we pursue this direction is that this theory complicates the c/s-selection system, which has been tacitly assumed to be more or less universal. This is because the theory would predict that English embedding verbs select *that*-clauses, while, in Japanese, corresponding verbs do not select them. Though I admit that this theoretical implication deserves our attention, we need more discussions

(28) Subject positions

a. [*Kare-no tomodati-ga kekkon si-te i-ta-koto*]-*ga*
he-GEN friend-NOM marriage do-CV PRF-PST-C-NOM
kare-o totemo odorokase-ta.
very much he-ACC surprise-PST
'That he got married surprised him very much.'

b. * [*Kare-no tomodati-ga kekkon si-te i-ta-*]-*to*
he-GEN friend-NOM marriage do-CV PRF-PST-C
kare-o totemo odorokase-ta.
very much he-ACC surprise-PST
'That he got married surprised him very much (intended).'

Adjunct position. A *to*-clause can form an adjunct clause — a quotative clause which seems 'unselected' by the main verb, which Kim (2018) calls a BARE QUOTATIVE (Kaiser et al. 2013; Fujii 2015; Oshima 2015; Özyıldız 2018; Yamada 2019c; Shimoyama and Goodhue 2019). Consider the sentences in (29). Notice that the main predicates in these examples would not c/s-select a quotative clause if used in English. Because of this unselected status, these *to*-clauses are considered adjuncts that represent the agent's publicized attitude (Kim 2018: 31).

and explorations, which is by all means beyond the scope of this dissertation. Thus, in this chapter, I follow the more conservative view that examples such as (21)) are selected by the embedding predicate and treat unselected clauses as exceptional constructions.

(29) Bare quotatives

a. Declarative

[{*Watasi*$_i$/*kare*$_{*i}$}*-wa* *kaer-u-to*] *kare*$_i$*-wa* *se-o*
I/he-TOP go home-PRS-C he-TOP back-ACC
muke-ta.
show-PST

'He$_i$ turned around, (as if to say/saying/thinking) [I$_i$/he$_{*i}$ will go home].'

b. Interrogative

[{*Omae*$_i$/*watasi*$_{*i}$}*-wa* *kaer-u-no-ka-to*] *kare-wa* *watasi*$_i$*-o*
you-TOP go home-PRS-Q-Q-C he-TOP I-ACC
mi-ta.
see-PST

'He$_i$ saw me (as if to say/saying/thinking) [will you$_i$/I$_{*i}$ go home?].'

c. Imperative

[{*Omae*$_i$/**watasi*$_i$}*-wa* *kaer-e-to*] *kare-wa* *watasi*$_i$*-o*
you-TOP go home-PRS-C he-TOP I-ACC
mi-ta.
see-PST

'He$_i$ saw me (as if to say/saying/thinking) [you$_i$/*I$_i$, go home].'

For detailed analyses of these constructions, see Yim (2007), Keiser et al. (2013), Oshima (2015) and Kim (2018). For our purpose, two observations are important. First, a *koto*-clause does not have this adjunct use, as shown in (30).

(30) *koto*-clauses

a. Declarative

*[{*Watasi$_i$/kare$_i$*}*-wa kaer-u-koto*](*-o*) kare$_i$*-wa se-o
I/he-TOP go home-PRS-C he-TOP back-ACC
muke-ta.
show-PST

'He$_i$ turned around, (as if to say/saying/thinking) [I$_i$/he$_i$ will go home] (intended).'

b. Interrogative

*[{*Omae$_i$/watasi$_i$*}*-wa kaer-u-no-ka-koto*](*-o*) kare-wa watasi$_i$*-o
you-TOP go home-PRS-Q-Q-C he-TOP I-ACC
mi-ta.
see-PST

'He$_i$ saw me (as if to say/saying/thinking) [will you$_i$/I$_i$ go home?] (intended).'

c. Imperative

*[{*Omae$_i$/watasi$_i$*}*-wa kaer-e-koto*](*-o*) kare-wa watasi$_i$*-o*
you-TOP go home-PRS-C-ACC he-TOP I-ACC
mi-ta.
see-PST

'He$_i$ saw me (as if to say/saying/thinking) [you$_i$/I$_i$, go home] (intended).'

Second, in a bare quotative, an indexical expression is anchored with respect to the reported context. For example, *watasi* 'I' in (31)a cannot refer to the speaker of the utterance context. Rather, it refers to the agent of the reported context, i.e., the referent of *kare* 'he.' On the other hand, an indexical element in a standard quotative shifts if it is used in direct speech but does not shift if it appears in an indirect speech context.

(31) Indexicality

a. Bare quotative

[{*Watasi*$_i$/*kare*$_{*i}$}*-no* *musuko-wa* *kaer-u-to*] *kare*$_i$*-wa*
I/he-GEN son-TOP go home-PRS-C he-TOP
se-o *muke-ta.*
back-ACC show-PST

'He$_i$ turned around (as if to say/saying/thinking), "my$_i$ son will go home".'

*'He$_i$ turned around (as if to say/saying/thinking), [that his$_i$ son would go home].'

b. Standard quotative

[{*Watasi*$_i$/*kare*$_i$}*-no* *musuko-wa* *kaer-u-to*] *kare*$_i$*-wa*
I/he-GEN son-TOP go home-PRS-C he-TOP
it-ta.
say-PST

'He$_i$ said, "my son$_i$ will go home".'

'He$_i$ said [that his son$_i$ would go home].'

Summary. A *to*-clause and a *koto*-clause are distributed in different grammatical environments. First, in a subject position, we are only allowed to use a *koto*-clause. Second, in an adjunct position, we are only allowed to use a *to*-clause. Finally, the only overlapping environment is the object position. But a *koto*-clause does not have a direct speech reading.

5.1.3 Difference 3: Embedding predicates

The fact that these two clauses compete for an object position with an indirect speech reading raises a new question; in what way do they differ?

The answer comes from embedding predicates. Embedding predicates differ to the extent to which they select the two clauses. First, we look at the overall tendency. Second, after reviewing findings from previous studies, we examine some characteristics of these clauses.

Overall tendency. First, there are two major classes that select *to*-clause; (i) verbs-of-saying (writing) and (ii) verbs-of-thinking. Prototypical examples are given in (32).

(32) Prototypical predicates that take a *to*-clause

a. **Verbs-of-saying**: *iw-* 'say,' *iikir-e-* 'can assert,' *dangen sur-* 'assert,' *iihar-* 'insist (by saying),' *i-e-* 'can say,' *kotae-* 'answer,' *iw-* 'say,' *tanom-* 'ask,' *mooside-* 'offer/propose.HONo,' *hinan sur-* 'criticize'

b. **Verbs-of-thinking**: *omow-* 'think,' *keturon sur-* 'conclude,' *minasu-* 'regard,' *omoikom-* 'wrongly assume,' *zihu sur-* 'take pride in,' *suisoku sur-* 'infer/predict,' *zonzur-* 'think.HONu,' *handan sur-* 'assess/conclude,' *katei sur-* 'hypothesize/postulate,' *omow-e-* 'can think,' *yosoku sur-* 'predict,' *kangae-* 'think/consider,' *sinzur-* 'believe'

Doxastic backgrounds and reportative backgrounds ("reported common ground") are similar, as discussed in Kim (2018), in that *thinking* can be conceived as a kind of interior speech. In this respect a *to*-clause is characterized as being used with a doxastic/speech verb. Since it is cumbersome to refer to the modal background of these verbs as 'doxastic modal background and reportative modal background,' I call it DOX for the sake of practical convenience.

Second, roughly speaking, predicates other than verbs-of-saying/thinking can take a *koto*-clause. Examples of *koto*-clause taking predicates are given in (33); detailed examples are given in Appendix A on p. 470.

(33) Predicates that take a *koto*-clause

a. **Aspectual predicate**: *hazime-* 'start,' oe- 'finish'

b. **Deontic predicate**: *hituyoo da* 'be necessary,' *yoo sur-* 'need'

c. **Dynamic predicate**: *deki-* 'can,' *kanoo da* 'be possible'

d. **Teleological predicate**: *kokoromi-* 'make an attempt,' *tame-* 'try'

e. **Implicative predicate**: *seikoo sur-* 'succeed,' *yaritoge-* 'achieve'

f. **Bouletic predicate**: *nozom-* 'desire,' *inor-* 'pray,' *negaw-* 'wish'

g. **Directive predicate**: *meezi-* 'order,' *motome-* 'favor, ask'

h. **Memory predicate**: *wasure-* 'forget,' *oboe* 'remember'

i. **Emotive factive predicate**: *kansya sur-* 'thank,' *kookai sur-* 'regret'

j. **Verbs-of-knowing**: *sir-* 'know,' *rikai sur-* 'understand'

k. **Verbs-of-expectation**: *kitai sur-* 'expect,' *yosoo sur-* 'forecast'

l. **Verbs-of-description**: *arawas-* 'express,' *simes-* 'suggest'

m. **Commissive predicate**: *yakusoku sur-* 'promise,' *tikaw-* 'swear'

n. **Doubt/fear-indicating predicate:** *utagaw-* 'doubt,' *ibukasim-* 'be suspicious'

o. **Verbs-of-saying (II)**: *tuge-* 'report,' *tutae-* 'tell'

p. **Verbs-of-thinking (II) (verbs-of-contemplation):** *kangae-* 'consider,' *zyukuryo sur-* 'contemplate'

This is rather a heterogeneous group of verbs. First, some are assumed to be involved with a PRO (e.g., *kessin sur-* 'decide' etc.) while others allow a full NP to be present in an embedded subject position (e.g., *yokorob-* 'be happy,' *nozom-* 'desire,' etc.) (Fujii 2006: 12). Observe the contrast below.

(34) a. *Kare-wa*$_i$ [**watasi*$_j$*-ga/*PRO$_i$ *gakkoo-ni ik-u-koto*]*-o kessin*
he-TOP I-NOM/PRO school-to go-PRS-C-ACC decision
si-ta.
do-PST
'He decided that *I/he would go to school.'

b. *Kare-wa*$_i$ [*watasi*$_j$*-ga/*PRO$_i$ *gakkoo-ni ik-u-koto*]*-o nozon-de*
he-TOP I-NOM/PRO school-to go-PRS-C-ACC desire-CV
i-ta.
PRG-PST
'He desired that I/he would go to school.'

Second, some have a tense distinction in an embedded clause (e.g., *hookoku sur-* 'report,' *hakken sur-* 'discover') while others only allow a present tense (e.g., *kessin sur-* 'decide,' *yakusoku sur-* 'promise'). Observe the contrast below.

(35) a. *Kare-wa* [*nihon-o tat-*{*u/*ta*}*-koto*]*-o kessin si-ta.*
he-TOP Japan-ACC leave-PRS/PST-C-ACC decision do-PST
'He decided to leave Japan.'

b. *Kare-wa* [*nihon-o tat-*{*u/ta*}*-koto*]*-o hookoku si-ta.*
he-TOP Japan-ACC report-PRS/PST-C-ACC decision do-PST
'He reported that (someone) left Japan.'

Third, some are restricted to a *de se* interpretation (e.g., *kessin sur-* 'decide') while others are ambiguous between a *de se* and a *non-de se* interpretation (e.g., *kimer-* 'decide') (Fujii 2006: 16). Consider the following context:

> *Taro has been working for a small company. One day, the owner of the company gave him a file that contained info about each employee's business achievements. She said that she would have to ask at least one employee to leave the company because downsizing was inevitable. She wanted him to go through the file and pick one person in some objective way. The owner left out employees' names and used different numbers to refer to them, so that Taro's evaluation wouldn't be biased. Reviewing the records, Taro reluctantly chose one person because his or her achievements were very poor. Imagining that the employee was*

asked to leave, he felt sorry. He gave the owner the number that was assigned to the employee in question. The owner found the employee to be Taro. She asked him to leave on the following day (Fujii 2006: 47).

Under this given context, the sentence in (36)a is unacceptable. Although *kessin sur-* 'decision do/make up one's mind' and *kime-* 'decide' seem to be synonymous, the former is compatible with a *de se* reading and a *non-de se* reading, while the latter is only licit with a *de se*-reading. In both cases, a *koto*-clause is used, showing that *-koto* itself is not related to the distinction.

(36) Non-*de se* reading

a. *Kare-wa* [*taisyoku* *sur-u-koto*]-*o* ***kessin*** ***si-ta.***
he-TOP leave company do-PRS-C-ACC decision do-PST
*'He decided that he would leave the company (non-*de se* reading).'
'He decided to leave the company (*de se* reading).'

b. *Kare-wa* [*taisyoku* *sur-u-koto*]-*o* ***kime-ta.***
he-TOP leave company do-PRS-C-ACC decide-PST
'He decided that he would leave the company (non-*de se* reading).'
'He decided to leave the company (*de se* reading).'

Observing the lists in (32) and (33), one may want to compare the distinction between a *to*-clause and a *koto*-clause with the indicative/non-indicative distinction in European languages. Certainly, a *to*-clause is indicative-like and a *koto*-clause is subjunctive/infinitive like; (i) even though there are some verbs that do not have PRO, if the verb takes a PRO, a *koto*-clause is used and (ii) even though there are some verbs that do have a tense distinction, if a verb lacks the tense distinction in an embedded clause, a *koto*-clause is used. In this sense, a *koto*-clause is somewhat 'defective' akin to a clause with non-indicative mood elements. But it is also the case that the coverage of a *koto*-clause is much wider than subjunctive/infinitive taking predicates. For example, verbs-of-knowing and verbs-of-describing are typically used with indicative mood in European languages but they are used with a *koto*-clause (for an overview of a clause selection system, see Portner 2018c; for an attempt to compare the Japanese clause selection sys-

tem with the indicative/non-indicative distinction, see Yamada 2019c).

Analyses in previous studies. Based on the above-mentioned properties, previous studies have tried to characterize semantic/pragmatic differences between *-to* and *-koto* (Kuno 1983 [1973]; Joseph 1976; McCawley 1978; Suzuki 1997; Miyagawa 2012, 2017; Yamada 2019c). One of the earliest, influential studies is Kuno (1983 [1973]: Ch. 18). Following Kiparsky and Kiparsky (1970), he proposes that the presence of presupposition determines the complementizer choice; *-koto* triggers the presupposition that the prejacent is true, while *-to* does not.

To understand his claim, compare the following pair in (37). Kuno observes that sentences with a *to*-clause, e.g., such as the one in (37)a, does not commit the speaker to the truth of the proposition expressed by the embedded clause. The sentence in (37)b, however, does have a presupposition that the speaker takes this proposition for granted. Based on this contrast, he concluded that *-koto* is presuppositional , while *-to* is not (for recent studies inheriting Kuno's presupposition hypothesis, see Miyagawa 2012, 2017).

(37) *nagak-* 'deplore'

a. *Kare-wa* [*gengogaku-wa muzukasii*]-***to*** *nagei-ta.*
he-TOP linguistics-TOP difficult-C deplore-PST
'He deplored (saying) that linguistics is difficult.'
→ The speaker may or may not think that linguistics is difficult.

b. *Kare-wa* [*gengogaku-ga muzukasii-**koto***]-*o nagei-ta.*
he-TOP linguistics-NOM difficult-C-ACC deplore-PST
'He deplored (the fact) that linguistics is difficult.'
→ The speaker thinks that linguistics is difficult.

His insight becomes very important as we go further. The relation between a *koto*-clause and commitment will be discussed extensively in 5.3.

However, it is also necessary to acknowledge the limitation of his generalization. Certainly, the contrast in (37) can be characterized by presence/absence of a presupposition. However, as seen in (33), a *koto*-clause can be selected by a wide range of predicates with no presupposition effect. For example, observe

the sentences in (38), in which the verb *negaw-* 'wish' is used in place of *nagek-* 'deplore.'

(38) *negaw-* 'wish'

a. *? *Kare-wa* [*okumantyoozya-ni* *nar-er-u*]-***to*** ***negat****-ta.*
he-TOP millionaire-DAT become-can-PRS-C wish-PST
'He wished (thinking) that he can become a millionaire.'

b. *Kare-wa* [*okumantyoozya-ni* *nar-er-u-****koto***]*-o* ***negat****-ta.*
he-TOP millionaire-DAT become-can-PRS-C-ACC wish-PST
'He wished that he could become a millionaire.'

The proposition expressed by the embedded clause depicts an unrealized and unrealistic event/situation, which is quite common to bouletic predicates. If Kuno's generalization is on the right track, we predict that these predicates should take a *to*-clause, because his being able to become a millionaire does not have to be what the speaker and the addressee take for granted. Nevertheless, bouletic predicates take a *koto*-clause.

Summary. We have seen how a *koto*-clause and a *to*-clause are distinguished with respect to embedding predicates. Here is the summary of the findings.

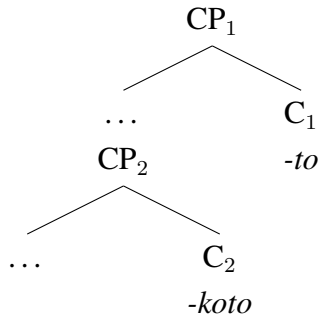
- A *to*-clause is restricted to verbs-of-saying/thinking, whereas a *koto*-clause can be used with a wider range of predicates.
- CONTROL (RAISING)/NON-CONTROL (RAISING) DISTINCTION is not the determining factor. But there is an implicational hierarchy; if an embedding predicate requires a control/raising construction, then a *koto*-clause must be used, though not vice versa.
- TENSE-DISTINCTION in an embedded clause is not the determining factor. But there is an implicational hierarchy; if a tense-distinction is missing, then a *koto*-clause must be used, though not vice versa.
- *De se/non-de se* DISTINCTION is not the determining factor for a *koto*-clause.

- INDICATIVE/NON-INDICATIVE CHOICE is another well-known classification criterion for embedding predicates in European languages. However, this classification does not match the clause selection system in Japanese perfectly. But there is an implicational hierarchy; if the corresponding embedding predicate takes a subjunctive/infinitive in European languages, then a *koto*-clause is used in Japanese, though not vice versa.
- PRESUPPOSITION is not the determining factor, either. But there is an implicational hierarchy; if an embedded proposition is presupposed, then a *koto*-clause is used, though not vice versa.

5.1.4 Interim summary

In this section, some preliminary remarks on Japanese embedded declarative clauses were provided. First, in Section 5.1.1, we examined the inner structure of the two clauses and confirmed that *-to* and *-koto* appear different in syntactic positions; (i) the C-system is split into fine-grained cascades of functional projections and (ii) the two C-heads are distributed in different positions as schematically illustrated in (39).

(39)



Second, in Section 5.1.2, we considered the distribution of the clauses. A *to*-clause cannot appear in a subject position but it can be used as an adjunct quotative clause called a bare quotative. When it appears in an object position, it can have both a direct speech reading and an indirect speech reading. A *koto*-clause is distributed in argument positions and is restricted to an indirect speech reading.

Third, in Section 5.1.3, we contrasted the two clauses with respect to embedding predicates. In English and other European languages, the indicative/non-indicative distinction is well-studied. If we apply the same contrast to Japanese, a *to*-clause is akin to an indicative clause and a *koto*-clause covers subjunctive and infinitive taking predicates. Yet, this does not mean that *-koto* is the subjunctive marker. There are some *koto*-taking predicates in which comparison or preference is not taken for granted and which would not normally take the subjunctive in European languages (e.g., verbs-of-knowing and verbs-of-description).

5.2 Embedded addressee-honorific markers

Now that we have had enough background in Japanese embedded C system, let us delve into some issues of embedded addressee-honorific markers. In this section, three important observations are to be discussed, namely the properties given in (40). Let us see them in turn.

(40) a. Semantics and pragmatics:

i. **Observation 1 (Enhanced politeness)** Section 5.2.1
Presence of an embedded addressee-honorific marker makes the sentence more polite.

ii. **Observation 2 (Commitment)** Section 5.2.2
The speaker not only commits to the proposition expressed by a main clause but also to the proposition expressed by an embedded clause.

b. Syntax:

Observation 3 (Subordination markers) Section 5.2.3
In indirect speech contexts, a *koto*-clause allows an embedded addressee-honorific marker, while a *to*-clause do not.

5.2.1 Observation 1: Enhancement and consistency in politeness

Embedded addressee-honorific markers and honorific levels. Existence of an embedded addressee-honorific marker intensifies the politeness level. I refer to this effect as the ENHANCEMENT EFFECT. In order for a sentence to be consistent in expressiveness, the main clause must be also appropriately polite. I call this restriction CONSISTENCY IN POLITENESS. To see what they are, consider the five sentences in (41).

(41) a. * [*Gomeiwaku-o* *o-kake* *si-**masi**-ta-koto*]-*wa*
trouble-ACC HON-giving do-HON$_A$-PST-C-TOP
***sit**-te* *i-ru.*
know-CV PRF-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the utterance context (UC) respects the addressee of the UC (< *-mas*).'

b. ? [*Gomeiwaku-o* *o-kake* *si-**masi**-ta-koto*]-*wa*
trouble-ACC HON-giving do-HON$_A$-PST-C-TOP
***sit**-te* *i-mas-u.*
know-CV PRF-HON$_A$-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the UC respects the addressee of the UC
(< embedded *-mas*)'
(iii) The speaker of the UC respects the addressee of the UC
(< main clause *-mas*).'

c. [*Gomeiwaku-o* *o-kake* *si-**masi**-ta-koto*]-*wa* ***zonzi**-te*
trouble-ACC HON-giving do-HON$_A$-PST-C-TOP know.HON$_U$-CV
i-mas-u.
PRF-HON$_A$-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the UC respects the addressee of the UC
(< embedded *-mas*)';
(iii) The speaker of the UC respects the addressee of the UC
(< main clause *-mas*).'

d. [*Gomeiwaku-o* *o-kake* *si-**masi**-ta-koto*]-*wa* ***zonzi**-te*
trouble-ACC HON-giving do-HON$_A$-PST-C-TOP know.HON$_U$-CV
***ori**-mas-u.*
HON$_U$.PRF-HON$_A$-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the UC respects the addressee of the UC
(< embedded *-mas*)';
(iii) The speaker of the UC respects the addressee of the UC
(< main clause *-mas*).'

e. [*Gomeiwaku-o* *o-kake* ***itasi**-**masi**-ta-koto*]-*wa*
trouble-ACC HON-giving do.HON$_U$-HON$_A$-PST-C-TOP
***zonzi**-te* ***ori**-mas-u.*
know.HON$_U$-CV HON$_U$.PRF-HON$_A$-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the UC respects the addressee of the UC
(< embedded *-mas*)';
(iii) The speaker of the utterance context respects the addressee of the utterance context
(< main clause *-mas*).'

In all these sentences, the at-issue meaning is the same; the difference comes from the politeness level that they encode. First, the sentence in (41)a has an addressee-honorific marker in the embedded clause but no addressee-honorific marker appears in the main clause. Presence of an embedded addressee-honorific marker enhances the politeness level (enhancement effect). This makes the audience expect that the speaker should also use a hyper-polite form when s/he pronounces the main clause (consistency in politeness). Nevertheless, there is no addressee-honorific marker in the main clause, which sounds as if s/he has changed their speech level, betraying the audience's expectation. The sentence is, thus, considered inconsistent and inappropriate (Tagashira 1973; Nonaka and Yamamoto 1985).

Second, the sentence in (41)b is minimally different from (41)a in that it has an addressee-honorific marker in the main clause, which ameliorates the

acceptability judgment. However, this sentence still sounds slightly awkward though it is not ungrammatical. Using an embedded addressee-honorific marker is a marked choice. If the speaker has decided to use one, his interlocutor infers that the speaker wants to elevate the honorific degree to a hyper-polite register. The main clause, however, has only one addressee-honorific marker, which is just the standard level of honorification and is not enough for the elevated degree of politeness the listener anticipates from the embedded *-mas*. Thus, the sentence in (41)b sounds less natural, if compared to the other sentences in (41).

Third, we can make the sentence acceptable by incorporating addressee-honorific upgraders into a main clause. As introduced in Section 2.3.1, addressee-honorific upgraders can enhance the degree of politeness. In (41)c, the verb *sir-* 'know' is replaced with its suppletive addressee-honrific upgrader *zonzi-* 'know.HON$_U$.' The politeness level is, thus, intensified. Now, the politeness level of the main clause matches the hyper-polite register anticipated from the embedded clause, making the sentence consistent in politeness. In (41)d, the perfective marker *i-* 'PRF' is also replaced with an addressee-honorific upgrader *ori-* 'PRF.HON$_U$.' Although both (41)c and (41)d are acceptable, (41)d sounds better.

Finally, an embedded addressee-honorific marker can also be upgraded as in (41)e, where *si-* 'do' (< *sur-* 'do') is replaced by its suppletive addressee-honorific upgrader *itas-* 'do.HON$_U$.' Since (41)d and (41)e are both acceptable, it is concluded that an embedded addressee-honorific upgrader is not necessary for the embedded addressee-honorific marker. However, in many cases, an embedded addressee-honorific marker is accompanied with an addressee-honorific upgrader.

5.2.2 Observation 2: Commitment

Presence of an embedded addressee-honorific marker commits the speaker to the proposition expressed by the embedded clause in a particular way (not necessarily to believing it to be true). To see this, consider the following context.

> Context 1 : *A presidential election is about to take place and two candidates are competing, Ms. A from Party X and Ms. B from Party Y. Al-*

ice is supporting Party X and takes an interview to become a member of the political campaign staff. At the interview, the campaign manager has asked her some questions and the last one is 'is your husband supporting Ms. A?' Unfortunately, her husband has a different political stance. Alice is now making a response choosing the hyper-polite speech register.

(42) Commitment effect Type I effect

a. *Zanennagara kare-wa* [*B-si-ga daitooryoo-ni*
unfortunately he-TOP B-Ms.-NOM president-DAT
nar-u-koto]*-o nozon-de ori-mas-u.*
become-PRS-C-ACC desire-CV PRS.HON$_U$-HON$_A$-PRS
'(i) Unfortunately, he desires that Ms. B becomes the president;
(ii) the speaker (Alice) respects the addressee (the campaign manager);
(iii) the respect is very high.'

b. # *Zanennagara kare-wa* [*B-si-ga daitooryoo-ni*
unfortunately he-TOP B-Ms.-NOM president-DAT
*nari-**mas**-u-koto*]*-o nozon-de ori-mas-u.*
become-PRS-C-ACC desire-CV PRS.HON$_U$-HON$_A$-PRS
'(i) Unfortunately, he desires that Ms. B becomes the president;
(ii) the speaker (Alice) respects the addressee (the campaign manager);
(iii) the respect is very high.'

The contrast in (42) suggests that an embedded *-mas* triggers what I want to call the COMMITMENT EFFECT. In (42)a, the proposition expressed by the embedded clause has nothing to do with the speaker. The speaker does not have to desire that Ms. B would be elected as the next president. But when the embedded clause in (42)b is uttered, it is suggested that the speaker sympathizes or agrees with the referent of the main clause subject; that is, not only her husband but also the speaker herself wishes that the expressed proposition would be true. Committing herself to such a publicized wish is inconsistent with her position and inappropriate in such an interview, making the sentence in (42)b infelicitous

under the given context (though it is a grammatical sentence). Compare with the following context, where both sentences in (43) are acceptable.

> Context 2: *The same context as before, except for the fact that her husband also likes Ms. A. So, she does not have to be worried about giving a negative impression to the interviewer.*

(43) a. *Motiron kare-wa* [*A-si-ga daitooryoo-ni*
of course he-TOP A-Ms.-NOM president-DAT
nar-u-koto]*-o nozon-de ori-mas-u.*
become-PRS-C-ACC desire-CV PRS.HON$_U$-HON$_A$-PRS
'(i) Of course, he desires that Ms. A becomes the president;
(ii) the speaker (Alice) respects the addressee (the campaign manager);
(iii) the respect is very high.'

b. *Motiron kare-wa* [*A-si-ga daitooryoo-ni*
of course he-TOP A-Ms.-NOM president-DAT
*nari-**mas**-u-koto*]*-o nozon-de ori-mas-u.*
become-PRS-C-ACC desire-CV PRS.HON$_U$-HON$_A$-PRS
'(i) Of course, he desires that Ms. A becomes the president;
(ii) the speaker (Alice) respects the addressee (the campaign manager);
(iii) the respect is very high.'

Type I effect and Type II effect. In the above example, the speaker's commitment is given to the publicized wish. But this does not always have to be the case. There seem to exist two different types of commitment.

The first type of commitment is the one we saw above. The nature of the commitment is sensitive to the embedding predicate, which I call TYPE I EFFECT. If we change the main clause predicate, the nature of the commitment also changes. For example, the embedding predicate in (44) is the verb *sinzi-* 'believe.' This sentence suggests that the speaker also 'believes' that the teacher kindly guides the referent of *kare* 'he.'

(44) *sinzi-* 'believe' Type I effect

Kare$_i$-wa [*sensei-ga* *kare$_i$-o* *mitibii-te* *kudasai-**mas**-u-koto*]-*o*
he-TOP teacher-NOM he-ACC guide-CV HON$_S$-HON$_A$-PRS-C-ACC
***sinzi**-te* *ori-mas-u.*
believe-CV PRF.HON$_U$-HON$_A$-PRS
'(i) He is believing that you, the teacher, will guide him;
(ii) the speaker of the UC respects the addressee of the UC very much.'

Another example is given in (45), where the main predicate is *yakusoku sur-* 'promise.' The speaker stands by the side of the referent of the subject and guarantees that the speaker also tries to do his best to make *kare* come and apologize to the addressee; i.e., by producing the utterance, the speaker is responsible to prevent the referent of the subject from changing his mind. In this example, the embedded proposition is also the publicized promise not only for the referent of the subject but also for the speaker himself.

(45) *yakusoku sur-* 'promise' Type I effect

Kare-wa [*ayamari-ni* *ukagai-**mas**-u-koto*]-*o* ***yakusoku** **si**-te*
he-TOP apology-for visit.HON$_O$-HON$_A$-PRSC-ACC promise do-CV
ori-mas-u.
PRF.HON$_U$-HON$_A$-PRS
'(i) He has promised that the will come an apologize;
(ii) the speaker respects the addressee (< *-mas* in the embedded clause);
(iii) the speaker respects the addressee (< *-mas* in the main clause);
(iv) the respect is very high (< *or-*)'

Second, in some cases, the speaker is committed to what has been taken for granted by the discourse participants; I call it the TYPE II EFFECT.

(46) a. **Type I effect**: the nature of commitment is sensitive to the modal background(s) of an embedding predicate.
b. **Type II effect**: the speaker is committed to what has been taken for granted.

The Type I reading and the Type II reading are available as long as it has no

conflict with the discourse context. For example, in the above examples (42) through (45), the embedded proposition should be new to the addressee, so Type II reading is suppressed. However, when the proposition is not discourse-old, Type II reading is obtained. For example, observe the sentence in (47).

(47) Commitment effect Type II effect

[*Sensei-ga intai s-are-**mas**-u-koto*]-*o gakusei-wa*
teacher-NOM retirement do-HON$_S$-HON$_A$-PRS-C-ACC student-TOP
nozon-de ori-mas-en.
desire-CV PRF.HON$_U$-HON$_A$-NEG

'(i) Students do not desire that you go into retirement;
(ii) the speaker respects the addressee (< *-mas* in the main clause);
(iii) the respect is very high (< *-te ori*)
(iv) the speaker respects the addressee (< *-mas* in the embedded clause).'

Comparison of the following two contexts elucidates the relevant point.

Context 3: *A professor at a university is well-known not only for his influential studies in the field of semantics but also for his warmhearted character and enthusiasm in teaching and guiding graduate students. But he is already over 70 and he has decided to retire from the university life. After making announcement of his retirement, he got an email from his young colleague at the same university, who personally wanted him to stay at the university (though she, of course, respects his decision).*

Context 4: *A professor at a university is well-known not only for his influential studies in the field of semantics but also for his warmhearted character and enthusiasm in teaching and guiding graduate students. He is now his 40's, so nobody assumes that he is going to retire. One day, however, he received the results of the course evaluation on his class he had taught for freshmen and realized that there was one student who had a very negative comment on his lecture. This student wrote that s/he wanted this professor to retire from the university right now because, according to this student, his way of teaching*

was very confusing. The professor was very disappointed. One of his colleagues, who is younger than the professor, now tries to cheer him up by writing an email.

The sentence in (47) is licit as a sentence produced by the colleague in Context 3. Here, the proposition that 'the professor retires' is a proposition that the speaker does not want to be true, because he is a good professor. So, Type I reading is suppressed. The fact that the sentence is acceptable even though the Type I reading is unavailable suggests that there is another possible reading available for this sentence.

In contrast, the same sentence in (47) sounds quite odd in Context 4. Here the speaker does not want him to leave. So again, the Type I reading is suppressed. Since the sentence is unacceptable, the other reading that the sentence in (47) may have is considered sensitive to the difference between the two contexts. In Context 3, that 'the professor retires' is a shared proposition, while, in Context 4, it is not a fact shared by the discourse participants. So, it is concluded that the additional reading is a presupposition. In Context 4, not only the bouletic commitment (the Type I effect) but also the doxastic commitment (the Type II effect/presupposition reading) is suppressed unlike in Context 3, resulting in an unacceptable sentence. Note that the following sentence is acceptable even in Context 4.[13]

(48) [*Sensei-ga* *intai* *s-are-u-koto*]-*o* *gakusei-wa*
teacher-NOM retirement do-HONs-PRS-C-ACC student-TOP
nozon-de *ori-mas-en.*
desire-CV PRF.HONu-HONa-NEG
'(i) Students do not desire that you go into retirement;
(ii) the speaker respects the addressee (< *-mas* in the main clause);
(iii) the respect is very high (< *-te ori*).'

[13] **Variation among native speakers:** A variation exists among the native speakers I have consulted concerning whether they get the Type I reading. Some native speakers only get Type II reading while other can get both readings. In the remainder of this dissertation, I assume that both readings are possible but, for those who obligatorily get the Type II reading, there is a mechanism that makes them interpret the sentence in that way. See Example 8 on p. 452.

Interaction with other operators. This commitment effect is considered another non-at-issue meaning because it has no interaction with other semantic operators. For example, consider the sentence in (49) and suppose that it is produced under Context 5 to see if there is an interaction with negation. Context 5 is created to avoid Type II reading; the proposition that 'the teacher retires from the university' is, obviously, not a shared presupposition among the discourse participants, who all know the university's power harassment. If there is a commitment effect, it must be a Type I effect.

> Context 5: *A professor at a university is well-known not only for his influential studies in the field of semantics but also for his warmhearted character and enthusiasm in teaching and guiding graduate students. But he is already over 70. Unfortunately, he suffers from a severe backache and he wants to retire from the university. But the university wants to have him work as long as possible, because he is a big catch.*

(49) Negation in the main clause

[*Sensei-ga* *intai* *s-are-**mas**-u-koto*]-*o* *uti-no*
teacher-NOM retirement do-HON$_S$-HON$_A$-C-ACC inside-GEN
gakusei-wa *nozon-de* *ori-mas-**en**.* *#Watasi-mo*
student-TOP desire-CV PRG.HON$_U$-HON$_A$-NEG I-also
doo-iken *des-u.*
same-opinion COP.HON$_A$-PRS

'(i) My students do not desire that you retire from the university. #I have the same opinion (as the students);
(ii) the speaker respects the addressee (< *-mas* in the main clause);
(iii) the respect is very high (< *-te ori*)
(iv) the speaker respects the addressee (< *-mas* in the embedded clause)'

There is a negation marker in the main clause. The question is whether this semantic operator can negate the speaker's bouletic commitment to the proposition 'it is not the case that the speaker bouletically commits to the proposition.' The answer is *no* because, as suggested in (49), it is quite odd to continue the sentence with 'I do not want you to retire from the university.' In other words, with or without the main clause negation, the speaker is bouletically committed to the

embedded proposition. The sentence in (50) illustrates the same point with another semantic operator (i.e., a modal operator). The expression *kamosiremasen* 'may' cannot modify the speaker's commitment to the embedded proposition.

(50) Modal in the main clause

[*Sensei-ga* *intai* *s-are-**mas**-u-koto*]-*o* *uti-no*
teacher-NOM retirement do-HON$_S$-HON$_A$-C-ACC inside-GEN
gakusei-wa *nozon-de* *i-nai-**kamosiremasen**.* *#Watasi-wa*
student-TOP desire-CV PRG.HON$_U$-HON$_A$-NEG-may I-TOP
nozon-de *ori-mas-en.*
desire-CV PRF.HON$_U$-HON$_A$-NEG

'(i) My students may not desire that you retire from the university. #I do not desire;

(ii) the speaker respects the addressee (< *-mas* in the main clause);

(iii) the speaker respects the addressee (< *-mas* in the embedded clause)'

5.2.3 Observation 3: Grammatical environments

It may be appealing to hypothesize that the semantics of embedding predicates determines the environments in which addressee-honorific markers can be licensed. For this reason, previous studies have been concerned with the classification of embedding predicates to see what kind of embedding predicates can take a clause with an embedded addressee-honorific marker (Tagashira 1973; Harada 1976; Nonaka and Yamamoto 1984; Nonaka 2006; Miyagawa 2012, 2017). Unfortunately, however, acceptability judgments differ from researcher to researcher. For example, based on Hooper and Thompson's (1973) classification, Miyagawa (2012, 2017) concludes that an addressee-honorific marker cannot be embedded under a factive-predicate (Type E predicate under Hooper and Thompson's terminology), which apparently contradicts Harada's view that "nondirect discourse complements may contain performative honorifics [= addressee-honorific markers] if they are factive complements (Harada 1976: 556)" (for a similar view, see Nonaka and Yamamoto 1985).

Factors affecting acceptability judgment. The inconsistency among previous studies does not mean that their descriptions are inaccurate. Rather, the disagree-

ment stems from the complexity of possible factors that may affect the acceptability judgment. The judgment, of course, depends on whether the sentence has a well-formed grammatical structure. But in addition, it is contingent upon the following factors.

First, it is important to control the honorific level. As we saw, the honorific level of a main clause must be polite enough for the hyper-polite register as shown in (51) (= (41)). If we only examine the sentence in (51)a, we may arrive at a hasty conclusion that *-mas* cannot be embedded under a factive predicate. But, here, the unacceptability does not come from the embedded *-mas* but it is rather due to inconsistency in the politeness level.

(51) a. * [*Gomeiwaku-o* *o-kake* *si-**masi**-ta-koto*]-*wa*
trouble-ACC HON-giving do-HON$_A$-PST-C-TOP
***sit**-te* *i-ru.*
know-CV PRF-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the utterance context (UC) respects the addressee of the UC (< *-mas*).'

b. [*Gomeiwaku-o* *o-kake* ***itasi-masi**-ta-koto*]-*wa*
trouble-ACC HON-giving do.HON$_U$-HON$_A$-PST-C-TOP
***zonzi**-te* ***ori**-mas-u.*
know.HON$_U$-CV HON$_U$.PRF-HON$_A$-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the UC respects the addressee of the UC
(< embedded *-mas*)';
(iii) The speaker of the utterance context respects the addressee of the utterance context
(< main clause *-mas*).'

Second, an embedded *-mas* is often accompanied by an addressee-honorific upgrader — which requires that the referent of the subject belongs to the speaker's territory (Section 2.3.1). Thus, the subject of a main clause is someone who the speaker thinks belongs to his or her domain, typically the first person, which Stegovec and Kaufmann (2015) call the reiteration constellation.

With no background information, other constellations are not as easily accepted. For example, consider the sentences in (52). (52)a sounds bizarre, not because of the embedded *-mas* but because of the difficulty in expressing empathy with a criminal. If we only observe (52)a, we might reach a biased conclusion that an embedded *-mas* is prohibited under an indirect speech context.

(52) a. ??***Ano*** ***hannin****-wa* [*kare-ga yuusyoo si-****mas****-u-koto*]*-o*
that criminal-TOP he-NOM winning do-HON$_A$-PRS-C-ACC
negat-te ori-mas-u.
wish-CV PRG.HON$_U$-HON$_A$-PRS
'(i) That criminal wishes that he would win;
(ii) the speaker respects the addressee (< the embedded *-mas*);
(iii) the speaker respects the addressee (< the main clause *-mas*);
(iv) the respect is very high (< *ori-*) (intended).'

b. ***Watasi****-wa* [*kare-ga yuusyoo si-****mas****-u-koto*]*-o* *negat-te*
I-TOP he-NOM winning do-HON$_A$-PRS-C-ACC wish-CV
ori-mas-u.
PRG.HON$_U$-HON$_A$-PRS
'(i) I wish that he would win;
(ii) the speaker respects the addressee (< the embedded *-mas*);
(iii) the speaker respects the addressee (< the main clause *-mas*);
(iv) the respect is very high (< *ori-*) (intended).'

Finally, a discourse topic may affect the acceptability judgment. Being produced in a hyper-polite speech register (cf., Section 2.3.1), sentences with an embedded addressee-honorific marker typically have an at-issue meaning that is appropriately produced in a formal setting, such as at a religious ceremony, at a wedding, in the Diet or in a context in which the speaker feels a strong inferiority and/or wants to behave in the most humble manner. If we select a prejacent clause that is unlikely to be used in such a formal context, the sentence would be judged as less appropriate. For example, even though grammatically correct, the proposition *we hope that he runs* is not as easily accompanied with embedded addressee-honorific markers as the proposition *we hope that the world is at peace* because with no prior knowledge a person's running does not seem to

be a common topic in a formal register.

I suspect that some of the sentences judged as ungrammatical by previous studies are infelicitous or unacceptable just because of an unintended violation of the above constraints, not because of a fatal grammatical error associated with an embedded addressee-honorific marker. In this section, I control the sentences so that (i) the main clause politeness level is consistent with the embedded clause politeness and (ii) the at-issue content of the sentence fits into a very formal register. Readers are also invited to interpret the referent of the subject as belonging to the speaker's territory when it does not refer to the speaker himself. Keeping these in mind, let us now examine embedded addressee-honorific markers in different grammatical positions; (i) in a subject position, (ii) in an object (complement) position, (iii) in a relative clause and (iv) in an adverbial clause.

5.2.3.1 Subject clauses

We saw earlier in Section 5.1.2 that only a *koto*-clause can be used in the subject position. An embedded addressee-honorific marker can appear in such a *koto*-clause.[14] An example is given in (53).

[14] **Particles:** As for the particles attached to the subject *koto*-clause, we have three options; (a) the subject can be marked by the nominative particle *-ga*; (b) if it is focalized/topicalized, *-ga* is replaced with *-wa*; and (c) the particle can be omitted. In all of three cases, we can have embedded addressee-honorific markers.

(53) Subject clause

[{*Kare$_i$/watasi$_{*i}$*}*-no musuko-kara denwa-ga*
he-GEN son-from telephone-NOM
*ari-**masi**-ta-koto*]*-wa kare$_i$-ni-wa akiraka dat-ta*
exist-HON$_A$-PST-C-TOP he-DAT-TOP obviousness COP-PST
hazu-de gozai-mas-u.
should-CV COP.HON$_U$-HON$_A$-PRS

'(i) That there is a call from his$_i$ son should have been obvious to him$_i$/me$_{*i}$;

(ii) the speaker respects the addressee;

(iii) the respect is very high;

(iv) the speaker respects the addressee (< *-mas* in the embedded clause).'

5.2.3.2 Object (complement) clauses

Direct speech context. As we saw, a *to*-clause can introduce a direct speech context. An addressee-honorific marker can be embedded in such a direct speech context. The respect bearer and the respect recipient shift to the speaker and the addressee of the reported context; n.b., a bare quotative also exhibits similar shifted reading (see (66)).

(54) *Ototoi, kare-wa* [*asita-made-ni-wa sigoto-o*
the day before yesterday he-TOP yesterday-until-by-FOC job-ACC
*oe-**mas**-u*]*-to **it**-te i-masi-ta.*
finish-HON$_A$-PRS-C say-CV PRG-HON$_A$-PST

Demo mada owat-te i-mas-en.
but yet finish-CV PRF-HON$_A$-NEG

'(i) The day before yesterday, he said, "I will finish the job by tomorrow." But (his job) has not been finished yet;

(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause both in the first and the second sentence);

(iii) the speaker of the reported context respects the addressee of the reported context (< *-mas* in the embedded clause).'

Indirect speech context. As we saw in Section 5.1.2, a *to*-clause and a *koto*-clause are both used to introduce an indirect speech context. First, it is rare to find an embedded addressee-honorific marker in a *to*-clause. Second, in a *koto*-clause, an embedded addressee-honorific marker is frequently observed. Let us discuss each in turn.

(A) *To*-CLAUSE. As we discussed in Section 5.1.3, there are two groups of verbs that are used with a *to*-clause and have an indirect speech reading, namely, verbs-of-saying and verbs-of-thinking. Unlike a direct speech context, an embedded addressee-honorific marker is very tricky in both cases.

First, an embedded addressee-honorific marker in an indirect speech context can be used with a verb-of-saying as illustrated in (55).[15]

(55) *Ototoi,* *kare-wa* [*kinoo-made-ni* *sigoto-o*
the day before yesterday he-TOP yesterday-until-by job-ACC
*oe-**mas**-u*]-*to* ***it**-te* *i-masi-ta.*
finish-HON$_A$-PRS-C say-CV PRG-HON$_A$-PST
'(i) The day before yesterday, he said that he would finish the job by yesterday;
(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause);
(iii) the speaker of the reported context respects the addressee of the reported context (< *-mas* in the embedded clause).'

In this example, there is a mismatch between the interpretation of the indexical item and the interpretation of *-mas*. The indexical element *kinoo* 'yesterday' is interpreted with respect to the utterance context. Nevertheless, the respect triggered by the embedded *-mas* is between the speaker and the addressee of the reported context, not the utterance context (the blended discourse, proposed by Kuno 1988).[16] Given its special status, this dissertation does not discuss

[15] ***-tte*:** Japanese is also equipped with another quotative particle *-tte* (which is used in a colloquial register). If *-to* in (55) is replaced with *-tte*, the sentence sounds much better.

[16] **Free indirect discourse:** This mismatch is a reminiscent of the free indirect discourse (Banfield 1982; Doron 1991; Schlenker 2004; Sharvit 2004, 2008; Eckardt 2015). A well-cited example is in (i), originally presented in Banfield (1982: 98), where the interpretation of *tomorrow*

this kind of special embedded addressee-honorific marker and leaves this issue to future studies.[17]

Second, verbs-of-thinking CANNOT be used with a *to*-clause if there is an embedded addressee-honorific marker. For example, the sentence in (56)b is illicit, despite the fact that it is acceptable when *-mas* is taken away from the embedded clause (= (56)a).

depends on the character's perspective but the tense is evaluated with respect to the utterance context.

(i) Free indirect discourse
Tomorrow was Monday, Monday the beginning of another school week!
(Lawrence, *Women in Love*)

	temporal adverb	verbal suffix
The sentence in (55)	*wrt* the utterance context (the utterance speaker's perspective)	*-mas*: *wrt* the reported context (the character's perspective)
The sentence in (i)	*wrt* the reported context (the character's perspective)	tense: *wrt* the utterance context (the utterance speaker's perspective)

[17] **Speech error?:** Some researchers might think that this is a speech error, external to the Japanese grammar. Due to its marginal status in frequency and variation among native speakers, perhaps it is a possible conclusion. However, with no clear empirical evidence that shows that they are indeed out of the realm of human language, I have hereby documented this construction in this section.

(56) Verbs-of-thinking

a. [*Isogasiku sugosi-te irassyair-u*]-*to* ***zonzi****-mas-u.*
busily spend-CV PRG.HON$_S$-PRS-C think.HON$_U$-HON$_A$-PRS
'(i) I think that (he) is busy (*lit.*, spending (his time) busily);
(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause);
(iii) the respect is very high.'

b. * [*Isogasiku sugosi-te irassyai-****mas****-u*]-*to*
busily spend-CV PRG.HON$_S$-HON$_A$-PRS-C
zonzi*-mas-u.*
think.HON$_U$-HON$_A$-PRS
'(i) I think that (he) is busy;
(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause);
(iii) the respect is very high;
(iv) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the embedded clause).'

However, the sentence is perfectly acceptable if we add *-koto* to the embedded clause (cf., Section 5.1.1; ex. (11)). Observe the following sentence.

(57) [*Isogasiku sugosi-te irassyai-****mas****-u-****koto***]-*to*
busily spend-CV PRG.HON$_S$-HON$_A$-PRS-C-C
zonzi*-mas-u.*
think.HON$_U$-HON$_A$-PRS
'(i) I think that (he) is busy;
(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause);
(iii) the respect is very high;
(iv) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the embedded clause).'

(B) *Koto*-CLAUSE. From the examination in Section 5.1.3, we know that a *koto*-clause is compatible with many embedding predicates. If an appropriate context

is provided, a *koto*-clause is able to embed addressee-honorific markers. However, some are more common than the others.

Prototypical examples are those that embody the reiteration constellation (*à la* Stegovec and Kaufmann 2015), where the reported speech context and the utterance speech context are conflated. In particular, explicit performative predicates and bouletic predicates are commonly observed, as shown in (58) and (59).

(58) Explicit performatives

a. *wab-* 'apologize'

[*Go-meiwaku-o* *o-kake* *itasi-**masi**-ta-koto*]*-o*
HON-trouble-ACC HON-giving do.HON$_U$-HON$_A$-PST-C-ACC
*o-**wabi*** *itasi-mas-u.*
HON-apologizing do.HON$_U$-HON$_A$-PRS
'(i) (I) apologize for having given (you) trouble;
(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause);
(iii) the respect is very high;
(iv) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the embedded clause).'

b. *o-rei sur-* 'thank'

[*Go-kyooryoku* *itadak-e-**masi**-ta-koto*]
HON-cooperating receive.HON$_O$-can-HON$_A$-PST-C-ACC
***o-rei**-moosiage-mas-u.*
HON-gratitude-HON$_O$-HON$_A$-PRS
'(i) (I) thank you for (my) being able to receive your cooperation;
(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause);
(iii) the speaker respects the referent of the object noun (= *you*; < *-moosiage* 'HON$_O$');
(iv) the speaker respects the referent of the object noun (= *you*; < *-itadak-* 'HON$_O$)';
(v) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the embedded clause).'

(59) Bouletic predicates

a. *negaw-* 'desire'

[*Itiniti-mo* *hayaku* *hukkoo-ga*
one day-even early recovery-NOM
*nas-are-**mas**-u-koto*]-*o* ***negai**-mas-u.*
do.HON$_S$-PASS-HON$_A$-PRS-C-ACC desire-HON$_A$-PRS
'(i) I desire that a recovery will be done as soon as possible;
(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause);
(iii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the embedded clause);
(iv) the speaker respects the referent of the subject noun (*people associated with the recovery*; < *nas-*)'

b. *inor-* 'pray'

[*Akarui* *itine-ni* *nari-**mas**-u-koto*]-*o* *kokoro-yori*
bright year-DAT become-HON$_A$-PRS-C-ACC heart-from
*o-**inori**-moosiage-mas-u.*
HON-pray-HON$_O$-HON$_A$-PRS
'(i) I pray that (this year) becomes a bright year;
(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause);
(iii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the embedded clause).'

Given the semantic and pragmatic effects of embedded addressee-honorific markers, we can easily explain why such examples are most common. First, when making a promise or asking a favor, people often pay an extraordinary attention to the addressee's negative face (Brown and Levinson 1987 [1978]). Such situations match a hyperpolite register, in which an embedded addressee-honorific marker is favored (see, Section 5.2.1). Second, in a hyperpolite register, the main clause is typically equipped with addressee-honorific upgraders, which, in addition to intensifying the politeness level, require that the referent of the subject be the speaker's associate, most typically the speaker himself (see, Section 2.3.1). Finally, presence of an embedded addressee-honorific marker commits

the speaker to the proposition of an embedded clause (see, Section 5.2.2). For example, the sentence in (59)a commits the speaker to the embedded clause; the proposition expressed by the embedded clause is one of the speaker's publicized wish. Such a commitment is easily achieved when the referent of the subject is identical to the speaker himself. For these reasons, bouletic/commissive explicit performative constructions naturally match the semantics and pragmatics of embedded addressee-honorific markers and are seen as prototypes of embedded addressee-honorific markers.

However, this does not mean that other embedding predicates are prohibited from taking a *koto*-clause that has an embedded addressee-honorific marker. Though less frequent in use, other *koto*-taking predicates can also embed addressee-honorific markers. I do not want to bother readers with too many examples in the main body of this dissertation. Rather, in Appendix B, I provide quite a few examples I have collected on the Internet and from some corpora to demonstrate that embedded addressee-honorific markers do exist beyond the constructed examples; see p. 483.

5.2.3.3 Relative clauses

We can also find embedded addressee-honorific markers in a relative clause (Tagashira 1973: 122; Harada 1976; Miyagawa 2012, 2017). In (60), *-mas* is inside a relative clause which modifies the head noun *hako* 'box.'

(60) Relative clause

Watasi-wa [*mizutama moyoo-no ari-**mas**-u*] *hako-o*
I-TOP polka dot design-GEN be-HON$_A$-PRS box-NOM
sagasi-te ori-mas-u.
look for COP.HON$_A$-PRS
'*Reading 1: I am looking for a box that has polka dots.'
'Reading 2: I am looking for the box that has polka dots.'

Specificity effect. Harada (1976: 557-558) observes that presence of an embedded addressee-honorific marker makes the referent of the noun specific. For example, compare the sentence in (60) with (61). He finds that *hako* 'box' in (60)

has to be specific. In contrast, the speaker of (61) does not have to be looking for a specific box. A specific reading is obtained but, in addition, this sentence can be used in a situation where he wants to buy one random box as long as it has polka dots.

(61) *Watasi-wa* [*mizutama moyoo-no ar-u*] *hako-ga sagasi-te*
I-TOP polka dot design-GEN be-PRS box-NOM want
des-u.
COP.HON$_A$-PRS
'Reading 1: I want a box that has polka dots.'
'Reading 2: I want the box that has polka dots.'

This specificity effect may remind some readers of the use of the subjunctive/indicative contrast of a relative clause (Farkas 1985; Quer 1998, 2001; Giannakidou 2014; Portner 2018a: 108). For example, in French, if a relative clause takes an indicative mood, then the speaker is talking about a specific box, while a non-specific reading is obtained if the subjunctive mood is selected.[18]

(62) French

a. Indicative

Je veux une boite [*qui* ***a*** *des pois*].
I want a box which have.3.SG.INDC DET points
'There are boxes in front of me and I want one of those that have polka dots (specific reading).'

b. Subjunctive

Je veux une boite [*qui* ***ait*** *des pois*].
I want a box which have.3.SG.SUBJ DET points
'I would like any box with polka dots (non-specific reading).'

We can understand this specificity effect in (60) as a type of commitment effect as we discussed in Section 5.2.2. In (60), the speaker at least believes that it is true that 'there is a box that has polka dots' while in (61) such a commitment is absent. Since presence of an embedded addressee-honorific marker commits the

[18] **Acknowledgements:** I would like to thank Bertille Baron for the judgment and the translation.

speaker to the proposition expressed by the embedded clause, we get the message that the proposition 'there is a box that has polka dots' is taken for granted by the speaker.[19] Hence, existence of polka dots is presupposed in (60), yielding the specificity effect.

5.2.3.4 Adverbial clauses

Some adverbial clauses can also embed an addressee-honorific marker. An example is given in (63).

(63) *keredomo*-clause (adversity adverbial clause)

[{*Kare*$_i$*/watasi*$_{*i}$}*-no* *musuko-wa* *manek-are-**masi**-ta*]*-keredomo,*
he/I-GEN son-TOP invite-PASS-HON$_A$-PST-although
kare$_i$*-wa* *yob-are-mas-en* *desi-ta.*
he-TOP call-PASS-HON$_A$-NEG COP.HON$_A$-PST
'(i) Although his$_i$/my$_{*i}$ son was invited, he$_i$ was not invited;
(ii) the speaker respects the addressee.'

However, not all adverbial clauses can have an embed addressee-honorific marker as easily. For example, a *ba*-clause, which is a conditional clause in

[19] **Commitment to a property?:** The commitment to the relative clause is, however, much harder than I have explained in the main text. This is because what the relative clause denotes is typically analyzed as a property, not a proposition. It is strange to say that the speaker commits to a property, not a proposition. In the remainder of this dissertation, I will not discuss embedded addressee-honorific markers in the relative clause and leave the issue of commitment to the relative clause to future studies. One possible way to handle the problem is to take advantage of lambda-abstraction, which is commonly assumed to exist at some point in the CP-periphery (Heim and Kratzer 1998). For example, the relative clause in (i) has a relative clause whose type is analyzed as type $< e,\ t >$, as in (ii); for the sake of simplicity, I assume the proposition is a type t element. Even though the meaning of the CP (= (ii)) is a type $< e, t >$ object, the meaning of the embedded TP is a type t object as in (iii) with the assumption that the trace is interpreted as a pronoun, e.g., *it*. If we consider that the speaker can and must be committed to TP, not CP, we may unify the commitment effect in the complement clause and the specificity effect in the relative clause.

(i) This is a box which has polka dots.

(ii) $[\![[_{\text{CP}}$ which $[_{\text{TP}}\ t_i$ has polka dots$]]]\!]^c \in D_{<e,t>}$

(iii) $[\![\ [_{\text{TP}}\ t_i$ has polka dots$]]\!]^c \in D_t$

contemporary Japanese, cannot embed an addressee-honorific marker. Observe the sentences in (64). As in (64)a, *-mas* is prohibited in a *ba*-clause. In this case, we have to use the plain form as illustrated in (64)b (for the syntax of a *ba*-clause, see Yamada 2014).

(64) *ba*-clause

a. * [{*Kare$_i$/watasi$_{*i}$*}*-no* *musuko-ga*
he/I-GEN son-NOM
*manek-are-**mase***]*-ba,* *kare-wa* *yob-are-nai*
invite-PASS-HON$_A$-PST-although he-TOP call-PASS-NEG
des-yoo.
COP.HON$_A$-will
'(i) If his$_{*i}$/my$_{*i}$ son is invited, he$_{*i}$ will not be invited (intended);
(ii) the speaker respects the addressee.'

b. [{*Kare$_i$/watasi$_{*i}$*}*-no* *musuko-ga*
he/I-GEN son-NOM
manek-arere-]*-ba,* *kare-wa* *yob-are-nai*
invite-PASS-HON$_A$-PST-although he-TOP call-PASS-NEG
des-yoo.
COP.HON$_A$-will
'(i) If his$_i$/my$_i$ son is invited, he$_i$ will not be invited;
(ii) the speaker respects the addressee.'

Independence. Tagashira (1973: 127) observes that, in some adverbial clauses, the polite form is preferred when there is a main clause addressee-honorific marker.[20]

[20] **Markedness:** So far, we have examined acceptable examples of embedded addressee-honorific markers that appear in the subject position, in the object position and the in the relative clause. In these examples, the embedded addressee-honorific markers are marked, though acceptable. People do not place them in these positions unless they have a particular goal; i.e., they want to behave in the most humble way so they can have the hearer have a good impression on him. In contrast, the use of embedded addressee-honorific markers in (65) is the default choice.

(65) Adversative adverbial clause

[*Tiisai kuni* {?***da/des***-*u*}]-{*ga/keredomo*}, *hitobito-wa yutakana*
small country COP/COP.HON$_A$-although people-TOP rich
kurasi-o si-te i-mas-u.
life-ACC do-CV PRG-HON$_A$-PRS
'(i) Though (this) is a small country, people live in comfort;
(ii) the speaker respects the addressee.'

She hypothesizes that the adverbial clause in (65) is more 'independent' from the main clause than a regular subordinate clause is.[21] Support for her view comes from the fact that such complementizers have developed into discourse-markers/pragmatic-particles (Schiffrin 1987). For example, compare the sentence in (65) with (66). In (65), *-ga* and *-keredomo* 'although' are attached to the preceding embedded clause and are used to introduce a subordinate adversative clause. However, these elements can be separated from the preceding clause by a pause, as illustrated in (66). In this example, they belong to the following sentence and are analyzed as discourse-particles, which would be better translated as *however*, rather than *although*.

(66) Discourse particle

[*Tiisai kuni* {**da/des-u*}]. {*Ga/Keredomo*}, *hitobito-wa*
small country COP/COP.HON$_A$ however people-TOP
yutakana kurasi-o si-te i-mas-u.
comfort life-ACC do-CV PRG-HON$_A$-PRS
'(i) Though (this) is a small country, people live in comfort;
(ii) the speaker respects the addressee.'

At the descriptive level, we can understand that a *ga*-clause and a *keredomo*-clause are independent from the main clause — or, to borrow Emonds' (1970) term, the prejacents to which they attach have a 'root-like' status. This is why they can accommodate an embedded addressee-honorific marker and why the

[21] **Acceptability judgment:** The sentence in (65) is taken from Tagashira (1973: 127), in which she concludes that the choice of *da* results in ungrammaticality *, rather than ?. To my ear, however, *da* is not as bad as she claims, though admittedly this is the less preferred option. Based on my intuition, I put a question mark in (65). Though this may be due to an idiolectal variation, this may also be because of a language change; her paper was written almost half a century ago.

subordination markers developed into a discourse particle (though, theoretically speaking, it remains mysterious what it means to be a 'root'-like environment).[22]

This independence can be understood along the same line as the commitment effect (= (42); Section 5.2.2) and Harada's (1976) specificity effect (= (60)). As a paraphrase of 'independency,' Tagashira (1973) uses the term 'the speaker's assertion'; i.e., the subordinate clause in (65) is not so much providing 'background information' to the main clause but conveying 'the speaker's assertion' (ibid.: 133). What she is trying to capture is, I believe, the correlation between presence of an embedded addressee-honorific marker and presence of the speaker's commitment to the truth of the proposition expressed by the embedded clause.

Bare quotatives. The indexical elements in a *keredomo*-clause and a *ba*-clause do not shift. However, as we saw earlier that, in a bare quotative (Section 5.1.2; (31)), an indexical element in an adjunct quotative shifts to the reported context. An embedded addressee-honorific marker can appear in such a shifted context as well. In this construction, the respect-bearer and the respect-receiver also shift to the reported speech (cf., shift-together property).

[22] **Pragmaticization to a discourse particle:** Though the difference between (65) and (66) appears to lie in the transcription, they show a sharp contrast in their pitch contour. When they are used as a suffix (= (65)), these elements start with a low pitch accent as shown in (i), whereas discourse markers begin with a high pitch accent as in (ii). This means that, by tracking the pitch profile, we can easily tell whether the preceding segment (= *this is a small country*) is an embedded clause or just an independent utterance. In this way, (65) and (66) are by no means the same.

(i) a. … *de.* *s-u.* ***-ga***. … b. … *de.* *s-u.* ***-ke***. *re.* *do.* *mo.* …
L L L L L L L

(ii) a. … *de.* *s-u.* ***Ga***. … b. … *de.* *s-u.* ***Ke***. *re.* *do.* *mo.* …
L L H L L H L L

(67) Bare quotatives

[{*Watasi*$_i$*/kare*$_{*i}$}*-wa* *kaeri-mas-u-to*] *kare*$_i$*-wa* *se-o*
I/he-TOP go home-HON$_A$-PRS-C he-TOP back-ACC
muke-ta.
show-PST

'(i) He$_i$ turned around, (as if to say/saying/thinking) [I$_i$/he$_{*i}$ will go home];
(ii) the speaker of the reported context respects the addressee of the reported context.'

The commitment is also shifted. Crucially, in (67), the commitment of the utterance speaker is absent. Rather, the commitment of the reported speaker is implied. The generalization holds that embedded *-mas* triggers the commitment of the respect-bearer to the proposition expressed by an embedded clause.

5.2.4 Interim summary and puzzles to be discussed

In this section, we saw the syntactic and semantic/pragmatic profile of the embedded addressee-honorific marker. First, when the embedded addressee-honorific marker is present, the politeness level of a sentence is enhanced (the ENHANCEMENT EFFECT). In addition, in order to make a sentence consistent in politeness, the root clause should be appropriately polite (CONSISTENCY IN POLITENESS). There are several ways to strengthen the politeness level of the main clause. Second, the embedded addressee-honorific marker can appear (i) in a *koto*-clause that appears in a subject position, (ii) in an object (complement) clause, (iii) in a relative clause and (iv) in an adverbial clause with some exceptions (e.g., in a *ba*-clause as shown in (64)).

Puzzles. Embedded clauses are by no means a monolithic environment. In this section, we examined addressee-honorific markers that appear in different embedded environments. However, the syntax of each clause is very different from that of the other embedded environments. Even among embedded complement clauses, a direct speech context should be treated differently from an indirect speech context. Furthermore, the difference in complementizer adds an-

other layer of complexity. A comprehensive, exhaustive theory of embedded addressee-honorific markers, thus, requires us to study all the clauses thoroughly and articulate how an embedded addressee-honorific marker is sanctioned in each case. Unfortunately, such an ideal theory is beyond the scope of this last chapter.

In the remainder of this chapter, I would like to zoom in on the following puzzles concerning indirect speech, complement clauses, with the most important research question being why a *koto*-clause can embed addressee-honorific markers and why a *to*-clause fails to accommodate an addressee-honorific marker.

(68) Puzzle 1: Why can a *koto*-clause embed an addressee-honorific marker? Why is a *to*-clause not able to accommodate an addressee-honorific marker?

As we saw in Section 5.1.3, a *koto*-clause is more similar to a non-indicative clause (an infinitive, a gerund, a bare infinitive and a subjunctive), when it is compared to a *to*-clause (although, as I emphasized, a *koto*-clause does not show a perfect match with non-indicative clauses). If so, it is predicted that a *koto*-clause does not go well with main clause phenomena. For example, in English, if we compare a *to*-infinitive clause and a *that*-clause, we know that the former is defective and less lenient to main clause phenomena; e.g., grammatical patterns such as topicalization, focalization, and locative inversion do not appear in a *to*-infinitive clause. However, a *koto*-clause is more generous about an embedded addressee-honorific marker, which appears to be another main clause phenomenon.

Another puzzling property concerns the commitment effect. Presence or absence of an addressee-honorific marker is correlated with whether the commitment effect obtains. If the main goal of having an addressee-honorific marker is to enhance the politeness level of the sentence, why is there such a strong correlation?

(69) Puzzle 2: Why does the presence of an embedded addressee-honorific marker cause a commitment effect?

Furthermore, it is necessary for us to explain the other important effects in (70).

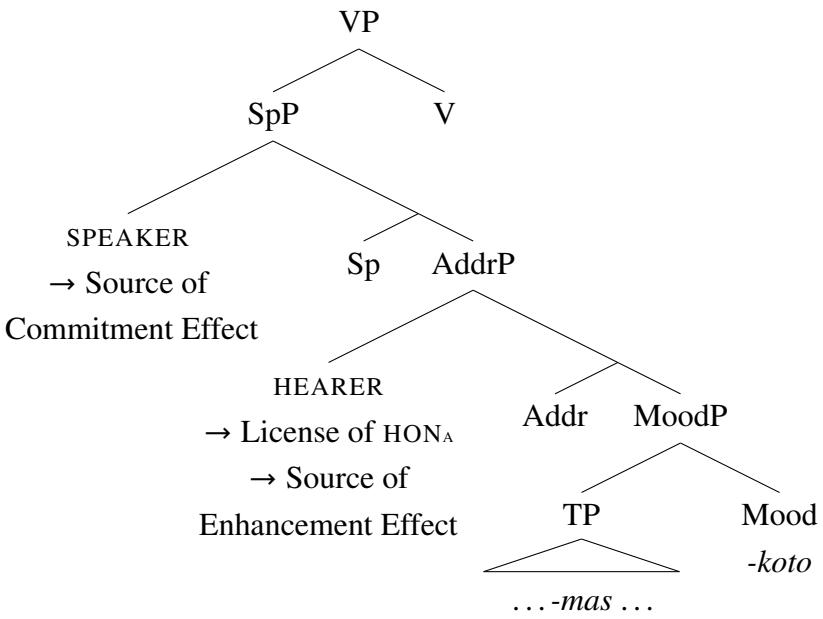
(70) a. Puzzle 3: How does the enhancement effect emerge?

b. Puzzle 4: How is the requirement about the consistency in politeness explained?

5.3 Proposal

The central claim of this chapter is very simple; the SpP-AddrP layer is embeddable. A speaker and an addressee are sometimes provided even in an embedded clause-periphery. More specifically, I argue for the structure in (71).

(71)



First, AddrP is responsible for agreement and the enhancement effect. In Chapter 3, we saw that *-mas* is a consequence of an agreement relation. I maintain this claim and further propose that, in addition to a root clause, an interpretable respect feature is provided by the embedded AddrP. The respect meaning is shipped to the storage of non-at-issue meanings and has no interaction with the other semantic operators (the multidimensional semantics). When the embedded

AddrP is present, we have two semantic objects for respect; one from the main clause and another from the embedded clause. As a result, the level of politeness is enhanced. By assuming a condition for a well-formed relation among such respect-objects, I explain how consistency in politeness is regulated.[23]

Second, I argue that the commitment effect comes from an embedded SpP. Irrespective of whether it appears in a root clause or in an embedded clause-periphery, a SpP commits the speaker to an proposition expressed by the TP. When the AddrP is present in order to license an embedded *-mas*, a SpP must also appear in the same clause-periphery, which automatically relates the speaker to what the embedded TP denotes. This brings about the commitment effect.

Finally, I analyze both *-koto* and *-to* as specifying the relation between an embedded proposition and a main clause — this is more or less the same as the traditional assumption that the main job of subordination markers is to give instruction on the way an embedded clause is linked to the main clause. But they occupy different syntactic positions. The quotative complementizer *-to* projects a CP which must be immediately dominated by a VP, while *-koto* is a realization of the head of the lowest functional projection in the clause left periphery (which I call MoodP). I argue that MoodP is semantically compatible with a SpP-AddrP layer while CP (for an indirect speech) is not.

In this section, we flesh out the hypothesis by a giving detailed characterization of these three functional projections. We start with an examination of the semantics of MoodP and CP (Section 5.3.1). Then, we provide an analysis of an embedded SpP-AddrP (Section 5.3.2). Finally, I revisit the above puzzles and show how they are accounted for by the proposed analysis (Section 5.3.3).

[23] **Embedded SpP-AddrP without *-mas*:** While this dissertation only explains why an embedded addressee-honorific marker automatically makes an embedded hearer exist in the embedded clause periphery, it remains unanswered whether the plain form [HON : −] makes embedded speech act layers available. In this dissertation, I assume that SpP and AddrP are always present in a main clause, while they are only provided where there is an embedded *-mas*, because if there is no *-mas* no commitment effect emerges, which I assume to be a consequence of an embedded SpP. I do not have a particular answer to this issue and leave this issue to future studies.

5.3.1 CP and MoodP

Based on the discussion in Section 5.1.1 (e.g., the structure in (14)b), I assume that, though they have been grouped together as Japanese 'complementizers,' *-koto* and *-to* are distributed in two distinct positions. In the following discussion, I use CP for the label of the upper projection, where *-to* appears, and MoodP for the lower layer, where *-koto* is located.[24]

Balkan subjunctive particles. Some might argue against the idea that *-koto* is a mood marker for a morpho-syntactic reason. In French and Spanish, a subjunctive mood is realized as an inflection of a verb, which is presumably around the area of TP. In contrast, *-koto* looks like an element that appears in the (lower) C-region.

However, it is also known that the subjunctive marking is available in the clause periphery, most notably, in Balkan languages (e.g. Albanian, Bulgarian, Serbo-Croatian, and Romanian; see Rivero 1994; Terzi 1992; Roussou 2000; Bulatovic 2008; Todorovic 2012; Socanac 2017). For example, the boldface elements in (72) are analyzed as subjunctive particles that function "both as a marker of the subjunctive mood (some kind of inflectional prefix) and as a subordinating conjunction (Dobrovie-Sorin 1994: 93)."

[24] **MoodP:** As for the label of this latter projection, two comments are in order. First, I name this projection after the SentMoodP proposed by Portner et al. (2019). However, I would rather like to call it MoodP. This is because the label SentMood sounds as if this is unique to the main clause (though they do assume that SentMoodP is embeddable). In order to clarify their embeddability, I use a more neutral notion, Mood. Second, position-wise, this projection is comparable to FinP (Rizzi 1997; Baker and Alok 2019) in that this is the lowest projection in the left periphery. However, as we saw in Section 5.1.3, the non-finite/finite distinction does not show a perfect match with the use of *-koto*. So, I would rather like to call it MoodP.

(72) Subjunctive particles in Balkan languages

a. Greek (Roussou 2009: 1812)

O Kostas theli [***na*** *odhiji*].
the Kostas want.3.SG SUBJ drive.3.SG
'John wants (him) to drive.'

b. Bulgarian (Socanac 2017: 119)

Ivan zapovjada [***da*** *dojdes*].
John order.3.SG. SUBJ come.2.SG
'John orders you to come.'

c. Romanian (Socanac 2017: 119)

Ion a reusit [***sa*** *vina*]
John managed.3.SG SUBJ come.3.SG
'John managed to come.'

d. Serbian (Socanac 2017: 119)

Marko zna [***da*** *vozi* *auto*].
Mark know.3.SG SUBJ drive.3.SG car
'Mark knows how to drive a car.'

Furthermore, in some languages these particles are known to appear with a complementizer as shown in (73), exhibiting a similarity with *-koto*, which can also be embedded inside a *to*-clause. For example, see (74) (cf., (11) in Section 5.1.1; (57) in Section 5.2.3.2).

(73) a. Romanian (Socanac 2017: 128)

Vreau [***ca*** *Petru* ***sa*** *citeasca* *o* *arte.*].
want.1.SG that Peter SUBJ read.3.SG a book
'I want Peter to read a book.'

b. Albanian (Socanac 2017: 128)

Une dua [***qe*** *Brixhida* ***te*** *kendoje*].
I want.1.SG that Brigitte SUBJ sing.3.SG
'I want Brigitte to sing.'

(74) [[*Yuuyoosei-o* *go-annai* *deki-ru-**koto**]-**to**]
usability-ACC HON-explanation can-HONs-PRS-C-C
zonzi-mas-u.
think.HONu-HONa-PRS
'(i) (We) think (we) can explain the usability.
(ii) the speaker respects the addressee (< *-mas*);
(iii) the respect is very high (< *zonzi-*);
(iv) the speaker respects people who are given the explanation.'

Since these subjunctive particles in Balkan languages are treated as a mood particle, I assume that it is reasonable to call *-koto* a "mood marker." To highlight the difference from the position of *-to*, I refer to the position as the head of MoodP.

Portner (2018c) and Mari and Portner (to appear). Despite their difference in syntactic positions, *-to* and *-koto* are both subordination markers. It is thus quite reasonable to see them as a linker specifying the way an embedded clause is interpreted. To elaborate this intuition, this subsection provides an analysis characterizing their semantic profiles by extending the analysis of Portner (2018c) and Mari and Portner (to appear), which is originally developed for the verbal mood in European languages.

As a discourse context is to a main clause, an attitude verb is to an embedded clause. Portner (2018c) and Mari and Portner (to appear) push this idea by analyzing mood elements (indicative mood/subjunctive mood indicators) as responsible for connecting the meaning of an embedded clause with a modal background coming from an embedding predicate in much the same way we connect a main clause with a discourse context. Consider the semantics in (75), which they propose for the meaning of the embedded moods in Romance languages: (i) an indicative and a subjunctive morpheme relate the proposition expressed by an embedded clause (= p) with a modal background (= T) and (ii), in the case of subjunctives, it is also involved with an ordering source (= O).

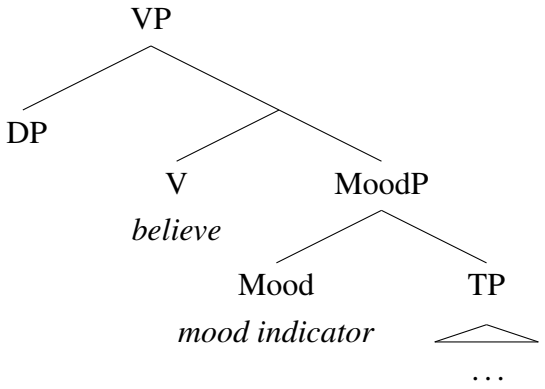
(75) a. $[\![indic]\!] = \lambda p.\ \lambda T.\ \lambda w.\ \cap T(x, w) \subseteq p.$
b. $[\![subj]\!] = \lambda p.\lambda <T, O> .\ \{<\text{SIM}(p)(w), \text{SIM}(\neg p)(w)>: w \in \cap T(w)\} \subseteq_{\leq_{O(w)}} .$

To see how this works, let us take a few examples. First, consider the sentence in (76) (French) and the assumed syntactic structure in (77).[25]

(76) Indicative clause

Jean croit [*que Marie* ***est*** *enceinte*].
Jean believe.3.SG.INDIC that Marie be.3.SG.INDIC pregnant
'Jean believes that Marie is pregnant.'

(77)



The following derivation is assumed for an indicative mood, which instantiates their insight that there is only one single modal background (= T) relevant to an indicative mood; i.e., no ordering source plays a role (see also Giorgi and Pianesi 1997: Chapter 5). This is because typically indicative-taking predicates such as verbs-of-thinking/knowing/asserting/mental creation/... are not involved with preferential meanings (Portner 2018b: 72, 2018c; Mari and Portner to appear).[26]

[25] **Position of mood markers:** Mari and Portner (to appear) and Portner (2018c) prudently avoid proposing any syntactic analysis especially about the position where the mood operator is located and the tree in (76) is what I assume that they (tacitly) assume. So the presented argument is what I reconstruct from their analysis, which I believe is one possible concrete implementation of their insights. I suspect that the reason why they are very careful about the position of the mood marker comes from the fact the mood indicators in French and Italian — the languages they investigate — are encoded as an inflection, whose pronunciation site is presumably T, not a position higher than this. Here in (76), I dare assume that the mood operator is interpreted in a position higher than the verb and the subject — a position high enough to scope over the proposition to emphasize the similarity between French/Italian mood system and Japanese/Balkan mood system. I also simplify the tree in (76) by not explicitly identifying the position of the complementizer *que* 'that' and its semantic contribution. [26] **Difference between Portner (2018c) and Mari and Portner (to appear):** There are some

(78) a. $[\![\ indic\ ]\!] = \lambda p.\ \lambda T.\ \lambda w.\ \cap T(w) \subseteq p.$

b. $[\![$ MoodP $]\!] = \lambda T.\ \lambda w.\ \cap T(w) \subseteq \{v$: Marie is pregnant in $v\}$.

c. $[\![\ believe\ ]\!] = \lambda r.\lambda e.\ \lambda w.\ r(\ \text{DOX}\ )(w)\ \wedge believe(e, w)$.

d. $[\![$ VP $]\!] = \lambda e.\ \lambda w.\ \cap\ \text{DOX}(w) \subseteq \{v$: Marie is pregnant in $v\} \wedge$ $believe(e, w) \wedge \text{EXP}(j, e, w)$.

The mood operator is designed to take the meaning of an embedded proposition p (= (78)a). Then, it situates this proposition against the modal background T, which will be provided by an embedding predicate. For example, in (78)c, the verb *believe* specifies that the relevant modal background is doxastic.

Second, a subjunctive mood indicator is involved with two modal backgrounds. Consider the sentence in (79).

(79) Subjunctive clause

Jean veut [*que Marie* ***soit*** *heureuse*].
Jean wants that Marie be.3.SG.SUBJ happy
'Jean wants Marie to be happy.'

It is known that bouletic predicates usually take a subjunctive (but see, e.g., Abruzzesse dialect in Italian; D'Alessandro and Ledgeway 2010). Being preferential, such embedding predicates are supposed to provide two modal backgrounds; i.e., not only the baseline set of propositions (which they call the Target), but also an ordering source (Ordering). They propose that (i) such embedding predicates provide two modal backgrounds and (ii) the subjunctive mood operator explicitly requires that two modal backgrounds be given by the embedding predicate. For instance, (80) shows how the derivation goes.[27]

differences between Portner (2018c) and Mari and Portner (to appear). For illustration's sake, I have slightly modified and unified the proposals in these two papers, so that the connection to my analysis becomes clearer in later discussions.

[27] **Notation ($\leq_{O(x,w)}$):** The symbol ≤ is used to refer to the set of tuples that indicate the ranking between the two sets of worlds based on the nature of the ordering designated by O with respect to the attitude holder x in w.

(80) a. $[\![subj]\!] = \lambda p.\lambda <T, O> . \lambda w.$
$\{< \text{SIM}(p)(w), \text{SIM}(\neg p)(w) >: w \in \cap T(x, w)\}$
$\subseteq_{\leq_{O(x,w)}}$.

b. $[\![\text{MoodP}]\!] = \lambda <T, O> . \lambda w.$
$\{< \text{SIM}([\![\text{TP}]\!])(w), \text{SIM}(\neg[\![\text{TP}]\!])(w) >: w \in$
$\cap T(x, w)\} \subseteq_{\leq_{O(x,w)}}$.

c. $[\![want]\!] = \lambda r.\ \lambda e.\ \lambda w.\ r(< \text{BUL}, \text{DOX} >)(w) \wedge want(e, w).$

d. $[\![\text{VP}]\!] = \lambda e.\ \lambda w.\ \{< \text{SIM}([\![\text{TP}]\!])(w), \text{SIM}(\neg[\![\text{TP}]\!])(w) >:$
$w \in \cap \text{DOX}(w)\} \subseteq_{\leq_{Bul(x,w)}} \wedge want(e, w) \wedge$
$\text{EXP}(e, w, j)$.

If the embedding predicate provides an inappropriate number of modal backgrounds, the derivation crashes, yielding an unacceptable sentence. The gist of their analysis is summarized as follows (Portner 2018c).

(81) a. The semantics of a propositional attitude verb is a predicate of events that is associated with a sequence of modal backgrounds.

b. In the semantic composition of propositional attitude verb with a mood marked clause, the mood morpheme is a modal operator which takes the backgrounds provided by the higher verb as argument.

c. Indicative and subjunctive differ in their argument structure — indicative takes one modal background as argument, while subjunctive takes two.

d. The mood selection properties of a verb follow from the number of modal backgrounds which are available to the mood marked complement clause.

Admittedly, as I emphasized above, the *koto/to*-distinction in Japanese does not show a perfect match with the indicative-subjunctive contrast, so we cannot approximate the meanings by the denotations they provide for indicative and subjunctive mood indicators. However, I would like to show that the basic assumptions from (81) can be maintained and applied to Japanese clause selection system with a slight modification.

Semantics of Japanese subordination markers. Following Mari and Portner's insight that verbal mood manipulates the relation among (i) the embedded proposition (= p), (ii) the attitude holder (= x), and (iii) the modal backgrounds (= O and T) in the given world (= w), I propose that Japanese subordination markers are also characterized much in the same way.[28]

First, *-koto* is a functor that specifies the relations among the three elements under the given world w. Reflecting the fact that a *koto*-clause is not restricted to preferential predicates, I analyze the meaning as follows (= (82)); the rigid definition of 'best' worlds will be provided shortly below.

(82) Denotation of *-koto* (First version)
$[\![$ *-koto* $]\!]$ = $\lambda p \in D_{wt}. \lambda M \in D_m. \lambda x \in D_e. \lambda w \in D_w$. The attitude holder x has a proposition p in the best worlds with respect to his or her modal background(s) M in w.

Here I assume the following semantic types. The M in (82) is a type m variable. D_m is a set of possible modal meaning associated with embedding predicates. Since some embedding predicates provide a set of modal backgrounds and others are associated with a single modal background (= D_b), D_m is composed of D_b and $\{< x, y > \in D_b \times \in D_b\}$.

(83) Semantic Types

D_e	: the set of entities	D_v	: the set of events
D_t	: the set of truth values	D_b	: the set of modal backgrounds
D_w	: the set of worlds	D_m	: $D_b \cup \{< x, y > \in D_b \times \in D_b\}$

Second, *-to* has a prespecified modal background Dox (the doxastic modal background). This analysis captures the observation that a *to*-clause is dedicated to verbs-of-thinking/saying.[29]

[28] **Heimian conditional approach vs. Krazerian necessity semantics:** Though Portner (2018c) and Mari and Portner (to appear) use the Heimian approach to the preference semantics, I adopt the Kratzerian necessity semantics for bouletic predicates. Nothing in our discussion hinges upon the choice of these approaches (see, von Fintel 1999; Rubinstein 2012, 2017; Portner 2018c).

[29] **Direct speech:** As mentioned, *-to* can also be used as a direct speech particle. I do not propose anything about this direct speech use.

(84) Denotation of *-to* (for indirect speech) (First version)
$[\![$ *-to* $]\!] = \lambda p.\ \lambda M \in D_m.\ \lambda x \in D_e.\ \lambda w.\ x$ has p in his doxastic modal base (Dox) in w.

But this denotation in (84) poses two interrelated questions. First, what is the denotation of *omow-* 'think/feel'? If the doxastic modal background is provided by the subordination marker, not by the embedding predicate, does this mean that a doxastic predicate is semantically vacuous or redundant in Japanese? Second, does a *to*-clause not connect an embedded clause with a matrix clause? The lambda M plays no role in (84). If we remove M from the semantics, a *to*-clause is predicted to be a property ($\in D_{<e,wt>}$), as if it were a relative clause.

To solve these problems, I improve the semantics as follows. First, verbs that are used with a complement clause are equipped with two layers of meaning — the layer for the event semantics and the layer for the modal meaning. For example, the verb *run* is given the denotation as in (85)a. In contrast, complement-taking predicates such as *desire* and *believe* are not only equipped with this layer of event semantics but they also provide a layer of modal meanings. The denotation of the verb *desire* is given in (85)b. For the sake of ease in interpretation, I use different rows for different semantic dimensions and place a small circle to clarify the boundary of the rows.

(85) a. $[\![$*hasir-*'run'$]\!] = \lambda x.\ \lambda e.\ \lambda w.\ run(e, w) \wedge \text{AG}(e, x).$

b. $[\![$*nozom-*'desire'$]\!] = \left[\begin{array}{r} \lambda x.\ \lambda e.\ \lambda w.\ desire(e, w) \wedge \text{AG}(e, x) \\ \text{: } \textit{(event)} \\ \bullet \\ \lambda y. \in D_e.\ \lambda u \in D_w. \\ < Dox(y, u), Bul(y, u) > \\ \text{: } \textit{(modal background)} \end{array}\right]$

c. $[\![$*omow-*'think/feel'$]\!] = \lambda x.\ \lambda e.\ \lambda w.\ think(e, w) \wedge \text{EXP}(e, x).$

As mentioned above, unlike English, the doxastic modal background is provided by *-to*, not by an embedding predicate; the denotation of *omow-* 'think/feel' is analyzed as in (85)c consisting only of the event layer of meaning.

Second, I improve the semantics for *-koto* and *-to* as follows.

(86) Denotation of *-koto* (Final version)

$$[\![\textit{-koto}]\!] = \lambda p \in D_{wt}.\ \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.\ \lambda x \in D_e.$$
$$\lambda w \in D_w. \left[\begin{array}{l} \lambda e \in D_v.\ M[\,1\,](x)(e)(w) \quad : \textit{(event)} \\ \bullet \\ \textsc{best}(M[\,2\,](x)(w)) \subseteq \{u : p(u)\} \\ \qquad\qquad\qquad\qquad : \textit{(modal background)} \end{array}\right]$$

(87) Denotation of *-to* (for indirect speech) (Final version)

$$[\![\textit{-to}]\!] = \lambda p \in D_{wt}.\ \lambda M \in D_{<e,<v,wt>>}.\ \lambda x \in D_e.$$
$$\lambda w \in D_w. \left[\begin{array}{l} \lambda e \in D_v.\ M(x)(e)(w) \quad : \textit{(event)} \\ \bullet \\ \textsc{best}(Dox(x,w)) \subseteq \{u : p(u)\} \\ \qquad\qquad\qquad\qquad : \textit{(modal background)} \end{array}\right]$$

Concerning the notation, two remarks are in order. First, I use brackets "[" to refer to the relevant dimension (row) of the multidimensional meaning. For example, when a semantic object X has three dimensions, the object in the first dimension is referred to by $X\,[\,1\,]$. In the example below, this refers to the semantic object a. Likewise, $X\,[\,2\,] = b$ and $X\,[\,3\,] = c$. There is no reason to use natural numbers to refer to these dimensions. We can alternatively write, for example, as $X\,[$ *"at-issue"* $]$ but, due to limited space, I use natural numbers.

(88) $$X = \left[\begin{array}{l} a \\ \bullet \\ b \\ \bullet \\ c \end{array}\right]$$

Second, the BEST-function here is defined as in (89). The job of this function is to take a modal background or a set of modal backgrounds and to return a set of best worlds.

(89) **BEST-function:**

BEST

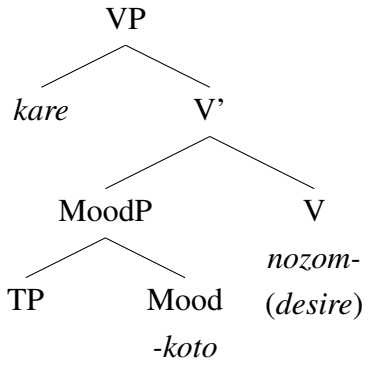
$$= \begin{cases} \text{(i) } \lambda M.\{w : \forall p \in M.w \in p\}, & \\ & \text{if} M \in \wp(\wp(D_w)). \\ \text{(ii) } \lambda M.\{w \in \cap M_1 : \neg\exists w' \neq w \in \cap M_1 \; s.t., w' \leq_{M_2} w\}, & \\ & \text{if} M \in \wp(\wp(D_w)) \times \wp(\wp(D_w)). \\ \text{(iii) undefined,} & \text{otherwise.} \end{cases}$$

where M_1 and M_2 refers to the first and the second component of the tuple M.

Example 1 (*-koto* with *nozom-* 'desire'). To see how this analysis works, consider the sentence in (90) (= (11)a) assuming the structure in (91).

(90) *Kare-wa* [*watasi-ga hasir-u-koto*]*-o* ***nozon****-de i-ru.*
he-TOP I-NOM run-PRS-C-ACC desire-CV PRG-PRS
'He desires that I run.' (Context: The speaker is Lucia.)

(91)



The derivation is shown in (92). In (92)a, I assume that the denotation of TP is a characteristic function of worlds. The denotation of *-koto* is given in (92)b. After lambda conversion, we have the denotation for MoodP in (92)c. MoodP is merged with the embedding predicate *nozom-* 'desire,' whose denotation is given in (92)d. Via a functional application, we derive the meaning of V' as in (92)e. In (92)f, I assume that the external theta role comes from the specifier position of VP for simplicity's sake.

(92) a. $[\![\text{TP}_{\text{emb}}]\!]^c$ = $\lambda w \in D_w$. Lucia runs in w.

b. $[\![\text{Mood}]\!]^c$ (*-koto*) = $\lambda p \in D_{wt}.\ \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.$
$\lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ M[\,1\,](x)(e)(w) \\ \qquad\qquad \bullet \\ \text{BEST}(M[\,2\,](x)(w)) \subseteq \{u : p(u)\} \end{array}\right]$

c. $[\![\text{MoodP}]\!]^c$ = $[\![\text{Mood}]\!]^c([\![\text{TP}]\!]^c)$
= $\lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.\ \lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ M[\,1\,](x)(e)(w) \\ \qquad\qquad \bullet \\ \text{BEST}(M[\,2\,](x)(w)) \\ \subseteq \{u : \text{Lucia runs in } u\} \end{array}\right]$

d. $[\![\text{V}]\!]^c$ (*nozom-*) =
$\left[\begin{array}{l} \lambda x \in D_e.\ \lambda e \in D_v.\ \lambda w \in D_w. \\ \quad desire(e,w) \wedge \text{EXP}(e,w,x) \ : \textit{(event)} \\ \qquad\qquad \bullet \\ \lambda x \in D_e.\ \lambda w \in D_w. \\ \quad <Dox(x,w), Bul(x,w)>\ . \\ \qquad\qquad : \textit{(modal background)} \end{array}\right]$

e. $[\![\text{V}']\!]^c$ = $[\![\text{MoodP}]\!]^c([\![\text{V}]\!]^c)$
= $\lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v. \\ desire(e,w) \wedge \text{EXP}(e,w,x) \ : \textit{(event)} \\ \qquad\qquad \bullet \\ \text{BEST}(<Dox(x,w), Bul(x,w)>) \\ \subseteq \{u : \text{Lucia runs in } u\} \\ \qquad\qquad : \textit{(modal background)} \end{array}\right]$

f. $[\![\text{VP}]\!]^c$ = $\lambda w \in D_w$.

$$\left[\begin{array}{l} \lambda e \in D_v.\ desire(e,w) \wedge \textsc{exp}(e,w,[\![\text{he}]\!]^c) \\ \qquad\qquad\qquad\qquad : \textit{(event)} \\ \qquad\qquad\qquad\qquad \bullet \\ \textsc{best}(< Dox([\![\text{he}]\!]^c,w), Bul([\![\text{he}]\!]^c,w) >) \\ \subseteq \{u : \text{Lucia runs in } u\} \quad : \textit{(modal background)} \end{array}\right]$$

The event meaning and the modal meaning must constitute an at-issue meaning by the time other semantic operators come into play. For example, if there is negation in a matrix clause, the meaning in the modal background is the target of negation. Thus, for practical reasons, I assume that the two meanings are unified into a single at-issue meaning by conjunction, resulting in the semantics given in (93); I put a small u on the shoulder of the equation to show that a unification takes place.[30]

(93) $[\![\text{VP}]\!]$ $=^u$ $\lambda w \in D_w$.

$$\left[\begin{array}{l} \lambda e \in D_v.\ desire(e,w) \wedge \textsc{exp}(e,w,[\![\text{he}]\!]^c) \\ \qquad\qquad\qquad\qquad \wedge \\ \textsc{best}(< Dox([\![\text{he}]\!]^c,w), Bul([\![\text{he}]\!]^c,w) >) \\ \subseteq \{u : \text{Lucia runs in } u\} \\ \qquad\qquad\qquad\qquad : \textit{(at-issue)} \end{array}\right]$$

$=$ $\lambda w \in D_w$.

$$\left[\begin{array}{l} \lambda e \in D_v.\ desire(e,w) \wedge \textsc{exp}(e,w,[\![\text{he}]\!]^c) \wedge \\ \left\{\begin{array}{l} u \in \cap Dox([\![\text{he}]\!]^c,w) : \\ \neg \exists w' \neq u \in \cap Dox([\![\text{he}]\!]^c,w) \\ s.t., w' \leq_{Bul([\![\text{he}]\!]^c,w)} u \end{array}\right\} \\ \subseteq \{u : \text{Lucia runs in } u\} \end{array}\right]$$

[30] **Unification:** Some might wonder if we use the semantics in (i), under which assumption unification can be dispensed with. The need for one independent layer for a modal background becomes more apparent when we examine the commitment effect; see Section 5.3.2 for details.

(i) $[\![\textit{-koto}]\!]$ = $\lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}$. $\lambda x \in D_e$. $\lambda w \in D_w$.$\lambda e \in D_v$. $M[\ 1\ ](x)(e)(w)$
$\wedge$ $\textsc{best}(M[\ 2\ ](x)(w)) \subseteq \{u :$ Lucia runs in $u\}$

Example 2 (*-koto* with *omow-* 'think/feel'). If we replace *nozom-* 'desire' with *omow-* 'think/feel,' the sentence becomes unacceptable (= (94)).

(94) * *Kare-wa* [*watasi-ga* *hasir-u-koto*]*-o* ***omot****-ta.*
he-TOP I-NOM run-PRS-C-ACC think-PST
'He thought that I would run (intended).'

Under the given analysis, this unacceptability is understood as the result of a type mismatch. Again, assume the structure in (91). The semantics of a *koto*-clause is the same up until we create the MoodP (= (95)a), which looks for a multidimensional semantic object. However, the verb *omow-* is not equipped with a modal layer by itself (= (95)b). So, the derivation crashes.

(95) a. $[\![\text{MoodP}]\!]^c = \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.\ \lambda x \in D_e.\ \lambda w \in D_w.$
$$\left[\begin{array}{c} \lambda e \in D_v.\ M[\ 1\ ](x)(e)(w) \\ \bullet \\ \text{BEST}(M[\ 2\ ](x)(w)) \subseteq \{u : \text{Lucia runs in } u\} \end{array}\right]$$
b. $[\![\text{V}]\!]^c = \lambda x \in D_e.\ \lambda e \in D_v.\ \lambda w \in D_w.$
(*omow-*) $think(e, w) \wedge \text{EXP}(e, w, x)$

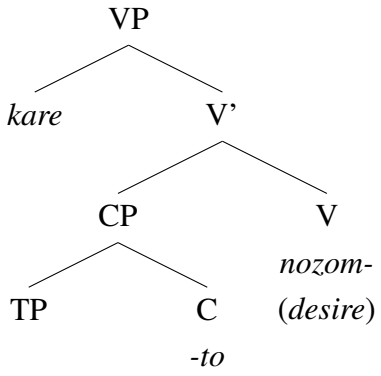
Example 3 (*-to* with *nozom-* 'desire'). Unlike a *koto*-clause, a *to*-clause cannot be used with *nozom-* 'desire' as shown by the unacceptability of the sentence in (96) (= (11)b).[31]

(96) * *Kare-wa* [*watasi-ga* *hasir-u*]*-to* ***nozon****-de* *i-ru.*
he-TOP I-NOM run-PRS-C desire-CV PRG-PRS
'He desires that I run (indirect speech reading; intended).'

[31] **Available reading in (96)b:** The only possible reading for (96) is the reading in which the *to*-clause is interpreted as a bare quotative. Even in the bare quotative reading, however, the sentence sounds awkward for two reasons. First, what he desires is not verbalized. Since Japanese is a *pro*-drop language, a non-verbalized argument is permitted. But without any contextual clue, such an ellipsis makes the sentence sound quite unsaturated. Second, typically, bare quotatives require the event depicted by the main predicate to be an agentive event. By coercion, such an agentive reading is not impossible but typically it is less common with such a bouletic predicate. The intended reading for (96) is the reading we get from the sentence in (90) and this reading is not available in (96). So, I put an asterisk for the judgment of this sentence.

The assumed syntactic structure is given in (97). First, unlike a *koto*-clause, a *to*-clause introduces the doxastic modal background (= (98)b). Second, as a result, the CP does not seek for a multidimensional object (= (98)c). Consequently, it cannot be combined with a verb with a multidimensional meaning (= (98)d).

(97)



(98) a. $[\![\text{TP}_{\text{emb}}]\!]^c$ = $\lambda w \in D_w$. Lucia runs in w.

b. $[\![\text{C}]\!]^c$ (*-to*) = $\lambda p \in D_{wt}.\ \lambda M \in D_{<e,<v,wt>>}.\ \lambda x \in D_e.$
$\lambda w \in D_w.$ $\left[\begin{array}{c} \lambda e \in D_v.\ M(x)(e)(w) \\ \bullet \\ \text{BEST}(Dox(x,w)) \subseteq \{u : p(u)\} \end{array}\right]$

c. $[\![\text{CP}]\!]^c$ = $\lambda M \in D_{<e,<v,wt>>}.\ \lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ M(x)(e)(w) \\ \bullet \\ \text{BEST}(Dox(x,w)) \\ \subseteq \{u : \text{Lucia runs in } (u)\} \end{array}\right]$

d. $[\![\text{V}]\!]^c$ (*nozom-*) = $\left[\begin{array}{l} \lambda x \in D_e.\ \lambda e \in D_v.\ \lambda w \in D_w. \\ \quad desire(e,w) \wedge \text{EXP}(e,w,x) \\ \bullet \\ \lambda x \in D_e.\ \lambda w \in D_w. \\ \quad < Dox(x,w), Bul(x,w) > . \end{array}\right]$

Example 4 (*-to* with *omow-* 'think/feel'). In contrast to (96), the following sentence is acceptable. Assuming the structure in (97), our analysis correctly predicts that the derivation converges:

(99) *Kare-wa* [*watasi-ga hasir-u*]*-to* ***omot-te*** *i-ru.*
he-TOP I-NOM run-PRS-C think-CV PRG-PRS
'He thinks that I will run.'

(100) a. $[\![\text{CP}]\!]^c$ = $\lambda M \in D_{<e,<v,wt>>}.\ \lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ M(x)(e)(w) \\ \bullet \\ \text{BEST}(Dox(x,w)) \subseteq \{u : \text{Lucia runs in } (u)\} \end{array}\right]$

b. $[\![\text{V}]\!]^c$ = $\lambda x \in D_e.\ \lambda e \in D_v.\ \lambda w \in D_w.$
(*omow-*) $think(e,w) \wedge \text{EXP}(e,w,x)$

c. $[\![\text{V}']\!]^c$ = $\lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ think(e,w) \wedge \text{EXP}(e,w,x) \\ \bullet \\ \text{BEST}(Dox(x,w)) \subseteq \{u : \text{Lucia runs in } u\} \end{array}\right]$

d. $[\![\text{VP}]\!]^c$ = $\lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ think(e,w) \wedge \text{EXP}(e,w,[\![\text{he}]\!]^c) \\ \bullet \\ \text{BEST}(Dox([\![\text{he}]\!]^c,w)) \subseteq \{u : \text{Lucia runs in } u\} \end{array}\right]$
= $\lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ think(e,w) \wedge \text{EXP}(e,w,[\![\text{he}]\!]^c) \\ \bullet \\ \cap Dox([\![\text{he}]\!]^c,w) \subseteq \{u : \text{Lucia runs in } u\} \end{array}\right]$

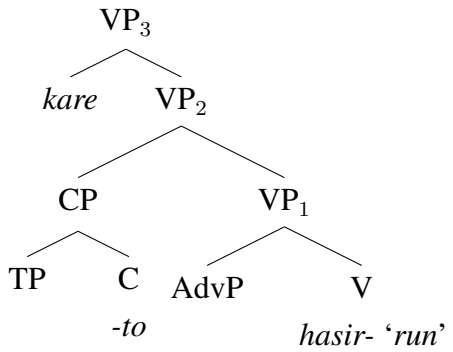
e. $[\![\text{VP}]\!]^c$ $=^u$ $\lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ think(e,w) \wedge \text{EXP}(e,w,[\![\text{he}]\!]^c) \wedge \\ \text{BEST}(Dox([\![\text{he}]\!]^c,w)) \subseteq \{u : \text{Lucia runs in } u\} \end{array}\right]$

In this way, our analysis correctly predicts which combination of a subordination marker and an embedding predicate is acceptable. In addition, it gives us desirable outcomes when we examine (i) the semantics of the bare quotative and (ii) the contrast in doubt/fear-indicating predicates. Let us see each in turn.

Example 5 (Bare quotative). The denotations in (85) and (87) predict that the sentence in (101) should be acceptable, which is correct. With the structure in (102), our analysis proposes the semantic derivation given in (103); $[\![\text{CP}]\!]^c$ is the same as (100)a.[32]

(101) *Kare-wa* [*sekaikiroku-o* *das-u*]*-to* *zensokuryoku-de* *hasit-ta.*
he-TOP world record-ACC set-PRS-C full speed-at run-PST
'He ran at full speed (thinking) that he would set a new world record.'

(102)



(103) a. $[\![\text{V}]\!]^c$ (*hasir-*) = $\lambda x \in D_e.\ \lambda e \in D_v.\ \lambda w \in D_w.$ $run(e, w) \wedge \text{AG}(e, w, x).$

b. $[\![\text{VP}_1]\!]^c$ = $\lambda x \in D_e.\ \lambda e \in D_v.\ \lambda w \in D_w.\ run(e, w)$ $\wedge \text{AG}(e, w, x) \wedge \text{MANNER}(e, w, \text{full speed}).$

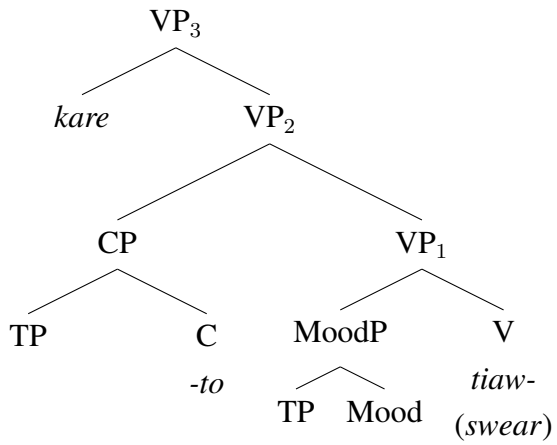
c. $[\![\text{VP}_3]\!]^c$ $=^u$ $\lambda w \in D_w.\ \lambda e \in D_v.\ run(e, w) \wedge \text{AG}(e, w, [\![\textit{he}]\!]^c) \wedge$ $\text{MANNER}(e, w, \text{full speed}) \wedge \text{BEST}(Dox([\![\textit{he}]\!]^c, w))$ $\subseteq \{u : \text{He sets a world record in } u\}.$

[32] **Indexicals:** One complication about the bare quotative is that it shows a indexical shift. For example, if we pronounce the embedded subject (101), a first person pronoun *ore* 'I' is selected, not *kare* 'he,' which highlights the difference between this construction and the preceding examples. I leave this problem to future studies.

Likewise, it is predicted that a *koto*-clause can be used together with a *to*-clause. Given the denotations in (86), (87), and (98), and the structure in (105), it is correctly predicted that the sentence in (104) is acceptable and that the VP_3 receives the denotation in (106).

(104) *Kare-wa* [*kenkoo-ni* *nar-u*]-***to*** [*watasi-ga* *hasir-u*-***koto***]-*o*
he-TOP health-DAT become-PRS-C I-NOM run-PRS-C-ACC
nozon-da.
desire-PST
'He desired that I would run (thinking/saying) that I would become healthy.'

(105)



(106) $[\![\text{VP}_3]\!]^c =^u \lambda w \in D_w.\ \lambda e \in D_v.$

$$\left[\begin{array}{l} swear(e.w) \wedge \text{EXP}(e, w, [\![\text{he}]\!]^c) \wedge \\ \text{BEST}(Dox(x, w)) \subseteq \{u : \text{Lucia becomes healthy (if} \\ \text{she runs) in } u\} \wedge \text{BEST}(< Dox(x, w), Bul(x, w) >) \\ \subseteq \{u : \text{Lucia runs in } u\} \end{array}\right]$$

Example 6 (Doubt/fear-indicating predicates). Our analysis can also explain the contrast concerning a doubt/fear-indicating predicate. Consider the sentences in (107). When used with a doubt/fear-indicating predicate, a *koto*-clause expresses what the subject doubts, while a *to*-clause expresses what he thinks is true.

(107) Doubt/fear-indicating predicate
Context: *Lucia is the speaker of the sentences.*

a. *Kare-wa* [*watasi-ga hasir-u-koto*]-*o* ***utagat****-te i-ru.*
he-TOP I-NOM run-PRS-C-ACC doubt-CV PRG-PRS
'He doubted (the fact) that I would run.'

b. *Kare-wa* [*watasi-ga hasir-u*]-*to* ***utagat****-te i-ru.*
he-TOP I-NOM run-PRS-C doubt-CV PRG-PRS
'He doubted (it, thinking) that I will run.'
= 'He suspects that I will run.'

First, our analysis correctly predicts that the proposition that *I (would) run* is a proposition that he doubts in (107)a. The denotation of VP^3 is given in (108)a, in which the set of worlds compatible with the proposition that *he* doubts entails that the speaker runs. Second, it is also correctly predicted that the sentence in (107)b means that the proposition that the speaker runs is a proposition that *he* thinks is true (= (108)b). The denotation of VP^3 is given in (108)b.

(108) a. $[\![VP^3]\!]^c =^u \lambda w \in D_w.\ \lambda e \in D_v.$
(with *-koto*) $\left[\begin{array}{l} doubt(e,w) \wedge \text{EXP}(e,w,[\![\text{he}]\!]^c) \wedge \\ \cap Doubt([\![\text{he}]\!]^c, w) \subseteq \{u : \text{Lucia runs in } u\} \end{array} \right]$

b. $[\![VP^3]\!]^c =^u \lambda w \in D_w.\ \lambda e \in D_v.$
(with *-to*) $\left[\begin{array}{l} doubt(e,w) \wedge \text{EXP}(e,w,[\![\text{he}]\!]^c) \wedge \\ \cap Dox([\![\text{he}]\!]^c, w) \subseteq \{u : \text{Lucia runs in } u\} \end{array} \right]$

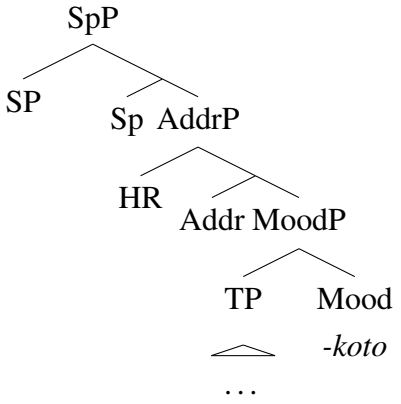
5.3.2 Embedded SpP-AddrP

Now that we have characterized the semantics of MoodP and CP, let us turn to the other projections in the clause periphery, namely SpP and AddrP. The central goal of this chapter is to demonstrate that these speech act layers are embeddable. Admittedly, this is not an assumption that all researchers adopt without hesitation. Indeed, the opposite view that the SpP-AddrP layers are not embeddable has been the dominant view in the current literature discussing the syntax-discourse interface (Zu 2018; Portner et al. 2019).

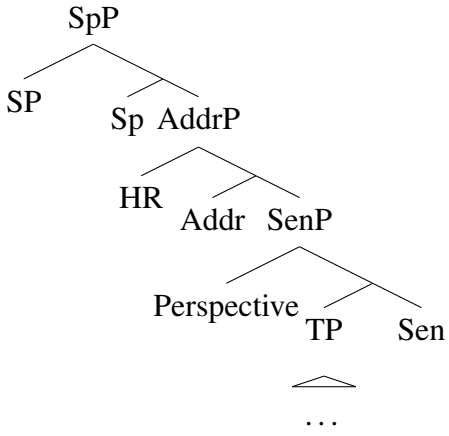
Here, we review some arguments from previous studies against the embedded SpP-AddrP analysis. It is shown that their reasoning is not strong enough to refute the embedded SpP-AddrP analysis. Then, after pointing out the difference between the main clause SpP-AddrP and the embedded SpP-AddrP, we examine the semantic derivation of a sentence with an embedded addressee-honorific marker.

Embeddable or not. Why do previous studies think that speech act layers are unavailable in an embedded environment? The empirical motivation of the advocates for this view comes from the distribution of discourse participant-oriented expressions. One most recent and influential discussion of the embeddability of SpP-AddrP is found in Zu's dissertation. Zu (2018) assumes the tree in (109)b, which is akin to my proposal in (109)a. But she hypothesizes that there is only one SpP-AddrP layer per sentence, i.e., as the highest superordinate structure above the main clause.[33]

(109) a. My analysis



b. Zu (2018)



She claims that they cannot be embedded, simply because, in the languages she examines (e.g., Basque allocutive markers, Jingpo agreement and Japanese addressee-honorific markers), speaker/hearer-oriented expressions are not embeddable. Below is the relevant paragraph where she reaches this conclusion:

[33] **Comparison with Zu's work:** She does claim that SenP can be embedded. We will examine other differences and commonalities in Section 5.4.

> *Another property that characterizes the saP is that it is only present for root clauses. This is supported by the fact that agreement with the speaker and addressee only applies to root clause predicates. Oyharçabal (1993) notices that allocutive agreement cannot be embedded.* (Zu 2018: 62)

Portner et al. (2019), who investigate Korean addressee-honorific markers, also reach a similar conclusion:

> *As we have been emphasizing throughout this paper, clauses with interlocutor-addressee speech style particles, which we analyze as cPs, cannot be embedded.* (Portner et al. 2019)

The empirical motivation for the claim of unembeddability comes from their observation that discourse-oriented element do not show up in an embedded environment. However, such a generalization was made when embedded addressee-honorific markers in Japanese and other languages were not well-documented and did not catch researchers' attention. In other words, I suspect that they would have concluded otherwise or modified their analysis if embedded addressee-honorific markers had been reported by the time when they studied the phenomena. In fact, much more recently, researchers working on South Asian languages have also reported that allocutive markings are embeddable in languages such as Tamil (Dravidian, McFadden 2017, 2018), Magahi (Indo-Aryan, Verma 1991; Alok and Baker 2018; Baker and Alok 2019; Alok 2019; Baker 2019) and Punjabi (Indo-Aryan, Kaur 2017, 2018, 2019; Kaur and Yamada 2019).

(110) Tamil (McFadden 2017, his ex. (38)a)

Maya$_i$ [*avæ*$_i$ *poo*ʈʈ*i-le* ʤ*ejikkæ-poo-r-aa*]-*ŋgæ-nnŭ*]
Maya she contest-LOC win-go-PRS-3.SG.FEM-ALLOC-C
so-nn-aa.
say-PST-3.SG.FEM
'(i) Maya$_i$ said that she$_i$ would win the contest;
(ii) The utterance speaker is being polite (< *ŋgæ*).'

(111) Punjabi (Kaur and Yamada 2019, their ex. (41))

karan-ne keyaa [*ki miraa kal aayegii je*].
Karan-ERG say.PRF that Mira.NOM tomorrow come.FUT ALLOC
'(i) Karan said that Mira will come tomorrow;
(ii) the speaker respects the utterance addressee (< *je*).'

(112) Magahi (Baker and Alok 2019, their ex. (3))

Santeeaa sochk-o [*ki Banteeaa bhag ge-l-o*].
Santee thought-ALLOC:H that Bantee run go-PRF-ALLOC:H
'(i) Santee thought that Bantee went to run;
(ii) the speaker is talking to a parent (< *o*).'

If we assume that addressee-honorific markers/allocutive markers are expressions that are locally sanctioned by a syntactically represented hearer in a clause-periphery, these data, as well as what I documented in Section 5.2, suggest that such a licensing system is present in the embedded clause-periphery. Here I hypothesize that speech act projections are the licensers and adopt the assumptions in (113).[34]

[34] **Long-distance agreement:** While admitting that embedded addressee-honorific markers/allocutive markers could be sanctioned by a speech act phrase, some may argue that they are licensed by the SpP/AddrP in the root clause. Since South Asian allocutive markers have some properties not observed in Japanese (e.g., allocutive shifting, see Kaur and Yamada 2019), I do not want to make a claim about these languages. But at least as far as Japanese is concerned, a long distance agreement without assuming an intermediate clause-periphery is a very daring claim given our common understanding that agreement is phase sensitive (Chomsky 2000, 2001; Baker 2008). For example, it would be predicted that the data below is acceptable if there was a long-distance agreement in Japanese, contrary to the fact.

(i) Embedded addressee-honorific marker (= (101) on p. 251)
*[*Gomeiwaku-o o-kake si-**masi**-ta-koto*]-*wa* ***sit**-te i-ru.*
trouble-ACC HON-giving do-HONA-PST-C-TOP know-CV PRF-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the utterance context (UC) respects the addressee of the UC (< *-mas*) (intended).'

(113) Embedded SpP-AddrP

a. In principle, natural languages can embed SpP-AddrP.

b. However, SpP-AddrP is highly restricted to limited environments.

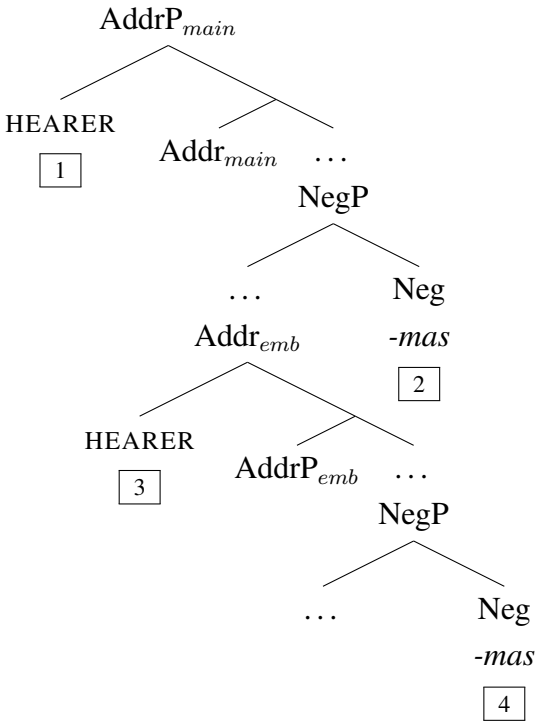
c. In some languages, the restriction is so strong that they are completely ruled out (e.g., Korean/Thai), while, in other languages, the restriction is not as strong (e.g., Japanese).

I take this generalization to be on the right track and, by restricting myself to the *koto*-clause environment in Japanese, I propose an analysis that elucidates the roles of these embedded speech act layers, especially their relation to MoodP.[35]

What if there was no embedded AddrP layer? Some might argue against the idea of embedded AddrP by proposing that the embedded *-mas* is syntactically licensed by long-distance agreement. For example, consider the structure in (114).

[35] **Variation:** The most difficult question concerning the statement in (113)c is why languages exhibit different strength in restriction. Of course, we can stipulate some possible sources for the variation. For example, Korean and Thai are CP-periphery languages as discussed in Section 3, i.e., the addressee-honorific marking appears in the CP-periphery while Japanese and Punjabi are not. Maybe, the position of the phonological exponent has something to do with the restriction. Or, perhaps, the fact that Korean and Thai addressee-honorific markers are morphologically fused forms, which also encode other grammatical functions (the gender of the speaker and the style), may be the reason for the source of the restriction. However, without any further evidence or arguments, it is hard to infer why the variation appears. Thus, I would like to take the agnostic position in this dissertation and leave such a cross-linguistic investigation to future studies. Rather, the point here is that the idea that SpP-AddrP is not embeddable is by no means a natural consequence of our empirical observations.

(114)



In Chapter 3, we argued that an honorific feature is sprouted at Neg and positions [1] and [2] are related via Agreement (Section 3.3). I maintain this view and propose that an honorific feature is also sprouted at the embedded Neg (position [4]), whose value is provided by the HEARER that appears in the spec, AddrP$_{emb}$ (position [3]).

One might alternatively propose that the honorific feature in position [4] (or position [3]) agrees with the feature in position [2] (or in position [1]) dispensing with the embedded speech act layer. If we could manage to make them agree, the idea of embedded speech act layers would be legitimately counter-argued. However, for the reasons presented below, such an approach conflicts with the traditional notion of agreement, so I defend the view that (i) *-mas* in position [4] agrees with the hearer in position [3] (just as *-mas* in [2] agrees with the hearer in [1]) and (ii) neither the embedded hearer nor the embedded *-mas* agrees with the feature(s) in position [1]/[2].

First, features in the embedded *-mas* (position [4]) must not agree with

features in position [2]. Consider the imperative sentence in (115). Here, embedded *-mas* is accompanied with no matrix addressee-honorific marker but the sentence is licit; deference to the addressee is appropriately expressed by the subject-honorific marker.

(115) Imperative

[*Asita* *bunkasai-ga* *hirak-are-**mas**-u-koto*]-*o*
tomorrow school festival-NOM hold-PASS-HON$_A$-PRS-C-ACC
go-syootioki-kudasai.
C-note-HON$_S$.APPL$_H$

'(i) Note that, tomorrow, the school festival will be held;
(ii) the speaker respects the addressee (< embedded *-mas*);
(iii) the speaker respects the referent of the main clause subject (< *kudasai*).'

Likewise, consider an example with the bouletic, adjectival suffix *-tai* 'eager (want).' In (116), where the speaker performatively expresses his desire, an embedded *-mas* is accepted without any token of main clause addressee-honorific markers.

(116) With a bouletic auxiliary *-tai* 'eager (want)'

[*Go-katuyaku* *s-are-te* *irassyai-**mas**-u-koto*]-*ni*
HON-do great things do-HON$_S$-CV PRG.HON$_S$-HON$_A$-PRS-C-DAT
keei-o *hyoo* *si-tai.*
respect-ACC expressing do-eager

'(i) I want (am eager to) to express my respect for the fact that (you) did great things;
(ii) the speaker respects the addressee (< *-mas*)
(iii) the speaker respects the referent of the embedded subject (= *you*; < *irassyai*).'

Importantly, it is not the case that an addressee-honorific marker can never be used in these environments. As shown in (117), presence of an addressee-honorific marker does not cause a problem by itself. The fact that a main clause

addressee-honorific marker is optional suggests that a main clause addressee-honorific marker is not a necessary condition for embedded addressee-honorific markers, casting a doubt on the view that embedded *-mas* is sanctioned by an element in position 2.

(117) a. [*Asita* *bunkasai-ga* *hirak-are-**mas**-u-koto*]*-o*
tomorrow school festival-NOM hold-PASS-HON$_A$-PRS-C-ACC
*go-syootioki-kudasai-**mas**-e.*
HON-note-HON$_S$.APPL$_H$-HON$_A$-IMP
'(i) Note that, tomorrow, the school festival will be held;
(ii) the speaker respects the addressee (< embedded *-mas*);
(iii) the speaker respects the referent of the main clause subject (< *kudasai*);
(iv) the speaker respects the addressee (< main clause *-mas*).'

b. [*Go-katuyaku* *s-are-te* *irassyai-**mas**-u-koto*]*-ni*
HON-do great things do-HON$_S$-CV PRG.HON$_S$-HON$_A$-PRS-C-DAT
keei-o *hyoo* *si-tai* ***des**-u.*
respect-ACC expressing do-want HON$_A$-PRS
'(i) I want to express my respect for the fact that (you) did great things;
(ii) the speaker respects the addressee (< *-mas*)
(iii) the speaker respects the referent of the embedded subject (= *you*; < *irassyai*);
(iv) the speaker respects the addressee (< main clause *des-*).'

Of course, with some subsidiary assumptions, one might try to maintain the view that position 2 is involved with agreement. For example, one might hypothesize that there is a covert main clause addressee-honorific element that appears with *-tai* and argue that it agrees with the embedded addressee-honorific marker. But this kind of invisible material cannot be detectable other than its ability to license embedded *-mas*, which also wrongly predicts that underlyingly (118)a has the form of (118)b and thus is as polite as the sentence in (118)c, contrary to the fact; (118)a is just a plain form and (118)c is more polite than (118)a; cf., as we saw in Chapter 2 (Section 2.2.3.2; ex. (156)b), *i*-adjectives

have to use *des-* when they are in the polite register.

(118) a. *Watasi-wa oyogi-tai.*
I-TOP swim-want
'I want to swim.'

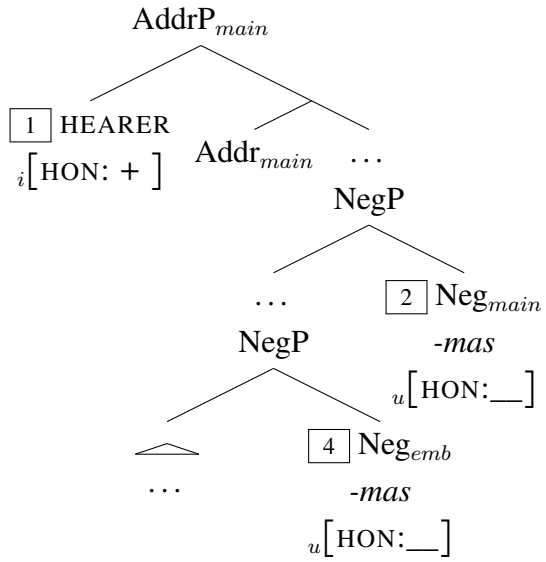
b. * *Watasi-wa oyogi-tai* ∅.
I-TOP swim-want COP.HON$_A$
'(i) I want to swim;
(ii) the speaker respects the addressee.'

c. *Watasi-wa oyogi-tai* ***des**-u.*
I-TOP swim-want COP.HON$_A$-PRS
'(i) I want to swim;
(ii) the speaker respects the addressee.'

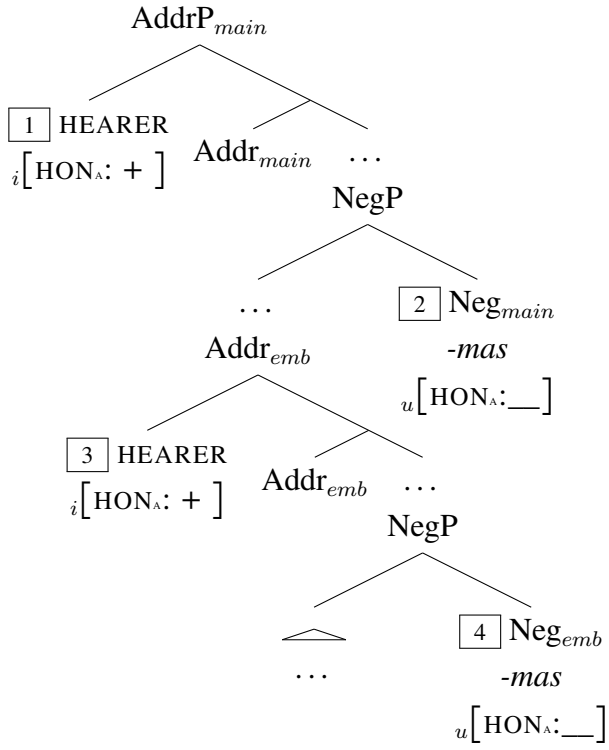
For this reason, it is hard to maintain that the main clause addressee-honorific marker (= the element at position $\boxed{2}$) syntactically licenses the addressee-honorific marker in the embedded clause.

Second, it is also difficult to see how embedded *-mas* agrees with the main clause HEARER, whether we adopt the structure in (119)a or (119)b.

(119) a.



b.



If embedded *-mas* agrees with the main clause HEARER, we predict that the agreement relation is beyond the phase boundary. But this is the wrong prediction. To see why, consider the sentences in (120). The a-sentence is acceptable in which

-mas appears in the main clause.

(120) a. [*Hasir-u-koto*]-*o* *yakusoku* *si-**mas**-u.*
run-PRS-C-ACC promise do-HON$_A$-PRS
'(i) (I) promise to run;
(ii) the speaker respect the addressee (< *-mas* in the main clause).'

b. * [*Hasiri-**mas**-u-koto*]-*o* *yakusoku* *sur-u.*
run-HON$_A$-PRS-C-ACC promise-PRS
'(i) (I) promise to run;
(ii) the speaker respect the addressee (< *-mas* in the embedded clause) (intended).'

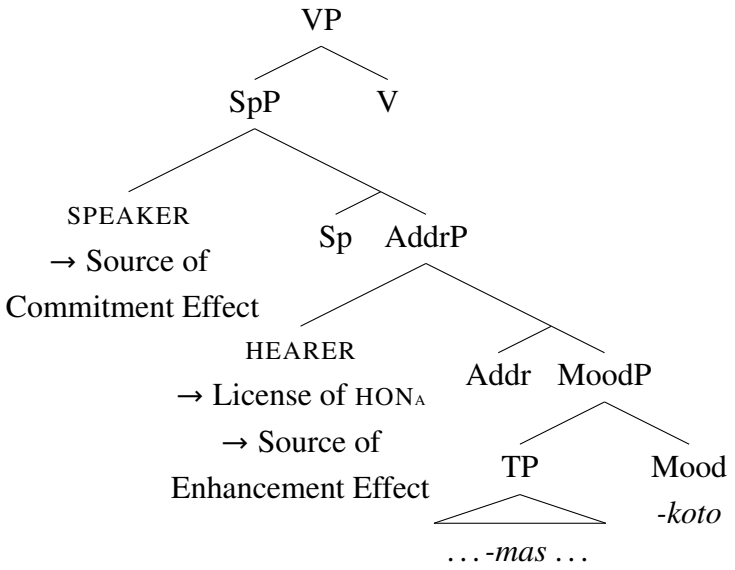
If the relation is indifferent to the phase, the b-sentence should also be acceptable, in which *-mas* is only present in the embedded clause. However, the b-sentence is illicit. Therefore, it is necessary for us to consider that the agreement between *-mas* and its licenser is phase-sensitive.

For these reasons, it is concluded that the feature of embedded *-mas* cannot be linked to the feature in position [1] or [2]. The only possibility left is that it has a grammatical relationship with the feature of the embedded specifier position of AddrP (position [3]). The proposal in Chapter 3 is maintained that the agreement relation is locally established. If we propose a mechanism by which the politeness level increases as we have as many instances of interpretable honorific features (= $_i$[HON:+]), we can satisfactorily capture the enhancement effect in semantics without having a syntactic relation between the main clause HEARER/*-mas* and the embedded HEARER/*-mas*. Below, we pursue this direction by fleshing out the semantic/pragmatic roles of the relevant interpretable features.[36]

[36] **Binding?:** One might wonder if Position [1] and Position [3] are syntactically linked in some way and might ask whether the hearer in embedded clauses (Position [3]) is bound from the addressee in Position [1]. The answer to this question does not affect the analysis in the subsequent discussions, so I would like to leave this problem to future studies. But it is at least useful to point out that if we take that direction, there are some hurdles to clear. First, since the GB-days, a common assumption for the local domain for binding has been assumed to be a TP (what is called the clause-mate condition). As is known, the binding is sensitive to a particular domain, as illustrated in (i). Since *himself* in (ii) can be bound by the matrix subject, we want

Roles of SpP/AddrP. Based on the structure in (71), repeated here as (121), I would like to propose two important properties of SpP and AddrP as given in (122).

(121)



(122) Role of SpP-AddrP phrases

a. LICENSING OF HONA/ENHANCEMENT EFFECT: embedded *-mas* agrees with the embedded HR, leaving an interpretable feature in the intermediate clause-periphery, resulting in the enhancement effect.

b. COMMITMENT: the speaker commits to the proposition expressed by the embedded TP.

to say that this domain is a TP, not a CP. If so, it is predicted that the hearer in the embedded specifier position of AddrP cannot be bound by the hearer in the main clause specifier position of AddrP, contrary to the fact. So, if one wants to propose a binding analysis, one has to modify an assumption.

(i) *James$_i$ thinks that himself$_i$ met Lucia.

(ii) [$_{TP}$ James$_i$ asks [which picture of himself$_i$ [$_{TP}$ Paul likes]].

Second, if a binding is a consequence of a copy or a movement, claiming that the embedded hearer is bound by the main clause hearer means that *-mas* is internally merged into the speech act layer with both copies deleted at PF but are present at LF. If a researcher takes the view that what was called the binding in the GB days is indeed reducible to Agree operation, the discussion whether *-mas* is involved with an Agree or a binding does not make any theoretical significance.

First, the interpretable honorific feature is in the specifier position of AddrP. As we saw above, the honorific meaning does not interact with other semantic operators in the main clause. So, it should be best viewed as a semantic object in a different plane (i.e., multidimensional semantics; Potts 2003, 2005, 2007a, b; Potts and Kawahara 2004; McCready 2014, 2018, 2019). Given this reasoning, I propose the semantics in (123).

(123) $[\![\text{HEARER}_{[\text{HON}_\text{A}: +]}]\!]^c = \lambda X. \begin{bmatrix} X & : (at\text{-}issue) \\ \bullet & \\ \lambda x. \ < x, 1, addr(c) > & : (respect) \end{bmatrix}$

The first row in (123) represents the at-issue meaning, which is identical to its sister node; that is the denotation of the MoodP. In the second row, HR introduces information about respect. Since the value of the honorific feature is positive and the target of respect is the addressee, the triple consists of 1 and $addr(c)$. The speaker is not introduced, so the respect-bearer is left open. I assume that this respect meaning gives birth to the enhancement effect.

Second, the main job of the SpP is to make the speaker commit to the at-issue meaning. However, remember that the nature of the commitment depends on the embedding predicate (Section 5.2.2). For example, in (124), the proposition that Ms. B becomes the next president is not a fact at least during the election. It is (i) a desire of the referent of the subject and (ii) a desire of the speaker of the sentence. In other words, the commitment is relativized by the modal background denoted by the embedding predicate.

(124) Commitment effect

Kare-wa [*B-si-ga* *daitooryoo-ni* *nari-**mas**-u-koto*]-*o* ***nozon**-de*
he-TOP B-Ms.-NOM president-DAT become-PRS-C-ACC desire-CV
ori-mas-u.
PRS.HON$_\text{U}$-HON$_\text{A}$-PRS
'(i) He desires that Ms. B becomes the president;
(ii) the speaker (Alice) respects the addressee (the campaign manager);
(iii) the respect is very high.'

In Section 5.3.1, we propose (125) for the semantics of *-koto* (cf., (92))

and (126) for the semantics of *nozom-* 'desire.' The meaning of a subordination marker is an attempt to relate the embedded proposition (= p) with an appropriate modal background (= $M[\ 2\ ]$) of a certain perspective holder (= x) (as well as inheriting the event semantics from the embedding predicate).

(125) Denotation of *-koto* (= (86))

$$[\![\ \textit{-koto}\ ]\!] = \lambda p \in D_{wt}.\ \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.\ \lambda x \in D_e.\ \lambda w \in D_w.\ \begin{bmatrix} \lambda e \in D_v.\ M[\ 1\ ](x)(e)(w) & : \textit{(event)} \\ \bullet & \\ \textsc{best}(M[\ 2\ ](x)(w)) \subseteq \{u : p(u)\} & \\ & : \textit{(modal background)} \end{bmatrix}$$

(126) Denotation of *nozom-* 'desire'

$$[\![\mathrm{V}]\!]^c = \textit{(nozom-)} \begin{bmatrix} \lambda x \in D_e.\ \lambda e \in D_v.\ \lambda w \in D_w.\ desire(e,w) \wedge \textsc{exp}(e,w,x) \\ \bullet \\ \lambda x \in D_e.\ \lambda w \in D_w.\ <Dox(x,w), Bul(x,w)> \end{bmatrix}$$

Assuming these denotations and the tree in (121), I propose the semantics in (127) for the SPEAKER, which explains why a commitment effect emerges with an embedded SpP/AddrP.[37]

(127) $[\![\ \textsc{speaker}\ ]\!]^c = \lambda X \in D_{<<e,<v,wt>>\bullet<e,wt>,<e,<v,<w,t\bullet t>>>>\bullet e\epsilon}.\ \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.$

$$\begin{bmatrix} X[\ 1\ ](M) & : \textit{(at-issue)} \\ \bullet & \\ X[\ 2\ ](sp(c)) & : \textit{(respect)} \\ \bullet & \\ X[\ 1\ ](M)(sp(c))(w_@) & : \textit{(commitment)} \end{bmatrix}$$

As for the at-issue meaning, it acts as an identity function. The second row shows that the speaker of context c saturates the lambda-bound variable in the respect-dimension. The speaker's commitment to the embedded proposition is provided

[37] **Source of commitment:** For convenience's sake, I identify that the SPEAKER is responsible for the commitment rather than the HEARER simply because the hearer does not play a role in the meaning of the commitment layer. But if we assume the structure in footnote 38, it may be a possibility that this commitment meaning comes from the head of SpP.

by the third row. When the SPEAKER is combined with MoodP, we obtain the semantics in (128). Crucially, the modal background has not been introduced yet but the expected modal background is shared by the at-issue meaning, which also expects a certain modal background to be provided by the embedding predicate.

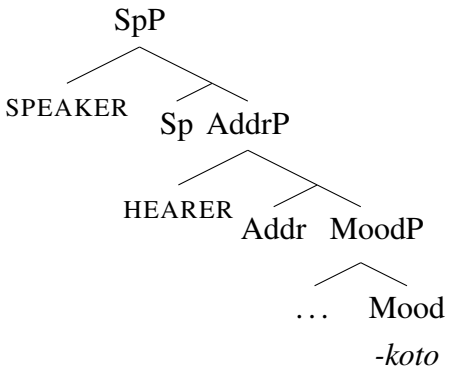
(128) $[\![\text{SpP}]\!]^c = \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.$

$$\begin{bmatrix} [\![\text{MoodP}]\!]^c(M) & : \textit{(at-issue)} \\ \bullet & \\ < sp(c), 1, addr(c) > & : \textit{(respect)} \\ \bullet & \\ [\![\text{MoodP}]\!]^c(M)(sp(c))(w_@)[\ 2\ ] & : \textit{(commitment)} \end{bmatrix}$$

Example 7 (Type I commitment). To be more precise, consider the derivation in (130), which is the analysis for the sentence in (129); n.b., this is for the Type I effect reading.

(129) *Kare-wa* [*kaigoo-ga* *11* *niti-ni* *hirak-are-mas-u-koto*]-*o*
he-TOP meeting-NOM 11 day-on hold-PASS-HON$_A$-C-ACC
nozon-de *i-mas-u.*
desire-CV PRG-HON$_A$-PRS
'(i) he desires that the meeting will be held on 11th;
(ii) the speaker respects the addressee (< *-mas* in the main clause);
(iii) the speaker respects the addressee (< *-mas* in the embedded clause).'

(130) Derivation I (Embedded clause) a *koto*-clause with an HON$_A$



a. $[\![\text{TP}_{\text{emb}}]\!]^c$ = λw. The meeting will be held on 11th in w.

b. $\left[\!\!\left[\begin{array}{c} \text{Mood}_{\text{emb}} \\ (\textit{koto}) \end{array} \right]\!\!\right]^c$ = $\lambda p \in D_{wt}.\ \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.$
$\lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ M[\,1\,](x)(e)(w) \\ \qquad\qquad\qquad\qquad \bullet \\ \text{BEST}(M[\,2\,](x)(w)) \subseteq \{u : p(u)\} \end{array} \right]$

c. $[\![\text{MoodP}_{\text{emb}}]\!]^c$ = $\lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.$
$\lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l} \lambda e \in D_v.\ M[\,1\,](x)(e)(w) \\ \qquad\qquad\qquad\qquad \bullet \\ \text{BEST}(M[\,2\,](x)(w)) \subseteq \{u : p(u)\} \end{array} \right]$

d. $[\![\text{Addr}]\!]^c = \lambda X.\ X.$

e. $[\![\text{Addr'}]\!]^c = [\![\text{MoodP}_{\text{emb}}]\!]^c$

f. $[\![\text{HEARER}]\!]^c = \lambda X \in D_{<<e,<v,wt>>\bullet<e,wt>,<e,<v,<w,t\bullet t>>>>}.$
$$\begin{bmatrix} X & : \textit{(at-issue)} \\ \bullet & \\ \lambda x.\ <x,\ 1,\ addr(c)> & : \textit{(respect)} \end{bmatrix}$$

g. $[\![\text{AddrP}]\!]^c =$
$$\begin{bmatrix} [\![\text{MoodP}_{\text{emb}}]\!]^c & : \textit{(at-issue)} \\ \bullet & \\ \lambda x.\ <x, 1, addr(c)> & : \textit{(respect)} \end{bmatrix}$$

h. $[\![\text{Sp}]\!]^c = \lambda X.\ X.$

i. $[\![\text{Sp'}]\!]^c = [\![\text{AddrP}]\!]^c$

j. $[\![\text{SPEAKER}]\!]^c = \lambda X \in D_{<<e,<v,wt>>\bullet<e,wt>,<e,<v,<w,t\bullet t>>>>\bullet e\epsilon}.$
$\lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.$
$$\begin{bmatrix} X\,[\ 1\ ](M) & : \textit{(at-issue)} \\ \bullet & \\ X\,[\ 2\ ](sp(c)) & : \textit{(respect)} \\ \bullet & \\ X\,[\ 1\ ](M)(sp(c))(w_@)[\ 2\ ] & : \textit{(commitment)} \end{bmatrix}$$

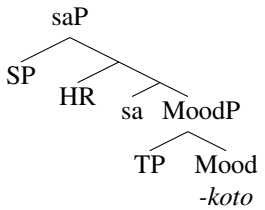
k. $[\![\text{SpP}]\!]^c = \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.$
$$\begin{bmatrix} [\![\text{MoodP}_{\text{emb}}]\!]^c(M) & : \textit{(at-issue)} \\ \bullet & \\ <sp(c), 1, addr(c)> & : \textit{(respect)} \\ \bullet & \\ [\![\text{MoodP}_{\text{emb}}]\!]^c(M)(sp(c))(w_@)[\ 2\ ] & : \textit{(commitment)} \end{bmatrix}$$

Notice that when we reach (130)k the semantic object in the second row has no lambda-bound variable. The expressive respect-dimension is now ready for interpretation. I assume that, when fully saturated, non-at-issue meanings are shipped to a 'storage' and are no longer active in the semantic derivation. As a result, (130)k results in (131). For ease of representation, I put a star on the shoulder of the equation symbol ($=^{\star}$) to indicate that shipping of the non-at-issue meaning has happened at the relevant moment.[38]

(131) $[\![\ \text{SpP}\ ]\!]^c \quad =^{\star} \quad \lambda M. \left[\begin{array}{l} [\![\ \text{MoodP}_{\text{emb}}\ ]\!]^c(M) \quad : \textit{(at-issue)} \\ \bullet \\ [\![\ \text{MoodP}_{\text{emb}}\ ]\!]^c(M)(sp(c))(w_{@})[\ 2\ ] \\ \quad : \textit{(commitment)} \end{array}\right]$

[38] **SpP-AddrP or a single saP:** The assumption that Sp and Addr are identity functions makes the tree practically similar to the one in (i), where the SP and HR both exist in specifiers of the same projection.

(i) an alternative tree



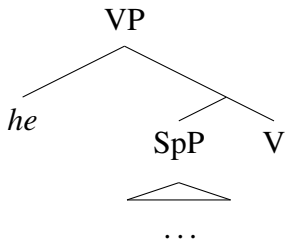
In practice, the difference in (130) and (i) does not cause a serious change in the proposed analysis in Chapter 3 and this chapter. One potential difference in prediction is that (under some assumptions) SP and HR are considered equidistant from the element outside the saP projection (cf., Chomsky 2000: 122, 130, 2001:27). At least from the Japanese addressee-honorific data, it is hard to argue for/against the argument. So, I leave this issue to future studies and simply adopt what has been assumed in previous studies (= the tree in (130) (Speas and Tenny 2003; Haegeman and Hill 2013; Miyagawa 2012, 2017; Zu 2018; among many others).

$$= \lambda M. \left[\begin{array}{l} \left[\begin{array}{l} \lambda x.\, \lambda w. \left[\begin{array}{l} \lambda e \in D_v.\, M[\,1\,](x)(e)(w)) \\ \bullet \\ \textsc{best}(M[\,2\,](x)(w)) \\ \quad \subseteq \{u : [\![\, \text{TP}_{\text{emb}} \,]\!]^c(u)\} \end{array} \right] \\ \qquad\qquad : \textit{(at-issue)} \end{array} \right] \\ \bullet \\ \left[\begin{array}{l} \lambda e \in D_v.\, M[\,1\,](sp(c))(e)(w_@) \\ \bullet \\ \textsc{best}(M[\,2\,](sp(c))(w_@)) \subseteq \{u : [\![\, \text{TP}_{\text{emb}} \,]\!]^c(u)\} \end{array} \right][\,2\,] \\ \qquad\qquad : \textit{(commitment)} \end{array} \right]$$

$$= \lambda M. \left[\begin{array}{l} \left[\begin{array}{l} \lambda x.\, \lambda w. \left[\begin{array}{l} \lambda e.\, M[\,1\,](x)(e)(w) \\ \bullet \\ \textsc{best}(M[\,2\,](x)(w)) \\ \quad \subseteq \{u : [\![\, \text{TP}_{\text{emb}} \,]\!]^c(u)\} \end{array} \right] \\ \qquad\qquad : \textit{(at-issue)} \end{array} \right] \\ \bullet \\ \textsc{best}(M[\,2\,](sp(c))(w_@)) \subseteq \{u : [\![\, \text{TP}_{\text{emb}} \,]\!]^c(u)\} \\ \qquad\qquad : \textit{(commitment)} \end{array} \right]$$

The derivation proceeds as shown in (132) and the SpP takes the meaning of the embedding predicate and the main clause subject.

(132) Derivation II (Embedding predicate) a *koto*-clause with an HON$_A$



a. $[\![\begin{matrix} \text{V} \\ (\textit{desire}) \end{matrix}]\!]^c =$

$$\left[\begin{array}{l} \lambda y \in D_e.\ \lambda e \in D_v.\ \lambda w'' \in D_w. \\ \quad desire(e, w'') \wedge \textsc{exp}(e, w'', y) \quad : \textit{(event)} \\ \bullet \\ \lambda z \in D_e.\ \lambda w''' \in D_w. \\ \quad <\ Dox(z,\ w'''), Bul(z,\ w''')\ > \\ \qquad\qquad\qquad\qquad : \textit{(modal background)} \end{array}\right]$$

b. $[\![\ \text{V'}\ ]\!]^c = [\![\ \text{SpP}\ ]\!]^c([\![\ \text{V}\ ]\!]^c)$

$$= \left[\begin{array}{l} \lambda x.\ \lambda w.\ \left[\begin{array}{l} \lambda e.\ [\![\ \text{V}\ ]\!]^c[\ 1\ ](x)(e)(w) \\ \bullet \\ \textsc{best}([\![\ \text{V}\ ]\!]^c[\ 2\ ](x)(w)) \\ \quad \subseteq \{u :\ [\![\ \text{TP}_{\text{emb}}\ ]\!]^c(u)\} \end{array}\right] \\ \qquad\qquad\qquad\qquad : \textit{(at-issue)} \\ \bullet \\ \textsc{best}([\![\ \text{V}\ ]\!]^c[\ 2\ ](sp(c))(w_@)) \subseteq \{u :\ [\![\ \text{TP}_{\text{emb}}\ ]\!]^c(u)\} \\ \qquad\qquad\qquad\qquad : \textit{(commitment)} \end{array}\right]$$

$$= \left[\begin{array}{l} \lambda x.\ \lambda w.\left[\begin{array}{l} \lambda e.\ [desire(e, w) \wedge \textsc{exp}(e, w, x)] \\ \bullet \\ \textsc{best}(<\ Dox(x,\ w), Bul(x,\ w)\ >) \subseteq \{u :\ [\![\ \text{TP}_{\text{emb}}\ ]\!]^c(u)\} \end{array}\right] \\ \qquad\qquad\qquad\qquad : \textit{(at-issue)} \\ \bullet \\ \textsc{best}(<\ Dox(sp(c),\ w_@), Bul(sp(c),\ w_@)\ >) \subseteq \{u :\ [\![\ \text{TP}_{\text{emb}}\ ]\!]^c(u)\} \\ \qquad\qquad\qquad\qquad : \textit{(commitment)} \end{array}\right]$$

c. $[\![\text{V'}]\!]^c$ $=^{\star}$ $\lambda x.\, \lambda w.\;\; \lambda e.$ $\left[\begin{array}{l} desire(e,w) \wedge \text{EXP}(e,w,x) \\ \bullet \\ \text{BEST}(< Dox(x,\ w), Bul(x,\ w) >) \\ \quad \subseteq \{u : [\![\text{TP}_{\text{emb}}]\!]^c(u)\} \end{array}\right]$

d. $[\![\text{VP}]\!]^c$ $=$ $\lambda w.\lambda e.$ $\left[\begin{array}{l} desire(e,w) \wedge \text{EXP}(e,w,[\![he]\!]^c) \\ \bullet \\ \text{BEST}(< Dox([\![he]\!]^c,\ w), Bul([\![he]\!]^c,\ w) >) \\ \quad \subseteq \{u : [\![\text{TP}_{\text{emb}}]\!]^c(u)\} \end{array}\right]$

$=^{u}$ $\lambda w.\lambda e.$ $\left[\begin{array}{l} desire(e,w) \wedge \text{EXP}(e,w,[\![he]\!]^c) \wedge \\ \text{BEST}(< Dox([\![he]\!]^c,\ w), Bul([\![he]\!]^c,\ w) >) \\ \quad \subseteq \{u : [\![\text{TP}_{\text{emb}}]\!]^c(u)\} \end{array}\right]$

The crucial step is in (132)c. The semantic object in the commitment layer gets a modal background from the main clause embedding predicate, as a result of which no lambda-bound variable remains. Just as $< sp(c), 1, addr(c) >$ gets shipped to the storage component, the saturated non-at-issue meaning is moved to the storage.

More formally, I assume that the storage is constituted of several compartments with each room dedicated to particular semantic objects. For example, at the step in (131), we ship the semantic dimension for 'respect.' Suppose that the speaker of this sentence is *Akitaka* and the addressee is *Satoshi*. Then, the storage s is created as in (133):

(133) a. $s =$ $\begin{array}{|c|}\hline \textit{"respect"} \\ \hline < a,\ 1\ , s > \\ \hline \end{array}$

Once it is shipped, that relevant dimension is taken away from the derivation. By the same token, when the embedding verb comes in, the 'commitment' dimension gets saturated and ready for interpretation. Hence, another dimension reduction happens at (132)c. The storage gets updated as shown in (134).

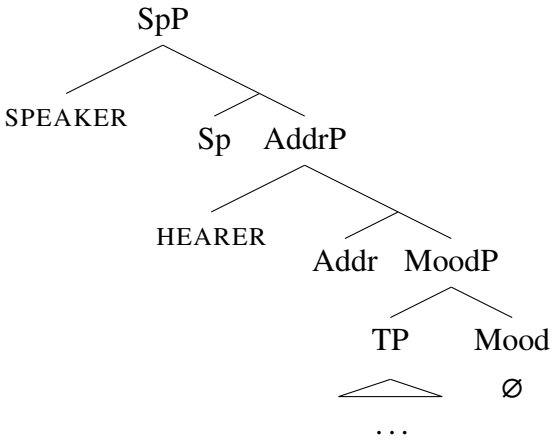
(134) s =

"respect"	*"commitment"*
$< a,\ 1\ , s >$	BEST($< Dox(sp(c),\ w_@), Bul(sp(c),\ w_@) >$)) $\subseteq \{u' :\ [\![\ \text{TP}_{\text{emb}}\ ]\!]^c(u')\}$

Finally, the derivation in (135) illustrates how the main clause speech act layers play a role. The definition of the speech act layers are exactly the same as before. The only change in denotation is the head of MoodP. Unlike embedded clause, there is no competition among mood elements (e.g., subjunctive vs. indicative, or the *koto*-clause vs. the *to*-clause). So, I simply assume a single mood marker for the declarative root clause $\varnothing_{main}$ as defined in (135)b.[39]

[39] ***-koto* in the main clause:** The main clause *-koto* is associated with the directive speech act and it is more similar to an imperative than an declarative. There is no contrast between -$\varnothing_{emb}$ and *-koto* in the main clause declarative sentence as we saw in the embedded declarative sentence.

(135) Derivation III (Main clause) a *koto*-clause with an HON$_A$



a. $[\![\ \text{TP}_{\text{main}}\ ]\!]^c$ = $\lambda w.\ \exists e.\ desire(e, w) \wedge \text{EXP}(e, w, [\![\ he\ ]\!]^c)] \wedge$
$\text{BEST}(< Dox([\![\ he\ ]\!]^c,\ w), Bul([\![\ he\ ]\!]^c,\ w) >)$
$\subseteq \{u : [\![\ \text{TP}_{\text{emb}}\ ]\!]^c(u)\}$

b. $\left[\!\!\left[\ \begin{array}{l}\text{Mood}_{\text{main}}\\ (\text{-}\varnothing_{main})\end{array}\ \right]\!\!\right]^c$ = $\lambda p \in D_{wt}.\ \lambda M.\ \lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l}\exists e.\ M[\ 1\ ](x)(e)(w)\\ \qquad\qquad\bullet\\ \text{BEST}(M[\ 2\ ](x)(w)) \subseteq \{u : p(u)\}\end{array}\right]$

c. $[\![\ \text{MoodP}_{\text{main}}\ ]\!]^c$ = $\lambda M.\ \lambda x \in D_e.\ \lambda w \in D_w.$
$\left[\begin{array}{l}\exists e.\ M[\ 1\ ](x)(e)(w)\\ \qquad\qquad\bullet\\ \text{BEST}(M[\ 2\ ](x)(w)) \subseteq \{u : [\![\ \text{TP}_{\text{main}}\ ]\!]^c(u)\}\end{array}\right]$

d. $[\![\ \text{Addr}\ ]\!]^c$ = $\lambda X.\ X.$

e. $[\![\ \text{Addr'}\ ]\!]^c$ = $[\![\ \text{MoodP}_{\text{main}}\ ]\!]^c$

f. $[\![\text{HEARER}]\!]^c = \lambda X. \begin{bmatrix} X & : \textit{(at-issue)} \\ \bullet & \\ \lambda x.\ <x,\ 1,\ addr(c)> & : \textit{(respect)} \end{bmatrix}$

g. $[\![\text{AddrP}]\!]^c = \begin{bmatrix} [\![\text{MoodP}_{\text{main}}]\!]^c & : \textit{(at-issue)} \\ \bullet & \\ \lambda x.\ <x, 1, addr(c)> & : \textit{(respect)} \end{bmatrix}$

h. $[\![\text{Sp}]\!]^c = \lambda X.\ X.$

i. $[\![\text{Sp'}]\!]^c = [\![\text{AddrP}]\!]^c$

k. $[\![\text{SPEAKER}]\!]^c = \lambda X.\ \lambda N. \begin{bmatrix} X\,[\ 1\ ](N) & : \textit{(at-issue)} \\ \bullet & \\ X\,[\ 2\ ](sp(c)) & : \textit{(respect)} \\ \bullet & \\ X\,[\ 1\ ](N)(sp(c))(w_@)[\ 2\ ] & : \textit{(commitment)} \end{bmatrix}$

l. $[\![\text{SpP}]\!]^c = \lambda N \in D_{<e,<v,wt>>\bullet<e,wt>}.$
$\begin{bmatrix} [\![\text{MoodP}_{\text{main}}]\!]^c(N) & : \textit{(at-issue)} \\ \bullet & \\ <sp(c), 1, addr(c)> & : \textit{(respect)} \\ \bullet & \\ [\![\text{MoodP}_{\text{main}}]\!]^c(N)(sp(c))(w_@)[\ 2\ ] & : \textit{(commitment)} \end{bmatrix}$

m. $[\![\text{SpP}]\!]^c =^\star \lambda N \in D_{<e,<v,wt>>\bullet<e,wt>}.$
$\begin{bmatrix} [\![\text{MoodP}_{\text{main}}]\!]^c(N) & : \textit{(at-issue)} \\ \bullet & \\ [\![\text{MoodP}_{\text{main}}]\!]^c(N)(sp(c))(w_@)[\ 2\ ] & : \textit{(commitment)} \end{bmatrix}$

n. $[\![\text{SpP}]\!]^c = \lambda N \in D_{<e,<v,wt>>\bullet<e,wt>}.$

$$\left[\begin{array}{l} \lambda x \in D_e.\ \lambda w \in D_w. \\ \quad \left[\begin{array}{l} \exists e.\ N[\ 1\ ](x)(e)(w) \\ \quad \bullet \\ \text{BEST}(N[\ 2\ ](x)(w)) \\ \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \end{array}\right] \\ \qquad\qquad\qquad\qquad\qquad\qquad : \textit{(at-issue)} \\ \quad \bullet \\ \text{BEST}(N[\ 2\ ](sp(c))(w_@)) \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \\ \qquad\qquad\qquad\qquad\qquad\qquad : \textit{(commitment)} \end{array}\right]$$

At the last stage of the derivation in (135)n, there are some unsaturated variables left behind; (i) the perspective holder ($x \in D_e$), (ii) the evaluation world ($w \in D_w$), (iii) the event predicates ($N[\ 1\ ] \in D_{<e,<v,wt>>}$) and (iv) the modal background ($N[\ 2\ ] \in D_{<e,wt>}$). We need to close off these unsaturated lambda terms. I assume that there exists a mechanism outside the core compositional system that enables us to complete the unsaturated terms by what counts as a default member of the relevant set, which I call SATURATION BY DEFAULT.[40]

This idea is originally proposed by Portner (2018c) and Mari and Portner (to appear), who are concerned with mood variation in Romance languages. In many languages (e.g., French) 'believe' selects the indicative mood while in Italian, it is grammatical with subjunctive mood. If we assume the same semantics

[40] **Different semantics for Mood?:** As an alternative, one might propose a different semantics for Mood for the main clause in such a way all the lambda terms will be saturated when we reach SpP. But if we want to keep the denotation of the SPEAKER the same between the main clause and the embedded clause, this does not work very well. Given the semantics for the SPEAKER repeated in (i) — which is intended to make an asymmetry between the at-issue meaning and the commitment meaning — there remain two more lambda terms for the at-issue meaning. So, I let pragmatics play a role to saturate the lambda-bound variables.

(i) $[\![\text{SPEAKER}]\!]^c = \lambda X.\ \lambda N.$

$$\left[\begin{array}{ll} X\ [\ 1\ ](N) & : \textit{(at-issue)} \\ \quad \bullet & \\ X\ [\ 2\ ](sp(c)) & : \textit{(respect)} \\ \quad \bullet & \\ X\ [\ 1\ ](N)(sp(c))(w_@) & : \textit{(commitment)} \end{array}\right]$$

for the subjunctive mood indicator, it appears to be mysterious why subjunctive is allowed in some languages but not in others. They provide the following two-step analysis. First, based on the observation that a subjunctive mood indicator is typically accompanied with preferential predicates, they argue that the subjunctive mood indicator requires the semantics of the embedding predicate to be something that provides the preferential structure. This is what we saw in the above discussion. Second, Italian can use the common ground as a default modal background in propositional attitude sentences. The predicate 'believe' only provides the doxastic modal background (used for Ordering source) but there is a pragmatic process applicable in Italian which saturates the left-open Target modal background by the default modal background, i.e., the common ground. They say:

> *Our analysis reduces the difference in mood selection between Italian and French to a single rule outside of the core compositional system. This is an important advantage over all previous theories, which attribute the difference either to the verbs' lexical semantics (without any other reason to assume that 'believe' means different things in the two languages), or to the mood morphemes (which makes it hard to explain how similar their mood selection properties are across all other contexts).*

As in the case of the Italian subjunctive, the orphan variables in (135)n are given default values by a pragmatic principle. First, as for the world (= w), the default world is the actual world. So, w is replaced with $w_{@}$. Second, as for the modal background, what one believes is treated as the default (i.e., the doxastic modal background); $N[\ 2\ ]$ is replaced with DOX = $\lambda x \in D_e.\ \lambda w \in D_w.Dox(y, w)$. Third, as for type *e* expressions, the default value is contingent upon the dimension; (i) an entity of the event layer of the at-issue meaning is the speaker him- or herself ($sp(c)$); (ii) the perspective holder, which appears in the modal background layer of the at-issue meaning, is set to the discourse participants ($dp(c)$), which reflects the fact that, unlike commitment (which updates the speaker's publicized belief), the at-issue meaning acts as a proposal to update the common ground of the discourse participants (for studies that emphasize

the importance of the distinction between the common ground and the discourse commitment, see, for example, Farkas and Bruce 2010); and (iii) the publicized belief, of course, belongs to the speaker himself ($sp(c)$). Finally, the predicate for the event layer is SPEECH = $\lambda x.\lambda e.\lambda x.say(e, w) \wedge \text{AG}(e, w, x)$. As a result, the derivation ends as follows; I put a dagger on the shoulder of the equation to indicate that default saturation has happened.

(136) **Saturation by default**

a. $[\![\text{SpP}]\!]^c$ = $\lambda N \in D_{<e,<v,wt>>\bullet<e,wt>}$.

$$\left[\begin{array}{l} \lambda x \in D_e.\ \lambda w \in D_w. \\ \left[\begin{array}{l} \exists e.\ N[\ 1\ ](x)(e)(w) \\ \bullet \\ \text{BEST}(N[\ 2\ ](x)(w)) \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \end{array}\right] \\ \qquad\qquad : \textit{(at-issue)} \\ \bullet \\ \text{BEST}(N[\ 2\ ](sp(c))(w_@)) \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \\ \qquad\qquad : \textit{(commitment)} \end{array}\right]$$

b. $[\![\text{SpP}]\!]^c$ $=^{\dagger}$

$$\left[\begin{array}{l} \left[\begin{array}{l} \exists e.\ \text{SPEECH}(dp(c))(e)(w_@) \\ \bullet \\ \text{BEST}(\text{DOX}(dp(c))(w_@)) \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \end{array}\right] \\ \qquad\qquad : \textit{(at-issue)} \\ \bullet \\ \text{BEST}(\text{DOX}(sp(c))(w_@)) \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \\ \qquad\qquad : \textit{(commitment)} \end{array}\right]$$

c. $[\![\text{SpP}]\!]^c$ =

$$\left[\begin{array}{l} \left[\begin{array}{l} \exists e.\ say(e, w_@) \wedge \text{AG}(e, w_@, sp(c)) \\ \bullet \\ \text{BEST}(Dox(dc(c), w)) \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \end{array}\right] \\ \qquad\qquad : \textit{(at-issue)} \\ \bullet \\ \text{BEST}(Dox(sp(c), w_@)) \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \\ \qquad\qquad : \textit{(commitment)} \end{array}\right]$$

By definition, what the speaker publicly believes is the discourse commitment of that individual and what the discourse participants publicly believe is the common ground. Thus, ignoring the event layer, the semantics in (136)c can be rewritten as follows. Based on these meanings, pragmatics does two jobs. First, it proposes the at-issue meaning from the first dimension. In principle, other dis-

course participants can challenge this at-issue meaning. Second, it automatically updates the speaker's discourse commitment.

(137) $[\![\text{SpP}]\!]^c = \left[\begin{array}{l} \text{CG} \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \\ \qquad\qquad : \textit{(at-issue)} \\ \qquad\qquad \bullet \\ dc_{sp(c),w_@} \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \\ \qquad\qquad : \textit{(commitment)} \end{array} \right]$

ENHANCEMENT EFFECT. Once all the lambda-bound variables of the commitment layer are saturated, it is shipped to storage. When the derivation ends, the storage is constituted of two non-at-issue compartments with each cell equipped with two semantic objects.

(138) s =

"respect"	*"commitment"*
$< a,\ 1\ , s >$, $< a,\ 1\ , s >$	$\text{BEST}(< Dox(sp(c),\ w_@), Bul(sp(c),\ w_@) >) \subseteq \{u' : [\![\text{TP}_{\text{emb}}]\!]^c(u')\}$, $dc_{sp(c),w_@} \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\}$

Now consider the respect-dimension. In order for a Bayesian update to happen (see Chapter 4), there must exist a single respect object. But we have two. For the need of an appropriate pragmatic update, I propose that these two semantic objects have to be collapsed into a single object which represents the politeness level of the entire sentence. The need of such a representative value is, indeed, envisioned already in McCready (2014), in which she takes the average of relevant intervals to get the summary interval (see Section 4.2.2.2). As discussed in Chapter 4, I do not adopt the interval-based approach and use non-negative integers to indicate the strength of the politeness level. Within this framework, the summary value is easily calculated by summing up the relevant numbers and I call this process COLLAPSING as defined below.

(139) **Collapsing:** When there are two respect objects $< a, z_1, b >$ and $< c, z_2, d >$, replace them with a new object $< a, z_1 + z_2, b >$ if $a = c \wedge b = d$.

Since non-negative integers are closed under addition (i.e., $z_1 + z_2 \in \mathbb{Z}^+$), the newly created object $< a, z_1 + z_2, b >$ is also a member of $D_e \times \mathbb{Z}^+ \times D_e$. Thus, this is also a well-formed semantic object of the respect dimension.

An example of collapsing is given in (140). Since the respect-bearer and the respect-receiver are the same, we collapse the two triples into one. As a result, we have an enhanced politeness level, i.e., $< a, 2, s >$.

(140)

"respect"
$< a,\ 1\ , s >$ (from the embedded HR),
$< a,\ 1\ , s >$ (from the main clause HR)

→

"respect"
$< a,\ 2\ , s >$

CONSISTENCY EFFECT. Notice that, without any explicit constraints, collapsing can be applied to all of the situations in (141). But as we saw in Section 5.2.1, when there is an embeddedd addressee-honorific marker, the politeness level of the main clause must be stronger than the politeness of the embedded clause. That is, the sentence in (142) cannot be acceptable (= (41)a), which represents the situation in (141)b.

(141)

a.

"respect"
$< a,\ 1\ , s >$
$< a,\ 1\ , s >$

b. *

"respect"
$< a,\ 1\ , s >$
$< a,\ 0\ , s >$

c.

"respect"
$< a,\ 1\ , s >$
$< a,\ 2\ , s >$

(142) * [*Gomeiwaku-o* trouble-ACC *o-kake* HON-giving *si-**masi**-ta-koto*]-*wa* do-HON$_A$-PST-C-TOP ***sit**-te* know-CV *i-ru.*
PRF-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the utterance context (UC) respects the addressee of the UC (< *-mas*).'

To capture this constraint, I propose the following requirement for the storage update.[41]

[41] **Variation:** We saw that the sentence in (i) (= (41)b) is marginally acceptable, where the main clause politeness is just as high as the embedded one. We expect variation in these judgments

(143) **Consistency requirement:** We cannot newly incorporate a respect object $< a, z_2, b >$ into the storage iff there is a triple $< a, z_1, b >$ already in the storage and $z_1 > z_2$.

The storage in (141)c is what happens when an addressee-honorific upgrader (HON$_U$) is present in the main clause and this requirement explains well-formedness in (144) (= (41)c).[42]

(144) [*Gomeiwaku-o* *o-kake* *si-**masi**-ta-koto*]-*wa* ***zonzi**-te*
trouble-ACC HON-giving do-HON$_A$-PST-C-TOP know.HON$_U$-CV
i-mas-u.
PRF-HON$_A$-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the UC respects the addressee of the UC
(< embedded *-mas*)';
(iii) The speaker of the UC respects the addressee of the UC
(< main clause *-mas*).'

Example 8 (Type II commitment). Finally, let us see how the other commitment effect (Type II effect) is triggered. In fact, the difference between Type I and Type II commitments is explained by the same saturation-by-default principle. In (131) (= (145)), we will encounter a situation where a modal background is left open. As the main clause modal background is pragmatically saturated, we can assume that at an embedded SpP boundary, pragmatic saturation can be

among native speakers. If he or she rejects the sentence, > should be replaced with ≥.

(i) ? [*Gomeiwaku-o* *o-kake* *si-**masi**-ta-koto*]-*wa* ***sit**-te* *i-mas-u.*
trouble-ACC HON-giving do-HON$_A$-PST-C-TOP know-CV PRF-HON$_A$-PRS
'(i) I know that I gave you trouble;
(ii) The speaker of the UC respects the addressee of the UC (< embedded *-mas*);
(iii) The speaker of the UC respects the addressee of the UC (< main clause *-mas*).'

[42] **Pragmatic rules for the main clause politeness:** As for the sentences in (116) and (115), it is assumed that there exist pragmatic rules that determine politeness level of a main clause. For example, (i) the combination of a subject-honorific makes the main clause politeness level polite enough for the embedded *-mas* and (ii) a performative use of *-tai* also makes the main clause polite enough.

optionally applied. If we saturate M in the commitment layer by replacing it with *Dox*, we obtain Type II commitment.

(145) a. $[\![\text{SpP}]\!]^c =^{\star} \lambda M. \left[\begin{array}{l} [\![\text{MoodP}_{\text{emb}}]\!]^c(M) \quad : \textit{(at-issue)} \\ \bullet \\ [\![\text{MoodP}_{\text{emb}}]\!]^c(M)(sp(c))(w_@)[\ 2\ ] \\ \qquad\qquad : \textit{(commitment)} \end{array} \right]$

b. $[\![\text{SpP}]\!]^c =^{\dagger} \lambda M. \left[\begin{array}{l} [\![\text{MoodP}_{\text{emb}}]\!]^c(M) \quad : \textit{(at-issue)} \\ \bullet \\ \text{BEST}(dc_{sp(c),w_@}) \subseteq \{u : [\![\text{TP}_{\text{main}}]\!]^c(u)\} \\ \qquad\qquad : \textit{(commitment)} \end{array} \right]$

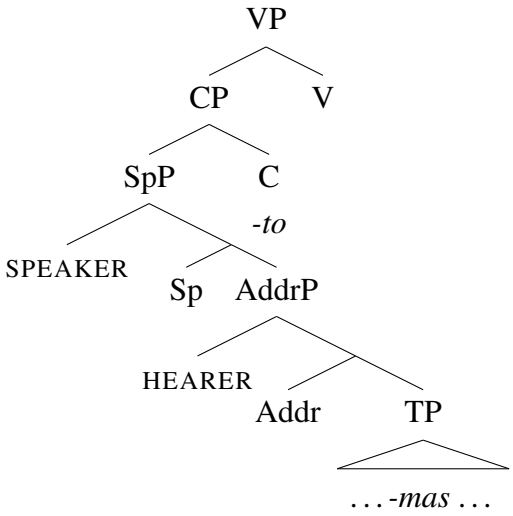
c. $[\![\text{SpP}]\!]^c =^{\star} [\![\text{MoodP}_{\text{emb}}]\!]^c(M)$: *(at-issue)*

After a modal background is pragmatically provided, no lambda-bound term is present in the commitment dimension. So, it is shipped to the storage. As we saw in (50) and (49), there is no interaction with other semantic operators.[43]

Difference between *-koto* and *-to*. In contrast, *-to* heads CP, which must be immediately dominated by a VP, i.e., the outermost layer of an embedded clause left periphery. So, if it appears, it must be in a position higher than the SpP, as in (146).

[43] **Variation:** As was mentioned on page 383 (footnote), some native speakers cannot get Type I reading. In that case, our theory explains that a pragmatic saturation is obligatory for those speakers.

(146)



But this results in a type mismatch. As shown in (147), *-to* requires the prejacent to be a type wt element, which the SpP is not.

(147) Denotation of *-to* (for indirect speech) (= (87))

$$[\![\text{-}to]\!] = \lambda p \in D_{wt}.\ \lambda M \in D_{<e,<v,wt>>}.\ \lambda x \in D_e.$$
$$\lambda w \in D_w. \left[\begin{array}{ll} \lambda e \in D_v.\ M(x)(e)(w) & : \textit{(event)} \\ & \bullet \\ \textsc{best}(Dox(x,w)) \subseteq \{u : p(u)\} & \\ & : \textit{(modal background)} \end{array} \right]$$

This is the answer to the question why only a *koto*-clause allows an embedded addressee-honorific marker. First, an embedded addressee-honorific marker requires there to be an embedded SpP-AddrP. Second, a *koto*-clause is semantically compatible with SpP, while *-to* has a conflict with SpP.

5.3.3 Interim summary

Let us recapitulate how the puzzles in Section 5.2.4, repeated in (148) are solved by our analysis.

(148) a. Puzzle 1: Why is a *koto*-clause able to embed an addressee-honorific marker? Why is a *to*-clause not able to accommodate an addressee-honorific marker?

b. Puzzle 2: Why does the presence of an embedded addressee-honorific marker cause a commitment effect?

c. Puzzle 3: How does the enhancement effect emerge?

d. Puzzle 4: How is a requirement about the consistency in politeness explained?

First, a *koto*-clause and a *to*-clause are different both in syntax and semantics. A *koto*-clause heads MoodP, the lowest layer of a clause left-periphery, while a *to*-clause heads CP, which is immediately dominated by a VP. The SpP-AddrP is sandwiched between these functional projections. Due to a semantic domain condition, *-to* of an indirect speech use cannot take a SpP. Second, when an embedded *-mas* is present, it must be linked to the hearer in the specifier position of AddrP, which requires there to exist a SpP. This SpP introduces commitment. Thus, an embedded *-mas* results in a commitment effect. Third, the enhancement effect is a consequence of multiple respect objects in the derivation. All the interpretable respect features are shipped to a storage, and, via collapsing, we get a single value that represents the politeness level of the entire sentence. Fourth, consistency in politeness is understood as a requirement on the storage. A newly introduced respect object must have a higher value than the previously stored semantic object.

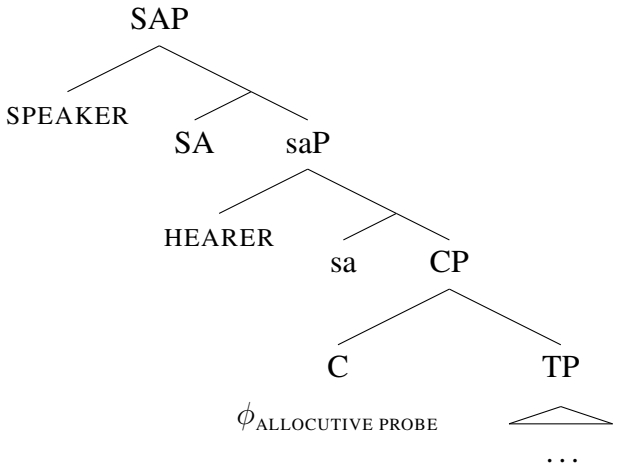
5.4 Relation to other work

Now that we have seen the analysis and explanations to each puzzle, let us compare the proposed analysis with previous studies to elucidate convergence and divergence in conclusions. Since each study examines different phenomena, it is not constructive to evaluate their theories for superiority based on the Japanese data, or to evaluate the present theory on the basis of data from these other languages. Rather, by summarizing their analysis and by comparing their analyses

with the analysis of this chapter, I would like to (i) clarify the unique characteristics of this study and (ii) discuss how these theories converge and/or diverge in their treatment of main clause phenomena.

Miyagawa (2012, 2017). Miyagawa (2012, 2017) discusses Japanese embedded addressee-honorific markers and proposes the structure in (149).

(149) Miyagawa (2017: 25)

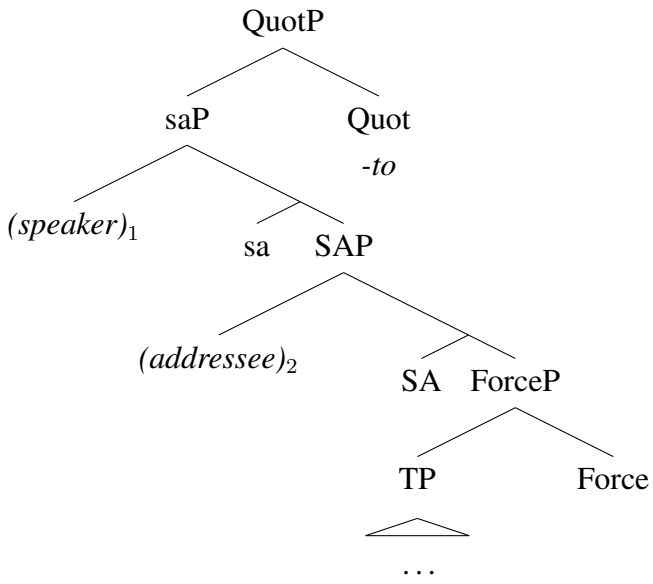


Similarities and differences are as follows. First, aside from the difference in label, his structure and my structure are the same in that there are two tiers proposed for clause left periphery — (i) the speech act layers (SpP-AddrP/SAP-saP) and (ii) the one below them. Though he uses C for the label of this lower projection, his C layer is comparable to my MoodP, because he argues that it is the locus of an interrogative particle (which is a candidate associated with a sentence mood/clause typing element, which other researchers would call ForceP or SentMoodP; Kim 2018; Portner et al. 2019).

Second, a difference comes from the relation between the upper tier and the lower tier; i.e., he proposes that C head-moves to SA through sa (cf., Chapter 3). In our analysis, no such syntactic relation is assumed between the speech act layers and MoodP (aside from the selectional restriction, which he and other studies also explicitly or implicitly assume). Rather, the nature of the relation is attributed to the semantics.

Kim (2018). In her dissertation, Kim (2018) discusses Japanese and Korean quotative constructions and identifies three tiers as shown below:

(150)



Similarities and differences are as follows. First, she identifies Force as the position for clause-typing elements, which Zanuttini et al. (2012) would call JussiveP (or, T-JussiveP, when conflated with the TP). MoodP, which is supposed to be the position for both the verbal mood and the sentence mood, plays a similar role.

Second, among the analyses proposed in recent years, her analysis is very similar to what I have proposed in that she also assumes that speech act layers are embeddable (see also Baker and Alok 2019 below). Certainly, she restricts her analysis to a bare quotative and carefully avoids overgeneralizing her conclusion to a canonical, standard quotative construction. But embedded speech act layers are an important aspect of her analysis just as mine.

Third, her attitude to the assertion is different from the analysis of this chapter. Under her theory, ASSERTION is a built-in property of a head of the speech act layers — she proposes that it comes from the lower head, as seen from her definition in (151a). Such an attempt to syntacticize an illocutionary force/a sentential force is classified as what Portner (2018b: 140) calls the oper-

ator approach. In contrast, in my analysis, a sentential force, e.g., assertion, is not encoded as a grammatical form. It is assumed that it is pragmatically derived based on the at-issue meaning of the sentence, i.e., a position that Portner (2018b: 140) calls the compositional approach.[44]

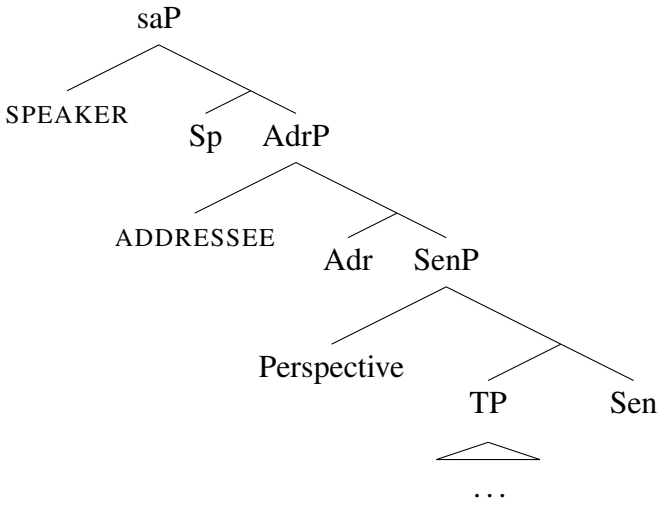
(151) a. $[\![\text{SA}]\!]^g = \lambda p.\ \lambda x.\ \lambda y.\ [\textsc{assert}(y, x, p)]$.

b. $[\![\text{saP}]\!]^g = \textsc{assert}(g(1), g(2), [\![\text{ForceP}]\!])$.

In my analysis, the semantic object in the commitment layer is also a static object and it is assumed that commitment slate is updated via dynamic pragmatics. The at-issue meaning is assumed to be negotiated before the context update while the commitment is assumed to affect the context without any such extra step (Farkas and Bruce 2010); cf., the contrast in discourse update between at-issue meaning and non-at-issue meaning is explicitly stated in Murray's (2017) studies on evidentials.

Zu (2015, 2018). In her dissertation, as well as in her previous studies, Zu proposes the structure in (152).

(152)



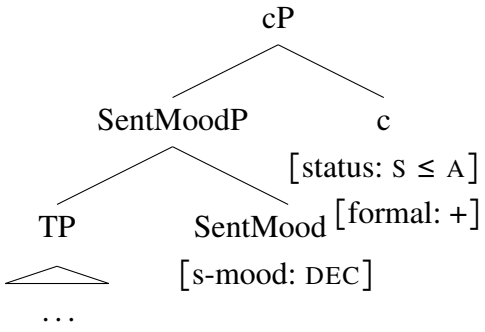
[44] **Some technical issues:** She assumes that indicies are given in syntax and the assignment function g finds the best referent. Besides, in order to explain some properties of bare quotatives, she further assumes a lambda-abstraction at saP, which are not relevant to our discussion, so I simplified her analysis. Interested readers are referred to the original implementation of her study.

Similarities and differences are as follows. First, she also assumes a two-tier analysis. The upper tier consists of two speech act projections and the lower one is called the Sen(tience)P (Zu 2018: 73), named after Speas and Tenny's (2003) original proposal.

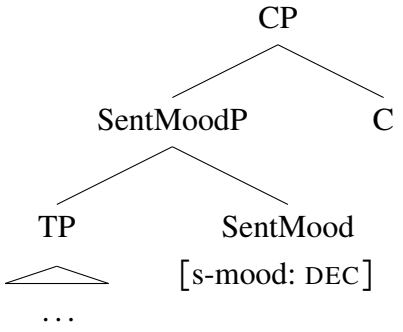
Second, what is unique to her analysis is the idea that the lower tier (SenP) has a specifier, where the attitude holder is syntactically represented. This specifier is linked either to the speaker or to the addressee via binding. This is a reminiscent of Miyagawa's (2012, 2017) proposal in that she assumes a syntactic relation between the two tiers (in addition to the selectional restriction). But she differs from Miyagawa in that she proposes binding, rather than movement and, in this sense, her analysis is even more different from my analysis, in which the relation between the two tiers is explained in terms of semantics. But the idea that the lower tier (MoodP or SenP) is responsible for the perspective of the attitude holder is shared by the two studies.

Portner et al. (2019). Examining Korean addressee-honorific markers, Portner et al. (2019) propose the following structure.

(153) a. Root



b. Embedded



Similarities and differences are as follows. First, they also propose that the clause periphery consists of two tiers. The upper tier is called cP and the lower one is named the SentMoodP.

Second, they propose that SentMood is embeddable while cP is not, which is akin to Zu's (2015, 2018) proposal, though the detailed characterization of each tier is different. If we assimilate their CP to what Kim (2018) calls QuotP, their

proposal in (153)b is the same as her proposal in (150) except for the fact that the upper tier (= cP/saP-SAP) is truncated when embedded.

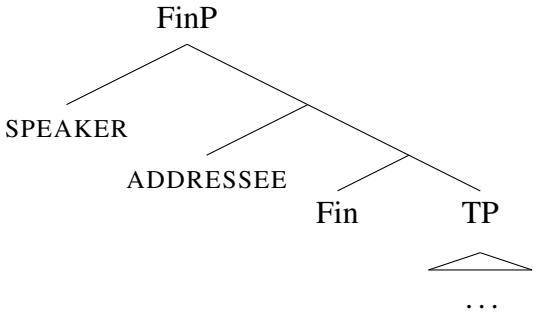
Third, Korean addressee-honorific markers are analyzed as a realization of both c and SentMood, capturing the fact that Korean markers are fused forms that not only encode the politeness information but the sentence mood. It seems that they assume something like a postsyntactic fusion as argued in Distributed Morphology, which results in the following morphemes:

(154) a. [status: S ≤ A], [formal: +], [s-mood: DEC] ↔ *-supnita* (formal)
b. [status: S ≤ A], [formal: -], [s-mood: DEC] ↔ *-eyo* (polite)
c. [status: S ≥ A], [formal: -], [s-mood: DEC] ↔ *-e* (intimate)

Aside from these morpohological assumptions (which are language-specific), their analysis and my analysis are similar in that the source of addressee-honorific comes from the upper tier; in my case it is an AddrP while for them it is a cP; as for the difference and the similarity in semantics/pragmatics, see Chapter 4.

Baker and Alok (2019). Examining allocutive markings in Magahi, Baker and Alok (2019), as well as Alok and Baker (2018), Alok (2019) and Baker (2019), propose the following structure.

(155)



Similarities and differences are as follows. First, although they identify particular syntactic positions for the speaker and the hearer, they differ from extent studies in that (i) the speaker and the hearer are located in same functional projection (but see the argument in footnote 38 on page 439) and (ii) they do not

explicitly propose a two-tiered structure. They use FinP as proposed by Rizzi (1997).

Second, like my analysis, they claim that the speaker and the addressee are embeddable in a finite clause (see also Bhadra's (2018) work on evidentials in Bangla). They report that Magahi allocutive marking is prohibited in non-finite clauses; the infinitive verb *jaayel* in (156) cannot be marked with any allocutive marking. In contrast, in finite context, allocutive markers can be embedded.[45]

(156) *Santeeaa* [***jaayel(*-au)***] *chaha h-au.*
Santee go.INF-ALLOC:NH want be.3.ALLOC:NH
'Santee wants to go.'

Finally, they assume that the speaker and the addressee can be controlled by the main clause GOAL argument. In Magahi, when an allocutive marker is embedded under an object control predicate as in (157), the respect can be directed to the addressee of the reported speech.[46]

(157) *Santeeaa Banteeaa-ke kahl-ain* [*ki Ram toraa*
Santee Bantee-ACC told-ALLOC:HH that Ram you.ACC
*dekh-l-i-**au*** *hal*].
saw-1S-ALLOC:NH be.
'Santee told Bantee that Ram saw you (= Bantee, not addressee).'

[45] **Non-finite environment:** If the sentence in (156) is translated into Japanese, the same unacceptability is observed. An addressee-honorific marker cannot be embedded in a complement of *-tai* 'want.'

(i) *Watasi-wa* [*iki(*-**masi**)*] *tai des-u.*
I-TOP go-HONA want COP.HONA-PRS
'(i) I want to go;
(ii) the speaker repsects the addressee.'

Some may find that this contradicts our observation that *-mas* is embeddable. But the key issue here is that *-koto* is absent in the embedded clause periphery. Since our theory predicts that 'an embedded *-mas* is accepted when *-koto* is present,' this data should not be counted as a genuine counterexample to our analysis. However, I also have to admit that I have not proposed any analysis as to how the data in (i) is explained, leaving this issue to future studies.

[46] **Kim's (2018) analysis:** Kim also assumes that the speaker in a bare quotative construction is controlled by an argument in a main clause but, in her case, it is not the GOAL argument but the AGENT that is linked to the embedded speaker.

This shift in respect is correlated to the shift in other indexicals. If shift in respect happens, the indexical shift happens automatically; *toraa* 'you' in (157) also has to refer to the reported addressee.

In this way, recent studies of main clause phenomena propose their own unique characterization about the syntax and the semantics of clause periphery elements. In my view, however, their conclusions (including the view presented in this chapter) are not contradictory. With a growing number of studies discussing similar problems in different languages, it is expected that we will have a more elaborated analysis of a clause left periphery in future studies.

For future studies. For future studies, I believe that (at least) the following issues deserve our attention. To begin with, if the analysis of this chapter is on the right track, it is of great importance to ask why other languages (e.g., Korean, Thai and Burmese) do not allow embedded addressee-honorific markers/allocutive markings. A prediction is that the subordination markers of these languages are all distributed in C, but not in Mood, akin to Japanese *-to*, rather than *-koto*. In future studies, we must discuss whether this prediction is on the right track.

From a cross-linguistic perspective, the problem of indexicality of embedded addressee-oriented expressions is also an important issue. As mentioned just above, in some languages, embedded allocutivity is involved with an indexical shift. In addition to Magahi, Punjabi is also reported to have a comparable effect (Kaur and Yamada 2019). In this language, like in Japanese, the reference of embedded allocutivey is typically restricted to the utterance context. For example, the sentence in (158), which has an embedded allocutive marker *je*, can be used correctly only when the utterance speaker is speaking to someone s/he respects (e.g., someone elder).

(158) Punjabi (Kaur and Yamada 2019; their ex. (41))

karan-ne keyaa [*ki* ***miiraa*** *kal aayegii* ***je***].
Karan-ERG say.PRF that Mira.NOM tomorrow come.FUT ALLOC
'(i) Karan said that Mira will come tomorrow;
(ii) the speaker respects the utterance addressee (< *je*).'

However, if the embedded domain consists of a first person pronoun, embedded allocutivity allows a shifted reading. For example, the sentence in (159) has two readings.

(159) *karan-ne keyaa* [*ki* ***maiN*** *kal aavaaNgaa* ***je***].
Karan-ERG say.PRF that I.NOM tomorrow come.FUT ALLOC
'Karan said that I will come tomorrow.'
(I = utterance speaker or Karan; *je* = utterance addressee or the reported hearer of Karan)

On the other hand, such a shifted reading is prohibited in Japanese as shown in (160).

(160) Japanese

a. *Karan-wa* [*Mira-ga asita mairi-mas-u-koto*]-*o*
Karan-TOP Mira-NOM tomorrow come-HON$_A$-PRS-C-ACC
tutae-te ori-masi-ta.
tell-CV PRF.HON$_U$-HON$_A$-PST
'(i) Karan had told that Mira will come tomorrow;
(ii) the speaker of the UC respects the addressee of UC/*RC.'

b. *Karan-wa* [*watasi-ga asita mairi-mas-u-koto*]-*o*
Karan-TOP I-NOM tomorrow come-HON$_A$-PRS-C-ACC
tutae-te ori-masi-ta.
tell-CV PRF.HON$_U$-HON$_A$-PST
'(i) Karan had told that I (= the speaker of the UC will come tomorrow;
(ii) the speaker of the UC respects the addressee of UC/*RC.'

Independently of allocutivity, Punjabi seems to pattern like an indexical shift language with speech act predicates (see Bhatia 2000) while Japanese does not allow an indexical shift.[47] An adequate theory is expected to explain not only the presence of embedded allocutive/addressee-honorific expressions

[47] **Indexical shift in Japanese:** Sudo (2012: 237) observes that the sentence in (i) is ambiguous between the two readings; (i) the one in which *watasi* refers to the utterance speaker and (ii) the reading in which it refers to the speaker of the reported context.

in these languages but also the interaction between shifted indexicality and the presence/absence of allocutivity/addressee-honorification (for such an attempt, see Alok and Baker 2018; Baker and Alok 2019; Baker 2019; Kaur and Yamada 2019).

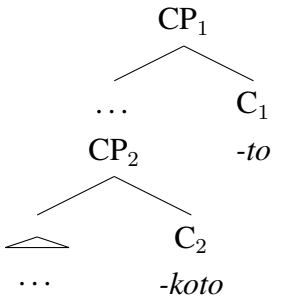
In addition to such a typological issue, it is also of importance to develop our theory to explain the behavior of other Japanese subordination markers. As mentioned above, *-koto* and *-to* can coexist within the same clause, as seen in (161) (= (11)a). This data is taken as evidence for two separate layers for Japanese subordination markers as illustrated in (162) (= (14)b).

(161) [[*Minasan genki-de irassyai-mas-u-**koto**]-**to**] *zonzi-mas-u.*
everyone healthy-COP be.HON$_S$-HON$_A$-C-C think.HON$_U$-PRS
'(i) I think that everyone is in good health;
(ii) the speaker respects *everyone*;
(iii) the speaker respects the addressee
(iv) the respect is very high.'

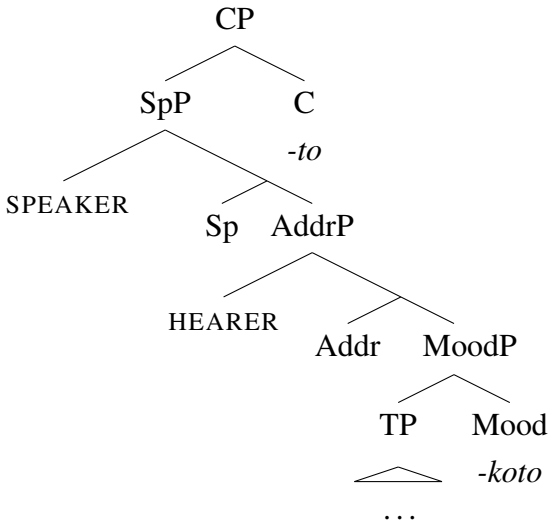
(i) *Mary-wa* [*dare-ga* ***watasi**-o suki da*]-*to it-ta-no?*
Mary-TOP who-NOM I-ACC like COP-C say-PST-Q
Reading 1: 'Who did Mary say liked me?'
Reading 2: 'Who did Mary say liked her?'

It seems that all the native speakers can get the first reading. But not all the native speakers allow the second reading; none of the people I have consulted (including myself) can get the shifted reading (= Reading 2). This may be attributed to dialectal variation or to a difference in generation. Future studies must be done to elucidate the variation in indexical shift in Japanese.

(162) a.



b.



Since *-mas* can be embedded under *-to*, our theory runs into a problem. It is predicted that presence of an embedded addressee-honorific marker requires an embedded SpP-AddrP, yielding the structure in (162)b. As long as we keep using the same denotations, SpP cannot be combined with *-to* due to a type mismatch. Though this dissertation does not provide an ultimate answer to this puzzle, one way out is to relate the meaning of *-to* with the meaning of *-koto*. Semantically, *-to* and *-koto* both relate an embedded clause with the main clause. There is no good reason to have two such connectors within a single clause periphery and it is more economical and reasonable to unify the two meanings into a single connector. For example, if *-to* is lowered to the head of MoodP at LF (LF-lowering), or if there is agreement between C and Mood and there is only a single interpretable feature at the head of MoodP, the semantic contribution of C becomes vacuous (by serving as an identity function), with which we can circumvent the problem of semantic type mismatch between SpP and C. At this moment, however, I do not have any further evidence for or against such a unification of C and Mood, so I would like to leave this as a remaining question to future studies.

Another puzzling construction for which our theory could not give a full account is the existence of an embedded *-mas* in a blended discourse context (Kaur and Yamada 2019). As we saw in Section 5.2.3.2, a *to*-clause is used with

an embedded *-mas* without a *-koto* (i) if the embedded context is a direct speech or (ii) the embedded context is a blended discourse as illustrated in (163).

(163) *Ototoi,* *kare-wa* [*kinoo-made-ni* *sigoto-o*
the day before yesterday he-TOP yesterday-until-by job-ACC
*oe-**mas**-u*]-*to* ***it***-*te* *i-masi-ta.*
finish-HON$_A$-PRS-C say-CV PRG-HON$_A$-PST
'(i) The day before yesterday, he said that he would finish the job by yesterday;
(ii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the main clause);
(iii) the speaker of the reported context respects the addressee of the reported context (< *-mas* in the embedded clause).'

Although I have not proposed any theory on the direct speech use, extension to a direct speech context would not be a difficult task if we provide a different denotation for the direct speech *-to* in such a way that C selects a multidimensional semantic object. However, what is more puzzling is the case of this blended discourse. Judging from the behavior of indexical elements, the embedded environment looks like an indirect speech context, so it appears that this *-to* in (163) is an indirect speech marker. However, if it has the same denotation as (87), it is predicted that SpP-AddrP cannot be selected, contrary to our assumption that an embedded *-mas* entails that there exist speech act projections in the embedded clause periphery.

Certainly, there is inter-speaker variation as to whether the sentence in (163) is a well-formed sentence (or just a byproduct of a speech error) and it is true that those who think that this kind of blended discourse does exists in Japanese grammar would agree that the status of this construction is somehow marginal. So, it may be true that the sentence in (163) does not count as a strong counterexample to our theory. However, if future studies prove that it does exist in the Japanese grammar, the analysis proposed in this chapter must be appropriately modified, for example, by proposing a different denotation for the blended

discourse complementizer.[48]

5.5 Chapter Summary

This chapter documented Japanese embedded addressee-honorific markers and has proposed a syntactic and semantic analysis explaining pepuliar properties of Japanese embedded addressee-honorific markers. In Section 5.1, as a preliminary setup, we examined the status of a *koto*-clause in comparison with a *to*-clause. We saw that (i) a *koto*-clause appears in a lower position in the clause-periphery; (ii) only an indirect speech reading is available for a *koto*-clause; and (iii) it can be used with a wider range of predicates than a subjunctive marker.

In Section 5.2, some important observations of Japanese embedded addressee-honorific markers were introduced. First, we saw two important requirements concerning the politeness level; the enhancement effect and the consistency requirement. Second, the commitment effect was explained. Third, it was shown that (i) an embedded *-mas* can appear in a subject position (in the *koto*-clause); (ii) in an object position; (iii) in a relative clause; and (iv) in an adverbial clause.

In Section 5.2.4, we restricted our attention mainly to embedded clauses that are used in an object position and set up four independent puzzles.

(164) a. Puzzle 1: Why is a *koto*-clause able to embed an addressee-honorific marker? Why is a *to*-clause not able to accommodate an addressee-honorific marker?

b. Puzzle 2: Why does the presence of an embedded addressee-honorific marker cause a commitment effect?

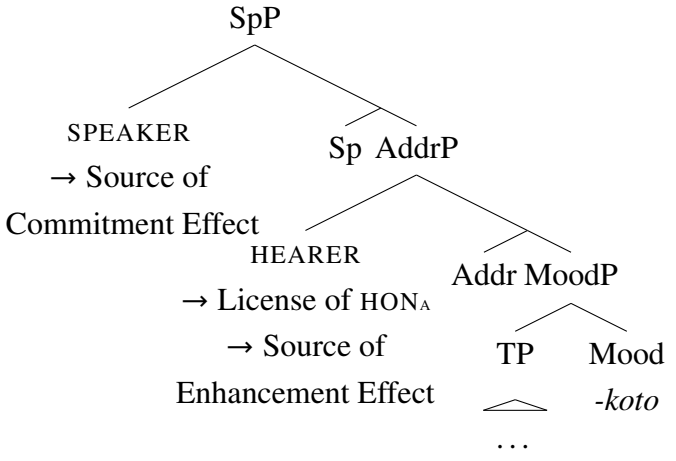
c. Puzzle 3: How does the enhancement effect emerge?

d. Puzzle 4: How is a requirement about the consistency in politeness explained?

[48] **Blended discourse:** If a blended discourse is proven to be a part of the Japanese grammar (not a speech error), it also has a theoretical implication for the shift-together property of indexicals (Schlenker 2003; Anand 2006, Anand and Nevins 2004; Sudo 2012; Deal 2018).

Section 5.3 proposed an analysis of the syntax and semantics of clause left-periphery and answered these questions. First and foremost, it is claimed that the SpP-AddrP layers can be embedded, which agree with the embedded addressee-honorific marker. Second, the semantics of the SpP-AddrP is provided. AddrP is the source of the respect meaning. SpP is the source for a commitment. MoodP is designed to relativize the embedded proposition with respect to (i) a perspective holder and (ii) a modal background/modal backgrounds. While *-to*, which is located in C and thus appears in a position higher than SpP, is not semantically compatible with SpP, *-koto* appears in a position lower than SpP and is able to combine with embedded speech act layers.

(165)



a. $[\![\textit{-koto}]\!]^c = \lambda p.\ \lambda M\ \lambda x.\ \lambda w.\ \textsc{best}(M(x)(w)) \subseteq \{u : p(u) = 1\}.$

b. $[\![\textsc{sp}]\!] = \lambda X.\ \lambda N.$
$$\begin{bmatrix} X[\,1\,](N) & : \textit{(at-issue)} \\ \bullet & \\ X[\,2\,](sp(c)) & : \textit{(respect)} \\ \bullet & \\ X[\,1\,](N)(sp(c))(w_@) & : \textit{(commitment)} \end{bmatrix}$$

c. $[\![\textsc{hr}_{[\textsc{hon}_A:+]}]\!] = \lambda X.$
$$\begin{bmatrix} X & : (at\text{-}issue) \\ \bullet & \\ \lambda x.\ <x, 1, Addr(c)> & : (respect) \end{bmatrix}$$

(166) Denotation of *-koto* (Final version)

$[\![\text{-}koto]\!] = \lambda p \in D_{wt}.\ \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.\ \lambda x \in D_e.$

$$\lambda w \in D_w. \left[\begin{array}{ll} \lambda e \in D_v.\ M[\,1\,](x)(e)(w) & : \textit{(event)} \\ & \bullet \\ \textsc{best}(M[\,2\,](x)(w)) \subseteq \{u : p(u)\} & \\ & : \textit{(modal background)} \end{array} \right]$$

(167) Denotation of *-to* (for an indirect speech) (Final version)

$[\![\text{-}to]\!] = \lambda p \in D_{wt}.\ \lambda M \in D_{<e,<v,wt>>}.\ \lambda x \in D_e.$

$$\lambda w \in D_w. \left[\begin{array}{ll} \lambda e \in D_v.\ M(x)(e)(w) & : \textit{(event)} \\ & \bullet \\ \textsc{best}(Dox(x,w)) \subseteq \{u : p(u)\} & \\ & : \textit{(modal background)} \end{array} \right]$$

Third, the enhancement effect and the consistency requirement were analyzed as a constraint on the storage; more specifically, the well-formedness of the semantic object of the respect dimension. The respect relation between the same individuals are collapsed into one summary triple, which results in the enhancement effect. The newly stored triple has to have a respect value higher than the previously stored value, which yields consistency effect in politeness.

In Section 5.4, this analysis was compared with several influential analyses proposed in recent years. First, aside from the details, researchers have proposed the two-tiered structure as I assume in (165). Second, as for the speaker/addressee-layer, opinions vary on whether they can be embedded and on how their semantics are analyzed. Third, as for the clause-typing/mood-tier, researchers agree that it is embeddable but its semantic characterization varies.

Appendix A: Japanese complementizer system

Aspectual predicates, deontic predicates, teleological predicates, and dynamic predicates are always used with *koto*-clauses.

A-1. Aspectual predicate

(1) Aspectual predicate

a. * *Kare-wa* [*hasir-u*]-*to* ***hazime****-ta.*
he-TOP run-PRS-C begin-PST
'He started running (intended).'

b. *Kare-wa* [*hasir-u-koto*]-*o* ***hazime****-ta.*
he-TOP run-PRS-C-ACC begin-PST
'He started running.'

A-2. Deontic predicate

(2) Deontic modal

a. * *Kare-ni-wa* [*hasir-u*]-*to* ***hituyoo*** *da.*
he-DAT-TOP run-PRS-C necessity COP
'It is necessary for him to run (intended).'

b. *Kare-ni-wa* [*hasir-u-koto*]-*ga* ***hituyoo*** *da.*
he-DAT-TOP run-PRS-C-NOM necessity COP
'It is necessary for him to run.'

A-3. Dynamic predicate

(3) Dynamic modal

a. * *Kare-wa* [*hayaku hasir-u*]-*to* ***deki-****ru.*
he-TOP fast run-PRS-C be able to-PRS
'He can run fast.'

b. *Kare-wa* [*hayaku hasir-u-koto*]-*ga* ***deki-****ru.*
he-TOP fast run-PRS-C-NOM be able to-PRS
'He can run fast.'

A-4. Teleological predicate

(4) Teleological predicate

a. * *Kare-wa* [*hasir-u*]-*to* ***kokoromi****-ta.*
he-TOP run-PRS-C-ACC try-PST
'He tried to run.'

b. *Kare-wa* [*hasir-u-koto*]-*o* ***kokoromi****-ta.*
he-TOP run-PRS-C-ACC try-PST
'He tried to run.'

Three comments are in order. First, these predicates lack tense distinction in the embedded clause. For example, in English, past tense cannot be used with a deontic modal expression *be necessary to* as illustrated in (5).

(5) a. It is possible for him to *run* a mile.

b. * It is possible for him to *ran* a mile.

Likewise, these predicates cannot embed a past tense under a *koto*-clause as shown in (6).

(6) Lack of tense distinction

a. *Kare-wa* [*iti mairu hasir-**u**-koto*]-*ga deki-ta.*
he-TOP one mile run-PRS-C-NOM be able to-PST
'He was able to run a mile.'

b. * *Kare-wa* [*iti mairu hasit-**ta**-koto*]-*ga deki-ta.*
he-TOP one mile run-PST-C-NOM be able to-PST
'He was able to ran a mile.'

Second, the thematic role of the subject noun phrase is restricted to AGENT (Yamada 2019d). Thus, the following sentences, where the subject noun cannot be interpreted as an object with its own volition, are illicit.

(7) a. * *Kane-ga* [*nar-u-koto*]-*o* ***hazime****-ta.*
bell-NOM ring-PRS-C-ACC start-PST
'The bell started ringing (intended).'

b. * *Fuji-san-wa* [*tookyoo-kara* *mi-re-ru-koto*]-*ga*
Fuji-Mt.-TOP Tokyo-from see-PASS-PRS-C-NOM
deki*-ru.*
be able to-PRS
'Mt. Fuji can be seen from Tokyo (intended).'

Third, the subject of the main clause and the subject of the embedded clause have to be the same, and the subject of the embedded clause must be unpronounced.

(8) * *Sensei-ga* [*seito-ga* *maitini* *hasir-u-koto*]-*o*
teacher-NOM student-NOM every day run-PRS-C-ACC
hazime-ta.
start-PST
'The teacher made students run every day (intended).'

Other predicates that select non-indicative clauses are bouletic predicates, directive predicates, implicative (causative) predicates, memory predicates.

A-5. Implicative predicate

(9) Implicative predicate

a. *Kare-wa* [*hasir-u-koto*]-*ni* ***seikoo*** ***si****-ta.*
he-TOP run-PRS-C-DAT success do-PST
'He succeeded in running.'

b. * *Kare-wa* [*hasir-u*]-*to* ***seikoo*** ***si****-ta.*
he-TOP run-PRS-C-ACC success do-PST
'He succeeded in running (intended).'

First, *to*-clauses cannot be used with implicative predicates. Second, there is no tense distinction in the embedded clause. Third, an overt embedded subject is not impossible (though slightly marked) as in (10). Fourth, the subject of the main clause is considered an AGENT because it can be used with volition-oriented adverbs (e.g., *mizukara-no isi-de* 'own-GEN volition-with').

(10) *Kare-wa* [*osie-ta* *gakusei-ga* *zen'in* *siken-ni* *gookaku*
he-TOP teach-PST student-NOM all exam-DAT passing
sur-u-koto]-*ni* ***seikoo*** ***si***-*ta.*
do-PRS-C-DAT sucess do-
'He succeeded in all of the students he had taught passing their exams.'

A-6. Bouletic predicate

(11) Bouletic predicate

a. *Kare*$_i$*-wa* [*watasi*$_{*i/j}$*-ga* *hasir-u-koto*]-*o* ***nozon***-*de* *i-ru.*
he-TOP I-NOM run-PRS-C-ACC desire-CV PRG-PRS
'He desires that I run.'

b. *Kare*$_i$*-wa* [*watasi*$_{i/*j}$*-ga* *hasir-u*]-*to* ***nozon***-*de* *i-ru.*
he-TOP I-NOM run-PRS-C-ACC desire-CV PRG-PRS
*'He desires that I run.'
'He$_i$ desires (something, thinking) "I$_i$ will run".'

First, *to*-clauses can stand next to a bouletic predicate as shown in (11)b. But since Japanese allows bare quotative constructions, we need to check whether the given *to*-clause is a standard quotative or a bare quotative. An easy test is to observe the behavior of indexical elements. In bare quotatives, indexical elements shift just as they do in direct speech context. For example, consider the sentence in (12). The main verb is *kake-* 'call/give' which takes an indirect object *kanozyo-ni* 'her-DAT' and *denwa-o* 'telephone (call)-ACC.' Here, the *to*-clause is not selected and is an adjunct. The pronoun *watasi* 'I' in the embedded context can be coindexed with the speaker of the reported context (= the referent of *kare* 'he') but it cannot be coindexed with the speaker of the utterance context; I use j to refer to the speaker of the utterance context.

(12) *Kare$_i$-wa* [*watasi$_{i/*j}$-ga* *hasir-u*]-*to* *kanozyo-ni* *denwa-o*
he-TOP I-NOM run-PRS-C she-DAT telephone-ACC
kake-ta.
give-PST
'He gave her a call (saying) "I will run."

In contrast, if it is a genuine standard quotative, indexical elements do not change, in which case *watasi* 'I' should refer to the speaker of the utterance context as in (11)a. In (11)b, *watasi* must be identical to the referent of the speaker of the reported context; hence, it is reasonable to conclude that the *to*-clause in (11)b is a bare quotative construction. Second, there is no tense distinction in the embedded clause. Third, unlike the above three predicates, bouletic predicates can be used with an overt embedded subject. Fourth, the subject of the main clause is considered an AGENT because it can be used with volition-oriented adverbs such as *mizukara-no isi-de* 'own-GEN volition-with' and *issyookenmei* 'earnestly.'

A-7. Directive predicate

(13) Directive predicate

a. *Kare$_i$-wa* [*watasi$_{*i/j}$-ga* *hasir-u-koto*]-*o* ***kime****-ta.*
he-TOP I-NOM run-PRS-C-ACC decide-PST
'He decided that I ran.'

b. *Kare$_i$-wa* [*watasi$_{i/j}$-ga* *hasir-u*]-*to* ***kime****-ta.*
he-TOP I-NOM run-PRS-C-ACC decide-PST
'He decided that I ran.'
'He decided (something, saying) "I will run".'

First, *to*-clauses are licit with directive predicates. As the coindexation shows, the sentence in (13)b is ambiguous between the standard quotative and the bare quotative reading. Second, there is no tense distinction in the embedded clause. Third, directive predicates can be used with an overt embedded subject. Fourth, the subject of the main clause is considered an AGENT because it can be used with volition-oriented adverbs (e.g., *mizukara-no isi-de* 'own-GEN volition-with').

So far, none of the above predicates accommodates an embedded past tense marker in the complement clause. However, there is a set of predicates that allows an embedded past tense marker.

A-8. Memory predicate

(14) Memory predicate

a. *Kare$_i$-wa* [*watasi$_{*i/j}$-ga* *hasir-u-koto*]-*o* ***oboe**-te*
he-TOP I-NOM run-PRS-C-ACC remember-CV
i-ru.
PRF-PST
'He remembers that I will run.'

b. *Kare$_i$-wa* [*watasi$_{i/j}$-ga* *hasir-u*]-*to* ***oboe**-te* *i-ru.*
he-TOP I-NOM run-PRS-C remember-CV PRF-PST
*'He remembers that I (should) run (intended).'
'He remembers (something, thinking) that I (should) run.'

First, the coindexation test shows that a standard quotative *to*-clause can be used with memory predicates. Second, there is a tense distinction in the embedded clause. Third, the embedded clause allows an overt embedded subject. Fourth, there is a difference between the sentences in (15) in the speaker's commitment. In (15)a, the speaker must think that the proposition expressed by the embedded clause is true (which is unacceptable given our common knowledge) while the sentence in (15)b is acceptable, suggesting that the speaker does not have to commit himself to the embedded proposition.

(15) a. *Kare$_i$-wa* [*amerika-no syuto-ga*
he-TOP US-GEN capital-NOM
{*wasinton/*nyuuyooku*}*-de mata watasi$_{*i/j}$-no*
Washington/New York-COP I-GEN birthplace-COP
syussinti-de ar-u-koto]*-o* ***oboe****-te i-ru.*
COP-PRS-C-ACC remember-CV PRF-PST
'He remembers that the capital of US is Washington D.C./*New York and is my birthplace.'

b. *Kare$_i$-wa* [*amerika-no syuto-ga*
he-TOP US-GEN capital-NOM
{*??wasinton/nyuuyooku*}*-de mata watasi$_{*i/j}$-no syussinti-de*
Washington/New York-COP and I-GEN birthplace-COP
ar-u]*-to* ***oboe****-te i-ru.*
COP-PRS-C remember-CV PRF-PST
'He remembers that the capital of US is *Washington D.C./New York and is my birthplace.'

A-9. Emotive factive predicate

(16) Emotive factive

a. *Kare$_i$-wa* [*watasi$_{*i/j}$-ga hasir-u-koto*]*-ni* ***odoroi****-ta.*
he-TOP I-NOM run-PRS-C-DAT be surprised-PST
'He was surprised at the fact that I would run.'

b. *Kare-wa$_i$* [*watasi-ga$_{i/*j}$ hasir-u*]*-to* ***odoroi****-ta.*
he-TOP I-NOM run-PRS-C be surprised-PST
*'He$_i$ was surprised at the fact that I$_j$ would run.'
'He$_i$ was surprised (thinking/saying) "I$_i$ am supposed to run!".'

First, there are some spurious cases where emotive factive predicates appear to take a *to*-clause as in (16)b. However, as coindexation shows, this should not be a standard quotative construction. Second, there is a tense distinction in the embedded clause. Third, the embedded clause allows an overt embedded subject.

A-10. Verbs-of-knowing

(17) Verbs-of-knowing

a. *Kare$_i$-wa* [*watasi$_{*i/j}$-ga* *hasir-u-koto*]-*o* ***sit-te***
he-TOP I-NOM run-PRS-C-ACC come to know-CV
i-ta.
PRF-PST
'He knew that I would run.'

b. *Kare$_i$-wa* [*watasi$_{??i/j}$-ga* *hasir-u*]-*to* ***sit-te*** *i-ta.*
he-TOP I-NOM run-PRS-C come to know-CV PRF-PST
'He knew that I would run.'
??'He knew (something, thinking/saying) "I will run".'

First, *to*-clauses are not impossible with verbs-of-knowing; however, compared to *koto*-clauses, they are less common. Bare quotative readings are also not impossible but, again, not as common. Second, there is a tense distinction in the embedded clause. Third, an overt embedded subject is grammatical.

A-11. Verbs-of-expectation

(18) Verbs-of-expectation

a. *Kare$_i$-wa* [*watasi$_{*i/j}$-ga* *hasir-u-koto*]-*o* ***kitai*** ***si-te***
he-TOP I-NOM run-PRS-C-ACC expectation do-CV
i-ta.
PRF-PRS
'He was expecting that I would run.'

b. *Kare$_i$-wa* [*watasi$_{i/j}$-ga* *hasir-u*]-*to* ***kitai*** ***si-te*** *i-ta.*
he-TOP I-NOM run-PRS-C expectation do-CV PRF-PRS
'He was expecting that I would run.'
'He was expecting (something saying) "I will run".'

First, it is not impossible for a *to*-clause to be used as a standard quotative as the indexation test shows in (18)b. However, compared to a *koto*-clause, such an indirect speech use is less common. Second, there is no tense distinction in the embedded clause. Third, an overt embedded subject is grammatical.

A-12. Verbs-of-description

(19) Verbs-of-description

a. *Deeta$_i$-wa* [*watasi$_{*i/j}$-ga* *hannin-de* *ar-u-koto*]-*o* ***simesi****-te*
data-TOP I-NOM culprit-COP be-PRS-C-ACC showing
i-ta.
do-CV PRF-PST
'The data showed that I was the culprit.'

b. *Deeta$_i$-wa* [*watasi$_{*i/j}$-ga* *hannin-de* *ar-u*]-*to* ***simesi****-te*
data-TOP I-NOM culprit-COP be-PRS-C showing
i-ta.
do-CV PRF-PST
'The data showed that I was the culprit.'

First, it is not impossible for a *to*-clause to be used as a standard quotative with a verb-of-description. However, compared to a *koto*-clause, such an indirect speech use is less common. Second, there is a tense distinction in the embedded clause. Third, an overt embedded subject is grammatical. Fourth, verbs-of-description select a non-animate subject (e.g., *the data*, *the evidence*).

A-13. Commissive predicate

(20) Commissive predicate

a. *Kare$_i$-wa* [*watasi$_{*i/j}$-no* *ie-de* *eiga-o*
he-TOP I-GEN house-at movie-ACC
mi-ru-koto]-*o* ***yakusoku*** ***si****-ta.*
watch-PRS-C-ACC promise do-PST
'He promised to watch a movie in my house.'

b. *Kare$_i$-wa* [*watasi$_{i/j}$-no* *ie-de* *eiga-o* *mi-ru*]-*to*
he-TOP I-GEN house-at movie-ACC watch-PRS-C
yakusoku ***si****-ta.*
promise do-PST
'He promised to watch a movie in my house.'
'He promised (something saying) "(I) will watch a movie".'

First, a *to*-clause can be used with a commissive predicate. The embedded *watasi* 'I' can refer to the speaker of the utterance context, suggesting that a *to*-clause can provide an indirect speech context. Second, there is no tense distinction in the embedded clause. Third, an overt embedded subject is not grammatical.

A-14. Doubt/fear-indicating predicate

(21) Doubt/fear-indicating predicate

a. *Kare$_i$-wa* [*watasi$_{*i/j}$-ga* *hasir-u-koto*]-*o* ***utagat*-*te*** *i-ta.*
he-TOP I-NOM run-PRS-C-ACC doubt-CV PRG-PST
'He was doubting that I ran.'

b. *Kare$_i$-wa* [*watasi$_{i/j}$-ga* *hasir-u*]-*to* ***utagat*-*te*** *i-ta.*
he-TOP I-NOM run-PRS-C-ACC doubt-CV PRG-PST
*'He was doubting that I ran.'
'He was doubting (something, thinking/saying) "I will run".'
'He was doubting (something, thinking/saying) that I would run.'

First, a *to*-clause can be used with a commissive predicate. However, unlike English *doubt*, the embedded proposition is not the target of the doubt. It is rather the suspicion of the doubt-bearer. The embedded *watasi* 'I' can refer to the speaker of the reported context, suggesting that it can be used as a bare quotative.[49] Second, there is a tense distinction in the embedded clause. Third, an overt embedded subject is grammatical.

[49] **Blended discourse in a bare quotative:** The sentence in (21)b also has a reading where the embedded *watasi* 'I' can refer to both the speaker of the utterance context. However, the embedded proposition is not the target of *doubt*, rather it is what the reported speaker has in his or her mind, which also suggests that this is not the indirect speech reading. This could be analyzed as a blended discourse in a bare quotative construction.

A-15. Verbs-of-saying (II)

(22) Verbs-of-saying

a. *Kare$_i$-wa kanozyo-ni* [*watasi$_{*i/j}$-ga hasir-u-koto*]-*o* ***tuge**-ta.*
he-TOP she-DAT I-NOM run-PRS-C-ACC tell-PST
'He told her that I would run.'

b. *Kare$_i$-wa kanozyo-ni* [*watasi$_{i/j}$-ga hasir-u*]-*to* ***tuge**-ta.*
he-TOP she-DAT I-NOM run-PRS-C tell-PST
'He told her that I would run.'
'He told her (something saying) "I will run".'

First, a *to*-clause can be used with speech act predicates. The embedded *watasi* 'I' can refer to the speaker of the utterance context, suggesting that a *to*-clause can provide an indirect speech context. Second, there is a tense distinction in the embedded clause. Third, an overt embedded subject is grammatical.

A-16. Verbs-of-thinking (II)

(23) a. Verbs-of-thinking

Kare$_i$-wa [*watasi$_{*i/j}$-ga hasir-u-koto*]-*o* ***kangae**-ta.*
he-TOP I-NOM run-PRS-C-ACC tell-PST
'He thought about his running event.'

b. *Kare$_i$-wa* [*watasi$_{?i/j}$-ga hasir-u*]-*to* ***kangae**-ta.*
he-TOP I-NOM run-PRS-C tell-PST
'He thought that I would run.'
?'He thought (of something thinking) "I will run".'

First, a *to*-clause can be used with a certain type of speech act predicate. The embedded *watasi* 'I' can refer to the speaker of the utterance context, suggesting that a *to*-clause can provide an indirect speech context. In fact, the bare quotative reading is quite marked. Second, there is a tense distinction in the embedded clause. Third, an overt embedded subject is grammatical.

A-17. Verbs-of-saying (I)

(24) Verbs-of-saying

a. * *Kare-wa* [*watasi-ga* *hasir-u-koto*]-*o* ***it****-ta.*
he-TOP run-PRS-C-ACC begin-PST
'He started running.'

b. *Kare*$_i$*-wa* [*watasi*$_{i/j}$*-ga* *hasir-u*]-*to* ***it****-ta.*
he-TOP I-NOM run-PRS-C say-PST
'He$_i$ said that I$_j$ would run.'
'He$_i$ said, "I$_i$ would run".'
'He$_i$ said (something, thinking), "I$_i$ would run".'

First, certain verbs-of-saying are compatible with a *to*-clause, but not with a *koto*-clause.[50] In (24)b, the embedded *watasi* 'I' can refer to the speaker of the utterance context (indirect speech), as well as the speaker of the reported context (direct speech/bare quotative). Second, there is a tense distinction in the embedded clause. Third, an overt embedded subject is grammatical.

A-18. Verbs-of-thinking (I)

(25) Verbs-of-thinking

a. * *Kare-wa* [*watasi-ga* *hasir-u-koto*]-*o* ***omot****-ta.*
he-TOP run-PRS-C-ACC begin-PST
'He thought that I would run.'

b. *Kare*$_i$*-wa* [*watasi*$_{*i/j}$*-ga* *hasir-u*]-*to* ***omot****-ta.*
he-TOP I-NOM run-PRS-C begin-PST
'He thought that I would run.'
'He thought (something, saying) "I will run".'

First, some verbs-of-thinking are used with a *to*-clause, but not with a *koto*-clause. The bare quotative reading is quite bizarre because the embedded *watasi* 'I' hardly refers to the speaker of the reported context. Second, there is a tense

[50] **A coercion:** If *iw-* 'say' is used in a loose way as a synonymous expression of *tutae-* 'tell,' the sentence in (24)a may be accepted by some native speakers (= verbs-of-saying (II)).

distinction in the embedded clause. Third, an overt embedded subject is grammatical.

Appendix B: Embedded addressee-honorific markers

Here, examples taken from real language data will be provided to ensure that addressee-honorific markers are indeed embeddable.

B-1. Aspectual predicate

(26) *ar-* 'be/PRF'

[*daisansya-ni* *zyooto* *matawa* *kookai-o*
third party-DAT transfer or publication-ACC
*itasi-**mas**-u*]*-koto-wa* ***gozai**-mas-en.*
do.HON$_U$-HON$_A$-PRS-C-FOC be.HON$_U$-HON$_A$-NEG
'(i) There has not been an event of making a transfer of (your property) to a third party or making (it) public;
(ii) the speaker respects the addressee (< the embedded *-mas*);
(iii) the respect is very high (< *itas-*);
(iv) the speaker respects the addressee (< the main clause *-mas*);
(v) the respect is very high (< *gozai-*).' (https://www.rakuten.ne.jp/gold/seijoishii/)

(27) *tuduke-* 'continue'

[[[*Simin-no* *katagata-ni* *yorokob-are-ru*]
citizen-GEN people.HON-DAT become happy-PASS-PRS
seihin-o *tukut-te* *mairi-**mas**-u*]*-koto-o* *kono*
product-ACC make-CV go.HON$_U$-HON$_A$-PRS-C-ACC this
saki-mo ***tuduke**-te* *mairi-tai*]*-to* *omot-te*
future-also continue-CV go.HON$_U$-will-C think-CV
ori-mas-u.
PRG.HON$_U$-HON$_A$-PRS
'(i) We are thinking, "[we want to continue [making products [that are happily accepted by the citizens]] from now on too]";
(ii) the speaker respects the addressee (< the embedded *mas*);
(iii) the respect is very high (< the embedded *mairi-*);
(iv) the respect is very high (< *mairi-*);
(v) the speaker respects the addressee (< the main clause *-mas*);
(vi) the respect is very high (< *ori-*).' (http://www.ishiidoboku.co.jp/company.php)

B-2. Deontic predicate

(28) *toozen da* 'natural COP'

[*kokkai-no ketugi-o sontyoo si-te mairi-**mas**-u-*]*koto-wa*
Congress-GEN decision-ACC respect do-CV go.HON$_U$-HON$_A$-C-TOP
***toozen**-to itasi-masi-te, ...*
natural-as do-.HON$_U$-HON$_A$-and
'(i) (We the government) find it (as a) natural duty (for us) to be going to respect the decision of the congress, and ...;
(ii) the speaker respects the addressee (< the embedded *-mas*);
(iii) the respect is very high (< *mairi-*);
(iv) the speaker respects the addressee (< the main clause *-mas*);
(v) the respect is very high (< *itasi-*).' (BCCWJ, OM31_00008)

(29) *hukaketu da* 'necessity COP'

[*Gensiryoku-no kaihatu riyoo-o kyooryoku-ni*
nuclear energy-GEN development exploitation-ACC powerfully
*suisin si-te mairi-**mas**-u-*]*koto-ga **hukaketu** de*
promote do-CV go.HON$_U$-HON$_A$-PRS-C-NOM necessary COP
ari-mas-u.
be.HON$_U$-HON$_A$-PRS
'(i) It is necessary/indespensible (for us) to powerfully promote the developement and exploitation of nuclear energy.' (BCCWJ, OM17_00001)

B-3. Dynamic predicate

(30) *kanoo da* 'possibility COP'

Yoyaku zyookyoo-yori [*uketamawari-**mas**-u-*]*koto-mo*
reservation statu-depending on accept-HON$_A$-PRS-C-also
***kanoo** des-u.*
possibility COP-PRS
'(i) (We) can accept (your reservation) depending on the reservation status;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the speaker respects the addressee (< *-des*).'
(https://hotel.travel.rakuten.co.jp/hotelinfo/plan/40061)

(31) *deki-* 'can'

[*Hitotu-no* *o-nimotu-de-no* *o-todoke-o*
one-GEN HON-package-with-GEN HON-delivery-ACC
s-ase-te *itadaki-**mas**-u*]*-koto-wa* ***deki**-kane-mas-u.*
do-CAUS-CV APPL$_{H}$.HON$_{O}$-HON$_{A}$-PRS-C-TOP can-NEG-HON$_{A}$-PRS
'(i) (We) cannot send one package;
(ii) the speaker respects the addressee (< the embedded *-mas*);
(iii) the speaker respects the addressee (< the main clause *-mas*).'
(https://kagimago.co.jp/hpgen/HPB/entries/8.html)

B-4. Teleological predicate

(32) *mokuhyoo-ni sur-* 'regard ... as the goal'

[*Tasseiritu-ga* *20%-tyoo-to*
accomplishment rate-NOM 20%-over-DAT
*nari-**mas**-u-*]*koto-o* ***mokuhyoo-ni*** ***si**-mas-u.*
become-HON$_{A}$-PRS-C-ACC goal-as do-HON$_{A}$-PRS
'(i) (I) aim (to make it the case) that the accomplishment rate becomes over 20%;
(ii) the speaker respects the addressee (< the embedded *-mas*);
(iii) the speaker respects the addressee (< the main clause *-mas*).'
(http://shogimaster.blog.fc2.com/category2-1.html)

B-5. Implicative predicate

(33) *seikoo sur-* 'succeed'

[*Omikuzi* *ibento-de* *daikiti-o* *dasi-**mas**-u-koto*]*-ni*
oracle event-at 'excellent good'-ACC
seikoo ***itasi**-masi-ta.*
draw-HON$_{A}$-PRS-C-DAT success do.HON$_{U}$-HON$_{A}$-PST
'(i) I succeeded in drawing an "excellent good" at an oracle event;
(ii) the speaker respects the addressee (< the embedded *-mas*);
(iii) the speaker respects the addressee (< the main clause *-mas*);
(iv) the respect is very high (< *itas-*).'

B-6. Bouletic predicate

(34) *negaw-* 'hope/wish'

[*Kotosi-mo* *ooku-no* *okyakusama-ni*
this year-also many-GEN customer-DAT
*go-raizyoo-itadak-e-**mas**-u*]-*koto-o* ***negat**-te*
HON-visiting-APPL$_{H}$.HON$_{O}$-can-HON$_{A}$-PRS-C-ACC hope/wish-CV
ori-mas-u.
PRG.HON$_{U}$-HON$_{A}$-PRS

'(i) (we) hope that we benefit from the event of many customers' visiting (us) this year as well;

(ii) the speaker respects the addressee (< the embedded *-mas*);

(iii) the speaker respects the addressee (< the main clause *-mas*);

(iv) the respect is very high (< *ori-*).'

(35) *inor-* 'pray'

[*Atarasii* *tosi-o* *huku-to* *tomoni*
new year-ACC fortune-with together
*mukae-rare-**mas**-u*]-*koto-o* *o-**inori**-moosiage-mas-u.*
welcome-can-HON$_{A}$-PRS-C-ACC HON-praying-APPL$_{H}$.HON$_{O}$-HON$_{A}$-PRS

'(i) (I) am praying (for you) that (we) can welcome a new year with a fortune;

(ii) the speaker respects the addressee (< the embedded *-mas*);

(iii) the speaker respects the referent of the applied argument (= *you*; < *-moosiage*);

(iv) the speaker respects the addressee (< the main clause *-mas*).'

B-7. Directive predicate

(36) *yookyuu sur-* 'demand'

[*Zehi* *izyoo-no* *koto-ni*
by all means above-GEN thing-DAT
*torikum-are-**mas**-u*]*-koto-o* ***yookyuu*** ***itasi****-mas-u.*
work on-HON$_S$-HON$_A$-PRS-C-ACC demanding do.HON$_U$-HON$_A$-PRS
'(i) (We) demand that (you) work on the above tasks by all means;
(ii) the speaker respects the referent of the embedded subject (< *-are*);
(iii) the speaker respects the addressee (< the embedded *-mas*);
(iv) the speaker respects the addressee (< the main clause *-mas*).'
(http://www.city.shimonoseki.yamaguchi.jp/water/icity/watertalk/vol41/html/hiroba/index.html)

(37) *yoosei sur-*

[[*Seigi-to* *ryoosin-to* *dootoku-o* *ikannaku* *hakki*
justice-and conscience-and moral-ACC thoroughly exerting
s-are-mas-u]*-koto-o* ***yoosei*** ***sur****-u*]*-mono* *des-u.*
do-HON$_S$-HON$_A$-C-ACC request do-PRS-thing COP.HON$_A$-PRS
'(i) (Our talk) is a thing that requests that (you) thoroughly show your justice, your conscience, and your moral;
(ii) the speaker respects the referent of the embedded subject (< *-are*);
(iii) the speaker respects the addressee (< the embedded *-mas*);
(iv) the speaker respects the addressee (< the main clause *-mas*).'
(https://www.city.ichihara.chiba.jp/gikai/_.files/28_2_chinjou_bunsyohyo.pdf)

B-8. Memory predicate

(38) *oboe-* 'remember'

[*Migi-mo hidari-mo wakar-az-u-ni yat-te*
right-and left-and understand-NEG-PRS-at do-CV
*i-**mas**-ta koto*]*-o **oboe**-te i-mas-u.*
PRG-HON$_A$-PST C-ACC remember-CV PRF-HON$_A$-PRS

'(i) I remember that I was doing that without recognizing right and left;
(ii) the speaker respects the addressee (< *-mas* in the embedded clause);
(iii) the speaker respects the addressee (< *-mas* in the main clause).'
(https://medium.com/product-run)

(39) *wasure-* 'forget'

[*Samazamana bunya-de minasan-noyoona sugureta enzinia-ga*
different field-at you-like excellent engineer-NOM
*hituyoo-to s-are-te i-**mas**-u-koto*]*-o **wasure**-nai-de*
necessity-as do-PASS-CV PRG-HON$_A$-PRS-C-ACC forget-NEG-CV
kudasai.
HON$_S$

'(i) Please do not forget that excellent engineers like you guys are considered indispensable in different fields;
(ii) the speaker respects the addressee (< *-mas*);
(iii) the speaker respects the referent of the subject (= *you*; < *kudasai*).'
(https://www.oita-ct.ac.jp/topics/photo/20150318_sotsugyo/kocho_kokuji_20150318.pdf)

B-9. Emotive factive predicate

(40) *kansya sur-* 'thank'

[*Go-enzyo-no* *moto-de* *katudoo* *s-ase-te*
HON-support-GEN basis-on activity do-CAUS-CV
*itadake-**mas**-u*]*-koto-o* ***kansya*** ***si**-te*
APPL$_{H}$.HON$_{O}$-HON$_{A}$-PRS-C-ACC thanking do-CV
ori-mas-u.
PRF.HON$_{U}$-HON$_{A}$-PRS

'(i) (We) thank for the fact that (we) benefit from (your) making us do activities with your support (= we thank you for your support for our activities);

(ii) the speaker respects the addressee (< the embedded *-mas*);

(iii) the speaker respects the addressee (< the main clause *-mas*);

(iv) the respect is very high (< *ori-*).' (https://smartlog.jp/142328)

(41) *yorokob-* 'become pleased/happy'

[*Doosookai* *sookai-ga* ... *seidai-ni* *kaisai*
alumni association general meeting-NOM splendidly holding
*deki-**mas**-u-*]*koto-o* ***yorokon**-de* *ori-mas-u.*
can-HON$_{A}$-PRS-C-ACC become pleased-CV PRF-HON$_{A}$PRS

'(i) (I) am pleased to have a general meeting of the alumni association splendidly;

(ii) the speaker respects the addressee (< the embedded *-mas*);

(iii) the speaker respects the addressee (< the main clause *-mas*);

(iv) the respect is very high (< *ori-*).' (https://fukuchu-fukkou.jp/pdf/dousoukai-2011.pdf)

B-10. Verbs-of-knowing

(42) *ryookai sur-* 'understand'

[[*Soo yuu doryoku-o itasi-te ori-**mas**-u-*]*koto-o*
that like effort-ACC do.HON$_U$-CV PRF.HON$_U$-HON$_A$-PRS-C-ACC
*go-**ryookai** itadaki-tai*]*-to omoi-mas-u.*
HON-understanding APPL$_H$.HON$_O$-want-C think-HON$_A$-PRS

'(i) (We) think (we) want to benefit from your understanding that (we) make efforts like these;

(ii) the speaker respects the addressee (< the embedded *-mas*);

(iii) the respect is very high (< *-itasi*;

(iv) the respect is very high (< *ori-*);

(v) the speaker respects the referent of the object (< *itadaki*);

(vi) the speaker respects the addressee (< the main clause *-mas*).'(BCCWJ, OM31_00001)

(43) *syooti sur-* 'know'

[*Syuugiin-no hutai ketugi-mo*
the House of Representatives-GEN supplementary resolution-also
*hus-are-te ori-**mas**-u*]*-koto, zyuuzyuu **syooti** **si**-te*
pass-PASS-CV PRF.HON$_U$-HON$_A$-C very well knowing do-CV
gozai-mas-u.
PRF.HON$_U$-HON$_A$-PRS

'(i) (I) know very well that a supplementary resolution of the House of Representatives has been passed;

(ii) the speaker respects the addressee (< the embedded *-mas*);

(iii) the respect is very high (< *ori-*);

(iv) the speaker respects the addressee (< the main clause *-mas*);

(v) the respect is very high (< *gozai-*).' (OM51_00004)

B-11. Verbs-of-expectation

(44) *kitai sur-* 'expect'

[[*Yuuekina zyoohoo-o teikyoo sur-u*] *kikai-to*
useful information-ACC providing do-PRS opportunity-as
*nari-**mas**-u*]*-koto-o **kitai** **si**-te ori-mas-u.*
become-HON$_A$-PRS-C-ACC expecting do-CV PRG.HON$_U$-HON$_A$-PRS
'(i) (We) are expecting that (this) becomes an opportunity in which (we) provide useful information (for you);
(ii) the speaker respects the addressee (< *-mas*);
(iii) the speaker respects the addressee (< *-mas*);
(iv) the respect is very high (< *ori-*).'
(https://www.nedo.go.jp/events/FF_100111.html)

B-12. Verbs-of-description

(45) *arawas-* 'express/show'

[[*Erab-are-ru*] *isyoo-ni yot-te ryookin-ga*
choose-HON$_S$-PRS costume-of basis-on price-NOM
*kawari-**mas**-u*]*-koto-o **arawasi**-te ori-mas-u.*
vary-HON$_A$-PRS-C-ACC show-CV HON$_U$-HON$_A$-PRS
'(i) (it) shows that the price varies depending on the costume (you) choose;
(ii) the speaker respects the referent of the subject (< *are*);
(iii) the speaker respects the addressee (< the embedded *-mas*);
(iv) the speaker respects the addressee (< the main clause *-mas*);
(v) the respect is very high (< *ori-*).'
(https://www.mpm-photo.jp/mpm-wedding-s/faq/)

B-13. Commissive predicate

(46) *yakusoku sur-* 'promise'

[*Sono hogo-ni tutome-te mairi-mas-u*]*-koto-o*
that protection-DAT manage-CV go.HON$_U$-HON$_A$-PRS-C-ACC
yakusoku itasi*-mas-u.*
promise do.HON$_U$-HON$_A$-PRS

'(i) (We) promise to be going manage the protection;

(ii) the speaker respects the addressee (< the embedded *-mas*);

(iii) the respect is high;

(iv) the speaker respects the addressee (< the main clause *-mas*);

(v) the respect is high (< *itas-*).' (www.148momotaro.com/contact.php)

B-14. Doubt/fear-indicating predicate

(47) *osore-* 'fear'

[*Sore-ga sonomama zizitu-tosite rikai*
that-NOM as it is fact-as understanding
*s-are-**mas**-u*]*-koto-o* ***osore****-te ori-mas-u.*
do-PASS-HON$_A$-PRS-C-ACC fear-CV PRG.HON$_U$-HON$_A$-PRS

'(i) (I) fear that that is understood as a fact as it is(= without being criticized);

(ii) the speaker respects the addressee (< the embedded *-mas*);

(iii) the speaker respects the addressee (< the main clause *-mas*);

(iv) the respect is very high.' (https://www.22art.net/life/americanishikaigan/)

B-15. Verbs-of-saying (II).

(48) *hookoku sur-* 'report'

[*Minasama-ni ansin si-te go-riyoo*
everyone-DAT trust do-CV HON-exploitation
*itadak-e-**mas**-u*]*-koto-o* *go-**hookoku***
APPL$_{H}$.HON$_{O}$-can-HON$_{A}$-PRS-C-ACC HON-reporting
***itasi**-mas-u.*
do.HON$_{U}$-HON$_{A}$-PRS
'(i) (We) report (to you) that all of you can trust and use (it);
(ii) the speaker respects the referent of the object (< *itadak*) ;
(iii) the speaker respects the addressee (< the embedded *-mas*);
(iv) the speaker respects of the referent of the indirect object (< *go-hookoku sur-*);
(v) the speaker respects the addressee (< the main clause *-mas*);
(vi) the respect is very high (< *itas-*).' (https://yukko-morioka.jp/news/2019/07/937/)

B-16. Verbs-of-thinking (II).

(49) *kangae-* 'consider'

[*Apuri-ga 'hihyoozi' settei-ni nat-te*
app-NOM 'Not Display' mode-DAT become-CV
*i-**mas**-u*]*-koto-ga* ***kangae**-rare-mas-u.*
PRF-HON$_{A}$-PRS-C-NOM consider-can-HON$_{A}$-PRS
'(i) It can be considered that apps are set to "Not Display" mode;
(ii) the speaker respects the addressee (< the embedded *-mas*);
(iii) the speaker respects the addressee (< the main clause *-mas*).'
(https://faq.support-huawei.com/pickup_faq?site_domain=default)

Chapter 6

Conclusion

The study of the Japanese honorific system has a long tradition, as we reviewed in Chapter 1. Until the 1970s, the idiosyncrasies that differentiate Japanese (and Korean) from other languages were emphasized. However, researchers with completely different research agendas have revealed different aspects of honorific expressions, and these findings have played an important role in general theories of language, such as Politeness Theory (Brown and Levinson 1987 [1978]; Takiura 2008), Wakimae Theory (Ide 2002, 2005, 2012), Territory Theory (Kamio 1995, 1997), Empathy Theory (Kuno 1987; Lee and Kuno 2004), Grammaticalization Theory (Dasher 1995; Traugott and Dasher 2002), the syntax of agreement (Suzuki 1988; Tribio 1990; Sells and Iida 1991; Ura 1996, 1999, 2000; Namai 2000; Niinuma 2003; Boeckx and Niinuma 2004; Hasegawa 2017 [2006]; Boeckx 2006; Ivana and Sakai 2007; Kishimoto 2010, 2012; Oseki and Tagawa 2019), theories of expressiveness (Potts and Kawahara 2004; Potts 2007a, b; Mc-

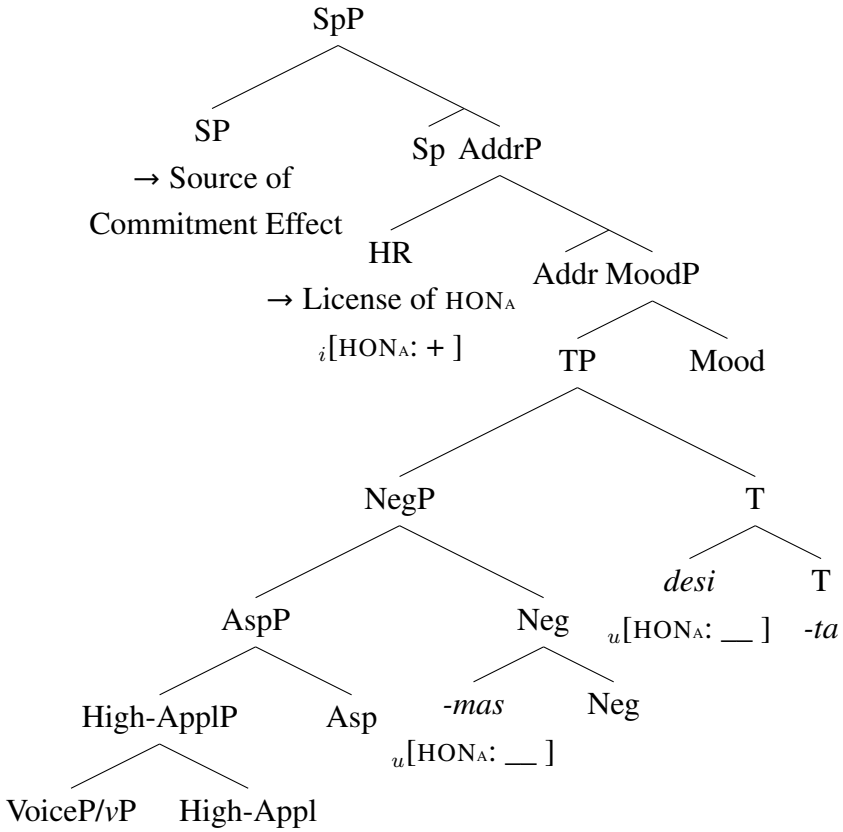
Cready 2014, 2018, 2019; Sawada 2017; Yamada 2017, 2018a, 2019a; Portner et al. 2019), and theories of left-periphery (Miyagawa 2012, 2017; Kaur and Yamada 2019).

However, even in such a long tradition of linguistic inquiry on honorifics, addressee-honorific markers have not been extensively discussed until very recently. A surge of interest in formal syntax, semantics, and pragmatics has occurred in the 2010s (syntax, Miyagawa 2012, 2017; Slocum 2016; Zu 2018; semantics/pragmatics, McCready 2014, 2018, 2019; Portner et al. 2019). The goal of this dissertation was (i) to give a detailed description of this understudied phenomenon and (ii) to develop an analysis in syntax, semantics and pragmatics. In this last chapter, let us review the central claims of this dissertation.

6.1 Morphology and syntax

If we take all the arguments of this dissertation into consideration, the relevant functional projections are aligned in the following manner:

(1)



Postsyntactic node-sprouting rule. In Chapter 2, we identified three positions of subject/object-honorific markers; (i) VoiceP/*v*P domain, (ii) High-Appl and (iii) Asp. As suggested by the relative order among morphemes (e.g., see (2)), the position of *-mas* must be higher than these positions, but it is lower than or equal to the Neg. Adopting assumptions from Distributed Morphology, it is proposed that (i) an honorific feature is sprouted in Neg (= (3)) and (ii) *-mas* is a realization of this feature, which enters into an agreement relation with the syntactically represented HEARER in the speech act layer.

(2) *Sensei-ga* *hasit-te* ***irassyai-mas**-en.*
teacher-NOM run-CV PRG.HONS-HONA-NEG
'(i) The teacher is not running;
(ii) the speaker respects the referent of the subject (= the teacher);
(iii) the speaker respects the addressee.'

(3) **HON$_A$-sprouting rule** (p. 245)
Neg → [$_{\text{Neg}}$ $_u$[HON$_A$: _] Neg] / [HEARER$_{[\text{HONA: +}]}$ . . . [. . . __ . . .]]

Economy principles. The presence of *-mas* causes morphological changes in Neg and the *be*-support element. Relevant examples are given below.

(4) a. *Hasir-**anak** **at**-ta.*
run-NEG COP-PST
'I did not run.'

b. *Hasiri-**mas**-**en** **desi**-ta.*
run-HON$_A$-NEG COP.HON$_A$-PST
'(i) I did not run;
(ii) the speaker respects the addressee.'

In Chapter 3, I proposed that this is a bi-product of agreement. Due to the two economy principles — (i) Multitasking and (ii) preference for agreement within a short-er distance — the addressee-honorific feature moves to the head of TP to solve the stranded affix problem and to minimize the distance in agreement.

(5) **Economy principles** (p. 237)

a. **Economy principle I (Agreement within a short-er distance):** Suppose that X and Y have an agree-link. The shorter the distance between X and Y, the more favorable the conditions for an agree-copy to take place.

b. **Economy principle II (Multitasking):** When there are more than two problems to solve during the derivation, the most economical solution is to fix all of the problems at once, rather than solving these problems one by one using different solutions.

Embedded SpP-AddrP. In Chapter 5, we examined the syntax-discourse interface. Japanese addressee-honorific markers are embeddable, as illustrated in (6).

(6) *Kare$_i$-mo* [*kare$_i$-no musuko-ga kabin-o kowasi-te*
he-also he-GEN son-NOM vase-ACC break-CV
*simai-**masi**-ta koto*]-*o wabi-te ori-mas-u.*
MAL-HON$_A$-PST C-ACC apologizing-CV PRG.HON$_U$-HON$_A$-PRS
'(i) He$_i$ is also apologizing for his$_i$ son's having broken the vase;
(ii) the speaker of the utterance context respects the addressee of the utterance context very much (< *ori-mas* in the main clause);
(iii) the speaker of the utterance context respects the addressee of the utterance context (< *-mas* in the embedded clause).'

To explain such an embedded use, we proposed that speech act layers are embeddable in Japanese.

(7) **Embedded SpP-AddrP** (p. 426)

a. In principle, natural languages can embed SpP-AddrP.

b. However, embedded SpP-AddrP is highly restricted and only occurs in limited environments.

c. In some languages, the restriction is so strong that embedded SpP-AddrP are completely ruled out (e.g., Korean/Thai), whereas in other languages, the restriction is not as strong (e.g., Japanese).

6.2 Semantics and pragmatics

Commitment effect. It is proposed that the main job of the SPEAKER is (i) to provide an at-issue meaning, which is used when negotiating the common ground update, and (ii) to provide the speaker's commitment as a non-at-issue meaning.

(8) **SPEAKER** (p. 435)

$$[\![\text{SPEAKER}]\!]^c = \lambda X \in D_{<<e,<v,wt>>\bullet<e,wt>,<e,<v,<w,t\bullet t>>>>\bullet e\epsilon>}.\ \lambda M \in D_{<e,<v,wt>>\bullet<e,wt>}.\ \begin{bmatrix} X[\,1\,](M) & : \textit{(at-issue)} \\ \bullet & \\ X[\,2\,](sp(c)) & : \textit{(respect)} \\ \bullet & \\ X[\,1\,](M)(sp(c))(w_@) & : \textit{(commitment)} \end{bmatrix}$$

As we have seen, there are two different types of commitments. Type I commitment refers to a case in which the nature of the commitment depends on the meaning of the embedding predicate. In Chapter 5, it was proposed that, when Type I effect is triggered, the lambda-bound N (the unsaturated modal background) is saturated by the meaning of the embedding predicate. When a Type II commitment appears, this N is saturated by the default modal background, *Dox* (the doxastic modal background).

Static semantics and dynamic pragmatics. The main tasks of the HEARER are (i) to guarantee that there is a particular addressee in the discourse (when ${}_i[\text{HON}_\text{A}]$ is set to positive) and (ii) to provide the 'respect' meaning, as seen in (9).

(9) **HEARER** (p. 434)

$$[\![\text{HEARER}_{[\text{HON}_\text{A}: +]}]\!]^c = \lambda X. \begin{bmatrix} X & : (at\text{-}issue) \\ \bullet & \\ \lambda x.\ <x, 1, addr(c)> & : (respect) \end{bmatrix}$$

As for the 'respect' dimension, a triple $<x, z, y> \in D_e \times \mathbb{Z}^+ \times D_e$ is provided. In Chapter 5, we saw that where an embedded addressee-honorific marker is present, we have (more than) two tuples of $< sp(c), 1, addr(c) >$, one from the main clause and the other(s) from the embedded clause(s). By collapsing the politeness levels, we obtain a single tuple that represents the 'respect' meaning of the entire sentence.

In Chapter 3, we saw that the following pragmatic rule exists in Japanese (cf., Portner et al. 2019):

(10) **Pragmatic principle about Japanese interrogatives** (p. 258)
The utterance effect of the *ka*-marked interrogative clause is a response-seeking question (= it can update the QUD) iff it is guaranteed that the addressee is different from the speaker.

A two-step context update process is assumed (cf., Murray 2017). The first step is the non-at-issue-checking. The second step is the QUD-update. In Japanese, a response-seeking question is only possible when the non-at-issue meaning guarantees that the speaker recognizes that there is an addressee in the discourse, which is the prerequisite for a response-seeking question because if the speaker wants a response, there should be an addressee who at least hears the speaker's question and can potentially give him or her a response. As a language-specific pragmatic rule, in Japanese (unlike in English), it is required that the sentence grammatically guarantees that the addressee is different from the speaker when making a response-seeking question.

In Chapter 4, we developed a dynamic pragmatic model for the manner in which this triple triggers a context change. The following structured discourse context is provided:

(11) a. $c =< cs, qs, tdl, \ldots, h >$ (p. 317)
b. $h = \{h_{ij}\}$, $\forall i, j \in D_{disc}$
c. $h_{ij} \in D_e \times (\mathbb{R}^+ \times \mathbb{R}^+) \times D_e$

This h is the honorific state. As we saw, we can assign different interpretation to this h. The first interpretation is to view this h as reflecting and summarizing the past honorific uses (= the set of SUMMARY PARAMETERS). By looking at the magnitude of each parameter, we can reconstruct what the past states were like. The second interpretation is that h reflects the AUDIENCE'S UNCERTAINTY about the speaker's honorific attitude. Third, we can interpret this h as a state that represents what kind of person the speaker is, or the SPEAKER'S PUBLICIZED SELF-IMAGE. Under this third view, discourse participants are engaged in a language game in which they not only narrow down the cs but also change the parameters to know what kind of neighbors they are surrounded by.

When we take the view that h represents the audience's uncertainty, we can interpret the two positive real numbers in $h_{i,j}$ as representing the parameters for the Beta distribution, which justifies the following context update in honorific expressiveness:

(12) a. $h+ < x, 1, y >= h'$ (p. 319)
where $h' = (h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy} + 1, \beta_{xy}), y >\}$

b. $h+ < x, 0, y >= h'$
where $h' = (h \setminus \{h_{xy}\}) \cup \{< x, (\alpha_{xy}, \beta_{xy} + 1), y >\}$

6.3 Looking forward

This dissertation has documented and examined several important aspects of Japanese addressee-honorific markers. Through the discussion, it has been shown that they are related to many important issues beyond Japanese that are widely discussed in recent literature, rejecting a naïve view that such politeness encodings are extra 'ornaments' that piggy-back on the main body of the sentence. Agreement, syntax-discourse interface, and expressiveness are indispensable areas of study in contemporary formal linguistic inquiry. There is no doubt that addressee-honorific markers, despite their short history in formal linguistics, play an important role in all these areas and perhaps beyond. Rather than seeing them as a language-specific phenomenon, it is of great importance for us to examine these elements to better understand languages addressee-oriented expressions and to build general linguistic theories.

This dissertation could not discuss several related important questions; for example, the question of how the addressee-honorific system differs from (or is similar to) other honorific systems remains unanswered (Kikuchi 1997 [1994]: 92). Politeness encodings in the nominal domain, such as the *tu-vous*/*du-Sie* distinctions in French and German, are well-known, and it has been reported that other languages also encode politeness in the nominal phrase (Brown and Gilman 1968 [1960], 1972; Koizumi 1984: 208; Helmbrecht 2003, 2005; Portner et al. 2019; for the Japanese pronominal system, see Barke and Uehara 2005). Titles

also convey the speaker's respect for the addressee (Hill 2014). Some adverbs and discourse markers (e.g., *please* and *yes* as opposed to *yeah*) can also be viewed as delivering the speaker's polite attitude.

Another related topic that deserves our attention is the analysis of addressee-honorific upgraders. Historical data shows that addressee-honorific markers and addressee-honorific upgraders are closely related, as we reviewed in Chapter 2. However, no formal analysis of these AH-upgraders has been proposed either in syntax or in semantics/pragmatics. They not only concern the addressee but also impose some restrictions on the subject, thus showing a hybrid property between an addressee-honorific marker (utterance honorifics) and a subject-honorific marker (content honorifics). Furthermore, their pronunciation sites are lower than *-mas*. How are they (morpho-)syntactically associated with *-mas*? In addition, addressee-honorific upgraders strengthen the politeness level. If we wish to incorporate these elements into the theory we built in Chapter 4, it would be necessary to modify the analysis, because we have to deal with three levels, not binary outcomes.

In Chapter 4, we also informally mentioned that this model could be extended by incorporating multiple correlated sociolinguistic factors. In Yamada (2018a), I mentioned that this extension makes the statistical model we built mathematically equivalent to a Bayesian interpretation of the formula proposed in Cedergren and Sankoff (1974), which has been used as one of the most basic models in the Variation Theory (Labov 1972). Traditionally, the distinction between sociolinguistics and formal pragmatics has been rather sharply distinguished, and certainly some researchers may want to maintain this distinction. Bayesian statistical reasoning forms a bridge across linguistic fields that have historically been considered independent.

The topics discussed in Chapter 5 could also be improved if we observed a wide range of comparable phenomena from different languages. If speech act layers are embeddable under certain circumstances, we may find constructions that appear to be a main clause phenomenon but yet turn out to be embeddable. Examining such phenomena facilitates our understanding of the differences be-

tween the main clause and the embedded clause.

I would like to leave these issues to future study.

References

Adaskina, Y. & Grashchenkov, P. (2009). Verb morphology and clause structure in Basque: allocutive. Oral Presentation at the Fifth Network Meeting & Morphology of the World's Languages, the University of Leipzig 2009.

Adger, D. & Harbour, D. (2008). Why phi. D. In *Phi theory: phi-features across modules and interfaces*, (eds.), D. Harbour, D. Adger & S. Béjar, 1-34. Oxford: Oxford University Press.

Aelbrecht, L. & Haegeman, L. (2012). VP-ellipsis is not licensed by VP-topicalization. *Linguistic Inquiry* 43, 591-614.

Aelbrecht, L., Haegeman, L. & Nye, R. (2012). Main Clause Phenomena and the privilege of the root. In *Main clause phenomena: new horizons*, (eds.), L. Aelbrecht, L. Haegeman, & R. Nye, 1-19. Amsterdam/Philadelphia: John Benjamins.

Ahn, H. & Yoon, H. (1989). Functional Categories in Korean. *Havard Workshop on Korean Linguistics* 3, 79-88.

Akita, S. (1966). 'Mawiru' to 'mawirasu' ['Mairu' and 'mawirasu']. *Kokugo Kokubun* 35(5), 1-12.

Alberdi, J. (1995). The development of the Basque system of terms of address and the allocutive conjugation. In *Toward a history of the Basque Language*, (eds.), J. I. Hualde, J. A. Lakarra, R. L. Trask, 275-294. Amsterdam/Philadelphia: John Benjamins.

Albert, J. (2009). *Bayesian computation with R*. Dordrecht, Heidelberg/London/New York: Springer.

Alexiadou, A., Anagnostopoulou, E. & Schäfer, F. (2006). The properties of anticausatives crosslinguistically. In *Phases of interpretation*, (ed.), M. Frascarelli, 187-211. Berlin: Mouton de Gruyter.

Allott, A. J. (1965). Categories for the description of the verbal syntagma in Burmese. *Lingua* 15, 283-309.

Alok, D. (2019). 2nd person pronoun bound by Hr: evidence from Magahi addressee agreement. Presented at Person and Perspective: a workshop honoring the work of Maria Luisa Zubizarreta, University of Southern California.

Alok, D. & Baker, M. (2018). On the mechanics (syntax) of indexical shift: evidence from allocutive agreement in Magahi. Ms., Rutgers University.

Altube, S. (1934). Observaciones al tratado de 'Morfología vasca' de Don R. M. Azkue. (Reprinted in *Morfología vasca (Gramaatica baasica dialectal del euskera)*, (ed.), R. M. Azkue. Bilbao: La Gran Enciclopedia Vasca.)

Anand, P. (2006). *De de se*. PhD thesis, Massachusetts Institute of Technology.

Anand, P. & Nevins, A. (2004). Shifty operators in changing context. *Proceedings of Semantics and Linguistic Theory* 14, 20-37.

Antonov, A. (2013). Grammaticalization of allocutivity markers in Japanese and Korean in a cross-linguistic perspective. In *Shared grammaticalization: with special focus on the Transeurasian languages*, (eds.), M. Robbeets & H. Cuyckens, 317-340. Amsterdam/Philadelphia: John Benjamins.

Antonov, A. (2015). Verbal allocutivity in a crosslinguistic perspective. *Linguistic Typology* 19(1), 55-85.

Antonov, A. (2016). Ryuukyuusyogo no arokyuutibitii [Allocutivity in Ryukyuan languages]. In *Ryuukyuusyogo to kodai nihongo [Ryukyuan and premodern Japanese]*, (eds.), Y. Takubo, J. Whitman & T. Hirako, 235-257. Tokyo: Kurosio Publishers.

Aoki, S. (2014). *Kinsei kindai hibogowasha niyoru nihongo keigo kenkyuu no ichizuke: rodorigesu, hofuman, asuton, chenbaren o chuushin ni shite [The status of studies of Japanese honorifics by non-native speakers in early modern and modern times: focusing on Rodriguez,*

Hoffmann, Aston and Chamberlain.]. PhD thesis, Kyushu University.

Aoun, J., Choueiri, L. & Hornstein, N. (2001). Resumption, movement, and derivational economy. *Linguistic Inquiry* 32(3), 371-403.

Arregi, K. & Nevins, A. (2012). *Morphotactics: Basque auxiliaries and the structure of Spellout*. Oxford: Oxford University Press.

Arregi, K. & Pietraszko, A. (2018). Generalized head movement. *Proceedings of the Linguistics Society of America* 3 (5), 1-15.

Austin, J. (1962). *How to do things with words*. New York : Oxford University Press.

Bach, K. (1999). The myth of conventional implicature. *Linguistics and Philosophy* 22(4), 367-421.

Baier, N. (2015). Adjective agreement in Noon: evidence for a split theory of noun-modifier concord. *Proceedings of the North East Linguistic Society* 45(1), 67-80.

Baker, M. C. (1985). The mirror principle and morphosyntactic explanation. *Linguistic Inquiry* 16(3), 373-415.

Baker, M. C. (2008). *The syntax of agreement and concord*. Cambridge: Cambridge University Press.

Baker, M. C. (2019). Sources of second person: indexical shift, imperatives, and a possible connection between them. Oral presentation at Person and Perspective: a workshop honoring the work of Maria Luisa Zubizarreta, University of Southern California.

Baker, M. C. & Alok, D. (2019). On the syntax of addressee agreement and indexical shift in Magahi. Paper presented at the Annual Meeting of the Linguistic Society of America, New York, NY.

Banfield, A. (1973). Narrative style and the grammar of direct and indirect speech. *Foundations of Language* 10, 1-39.

Banfield, A. (1982). *Unspeakable Sentences*. London: Routledge.

Banno, E. (2012). Koopasu o tsukatta jutsugo hitei kei "masen" to "naidesu" no shiyoo jittai choosa [A corpus-based study of the negative predicate forms "*masen*" and "*nai desu*"]. *Ryuugakusei Kyooiku [Journal of International Students Education]* 17. 133-140.

Barke, A. & Uehara, S. (2005). Japanese pronouns of address: their behavior and maintenance over time. In *Broadening the horizon of linguistic politeness*, (eds.), R. T. Lakoff, & S. Ide, 301-313. Amsterdam/Philadelphia: John Benjamins.

Barker, C., Bernardi, R. & Shan, C.-C. (2010). Principles of interdimensional meaning interaction. *Proceedings of Semantics and Linguistic Theory* 20, 109-127.

Belletti, A. (2001). "Inversion" as focalization. In *Subject inversion in Romance and the theory of universal grammar*, (eds.), A. C. Hulk & J. Y. Pollock, 60-90. Oxford: Oxford University Press.

Belletti, A. (2004). Aspects of the low IP area. In *The structure of CP and IP*, (ed.), Rizzi, L., 16-51. Oxford: Oxford University Press.

Beltrama, A. (2014). Scalar meaning in diachrony: the suffix *-issimo* from Latin to Italian. *Proceedings of the North East Linguistic Society* 44, 29-40.

Beltrama, A. (2015). From totally dark to totally old: the formal semantics of subjectification. *Proceedings of Sinn und Bedeutung* 19, 125-42.

Bennett, J. (1982). 'Even if.' *Linguistics and Philosophy* 5(3), 403-418.

Bhadra, D. (2018). *Evidentiality, epistemic modality and questions: Bangla at the interfaces*. PhD thesis, Rutgers University.

Bhatt, R. & Walkow, M. 2013. Locating agreement in grammar: an argument from agreement in conjunctions. *Natural Language and Linguistic Theory* 31, 951-1013.

Bjorkman, B. A. M. (2011). BE-ing default: the morphosyntax of auxiliaries. PhD thesis, Massachusetts Institute of Technology.

Blakemore, D. (2015). Slurs and expletives: a case against a general account of expressive meaning. *Language Science* 52, 22-35.

Bobaljik, J. D. (1995). *Morphosyntax: the syntax of verbal inflection*. PhD thesis, Massachusetts Institute of Technology.

Bobaljik, J. D. (2008). *Where's Phi? Agreement as a post-syntactic operation*. In *Phi-theory: phi-features across modules and interfaces*, (eds.), D. Harbour, D. Adger & S. Béjar, 295-328. Oxford: Oxford University Press.

Bobaljik, J. D. & Yatsushiro, K. (2006). Problems with honorification-as-agreement in Japanese: a reply to Boeckx and Niinuma. *Natural Language and Linguistic Theory* 24, 355-384.

Boeckx, C. (2006). Honorification as agreement. *Natural Language and Linguistic Theory* 24, 385-398.

Boeckx, C. & Niinuma, F. (2004). Conditions on agreement in Japanese. *Natural Language and Linguistic Theory* 22, 453-480.

Bonaparte, L.-L.. (1862). *Langue basque et langues finnoises*. London: Strangeways & Walden.

Borer, H. (1994). The projection of arguments. *Functional projections: university of Massachusetts occasional papers* 17, 19-48.

Borer, H. & Grodzinsky ,Y. (1986). Syntactic cliticization and lexical cliticization: the case of Hebrew dative clitics. *Syntax and Semantics* 19, 175-217.

Bosse, S., Bruening, B. & Yamada, M. (2012). Affected experiences. *Natural Language & Linguistic Theory* 30 (4), 1185-1230.

Bowers, J. (1993). The syntax of predication. *Linguistic Inquiry* 24, 591-656.

Brinton, L. J. (1995). Pragmatic markers in a diachronic perspective. *Proceed-*

ings of Annual Meeting of the Berkeley Linguistics Society 21 (1), 377-388.

Brown, L. (2010). Observations on Korean and Japanese speech style shifting. *Journal of Korean Culture* 14, 65-102.

Brown, L. (2011a). *Korean honorifics and politeness in second language learning*. Amsterdam/Philadelphia: John Benjamins.

Brown, L. (2011b). Korean honorifics and 'revealed', 'ignored' and 'suppressed' aspects of Korean culture and politeness. In *Politeness across cultures*, (eds.), F. Bargiela-Chiappini, & D. Kádár, 106-127. London: Palgrave Macmillan.

Brown, L. (2013). 'Mind your own esteemed business': sarcastic honorifics use and impoliteness in Korean TV dramas. *Journal of Politeness Research* 9(2), 159-186.

Brown, L. (2015a). Honorifics and politeness. In *The handbook of Korean linguistics*, (eds.), L. Brown & J. Yeon, 303-319. US: Wiley & Sons.

Brown, L. (2015b). Revisiting "polite" *-yo* and "deferential" *-supnita* speech style shifting in Korean from the viewpoint of indexicality. *Journal of Pragmatics* 79, 43-59.

Brown, P. & Levinson, S. C. (1987 [1978]). *Politeness: some universals in language usage*. Cambridge: Cambridge University Press.

Brown, R. & Gilman, A. (1968 [1960]). The pronouns of power and solidarity. In *Style in language*, (ed.), T. A. Sebeok, 253-276. Cambridge, Mass.: MIT Press. Reprinted in *The sociology of language*, J. A. Fishman, & J. Cooke, 252-275. The Hague: Mouton.

Brown, R. & Gilman, A. (1972). The pronouns of solidarity and power. In *Language and social context*, (ed.), P. Giglioli, 252-282. Harmondsworth: Penguin.

Bulatovic, G. (2008). *Modality, futurity, and temporal dependency: the semantics of the Serbian perfective nonpast and future 2*. PhD thesis, Uni-

versity of Chicago.

Bybee, J. (2003). Mechanisms of change in grammaticalization: the role of repetition. In *Handbook of historical linguistics*, (eds.), R. Janda & B. Joseph, 602-623. Oxford: Blackwell.

Bybee, J. (2010). *Language, usage and cognition*. Cambridge, New York: Cambridge University Press.

Bybee, J., Perkins, R. D. & Pagliuca, W. (1994). *The evolution of grammar: tense, aspect, modality in the languages of the world*. Chicago: University of Chicago Press.

Castroviejo, E. (2010). An expressive answer: some considerations on the semantics and pragmatics of wh-exclamatives. *Proceedings of the Chicago Linguistics Society* 44, 3-17.

Cedergren, H. J. & Sankoff, D. (1974). Variable rules: performance as a statistical reflection of competence. *Language* 50(2), 333-355.

Cepollaro, B. (2015). In defence of a presuppositional account of slurs. *Language Science* 52, 36-45.

Chierchia, G. & McConnell-Ginet, S. (2000 [1990]). *Meaning and grammar: an introduction to semantics.* Cambridge, Mass.: The MIT Press.

Choi, J. & Harley, H. B. (2019). Locality domains and morphological rules: phases, heads, node-sprouting and suppletion in Korean honorification. *Natural Language and Linguistic Theory*, 1-47.

Chomsky, N. (1989). Some notes on economy of derivation and representation. *MIT Working Papers in Linguistics* 10, 43-73.

Chomsky, N. (1995). *The minimalist program*. Cambridge, MA: MIT Press.

Chomsky, N. (2000). Minimalist inquiries: the framework. In *Step by step: essays on minimalist syntax in honor of Howard Lasnik*, (eds.), R. Martin, D. Michaels, & J. Uriagereka, 89-155. Cambridge, MA.: MIT Press.

Chomsky, N. (2001). Derivation by phase. In *Ken Hale: a life in language*, (ed.), M. Kenstowicz, 1-50. Cambridge, MA: MIT Press.

Ciardelli, I., Groenendijk, J. & Roelofsen, F. (2019). *Inquisitive semantics*. Oxford: Oxford University Press.

Cinque, G. (1999). *Adverbs and functional heads: a cross-linguistic perspective*. New York, Oxford: Oxford University Press.

Cinque, G. & Rizzi, L. (2008) The cartography of syntactic structures. *Studies in Linguistics: CISCL Working Papers on Language and Cognition* 2, 43-59.

Clark, H. H. & Gerrig, R. J. (1990). Quotations as demonstrations. *Language* 66(4), 764-805.

Collins, C. & Thráinsson, H. (1993). Object shift in double object constructions and the theory of case. *MIT Working Papers in Linguistics* 19, 131-74.

Collins, C. & Thráinsson, H. (1996). VP-internal structure and object shift in Icelandic. *Linguistic Inquiry* 27(3), 391-444.

Constant, N. (2012). English rise-fall-rise: a study in the semantics and pragmatics of intonation. *Linguistics and Philosophy* 35(5), 407-442.

Cook (Minegishi), H. (1998). Situational meanings of Japanese social deixis: the mixed use of the "masu" and plain forms. *Journal of Linguistic Anthropology* 8(1), 87-110.

Cook (Minegishi), H. (2002). The social meanings of the Japanese plain form. *Japanese/Korean Linguistics* 5, 150-166.

Cooper, R., Dobnik, S., Lappin, S. & Larsson, S. (2014). A probabilistic rich type theory for semantic interpretation. *Proceedings of the EACL 2014 Workshop on Type Theory and Natural Language Semantics (TTNLS)*, 72-79.

Cooper, R., Dobnik, S., Lappin, S. & Larsson, S. (2015). Probabilistic type

theory and natural language semantics. *Linguistic Issues in Language Technology* 10(4), 1-43.

Corazza, E. (2005). On epithets qua attributive anaphors. *Journal of Linguistics* 41(1), 1-32.

Council for Cultural Affairs (2007). Keigo no shishin. http://www.bunka.go.jp/seisaku/bunkashingikai/kokugo/hokoku/pdf/keigo_tosin.pdf.

Cox, R. T. (1946). Probability, frequency and reasonable expectation. *American Journal of Physics* 14, 1-13.

Cox, R. T. (1961). *The algebra of probable inference*. Baltimore: The Johns Hopkins Press.

Crnič, L. & Trinh, T. (2009a). Embedding imperatives. *Proceedings of the North East Linguistic Society* 39, 227-238.

Crnič, L. & Trinh, T. (2009a). Embedding imperatives in English. *Proceedings of Sinn und Bedeutung* 13, 113-127.

Cruse, D. A. (1986). *Lexical Semantics*. Cambridge: Cambridge University Press.

Cuervo, M. C. (2003). *Datives at large*. PhD thesis, Massachusetts Institute of Technology.

D'Alessandro, R & Ledgeway, A. (2010). At the C-T boundary: investigating Abruzzese complementation. *Lingua* 120, 2040-2060.

Danescu-Niculescu-Mizil, C., Sudhof, M., Jurafsky, D. & Leskovec, J. & Potts, C. (2013). A computational approach to politeness with application to social factors. *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics*, 250-259, Sofia, Bulgaria, 2013.

Dasher, R. B. (1995). *Grammaticalization in the system of Japanese predicates honorifics*. PhD thesis, Stanford University.

Davis, C. (2009). Decisions, dynamics and the Japanese particle *yo*. *Journal of*

Semantics 26, 329-366.

Davis, C. & McCready, E. (2016). Expressives in questions. *Proceedings of Semantics and Linguistic Theory* 26, 1119-1138.

Deal, A. R. (2018). Indexiphors: notes on embedded indexicals, shifty agreement, and logophoricity. In *UMOP 40: the leader of the pack: a Festschrift in honor of Peggy Speas*, (ed.), R. Ivan, 59-86. Amherst, MA: GLSA.

Dobrovie-Sorin, C. (1994). *The syntax of Romanina*. Berlin/New York: Mouton de Gruyter.

Doron, E. (1991). Point of view as a fator of content. *Proceedings of Semantics and Linguistic Theory* 1, 51-64.

Eckardt, R. (2015). *The semantics of free indirect discourse.* Leiden/Boston: Brill.

Embick, D. (1997). *Voice and the interfaces of syntax*. PhD thesis, University of Pennsylvania.

Embick, D. (2004). On the structure of resultative participles in English. *Linguistic Inquiry* 35, 355-392.

Embick, D. & Noyer, R. (2001). Movement operations after syntax. *Linguistic Inquiry* 32(4). 555-595.

Emonds, J. (1970). *Root and structure-preserving transformations*. PhD thesis, Massachusetts Institute of Technology.

Endo, Y. (2010). Shuujosi no kaatografii [the cartography of sentence final particles]. In *Toogoron no shintenkai: meidai o koete [New developments in syntactic theory and the analysis of Japanese: beyond propositions]*, (ed.), N. Hasegawa, 67-94. Tokyo: Kaitakusha.

Fanselow, G. & Ćavar, D. (2002). Distributed deletion. In *Theoretical approaches to universals*, (ed.), A. Alexiadou, 65-107. Amsterdam/Philadelphia: John Benjamins.

Farkas, D. (1985). *Intensional descriptions and the romance subjunctive mood*. New York: Garland.

Farkas, D. F. & Bruce, K. B. (2010). On reacting to assertions and polar questions. *Journal of Semantics* 27, 81-118.

von Fintel, K. (1999). NPI licensing, Strawson entailment, and context dependency. *Journal of Semantics* 16(2), 97-148.

Fischer, O. (2007). *Morphosyntactic change: functional and formal perspectives*. Oxford: Oxford University Press.

Folli, R. & Harley, H. (2007). Causation, obligation, and argument structure: on the nature of little v. *Linguistic Inquiry* 38, 197-238.

Fortin, A. (2011). *The morphology and semantics of expressive affixes*. PhD thesis, University of Oxford.

Fox, D. & Pesetsky, D. (2005). Cyclic linearization of syntactic structure. *Theoretical Linguistics* 31, 1-45.

Francescotti, R. M. (1995). Even: The conventional implicature approach reconsidered. *Linguistics and Philosophy* 18(1), 153-173.

Frege, G. (1980 [1892]). On sense and reference. In *Translations from the philosophical writings of Gottlob Frege*, (eds.), P. Geach & M. Black, 56-78. Oxford: Blackwell.

Fujii, S. (2015). A corpus-based analysis of adverbial uses of the quotative TO construction: speech and thought representation withotu speech or thought predicates. *Japanese/Korean Linguistics* 22, 293-305.

Fujii, T. (1799). *Shoosoko bunrei [Examples of letters]*. Matsunoya Zoohan.

Fujii, T. (2006). *Some theoretical issues in Japanese control*. PhD thesis, The University of Maryland.

Fujita, Y. (2000). *Kokugo in'yookoobun no kenkyuu [A study of Japanese quotatives]*. Osaka: Izumi Shuppan.

Fukuda, S. (2013). Flavors of Voice and selection of vPs in Japanese. Oral

presentation. Little v Workshop. Leiden University Centre for Linguistics, Leiden, Netherland.

Fukushima, N. (2015). Kooki edogo ni okeru kooi yookyuu hyoogen no shosoo [Aspects of directive expressions in late Edo-period Japanese]. *Gakushuin Joshi Daigaku Kiyoo [Bulletin of Gakushuin Women's College]* 17, 129-146.

Fukushima, N. (2016). Kooki edogo ni okeru "gozarimasu" to "gozaimasu" ni kansuru ichikoosatsu [A reflection on "gozarimasu" and "gozaimasu"]. *Gakushuin Joshi Daigaku Kiyoo [Bulletin of Gakushuin Women's College]* 18, 181-195.

Fukuzawa, M. (2012). Amakusaban Heikemonogatari to Shookai Shingo: kenjogo o chushin ni [Amakusaban Heikemonogatari and Shookai Shingo: focusing on object-honorifics]. *Aichi Kenritsu Daigaku Setsurin [Bulletin of Aichi Prefectural University]* 60, 63-79.

Funakoshi, K. (2014). *Syntactic head movement and its consequences*. PhD thesis, University of Maryland.

Gavel, H. & Lacombe, G. (1933-1936). *Grammaire Basque*. Gure Herria.

Gazdar, G. (1981). Speech act assignment. In *Elements of discourse understanding*, (eds.), A. K. Joshi, I. A. Sag, & B. Webber, 64-83. New York: Cambridge University Press.

Gelman, A., Carlin, J. B., Stern, H. S., Dunson, D. B., Vehtari, A. & Rubin, D. B. (2014) *Bayesian data analysis*. Boca Raton, Florida: Chapman & Hall/CRC.

Ghosal S. & van der Vaart A. (2012). *Theory of nonparametric Bayesian inference*. Cambridge: Cambridge University Press.

Giannakidou, A. (2014). (Non)veridicality, epistemic weakening, and event actualization: evaluative subjunctive in relative clauses. In *Nonveridicality and evaluation: theoretical, computational, and corpus approaches*, (eds.), M. T. Taboada & R. Trnavac, 17-49. Leiden: Brill.

Giorgi, A. & Pianesi, F. (1997). *Tense and aspect from semantics to morphosyntax*. New York: Oxford University Press.

Goodman, N. D. & Frank, M. C. (2016). Pragmatic language interpretation as probabilistic inference. *Trends in Cognitive Sciences* 20(11), 818-829.

Goodman, N. D. & Stuhlmüller, A. (2013). Knowledge and implicature: modeling language understanding as social cognition. *Topics in Cognitive Science* 5(1), 173-184.

Greenberg, J. H. (1978). How does a language acquire gender markers? In *Universals of human language* 3, (eds.), J. H. Greenberg, C. A. Ferguson, & E. Moravcsik, 249-295. Stanford: Stanford University Press.

Grice, H. P. (1975). Logic and conversation. In *Syntax and semantics 3: speech acts*, (eds.), P. Cole & J. Morgan, 43-58. New York: Academic Press.

Grimshaw, J. & Mester, A. (1988). Light verbs and θ-marking. *Linguistic Inquiry* 19, 205-232.

Groenendijk, J. (1999). The logic of interrogation. *Semantics and Linguistic Theory* 9, 109-126.

Gunji, T. (1987). *Japanese phrase structure grammar: a unification-based approach*. Dordrecht: Reidel.

Gutzmann, D. (2007). Eine Implikatur konventioneller Art: der Dativus Ethicus. *Linguistische Berichte* 211, 277-308.

Gutzmann, D. (2008). Expressive modifiers and mixed expressives. In *Empirical issues in syntax and semantics 7*, (eds.), O. Bonami & P. C. Hofherr, 123-141. Paris: Colloque de syntaxe et sémantique à Paris.

Gutzmann, D. (2012). *Use-conditional meaning: studies in multidimensional semantics*. PhD thesis, University of Frankfurt.

Gutzmann, D. & Castroviejo, E. (2008). The dimensions of verum. In *Empirical issues in syntax and semantics 7*, (eds.), O. Bonami & P. C. Hofherr, 143-165. Paris: Colloque de syntaxe et sémantique à Paris.

Haddad, Y. A. (to appear). Counter-cyclic merge as a last resort for adjuncts: evidence from Levantine Arabic attitude datives. *Brill's Journal of Afroasiatic Languages and Linguistics*.

Haddican, B. (2015). A note on Basque vocative clitics. In *Ibon Sarasola, Gorazarre*, (eds.), B. Fernandez, & P. Salaburu, 303-317. University of the Basque Country, Bilbao.

Haddican, B. (2018). The syntax of Basque allocutive clitics. *Glossa* 3(1), 101, 1-31.

Haegeman, L. & Hill, V. (2013). The syntacticization of discourse. In *Syntax and its limits*, (ed.), R. Folli, C. Sevdali, & R. Truswell, 370-390. Oxford: Oxford University Press.

Hale, K. & Keyser, S. J.(1993). On argument structure and the lexical expression of syntactic relations. In *The view from Building 20: essays in linguistics in honor of Sylvain Bromberger*, (eds.), K. Hale & S. J. Keyser, 53-109. Cambridge, MA: MIT Press.

Halle, M. & Marantz, A. (1993). Distributed morphology and the pieces of inflection. In *The view from Building 20: essays in linguistics in honor of Sylvain Bromberger*, K. Hale & S. J. Keyser, 111-176. Cambridge, MA: MIT Press.

Han, M. (1994). *"Shunkai Shingo" ni okeru keigo kenkyuu: nikkan ryookokugo no taishoo no kanten kara [A study of honorifics in "Shunkai Shingo": from the perspective of comparing Japanese and Korean]*. PhD thesis, Tohoku University.

Hara, Y., Kim, Y., Sakai, H. & Tamura, S. (2013). Projections of events and propositions in Japanese: a case study of *Koto*-nominalized clauses in causal relations. *Lingua* 133, 262-288.

Harada, S.-I. (1976). Honorifics. In *Syntax and semantics 5: Japanese generative grammar*, (ed.), M. Shibatani, 499-561. New York: Academic Press.

Haraguchi, Y. (1974). " 'O — ninaru' koo" zokuchoo [A note of "a reflection of 'o — ninaru' "]. *Kokugogaku* 96, 23-32.

Harley, H. (1995). *Subjects, events, and licensing*. PhD thesis, Massachusetts Institute of Technology.

Harley, H. (2008). On the causative construction. In *Handbook of Japanese linguistics*, (eds.), S. Miyagawa & M. Saito, 20-53. Oxford: Oxford University Press.

Harley, H. (2009). The morphology of nominalizations and the syntax of vP. In *Quantification, definiteness, and nominalization*, (eds.), M. Rathert & A. Giannakidou, 320-342. Oxford: Oxford University Press.

Harley, H. & Noyer, R. (2000). Formal versus encyclopedic properties of vocabulary: evidence from nominalisations. In *The lexicon/encyclopedia interface*, (ed.), B. Peeters, 349-374. Amsterdam: Elsevier.

Hasegawa, N. (2017 [2006]). Honorifics. In *The Blackwell companion to syntax*, (eds.), M. Everaert & H. van Riemsdijk, 1836-1884. Oxford: Blackwell.

Hayashi, S. & Minami, F. (1973-1974). *Keigo kooza [Lectures on honorifics]*. Tokyo: Meiji Shoin.

Heim, I. (1982). *The semantics of definite and indefinite noun phrases.* PhD thesis, University of Massachusetts.

Heim, I. & Kratzer, A. (1998). *Semantics in generative grammar*. Oxford: Blackwell Publishing.

Helmbrecht, J. (2003). Politeness distinctions in second person pronouns. In *Deictic conceptualisation of space, time and person*, (ed.), F. Lenz, 185-202. Amsterdam/Philadelphia: John Benjamins.

Helmbrecht, J. (2005). Politeness distinctions in personal pronouns. In *World Atlas of language structures*, (eds.), M. Haspelmath, M. Dryer, D. Gil & B. Comrie, 186-189, Oxford: Oxford University Press.

Heycock, C. (2006). Embedded root phenomena. In *The Blackwell companion*

to syntax, (eds.), H. van Riemsdijk & M. Everaert, 174-209. Oxford: Blackwell.

Hill, V. (2007). Vocatives and the pragmatics-syntax interface. *Lingua* 117, 2077-2105.

Hill, V. (2014). *Vocatives: how syntax meets with pragmatics*. Leiden and Boston: Brill.

Ho, C. (2014). Jutsugobu hitei koozoo ni okeru bunpoo kategorii no ketsugoo: Wakamatsu Shizuko yaku 'Shookooshi' o shiryoo to shite [The complex of grammatical categories in the predicate constitutions including negative elements: a case study of Little Lord Fauntleroy translated by Wakamatsu Shizuko]. *Bungaku Kenkyuu Ronshuu [Studies in Arts & Letters]* 41,1-13.

Ho, C. (2015). *Edo, Tookyoogo ni okeru hitei hyoogen koozoono kenkyuu [A study of the constitutions including negative expressions in the Japanese of Late Edo and Meiji period]*. PhD thesis, Meiji University.

Ho, C. (2018). *Edo, Tookyoogo no hitei hyoogen koozoo no kenkyuu [A study of the structure of negative expressions in Edo and Tokyo Japanese]*. Tokyo: Bensei Shuppan.

Hom, C. (2008). The semantics of racial epithets. *The Journal of Philosophy* 105, 416-440.

Honda, C. (1984). Chuuko makki kara chuusei zenki ni mieru kenjoo hyoogen ni tsuite: joryuu sakuhin no 'mawirasu' o chuushin ni [On object-honorifics from Late Old/Early Middle Japanese to Late Middle Japanese: focusing on 'mawirasu' in texts written by femal writers]. *Nishoogakusha Daigaku Jinbun Ronshuu* 28, 42-59.

Hooper, J. B. & Thompson, S. A. (1973). On the applicability of root transformations. *Linguistic Inquiry* 4, 465-497.

Hopper, P. J. & Traugott, E. C. (2003 [1993]). *Grammaticalization*. Cam-

bridge: Cambridge University Press.

Horn, L. R. (1979). "Only", "even", and conventional implicature, LSA paper, Los Angeles.

Horn, L. R. (2002). Assertoric inertia and NPI licensing. *Proceedings of the Chicago Linguistic Society* 38(2), 55-82.

Horn, L. R. (2007). Towards a Fregean pragmatics: Voraussetzung, Nebengedanke, Andeutung. In *Explorations in pragmatics: linguistic, cognitive and intercultural aspects*, (eds.), I. Kecskes & L. R. Horn, 39-69. Berlin: Mouton de Gruyter.

Horn, L. R. (2008), "I love me some him": the landscape of non-argument datives. In *Empirical issues in syntax and semantics 7*, (eds.), O. Bonami & P. C. Hofherr, 169-192. Paris: Colloque de syntaxe et sémantique à Paris.

Horn, L. R. (2011). Almost forever. In *Pragmatics and autolexical grammar: in honor of Jerry Sadock*, (eds.), E. Yuasa, T. Bagchi, & K. Beals, 3-21. Amsterdam/Philadelphia: John Benjamins.

Hwang, J. (1990). 'Deference' versus 'politeness' in Korean speech. *International Journal of the Sociology of Language* 82, 41-55.

Ide, S. (2002). The speaker's viewpoint and indexicality in a high context culture. In *Bunka, intaa'akushon, gengo [Culture, interaction, and language]*, (eds.), K. Kataoka & S. Ide, 3-20. Tokyo: Hituzi Shobo.

Ide, S. (2005). How and why honorifics can signify dignity and elegance: the indexicality and reflexivity of linguistic rituals. In *Broadening the horizon of linguistic politeness*, (eds.), R. L. Lakoff & S. Ide, 45-64. Amsterdam/Philadelphia: John Benjamins.

Ide, S. (2006). *Wakimae no goyooron. [Pragmatics of wakimae].* Tokyo: Taishuukan Publishers.

Ide, S. (2012). Roots of the wakimae aspect of linguistic politeness. In *Pragmaticizing understanding: studies for Jef Verschueren*, (eds.), M.

Meeuwis & J. Östman, 121-138. Amsterdam/Philadelphia: John Benjamins.

Inoue, F. (2010). "O" no tsukaiwake ni mieru bikago no junkan katei [The cyclic process of the "beautifying words" with "o-" as seen from their usage patterns]. *Nihongo no Kenkyuu [Studies in the Japanese Language]* 6(4), 63-78.

Ishizaka, S. (1944). *Keigoshi ronkoo [A reflection on the history of honorific studies]*. Osaka: ooyashima Shuppan.

Ishizaka, S. (1951). Keigoteki ninshoo no gainen [Grammatical persons in Japanese honorifics]. *Hoobun Ronsoo* 2, 1-26.

Ito, F. (1999). Kamakura jidai makki shojoo no "sooroo": Kanazawa Sadaaki shojoo no "sooroo" ni tsuite ["Sooroo" in letters in the late Kamakura period: concerning "sooroo" in the letters of Sadaaki Kanazawa]. *Nara Kyooiku Daigaku Kokubun: Kenkyuu to Kyooiku [Bulletin of Japanese Literature at Nara University of Education: Studies and Education]* 22, 44-45.

Ivana, A. & Sakai, H. (2007). Honorification and light verbs in Japanese. *Journal of East Asian Linguistics* 16, 171-191.

Iwasaki, S. & Ingkaphirom, P. (2005). *A reference grammar of Thai*. Cambridge: Cambridge University Press.

Jayaseelan, K. A. (2001). Questions and question-word incorporating quantifiers in Malayalam. *Syntax* 4: 63-93.

Jayaseelan, K. A. (2010). Stacking, stranding, and pied-piping: a proposal about word order. *Syntax* 13 (4), 298-330.

Jenny, M. & Hnin Tun, S. S. (2016). Burmese: A comprehensive grammar. London: Routledge Ltd.

Jeong, Y. (2006). *The landscape of applicatives*. PhD thesis, The University of Maryland.

Jiménez-Fernández, Á. L. & İşsever, S. (2019). Politeness marking and the

syntax of discourse. *Proceedings of Workshop on Altaic Formal Linguistics* 15, 129-136.

Johnson, K. (1991). Object position. *Natural Language & Linguistic Theory* 9, 577-636.

Johnson, K. (2012) Towards deriving differences in how *Wh* movement and *QR* are derived. *Lingua* 122, 529-553.

Josephs, L. S. (1976). Complementation. In *Syntax and semantics 5, Japanese generative grammar*, (ed.), M. Shibatani, 307-369. New York: Academic Press.

Kageyama, T. (1977). Iwayuru nihongo no 'meishiku hobun ji' ni tsuite [On so-called Japanese 'nominalizing complementizer]. *Eigo Kyooiku [English Education]* 25, 11-25.

Kageyama, T. (1993). *Bunpoo to gokeisei [Grammar and word formation]*. Tokyo: Hituzi Shobo.

Kageyama, T. (2016a). Lexical integrity and the morphology-syntax interface. In *Handbook of Japanese lexicon and word formation*, (eds.), T. Kageyama & H. Kishimoto, 489-528. Boston/Berlin: Walter de Gruyter.

Kageyama, T. (2016b). Verb-compounding and verb-incorporation. In *Handbook of Japanese lexicon and word formation*, (eds.), T. Kageyama, & H. Kishimoto, 273-310. Boston: De Gruyter Mouton.

Kageyama, Y. & Yumoto, Y. (1997). *Gokeisei to gaine koozoo*. Tokyo: Kenkyusha Shuppan.

Kaiser, S., Ichikawa, Y., Kobayashi, N. & Yamamoto, H. (2013). *Japanese: a comprehensive grammar*. New York: Routledge.

Kamio, A. (1990). *Joohoo no nawabari riron [The theory of territory of information]*. Tokyo: Taishuukan Publishers.

Kamio, A. (1995). Territory of information in English and Japanese and psychological utterances. *Journal of Pragmatics* 24, 235-264.

Kamio, A. (1997). *Territory of information*. Amsterdam/Philadelphia: John Benjamins.

Kanazawa, H. (1996). "N-katta" koo. *Journal of the Faculty of Letters, Okayama University* 25, 192-200.

Kanazawa, H. (1999). "Nakatta" shinkoo [A new view of nakatta]. *Kokugogaku* 196, 79-88.

Kaneda, H. (1985). Nakatta koo [A view of nakatta]. *Kokugo to Kokubun* 62(5), 11-20.

Karttunen, L. (1971). Implicative verbs. *Language* 47(2): 340-358.

Karttunen, L. (1973). Presuppositions of compound sentences. *Linguistic Inquiry* 4 (2), 169-193.

Karttunen, L. (1976). Discourse referents. *Syntax and semantics 7: notes from the linguistic underground*, (ed.), J. D. McCawley, 363-385. New York: Academic Press.

Karttunen, L. & Peters, S. (1979). Conventional implicature. In *Syntax and semantics 11: presupposition*, (eds.), C.-K. Oh & D. A. Dinneen, 1-56. New York: Academic Press.

Kasuga, K. (1971). Kodai no keigo I [Honorifics in old days]. In *Keigosi [History of honorifics]*, (ed.), T. Tsujimura, 33-95. Tokyo: Taishukan Shoten.

Kato, A. (2018). Burmese. In *Levels in clause linkage: a crosslinguistic survey*, (ed.), T. Tsunoda, 571-613. Berlin and New York: Mouton de Gruyter.

Kaur, G. (2017). Variation in subject-triggered clitic restrictions: a case of Punjabi. *Proceedings of Glow in Asia XI*, 111-126.

Kaur, G. (2018). Addressee agreement as the locus of imperative syntax. Presentation at the 49th meeting of the North East Linguistics Society, Cornell University 2018.

Kaur, G. (2019). Not all imperatives have a Jussive head: emphasizing the role of allocutivity in syntax. Presented at Person and Perspective: a workshop honoring the work of María Luisa Zubizarreta. May 3-4, Los Angeles, University of Southern California. 3-4 May 2019.

Kaur, G. & Yamada, A. (2019). Embedded allocutivity and its reference. Presented at Person and Perspective: a workshop honoring the work of María Luisa Zubizarreta. May 3-4, Los Angeles, University of Southern California. 3-4 May 2019.

Kawaguchi, R. (2010). 'Masen'kei kara 'naidesu'kei e no shifuto ni kakawaru yooin ni tsuite: dooshi hitei teineikei no gengo henka toiu shiten kara [Factors related to the shift from the *-masen* to the *-nai desu* form: in terms of language change of the negative polite verb form]. *Nihongo Kyoiku [Japanese Language Education]* 144, 121-132.

Kawaguchi, R. (2014). *Teineitai hiteikei no barieeshon ni kansuru kenkyuu [A study of variations among negative polite forms]*. Tokyo: Kurosio Publishers.

Kawahara, S. (1995). Muromachi jidai danwa go no kenkyuu (sono ichi): Okura Toraakira bon kyoogen no gengoteki isoo [A study of the discourse in the Muromachi period No. 1: some linguistic aspects of kyoogen texts written by Toraakira Okura]. *Shimane Joshi Tanki Daigaku Kiyoo [Bulletin of Shimane Women's Junior College]*. 33, 13-20.

Kikuchi, Y. (1997 [1994]). *Keigo [Honorifics]*. Tokyo: Kadokawa Shoten. (reprinted in 1997, Tokyo: Koodansha).

Kim, J. (2018). *Embedding without a license?: typology of unselected embedded clauses*. PhD thesis, The University of Delaware.

Kim, J. & Sells, P. (2007). Korean honorification: a kind of expressive meaning. *Journal of East Asian Linguistics* 16(4), 303-336.

Kindaichi, K. (1992 [1941]). Joseigo to keigo [Women's language and honorifics]. Reprinted in *Kindaichi Kyoosuke zenshuu [Complete works of Kindaichi Kyoosuke]*, (ed.), Kindaichi Kyoosuke Zenshuu Hen-

shuu Iinkai [Editorial Committee of Complete Works of Kindaichi Kyoosuke] 3, 302-316. Tokyo: Sanseido.

Kinsui, S. (2004). Nihongo no keigo no rekishi to bunpooka [The history of honorifics in Japanese and their grammaticalisation]. *Gengo [Language]* 33(4). 34-41.

Kinsui, S. (2005). Nihongo keigo no bunpooka to imi henka [The grammaticalization and semantic change of honorifics in Japanese]. *Nihongo no Kenkyuu [Studies in the Japanese Language]* 1(3), 18-31.

Kinsui, S. (2011). Teineigo no gogen to hattatsu [Etymology and development of addressee-honorific markers]. In *Rekishi goyooron nyuumon [Introduction to historical pragmatics]*, (eds.), H. Takada, M. Shiina & N. Onodera, 163-173. Tokyo: Taishuukan Publishers

Kiparsky, P. & Kiparsky, C. (1970). Fact. In *Progress in linguistics*, (eds,), M. Bierwisch & K. E. Heidolph, 143-173. The Hague: Mouton.

Kishimoto, H. (2010). Honorific agreement in Japanese. *The Canadian Journal of Lingusitics* 55(3), 405-415.

Kishimoto, H. (2012). Subject honorification and the position of subjects in Japanese. *Journal of East Asian Linguistics* 21, 1-41.

Koizumi, T. (1984). Gaikokugo no keigo [Honorifics in foreign languages]. In *Kenkyuu shiryoo nihon bunpoo 9: keigohoo hen [Documents for studies on Japanese grammar 9: honorifics]*, (eds.), K. Suzuki & O. Hayashi, 198-216. Tokyo: Meiji Shoin.

Koizumi, M. (1993). Object agreement phrases and the split VP hypothesis. *Papers on Case and Agreement I: MIT Working Papers in Linguistics* 18, 99-148.

Komatsu, H. (1966). Edo shoosetsu ni okeru keigo. *Kokubungaku: Kaishaku to Kyoozai no Kenkyuu [Japanese Literature: Interpretation and Studies of Teaching Materials]* 11(8), 95-100.

König, E. & Siemund, P. (2007) Speech act distinctions in grammar. In *Lan-*

guage typology and syntactic description, (ed.), T. Shopen, 276-324. Cambridge: Cambridge University Press.

Kramer, R. (2009). *Definite markers, phi-features, and agreement: a morphosyntactic investigation of the Amharic DP*. PhD thesis, UC Santa Cruz.

Kramer, R. (2010). The Amharic definite marker and the syntax-morphology interface. *Syntax* 13, 196-240.

Kratzer, A. (1994) On external arguments. *Functional Projections: University of Massachusetts Occasional Papers (UMOP)* 17, 103-130.

Kratzer, A. (1996). Severing the external argument from its head. In *Phrase structure and the lexicon*, (eds.), J. Rooryck & L. Zaring, 109-137. Dordrecht: Kluwer.

Kratzer, A. (1999). Beyond *ouch* and *oops*: how descriptive and expressive meaning interact. A comment on David Kaplan's paper, Cornell Conference on Theories of Context Dependency.

Kratzer, A. (2004). Interpreting focus: presupposed or expressive meanings? *Theoretical Linguistics* 30(1), 123-136.

Kruschke, J. K. (2015 [2011]). *Doing Bayesian data analysis: a tutorial with R, JAGS, and Stan*. Burlington, MA: Academic Press/Elsevier.

Kubo, M. (1992). Japanese passives. *Working Papers of the Department of Languages and Cultures* 23, 231-302. Sapporo: University of Hokkaido.

Kubota, Y. (2010). Marking aspect along a scale: the semantics of *-te iku* and *-te kuru* in Japanese. *Proceedings of Semantics and Linguistic Theory* 20, 128-146.

Kumai, H. (1986). Nihongo shokyuu kyookasho ni okeru keigoteki yooso no bunseki to keigobunrui ni kansuru ichikoosatsu [An analysis of some honorific aspects in Japanese education for beginners and a reflection of classification of honorifics]. *Nihongo Gakkoo Ronshuu [Papers of Japanese Schools]* 13, 49-64.

Kumai, H. (1988). Gendai nihongo ni okeru taiguuhyoogen no taikei ni tsuite: keigo bunrui no shiten [On expressions of treatment in contemporary Japanese: from the perspective of classification of honorifics]. *Nihongo Gakkoo Ronshuu [Papers of Japanese Schools]* 15, 57-73.

Kuno, S. (1983 [1973]). *The structure of Japanese language*. Cambridge, MA: MIT Press.

Kuno, S. (1987). *Functional syntax*. Chicago: The University of Chicago Press.

Kuno, S. (1988). Blended quasi-direct discourse in Japanese. *Papers from the second international workshop on Japanese syntax*, (ed.), W. Poser, 75-102. Stanford: Center for the Study of Language and Information.

Labov, W. (1972 [1963]). *Sociolinguistic patterns*. University of Philadelphia: Pennsylvania Press.

Lafon, R. (1980 [1944]). *Le systeme du verbe basque au XVIe siècle*. Zarautz: Elkar.

Laka, I. (1993). The structure of inflection: a case study in X^0 syntax. In *Generative studies in Basque linguistics*, (eds.), J. I. Hualde & J. rtiz de Urbina, 21-70. Amsterdam/Philadelphia: John Benjamins.

Landau, I. (2006). Chain resolution in Hebrew V(P)-fronting. *Syntax* 9, 32-66.

Lassiter, D. & Goodman, N. D. (2015). How many kinds of reasoning? Inference, probability, and natural language semantics. *Cognition* 136, 123-134.

Lassiter, D. & Goodman, N. D. (2017). Adjectival vagueness in a Bayesian model of interpretation. *Synthese* 194, 3801-3836.

Lee, H.-C. (2012). Applicatives in Taiwan Sourthern Min: benefactives and malefactives. *Journal of East Asian Linguistics* 21, 367-386.

Lee, I. & Kuno, S. (2004). Emphathy and hearer-based honorifics in Korean. In *Studies in Korean syntax and semantics by Susumu Kuno*, (eds.),

K. Young, R. Kim, & J. B. Whitman, 87-138. Seoul: International Circle of Korean Linguistics.

Lee, J. (1999). Kwukekyengepep-uy cenlyakcek yongpep-ey tayhaye [On the strategic usage of Korean honorifics]. *Ehakyenkwu [Language Research]* 35(1), 91-122.

Lee, J. (2001). *Kwuke kyengepep sayong-uy cenlyakcek thukseng [The characteristics of the strategic use of Korean honorifics]*. Seoul: Thaehaksa.

Legate, J. A. (2002). *Warlpiri: theoretical implications*. PhD thesis, Massachusetts Institute of Technology.

Legate, J. A. (2008). Morphological and abstract case. *Linguistic Inquiry* 39, 55-101.

Legate, J. A. (2014). *Voice and v: lessons from Achenese*. Cambridge, MA: MIT Press.

Lehmann, C. (1995 [1982]). *Thoughts on grammaticalization*. Munich: Lincom Europa. (originally published as *Thoughts on grammaticalization: a programmatic sketch* vol. 1. Arbeiten des Kölner Universalien-Projekts 48. Cologne: University of Cologne).

Lewis, D. K. (1979). Scorekeeping in a language game. *Journal of Philosophical Logic* 8(1), 339-359.

Lightfoot, D. (2006). *How new languages emerge.* Cambridge: Cambridge University Press.

Marantz, A. (1984). *On the nature of grammatical relations*. Cambridge, MA: MIT Press.

Marantz, A. (1997). No escape from syntax: don't try morphological analysis in the privacy of your own lexicon. *Proceedings of Penn Linguistics Colloquium* 21, 201-225.

Marantz, A. (2008). Phases and words. In *Phases in the theory of grammar*, (ed.), S.-H. Choe, 191-222. Seoul: Dong In.

Marantz, A. (2013). Verbal argument structure: events and participants. *Lingua* 130, 152-168.

Mari, A. & Portner, P. (to appear). Mood variation with belief predicates: modal comparison in semantics and the common ground.

Marušič, F., Nevins, A. & Badecker, W. (2015). The grammars of conjunction agreement in Slovenian. *Syntax* 18, 39-77.

Massam, D. (2006). Neither absolutive nor ergative is nominative or accusative. In *Ergativity: emerging issues*, (eds.), A. Johns, D. Massam & J. Ndayiragije, 27-46. Dordrecht: Kluwer.

Matsumoto, Y. (1997). The rise and fall of Japanese nonsubject honorifics: the case of '*o*-Verb-*suru*.' *Journal of Pragmatics* 28, 719-740.

Matsumura, A. (1957). *Edogo Tookyoogo no kenkyuu [A study of Edo Japanese and Tokyo Japanese]*. Tokyo: Tokyodoo Shuppan.

Matsuo, S. (1936). *Kokugo hoo ronkoo [A reflection on the grammar of Japanese]*. Tokyo: Bungakusha.

Matsushita, D. (1901). *Nihon zokugo bunten [The grammar book of colloquial Japanese]*. Tokyo: Seishidoo.

Matsushita, D. (1978 [1923]). Kokugo yori mitaru nihon no kokuminsei [Japanese nationality from the pespective of the national language]. *Kokugakuin Zasshi [The Journal of Kokugakuin University]* 29 (5), 36-72. Reprinted in *Ronshuu Nihongo Kenkyuu 9: Keigo [Papers of Japanese Studies 9: honorifics]*, (ed.), Y. Kitahara. Tokyo: Yuuseido.

Matsushita, D. (1924). *Hyoojun nihon bunpoo [The Japanese grammar of Japanese people]*. Tokyo: Kigensha.

Matsushita, D. (1928). *Kaisen hyoojun nihon bunpoo [The revised version of the Japanese grammar of Japanese people]*. Tokyo: Kigensha.

McCawley (Akatsuka), N. (1978). Another look at NO, KOTO, and TO: epistemology and complementizer choice in Japanese. In *Problems in*

Japanese syntax and semantics, (eds.), J. Hinds & I. Howard. Tokyo: Kaitakusha.

McCready, E. (2009). What man does. *Linguistics and Philosophy* 31, 671-724.

McCready, E. (2010). Varieties of conventional implicature. *Semantics and Pragmatics* 3(8), 1-57.

McCready, E. (2014). A semantics for honorifics with reference to Thai. *Proceedings of Pacific Asia Conference on Language, Information and Computing (PACLIC)* 28, 503-512.

McCready, E. (2018). Social knowledge and semantic content. Presented at workshop of the Linguistic Society of Korea: Modality in Discourse, Dec. 7-8 2018, Seoul National University.

McCready, E. (2019). *Honorification and social meaning*. New York, Oxford: Oxford University Press.

McFadden, T. (2017). The morphosyntax of allocutive agreement in Tamil. Ms., Leibniz Zentrum Allgemeine Sprachwissenschaft.

McFadden, T. (2018). Tamil allocutive agreement and the syntax of the Speech Act Phrase. Oral presentation at GLOW 41, Budapest.

McGinnis, M. (2001a). Phases and the syntax of applicatives. *Proceedings of the North East Linguistic Society* 31, 333-349.

McGinnis, M. (2001b). Variation in the phase structure of applicatives. *Linguistic Variation Yearbook* 1, 105-146.

McGinnis, M. (2002). Object asymmetries in a phase theory of syntax. *Proceedings of the 2001 Canadian Linguistic Association Annual Conference*, 133-144.

McGinnis, M. & Gerdts, D. (2004). A phase-theoretic analysis of Kinyarwanda multiple applicatives. *Proceedings of the 2003 Canadian Linguistic Association Annual Conference*, 154-165.

Mihara, Y. (2010). Sanshootei Karaku no sakuhin ni okeru “gozaru” ni tsuite

[On "gozaru" in the text of Karaku Sanshootei.]. *Ronshuu* 8, 43-62.

Mihara, Y. (2012). Edo jidai zenki no hanashibon ni arawareta "gozaru" ["Gozaru" found in the hanashibon in the early Edo period]. *Ronshuu* 8, 43-62.

Mihara, Y, (2016). *Edogo shiryoo toshite no kooki hanashibon no kenkyuu [A study of late hanashibon texts as research materials for Edo-period Japanese].* PhD thesis, Waseda University.

Minami, F. (1986). *Keigo [Honorifics].* Tokyo: Iwanami Shoten.

Minami, F., Hayashi, H., Hayashi, S. & Haga, Y. (1974). Keigo no taikei [The system of honorifics]. In *Keigo no taikei [The system of honorifics]*, (eds.), S. Hayashi & F. Minami, 47-142.

Mio, I. (1942). *Hanashi kotoba no bunpoo (Kotobazukai hen) [The grammar of colloquial language (about the speech style)].* Tokyo: Teikoku Kyooikukai Shuppanbu.

Mitsuhashi, T. (1978 [1892]). Hoobunjoo no keigo. In *Kooten kookyuujo kooen* 71/72, 33-60. Tokyo: Kooten kookyuujo. Reprinted in *Ronshuu Nihongo Kenkyuu 9: Keigo [Papers of Japanese Studies 9: honorifics]*, (ed.), Y. Kitahara. Tokyo: Yuuseido.

Mitsuya, S. (1908 [1928]). *Kootoo nihon bunpoo [The advanced Japanese grammar].* Tokyo: Meiji Shoin.

Miyachi, K. (1960). Mawiru mawirasu koo [A reflection of mawiru and mawirasu]. *Kokugakuin Zasshi [The Journal of Kokugakuin University]* 61 (7), 80-105.

Miyachi, K. (1971). Mawiru mawirasu koo: Heike monogatari o chuushin ni shite [A reflection of mawiru and mawirasu: focusing on Heike monogatari]. *Kokugakuin Zasshi [The Journal of Kokugakuin University]* 72 (1), 22-65.

Miyachi, K. (1977). '*-masuru*' kara '*-masu*' e no zen'isoo: sharebon shishoo no koosatsu [Transition fom '-masuru' to '-mas': a reflection on share-

bon texts]. *Teikyoo Daigaku Bungakubu Kiyoo Kokugo Kokubungaku [Journal of the Department of Japanese Literature Teikyo University]* 9, 1-50.

Miyachi, K. (1980). *Masu genryuu koo [A reflection on the historical origin of masu]*. Tokyo: Ohfu.

Miyachi, K. & Miyakoshi, M. (1971). Hojodooshi 'kikoyu' kara 'mawirasu' e no zen'isoo: joryuu nikki sakuhin o chuushin ni [a study of the gradual transition from the 'auxiliary' verb KIKOYU to MAWIRASU: with reference to the diaries by court ladies]. *Tookyoo Gakugei Daigaku Kiyoo [Bulletin of Tokyo Gakugei University]* 22, 159-174.

Miyagawa, S. (1987). LF affix raising in Japanese. *Linguistic Inquiry* 18, 362-367.

Miyagawa, S. (2012). Agreements that occur mainly in main clauses. In *Main clause phenomena: new horizons*, (eds.), L. Aelbrecht, L. Haegeman, & R. Nye, 79-112. Amsterdam/Philadelphia: John Benjamins.

Miyagawa, S. (2017). *Agreement beyond phi*. Cambridge, MA: MIT Press.

Miyaji, Y. (1971a). Gendai no keigo [Honorifics in contemporary Japanese]. In *Keigoshi [History of honorifics]*, (ed.), T. Tsujimura, 367-425. Tokyo: Taishukan.

Miyaji, Y. (1971b). *Bunron [The grammar of sentences]*. Tokyo: Meiji Shoin.

Miyakoshi, M. (1971). Sanukinosuke nikki ni okeru hojodooshi '*mawirasu*' ni tsuite [A study of subsidiary verb 'mawirasu' in the diary of Sanukinosuke]. *Kokugakuin Zasshi [The Journal of Kokugakuin University]* 72 (12), 31-40.

Miyakoshi, M. (1974). Eiga monogatari ni okeru hojodooshi '*mawirasu*' ni tsuite [A study of the subsidiary verb 'mawirasu' used in "Eiga-Monogatari"]. *Tookyoo Gakugei Daigaku Kiyoo [Bulletin of Tokyo Gakugei University]* 25, 191-198.

Miyakoshi, M. (1975). Hojodooshi 'kikoyu' kara 'mawirasu' e no zen'isoo:

Eiga monogatari ni okeru [A study of the gradual transition from the subsidiary verb 'kikoyu' to 'mawirasu': with reference to the "Eiga-Monogatari"]. *Tookyoo Gakugei Daigaku Kiyoo [Bulletin of Tokyo Gakugei University]* 26, 189-196.

Miyakoshi, M. (1986). "Ookagami" ni okeru 'mimawirasu' [A study of 'mimawirasu' in "Ohkagami"]. *Tookyoo Gakugei Daigaku Kiyoo [Bulletin of Tokyo Gakugei University]* 37, 239-245.

Miyamoto, T. (1993). Event and control structures of the Japanese light verb construction. *Proceedings of the Western Conference on Linguistics (WECOL)* 6, 278-290.

Miyamoto, T. (1999). *The light verb construction in Japanese.* Amsterdam/Philadelphia: John Benjamins.

Miyamoto, T & Kishimoto, H. (2016). Light verb constructions with verbal nouns. In *Handbook of Japanese lexicon and word formation*, (eds.), T. Kageyama & H. Kishimoto, 425-457. Berlin: De Gruyter Mouton.

Miyazaki, K. (1988). Gendai keigo no seiritsu katei: chuusei kara gendai ni wataru keigo no hensen [The process whereby the honorifics in contemporary Japanese developed: transition of honorifics from middle Japanese to contemporary Japanese]. *Gakkai* 4, 58-65.

Moriyama, Y. (1996). *Nihongo keigo hyoogen no shiteki tenkai ni tsuite no kenkyuu [A study of historical developements of Japanese honorific expressions]*. PhD thesis, Nara Women's University.

Moriyama, Y. & Suzuki, R. (2011). Nihongo ni okeru kikite keigo no kigen: sozai keigo no ten'yoo. In *Rekishi goyooron nyuumon [Introduction to historical pragmatics]*, (eds.), H. Takada, M. Shiina & N. Onodera, 163-173. Tokyo: Taishuukan Publishers.

Moro, A. (2003). Notes on vocative case: a case study in clause structure. In *Romance languages and linguistic theory 2001*, (eds.), J.

Quer, J. Schroten, P. Sleeman, & E. Verheugd, 251-265. Amsterdam/Philadelphia: John Benjamins.

Motoori, N. (1792). *Tamaarare [Tamaarare]*. Matsusaka Hinomachi (Seishuu) : Bunkaidoo.

Murray, S. E. (2017). *The semantics of evidentials*. Oxford: Oxford University Press.

Nakatani, K. (2013). *Predicate concatenation: a study of the V-te V predicate in Japanese*. Tokyo: Hituzi Shobo.

Nakatani, K. (2016). Complex predicates with *-te* gerundive verbs. In *Handbook of Japanese lexicon and word formation*, (eds.), T. Kageyama & H. Kishimoto, 387-423. Berlin: De Gruyter Mouton.

Namai, K. (2000). Subject honorification in Japanese. *Linguistic Inquiry* 31(1), 170-176.

Narrog, H. (2005). Nihongo no bunpooka no keitaiteki sokumen [The morphological aspect of grammaticalization in Japanese]. *Nihongo no Kenkyuu [Study of Japanese Language]* 1(3), 108-122.

Neale, S. (1999). Coloring and composition. In *Philosophy and linguistics*, (ed.), R. Stainton, 35-82. Boulder, CO; Westview Press.

Niinuma, F. (2003). *The syntax of honorification*. PhD thesis, University of Connecticut.

Nishiyama, A. (2006). *The semantics and pragmatics of the perfect in English and Japanese*. PhD thesis, The State University of New York at Buffalo.

Niyogi, S. (2002). Bayesian learning at the syntax-semantics interface. *Proceedings of the Cognitive Science Society* 24, 697-702.

Noda, H. (2004). Hitei teineikei '*-masen*' to '*-nai desu*' no shiyoo ni kakawaru yooin: yoorei choosa to jakunensoo ankeeto choosa ni motozuite [Factors relating to the use of '-masen' and '-nai desu' as polite negative form: based on a usage investigation and on a questionnaire

investigation of young generation speakers]. *Keiryoo Kokugogaku [Mathematical Linguistics]* 24(5), 228-244.

Nonaka, H. & Yamamoto, M. (1985). Semantic and syntactic analysis of polite forms in Japanese complement sentences. *Chiba Koogyoo Daigaku Kenkyuu Hookoku [Report of Chiba Institute of Technology]* 22, 143-159.

Nonaka, H. (2006). The polite forms in Japanese complement sentences. *Kiryuu Tanki Daigaku Kiyoo [Bulletin of Kiryu Junior College]* 17, 103-112.

Noonan, M. B. (1993). Statives, perfectives, and accusativity: the importance of being HAVE. *Proceedings of the 11th West Coast Conference on Formal Linguistics*, 354-370.

Noonan, M. B. (1995). VP internal and VP external AGRoP: evidence from Irish. *Proceedings of the West Coast Conference on Formal Linguistics (WCCFL)* 13, 318-333.

Norris, M. (2012). Towards an analysis of Concord (in Icelandic). In *Proceedings of the West Coast Conference on Formal Linguistics (WCCFL)* 29, 205-213.

Norris, M. (2014). *A theory of nominal concord*. PhD thesis, UC Santa Cruz.

Nunes, J. (1995). *The copy theory of movement and linearization of chains in the minimalist program*. PhD thesis, University of Maryland.

Nunes, J. (2004). *Linearization of chains and sideward movement*. Cambridge, MA: MIT Press.

Ochiai, T. (2012). Kakikotoba ni arawareru "masen" to "naidesu" ["Masen" and "naidesu" found in written texts]. *Kokubun Mejiro [Japanese Literature Mejiro]* 51.14-22.

Ohori, T. (2005). Nihongo no bunpooka kenkyuu ni atatte: gaikan to rironteki kadai [Perspectives on grammaticalization in Japanese: survey and theoretical issues]. *Nihongo no Kenkyuu [Study of Japanese Language]* 1(3), 1-17.

Oishi, H. (1977). Keigo no kenkyuushi [History of the study of honorifics]. In *Keigo [Honorifics]*, (eds.), S. Ohno, & T. Shibata, 205-246. Tokyo: Iwanami Shoten.

Oishi, H. (1983). *Gendai keigo kenkyuu [A study of honorifics in contemporary Japanese]*. Tokyo: Chikuma Shobo.

Okell, J. (1969). *A reference grammar of colloquial Burmese*. London/Bombay/ Kuala Lumpur: Oxford University Press.

Okell, J. & Allott, A. (2001). *Burmese/Myanmar dictionary of grammatical forms*. Richmond, Surrey: Curzon

Okutsu, K. (1974). *Seisei nihon bunpooron [The generative grammar of Japanese]*. Tokyo: Taishukan.

Oseki, Y. & Tagawa, T. (2019). Dual suppletion in Japanese. *Proceedings of the Workshop on Altaic Formal Linguistics* 15, 193-204.

Oshima, D. Y.. (2006). *Perspectives in reporeted discourse*. PhD thesis, Stanford University.

Oshima, D. Y.. (2015). Ellipsis of say, think, and do in Japanese subordination clauses: a constructional analysis. *Proceedings of International Conference on Head-Driven Phrase Structure Grammar* 22, 157-176.

Oshima, D. Y. (2018). The logical principles of honorification and dishonorification in Japanese. Presentation at Logic and Engineering of Natural Language Semantics 15, Keio University, Nov. 2018.

Oyharçabal, B. (1993). Verb agreement with non-arguments: on allocutive agreement. In *Generative studies in Basque linguistics*, (eds.), J. I. Hualde. & J. Ortiz de Urbina, 89-114. Amsterdam/Philadelphia: John Benjamins.

Ozaki, N. (2004). Hitei no teineikei '*naidesu*' to '*masen*' ni tsuite [Polite forms in negative sentences 'naidesu' and 'masen']. *Okayama Daigaku Gengogaku Ronsoo [Discussions of Linguistics at Okayama University]*

11, 29-42.

Özyıldız, D. (2018). Unselected questions. Presentation given at the Workshop on Altaic Formal Linguistics 14, MIT, Oct. 2018.

Pak, M. (2008). Types of clauses and sentence end particles in Korean. *Korean Linguistics* 14,113-155.

Pesetsky, D. (1989). Language-particular processes and the earliness principle. Ms., Massachusetts Institute of Technology.

Pesetsky, D. & Torrego, E. (2001). T-to-C movement: causes and consequences. In *Ken Hale: a life in language*, (ed.), M. Kenstowicz, 355-426. Cambridge, MA: MIT Press.

Pesetsky, D. & Torrego, E. (2007). The syntax of valuation and the interpretability of features. In *Phrasal and clausal architecture*, (eds.), S. Karimi, V. Samiian, & W. K. Wilkins, 262-294. Amsterdam/Philadelphia: John Benjamins.

Piantadosi, S. T., Goodman, N. D., Ellis, B. A. & Tenenbaum, J. B. (2008). A Bayesian model of the acquisition of compositional semantics. *Proceedings of the Annual Conference of the Cognitive Science Society* 30, 1620-1625.

Poletto, C. & Zanuttini, F. (2003). Making imperatives: evidence from central Rhaetoromance. In *The syntax of Italian dialects*, (ed.), C. Tortora, 175-206. Oxford: Oxford University Press.

Pollock, J. (1989). Verb movement, universal grammar, and the structure of IP. *Linguistic Inquiry* 20(3), 365-424.

Portner, P. (2004). The semantics of imperatives within a theory of clause types. *Proceedings from Semantics and Linguistic Theory* 14, 235-252.

Portner, P. (2007). Instructions for interpretation as separate performatives. In *Information structure, meaning, and form*, (eds.), K. Schwabe & S. Winkler, 407-425. Amsterdam/Philadelphia: John Benjamins.

Portner, P. (2018a). Commitment to priorities. In *New work on speech acts*,

(eds.), D. Fogel, D. Harris, & M. Moss, 296-316. Oxford: Oxford University Press.

Portner, P. (2018b). *Mood*. Oxford: Oxford University Press.

Portner, P. (2018c). Mood Variation and Modal Semantics. Presented at workshop of the Linguistic Society of Korea: Modality in Discourse, Dec. 7-8 2018, Seoul National University.

Portner, P., Pak, M. & Zanuttini, R. (2019). The addressee at the syntax-semantics interface: evidence from politeness and speech style. *Language* 95(1), 1-36.

Potts, C. (2003). *The logic of conventional implicatures*. PhD thesis, UC Santa Cruz.

Potts, C. (2005). *The logic of conventional implicatures*. Oxford: Oxford University Press.

Potts, C. (2007a). Conventional implicatures, a distinguished class of meanings. In *The Oxford handbook of linguistic interfaces*, (eds.), G. Ramchand, & C. Reiss, 475-501. Oxford: Oxford University Press.

Potts, C. (2007b). The expressive dimension. *Theoretical Linguistics* 33, 165-197.

Potts, C. (2015). Presupposition and implicature. In *The handbook of contemporary semantic theory*, (eds.), S. Lappin, & C. Fox, 168-202. Oxford: Wiley-Blackwell.

Potts, C. & Kawahara, S. (2004). Japanese honorifics as emotive definite descriptions. *Proceedings of Semantics and Linguistic Theory* 14, 235-254.

Potts, C., Alonso-Ovalle, L., Asudeh A., Bhatt, R., Cable, S., Davis, C., Hara, Y., Kratzer, A., McCready, E., Roeper, T. & Walkow, M. (2009). Expressives and identity conditions. *Linguistic Inquiry* 40(2), 356-366.

Prideaux, G. D. (1970). *The syntax of Japanese honorifics*. Berlin, Boston: Mouton de Gruyter.

Pylkkänen, L. (2008). *Introducing arguments*. Cambridge, MA: MIT Press.

Quer, J. (1998). *Mood at the interface*. The Hague: Holland Academic Graphic.

Quer, J. (2001). Interpreting mood. *Probus* 13, 81-111.

Radford, A. (1988). *Transformational grammar: a first course*. Cambridge: Cambridge University Press.

Radford, A. (2018). *Colloquial English: structure and variation.* Cambrdige: Cambrdige University Press.

Reis, M. (1999). On sentence types in German: an enquiry into the relationship between grammar and pragmatics. *Interdisciplinary Journal for Germanic Linguistics and Semiotic Analysis (IJGLSA)* 4(2), 195-236.

Richards, N. (2016). *Contiguity theory*. Cambridge, MA.: MIT Press.

Rieber, S. D. (1997). Conventional implicatures as tacit performatives. *Linguistics and Philosophy* 20(1), 51-72.

de Rijk, R. P. G. & Coene, A. D. (2007). *Standard Basque: a progressive grammar*. Cambridge, US: MIT Press.

Rivero, M. L. (1994). Clause structure and V-movement in the languages of the Balkans. *Natural Language and Linguistic Theory* 12, 63-120.

Rizzi, L. (1997). The fine structure of the left periphery. In *Elements of grammar: a handbook of generative syntax*, (ed.), L. Haegeman, 281-337. Dordrecht: Kluwer.

Rizzi, L. (2018). Cartography and the explanatory role of grammatical principles. Talk at the workshop of Cross-linguistic Variation in the Left Periphery at the Syntax-Discourse Interface. SNU International Conference on Linguistics, Seoul National University 2018.

Rizzi, L. & Cinque, G. (2016). Functional categories and syntactic theory. *Annual review of Linguistics* 2, 139-163.

Roberts, C. (2012 [1996]). Information structure in discourse: towards an integrated formal theory of pragmatics. *Semantics and Pragmatics* 5(6), 1-69.

Roberts, I. (2007). *Diachronic syntax.* Oxford: Oxford University Press.

Rodriguez, J. (1604-1608). *Arte da lingoa de Iapam*. Nagasaki.

Romeo, N. (2008). *Aspect in Burmese: meaning and function*. Amsterdam/Philadelphia: John Benjamins.

van Rooy, R. (2003). Being polite is a handicap: towards a game theoretical analysis of polite linguistic behavior. *Proceedings of the Conference on Theoretical Aspects of Rationality and Knowledge* 9, 45-58.

Ross, R. (1970). On declarative sentences. In *Readings in English transformational grammar*, (eds.), R. A. Jacobs, & P. S. Rosenbaum, 222-272. Waltham, Mass.: Xerox College Publishing.

Roussou, A., (2000). On the left periphery: modal particles and complementisers. *Journal of Greek Linguistics* 1, 65-94.

Rubinstein, A. (2012). *Roots of modality*. PhD thesis, University of Massachusetts.

Rubinstein, A. (2017). Straddling the line between attitude verbs and necessity modals. In *Modality across syntactic categories*, (eds.), A. Arregui, M. L. Rivero, & A. Salanova, 109-131. Oxford: Oxford University Press.

Sacks H., Schegloff, E. A. & Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation. *Language* 50 (4), 696-735.

Sakurai, M. (1971). Kindai no Keigo I [Honorifics in modern Japanese I]. In *Keigoshi [History of honorifics]*, (ed.), T. Tsujimura, 183-282. Tokyo: Taishuukan Publishers.

Salmon, W. (2011). Conventional implicature, presupposition, and the meaning of must. *Journal of Pragmatics* 43(14), 3416-3430.

Savage, L. J. (1972 [1954]). *The foundation of statistics*. New York: Dover.

Sawada, J. (2016). Nihongo no higo keishiki o megutte: yagaru koobun o chushin ni [On Japanese antihonorific forms: focusing on yagaru construction]. *Proceedings of the International Modality Workshop* 10, 111-30.

Sawada, O. (2010). *Pragmatic aspects of scalar modifiers*, PhD thesis, University of Chicago.

Sawada, O. (2017). *Pragmatic aspects of scalar modifiers: the semantics-pragmatics interface*. Oxford: Oxford University Press.

Sawada, O. (2013). The meanings of diminutive shifts in Japanese. *Proceedings of the North East Linguistic Society* 42, 163-76.

Sawada, O. & Sawada, J. (2013). The meaning of modal affective demonstratives in Japanese. *Japanese/Korean Linguistics* 21, 181-96.

Schiffrin, D. (1987). *Discourse markers.* Cambridge: Cambridge University Press.

Schlenker, P. (2003). A plea for monsters. *Linguistics & Philosophy* 26, 29-120.

Schlenker, P. (2004). Context of thught and context of utterance (a note on Free Indirect Discourse and the Historical Present). *Mind & Language* 19, 279-304.

Schuchardt, H. (1893). *Sobre la formación de las flexiones de relación del verbo vasco*. Sp. (ed.), Goenaga, A. (1947). Reprinted in *Boletín de la Real Sociedad Vascongada de los Amigos del País* 28, 217-337.

Sells, P. & Iida, M. (1991). Subject and object honorification in Japanese. *Proceedings of the Berkeley Linguistics Society* 17, 312-323

Sharvit, Y. (2004). Free indirect discourse and *de re* pronouns. *Proceedings of Semantics and Linguistics Theory* 14, 305-322.

Sharvit, Y. (2008). The puzzle of free indirect discourse. *Linguistics & Philosophy* 31(3), 353-395.

Shibamoto-Smith, J. S. (2011). Honorifics, "politeness," and power in Japanese political debate. *Journal of Pragmatics* 43, 3707-3719.

Shibatani, M. (1977). *Grammatical relations and surface cases*. Language 53, 780-809.

Shibatani, M. (1978). Mikami Akira and the notion of 'subject' in Japanese grammar. In *Problems in Japanese syntax and semantics*, (eds.), J. Hinds & I. Howards, 52-67. Tokyo: Kaitakusha.

Shibatani, M. (1985). Passives and related constructions: a prototype analysis. *Language* 61(4), 821-848.

Shibatani, M. (1990). *The languages of Japan*. Cambridge: Cambridge University Press.

Shibatani, M. (1996). Applicatives and benefactives: a cognitive account. In *Grammatical constructions: their form and meaning*, (eds.), M. Shibatani & S. A. Thompson, 159-194. Oxford: Oxford University Press.

Shibatani, M. (1998). Honorifics. In *Concise encyclopedia of pragmatics*, (ed.), M. Jacob, 341-350. Amsterdam, New York: Elsevier.

Shimoyama, J. & Goodhue, D. (2019). Embedded negative polar questions with positive epistemic bias. Workshop GLOW-in-Asia XII & SICOGG 21, Dongguk University, August 6-9 2019.

Shirai, Y. (2000). The semantics of the Japanese imperfective *-teiru:* an integrative approach. *Journal of Pragmatics* 32, 327-361.

Sigurðsson, H. Á. (2004). The syntax of person, tense, and speech features. *Italian Journal of Linguistics* 16, 219-251.

Slocum, P. (2016). *The syntax of address*. PhD thesis, Stony Brook University.

Smyth, D. (2002). *Thai: an essential grammar*. London/New York: Routledge

Ltd.

Socanac, T. (2017). Balkan subjunctive distribution: world semantics and default selection. *Generative Grammar in Geneva* 10, 117-130.

Soe, M. (1999). *A grammar of Burmese*. PhD thesis, University of Oregon.

Someya, H. (2001). Gachuushi no naka no 'sooroobekusooroo': sono hyoogen ito o kangaeru ['Sooroobekusooroo' in texts inserted in paintings: considering purposes of these expressions]. *Choofu Nihon Bunka [The Chofu's Japanese Culture]* 11, 15-33.

Speas, P. & Tenny, C. (2003). Configurational properties of point of view roles. In *Asymmetry in grammar vol. 1: syntax and semantics*, (ed.), A. M. Di Sciullo, 315-345. Amsterdam/Philadelphia: John Benjamins.

Stalnaker, R. C. (1974). Pragmatic presuppositions. In *Semantics and philosophy*, (eds.), M. Munitz & P. Unger, 197-213. New York: New York University Press.

Stalnaker, R. C. (1978). Assertion. In *Syntax and semantics 9: pragmatics*, (ed.), P. Cole, 315-332. New York: Academic Press.

Stalnaker, R. C. (2002). Common ground. *Linguistics and Philosophy* 25, 701-721.

Stegovec, A. & Kaufmann, M. (2015). Slovenian imperatives: you can't always embed what you want! *Proceedings of Sinn und Bedeutung* 19, 621-638.

Sudo, Y. (2012). *On the semantics of phi features on pronouns*. PhD thesis, Massachusetts Institute of Technology.

Sugisaki, K. (1984). Keigohoo no bunrui [Classification of honorifics]. In *Kenkyuu shiryoo nihonbunpoo 9: keigohoo hen [Documents for studies on Japanese grammar 9: honorifics]*, (eds.), K. Suzuki & O. Hayashi, 21-46. Tokyo: Meiji Shoin.

Suñer, M. (1993). About indirect auestions and semi-questions. *Linguistics and Pilosophy* 16, 45-77.

Suzuki, S. (1997). The relevance of factivity to complementizer choice in Japanese. *Studies in Languages*. 21(2), 287-311.

Suzuki, T. (1988). A syntactic analysis of an honorific construction *o . . . naru*. *Proceedings of the West Coast Conference on Formal Linguistics* 8, 373-383.

Tagashira, Y. (1973). Polite forms in Japanese. In *You take the high node and I'll take the low node: papers from the comparative syntax festival, the difference between main and subordination clauses*, (eds.), C. Corum, T. G. Smith-Stark & A. Weiser, 121-134. Chicago: Chicago Linguistic Society.

Takishima, M. (2018). Hoosoo ni okeru bikago no ishiki choosa [Examination of people's awareness of beatufication in broadcasting programs]. *Hoosoo Kenkyuu to Choosa* 68(1), 26-45.

Takiura, M. (2008). *Poraitonesu nyuumon*. Tokyo: Kenkyuusha.

Takiura, M. (2017). *Nihongo keigo oyobi kanren genshoo no shakai goyooron-teki kenkyuu*. PhD thesis, Hokkaido University.

Takiura, M. (to appear). Intersection of traditional Japanese honorific theories and Western politeness theories. In *Handbook of Japanese sociolinguistics*, (eds.), Y. Asahi, M. Usami & F. Inoue. Berlin: Mouton de Gruyter.

Tan, M. T., Tian, G.-L. & Ng, K. W. (2009). *Bayesian missing data problems: EM, data augmentation and non-iterative computation*. London and Boca Raton, Florida: Chapman & Hall/CRC Press.

Tanaka, A. (2008). "Masu" kara "desu" e: teineitai no hen'yoo [From "masu" to "desu": a change of addressee-honorific forms]. *Kindaigo Kenkyuu [Studies of Modern Japanese]* 14, 326-341.

Tanomura, T. (1994). Teineitai no jutsugo hiteikei no sentaku ni kansuru keiryooteki choosa [A corpus-based study on the polite negative predicate forms in Japanese]. *Osaka Gaikokugo Daigaku Ronshuu [Journal of*

Osaka University of Foreign Studies] 11, 51-66.

Terzi, A. (1992). *PRO in finite clauses: a study of the inflectional heads of the Balkan languages.* PhD thesis, City University of New York.

Thoma, S. (2016). *Discourse particles and the syntax of discourse: evidence from Miesbach Bavarian*. PhD thesis, The University of British Columbia.

Thompson, A. (2011). Irregularity in Japanese honorifics. In *Morphology at Santa Cruz: papers in honor of Jorge Hankamer*, (eds.), N. LaCara, A. Thompson & M. A. Tucker, 153-175. Santa Cruz: Linguistic Research Center, University of California.

Todorovic, N. (2012). *The indicative and subjunctive* da*-complements in Serbian: a syntactic-semantic approach*. PhD thesis, The University of Illinois at Chicago.

Tojo, G. (1818). *Yamaguchi no shiori [A guide to the entrance of mountains]*. Matsumura Kyuubee: Osaka.

Tokieda, M. (1941). *Kokugogaku genron [The principles of Japanese linguistics]*. Tokyo: Iwanami Shoten.

Toribio, A. (1990). Specifier-head agreement in Japanese. *Proceedings of the West Coast Conference on Formal Linguistics (WCCFL)* 9, CSLI, Stanford, 535-548.

Toyama, E. (1977). Keigo no hensen (2). In *Keigo [Honorifics]*, (eds.), S. Ohno & T. Shibata, 135-167. Tokyo: Iwanami Shoten.

Traugott, E. C. (1995). The role of the development of discourse markers in a theory of grammaticalization. Paper presented at ICHL WII, Manchester 1995.

Traugott, E. C. (2003). From subjectification to intersubjectification. In *Motives for language change*, (ed.), R. Hickey, 124-139. Cambridge: Cambridge University Press.

Traugott, E. C. & Dasher, R. B. (2002). *Regularity in semantic change*. Cambridge: Cambridge University Press.

Traugott, E. C. & Trousdale, G. (2013). *Constructionalization and constructional changes*. Oxford: Oxford University Press.

Travis, L. (1991). Derived objects, inner aspect, and the structure of VP. Ms., McGill University.

Travis, L. (2000). The L-syntax/S-syntax boundary: evidence from Austronesian. In *Formal issues in Austronesian linguistics*, (eds.), I. Paul, V. Phillips & L. Travis, 167-194. Dordrecht: Kluwer.

Tribio, A. J. (1991). Specifier-head agreement in Japanese. *Proceedings of the West Coast Conference on Formal Linguistics* 9, 535-548.

Tsujimura, T. (1951). "O ..... ninaru" koo [A reflection on "o ..... ninaru"]. *Kokubungaku Kenkyuu [Studies of Japanese Literature]*. Reprinted in Keigo no shiteki kenkyuu, 1968. Tokyo: Tokyodo.

Tsujimura, T. (1958). Kotoba no tsukaikata: keigo [The way we speak: honorifics]. In *Nihon bunpoo kooza [Lectures on Japanese grammar]*, 131-149. Tokyo: Meiji Shoin.

Tsujimura, T. (1963). Keigo no bunrui ni tsuite [On the classification of honorifics]. *Gengo to bungei [Language and Literature]* 5(2), 8-13.

Tsujimura, T. (1965). "Desu" no yoohoo [Usage of "desu"]. *Kindaigo Kenkyuu [Studies of Modern Japanese]* 1, 242-262.

Tsujimura, T. (1968). *Keigo no shiteki kenkyuu [A historical study of honorifics]*. Tokyo: Tokyodo Shuppan.

Tsujimura, T. (1971). Keigoshi no hoohoo to mondai [Methods and problems in studies of the history of honorifics]. In *Keigoshi [History of honorifics]*, (ed.), T. Tsujimura, 3-32. Tokyo: Taishukan Shoten.

Tsujimura, T. (1974). Meiji Taisho jidai no keigo gaikan [An overview of honorifics in the Meiji and Taisho period]. In *Meiji Taisho jidai no keigo*

[Honorifics in the Meiji and Taisho period], (eds.), S. Hayashi & F. Minami, 7-33. Tokyo: Meiji Shoin.

Tsujimura, T. (1984). Tauguuhyoogen. In *Kenkyuu shiryoo nihonbunpoo 9: Keigohoo hen [Documents for studies on Japanese grammar 9: honorifics]*, (eds.), K. Suzuki & O. Hayashi, 2-20. Tokyo: Meiji Shoin.

Tsujimura, T. (1988). Keigo bunrui no mondaiten o megutte [On the problem of the classification of honorifics]. *Kokubungaku Kenkyuu [Studies of Japanese Literature]* 94, 43-52.

Uchida, Y. & Nakayama, M. (1993). Japanese verbal noun constructions. *Linguistics* 31, 623-666.

Ura, H. (1996). *Multiple-feature checking: a theory of grammatical function splitting*. PhD thesis, Massachusetts Institute of Technology.

Ura, H. (1999). Checking theory and dative subject constructions in Japanese and Korean. *Journal of East Asian Linguistics* 8, 223-254.

Ura, H. (2000). *Checking theory and grammatical functions in generative grammar*. Oxford: Oxford University Press.

Ura, H. (2001). Case. In *The handbook of contemporary syntactic theory*, (eds.), M. Baltin & C. Collins, 334-373. Oxford: Blackwell.

van Urk, C. (2015). *A uniform syntax for phrasal movement: a case study of Dinka Bor*. PhD thesis, Massachusetts Institute of Technology.

van Urk, C. (2018). Pronoun copying in Dinka Bor and the copy theory of movement. *Natural Language and Linguistic Theory* 36(3), 937-990.

van Urk, C. & Richards, N. (2015). Two components of long-distance extraction: successive cyclicity in Dinka. *Linguistic Inquiry* 46, 113-155.

Verma, M. (1991). Exploring the parameters of agreement: the case of Magahi. *Language Sciences* 13(2), 125-143.

Ward, G. & Hirschberg, J. (1985). Implicating uncertainty: the pragmatics of

fall-rise intonation. *Language* 61(4), 747-776.

Ward, G., Birner, B. J. & Kaplan, J. P. (2003), A pragmatic analysis of the epistemic *Would* construction in English. In *Modality in Contemporary English*, (eds.), R. Facchinetti, M. Krug & F. R. Palmer, 71-79. Berlin: Mouton de Gruyter.

Watanabe , M. (1971). *Kokugo koobunron [Studies of Japanese constructions].* Tokyo: Hanawa Shoboo.

Watanabe, T. & Nishio, K. (1960). *Ujishuui monogatari [The Ujishuui tales].* Tokyo: Iwanami Publishers.

Watanabe, N., McCready, E. & Bekki, D. (2014). Japanese honorification: Compositionality and expressivity. *Proceedings of Formal Approaches to Japanese Linguistics (FAJL)* 7, 265-276.

Wechsler, S. & Hargreaves, D. (2018). Egophoric attitudes and questions in Kathmandu Newar. *Proceedings of TripleA: Fieldwork Perspectives on the Semantics of African, Asian and Austronesian Languages* 4, 91-105. Universitätsbibliothek Tübingen, Publikationssystem.

Whaley, L. (2011). Syntactic Typology. In *The Oxford handbook of linguistic typology* (ed.), J. J. Song, 465-486. Oxford: Oxford University Press.

Wheatley, J. K. (1982). *Burmese: A grammatical sketch.* PhD thesis, UC Berkeley.

Winchester, L. (2019). Concord and agreement features in Modern Standard Arabic. *Glossa: a journal of general linguistics* 4(1): 91, 1-15.

Wolpert, M., Mancini, S. & Caffarra, S. (2017). Addressee identity and morphosyntactic processing in Basque allocutive agreement. *Frontiers in Psychology* 8, 1-11.

Woolford, E. (2006). Lexical case, inherent case, and argument structure. *Linguistic Inquiry* 37, 111-130.

Wrona, J. (2008). *The Old Japanese complement system: a synchronic and diachronic study*. Folkestone, England: Global Oriental.

Wurmbrand, S. (2001). *Infinitives: restructuring and clause structure.* Berlin: Mouton de Gruyter.

Wurmbrand, S. (2014). The merge condition. In *Minimalism and beyond: radicalizing the interfaces*, (eds.), P. Kosta, S. L. Franks, T. Radeva-Bork & L. Schurcks, 130-166. Amsterdam/Philadelphia: John Benjamins.

Yada, T. (1993). Sooroobun ni okeru "sooroo" ji no kinoo [Functions of the morpheme "sooroo" in sooroobun]. In *Kokugo Kenkyuu*, (ed.), Matsumura Akira Sensei Kiju Kinenkai, 385-403. Tokyo: Meiji Shoin.

Yada, T. (2011). Hyookikan no kanshoo to shin hyookitai no sooshutsu: sooroobun no seiritsu ni taisuru kana bunsho no kan'yo ni tsuite [Interaction among writings and emergence of a new writing style: on the relevance of kana texts to the establishment of the sooroobun]. *Kokubun Ronsoo [The Journal of Japanese Language and Literature]* 43, 76-92.

Yamada, A. (2014). Jookensetsu no toogobunseki: nihongo no jirei ni motozuku ketsurakusetsu to idoosetsu no hikaku [Syntactic analysis of conditional clauses: comparison between truncation approach and movement approach on the basis of Japanese conditionals], *Gengojoohoo Kagaku [Language and Information Sciences]* 12, 37-53

Yamada, A. (2017). The syntax-semantics interface of the addressee-honorific construction: the multidimensional in-situ analysis vs the copy analysis. Oral Presentation at Mid-Atlantic Colloquium of Studies in Meaning (MACSIM), Georgetown University 2017.

Yamada, A. (2018a). *Bayesian update: from semantics/pragmatics to variation theory*. Poster presentation at Georgetown University Round Table (GURT), Washington 2018.

Yamada, A. (2018b). A modal approach to no-clauses in Japanese. *Proceedings of the Linguistic Society of Japan* 156, 145-150.

Yamada, A. (2018c). Historical developments/variations of Japanese addressee-honorific markers and economy principles. Oral presentation at the workshop of Cross-linguistic Variation in the Left Periphery at the Syntax-Discourse Interface. SNU International Conference on Linguistics, Seoul National University 2018.

Yamada, A. (2018d). Phase-based prosody: evidence from pitch-accent distribution in the Japanese verbal domain. Oral Presentation at *Proceedings of North East Linguistics Society* 49, Cornell University 2018.

Yamada, A. (2019a). Expressiveness from a Bayesian Perspective. *Proceedings of the English Linguistic Society of Japan* 36, 308-314.

Yamada, A. (2019b). Do-support and be-support as defective movements. Oral Presentation at the 55th annual meeting of the Chicago Linguistics Society. May 16-18, Chicago, the University of Chicago.

Yamada. A. (2019c). Embedded moods in Japanese. *Proceedings of the Linguistic Society of Japan* 157, 267-273.

Yamada. A. (2019d). Syntax and semantics of aspectual constructions in Japanese: defective T and habituality. *Proceedings of the 12th Generative Linguistics in the Old World and the 21st Seoul International Conference on Generative Grammar 2019*, 565-574.

Yamada, A. (2019e). A quantitative approach to addressee-honorific markers: identification of crucial independent variables and prototypes. *Keiryoo Kokugogaku [Mathematical Linguistics]* 32(2), 117-132.

Yamada, A. (2019f). Wago kigen no dooshi to kyoogoosuru sonkeigo koobun [Competing subject-honorific constructions with predicates of Yamato origin]. *Proceedings of The Mathematical Linguistic Society of Japan* 63, 66-71.

Yamada, A. (2019g). An OT-driven dynamic pragmatics: high-applicatives, subject-honorific markers and imperatives in Japanese. *Proceedings in Logic and Engineering of Natural Language Semantics* 16(5), 1-14.

Yamada, I. (1959). Meiji shoki no bunken ni arawareta sonkei hyoogen "o(go)...ninaru" ni tsuite [On the subject-honorific expression "o(go)...ninaru" that appeared in texts in the early Meiji period]. *Kotoba no Kenkyuu [Studies of Languages]* 1, 201-214.

Yamada, R. (2013). Meiji 20 nendai made ni okeru "suru, naru" no sonkei hyoogen keishiki [On subject-honorific expressions using "suru, naru" by the Meiji 20's]. *Waseda Daigaku Daigakuin Kyooikugaku Kenkyuuka Kiyoo [The Bulletin of the Graduate School of Education of Waseda University]* 21(1), 115-127.

Yamada, R. (2015). *Kinsei kooki edogo kara meijiki tookyoogo ni okeru sonkei hyoogen kenkyuu [A study of subject-honorific expressions in late modern Edo Japanese through Meiji Tokyo Japanese]*. PhD thesis, Waseda University.

Yamada, Y. (1922a). *Nihon bunpoo koogi [Lectures on Japanese formal grammar]*. Tokyo: Hoobunkan.

Yamada, Y. (1922b). *Nihon koogo hoo koogi [Lectures on Japanese colloquial grammar]*. Tokyo: Hoobunkan.

Yamada, Y. (1924). *Keigo hoo no kenkyuu [A study of honorifics]*. Tokyo: Hoobunkan.

Yamagishi, T. (1963). *Genji monogatari [The Genji tales]* 5. Tokyo: Iwanami Publishers.

Yamaguchi, T. (2015). The historical development of saburafu: the roles of communication and cognition. In *Yearbook of the German Cognitive Linguistics Association 2015 vol. 3*, (eds.), P. Uhrig & T. Herbst, 71-87. Berlin/Boston: Walter de Gruyter.

Yasuda, K. (1968). 'Marasu' to 'masu' ['Marasu' and 'masu']. *Kindaigo Kenkyuu [Studies of modern Japanese]* 2, 199-216.

Yasuda, K. (1977). 'Masu' to 'desu' ['Masu' and 'desu']. *Kindaigo Kenkyuu [Studies of modern Japanese]* 5, 280-204.

Yasuda, K. (1980). 'Masu' to 'desu' no zokuron [Revisiting 'masu' and 'desu']. *Kindaigo Kenkyuu [Studies of Modern Japanese]* 6, 64-89.

Yasuda, N. (2008). 'Masenkatta' wa Yokohama kotoba ka?: 'masenkatta' no mukashi to ima [Is 'masenkatta' a Yokohama dialect?: "masenkatta" from then to now]. *Kokugo Goishi no Kenkyuu [Studies of Etymology of Japanese]* 27, 263-280.

Yasuhara, T. (1650 [1931]). Katakoto [Katakoto]. In *Katakoto fu hoi, butsurui shooko, Naniwa kikigaki, Tanba tsuuji [Supplements of Katakoto: names of things, writings in Naniwa, Tanba translators]*, (ed.), A. Masamune. Tokyo: Nihon Koten Zenshuu Kankoo Kai. http://dl.ndl.go.jp/info:ndljp/pid/1194128

Yi, C. (2011). "Amakusaban Heikemonogatari" to "Okura Toraakira bon kyoogenshuu" ni okeru 'shitegozaru' keisiki no imi [The meaning of 'shitegozaru' form in "Amakusaban Heike monogatari" and "Okura Toraakira bon kyoogen texts"]. *Nihongogaku Ronshuu [Papers of Japanese Linguistics]* 7, 104-117.

Yim, E. (2007). The meaning of the connective ending *-tako*. *Hyengtaylon* 9(1), 115-133.

Yoon, J.-M. (1990). Verb movement and structure of IP in Korean. *Language Research* 26(2), 343-371.

Yoshida, K. (1971). *Gendai jodooshi no shiteki kenkyuu [A historical study of contemporary auxiliaries]*. Tokyo: Meiji Shoin.

Yoshioka, K. (1906). *Nihon koogo hoo [Japanese honorifics]*. Tokyo: Dainihon Tosho.

Yuzawa, K. (1959). *Bungo bunpoo shoosetsu [Detailed explanation of formal grammar]*. Tokyo: Yubun Shoin.

Zanuttini, R. (2008). Encoding the addressee in the syntax: evidence from English imperative subjects. *Natural Language & Linguistic Theory* 26, 185-218.

Zanuttini, R., Pak, M. & Portner, P. (2012). A syntactic analysis of interpretive restrictions on imperative, promissive and exhortative subjects. *Natural Language & Linguistic Theory* 30, 1231-1274.

Zanuttini, R., Portner, P. & Pak, M. (2019). Person, politeness and the embeddability of imperatives. Oral presentation at Person and Perspective: a workshop honoring the work of Maria Luisa Zubizarreta, University of Southern California.

Zeijlstra, H. 2012. There is only one way to agree. *The Linguistic Review* 29(3), 491-539.

Zu, V. (2015). A two-tiered theory of the discourse. *Proceedings of the West Coast Conference on Formal Linguistics (WCCFL)* 33, 151-160.

Zu, V. (2018). *Discourse participants and the structural representation of the context.* PhD thesis, New York University.