

A mixed-effects analysis of addressee honorifics in Japanese voice actor livestreams

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Abstract. This study examines the distribution of addressee honorific (AH) and plain forms in Japanese voice actor livestreams to determine whether honorific usage can be predicted by contextual factors. Using mixed-effects modeling combined with an analysis of within-section progression, we demonstrate that AH usage is neither random nor uniform, but systematically conditioned by section type, speaker role, and the unfolding interactional structure of discourse. Across most interactional contexts, speakers predominantly use the plain form, which functions as the default speech style. AH forms occur most frequently in introduction and conclusion sections, where presenters explicitly orient to the audience. In sections where the plain form is dominant, speakers dynamically alternate between AH and plain forms to index shifts in stance, participation framework, and audience orientation. These findings provide quantitative evidence that defaultness in speech style is locally and interactionally established rather than fixed by social norms or role relations. By situating honorific usage within moment-by-moment interaction, this study supports interactional and indexical accounts of Japanese honorifics (e.g., Cook 2011; Okamoto 2010) and demonstrates the value of quantitative modeling for analyzing context-sensitive linguistic resources.

Keywords. Japanese honorifics; indexicality; politeness; addressee honorifics; plain form

1. Introduction. Speech style is a significant aspect of sociolinguistics that plays a crucial role in shaping everyday interaction. In Japanese, speech style is largely realized by the use of the addressee honorific (AH) form and the plain form. Previous studies have offered different accounts of how these forms are used. Some have argued that AH functions as a negative politeness strategy employed to mitigate face-threatening acts (Brown & Levinson 1987; Fukada & Asato 2004). Others have suggested that honorific usage is governed by social conventions, such as relative status and role relations between speaker and addressee (Matsumoto 1988; Ide 1989, 2006).

More recent research, however, challenges the assumption that AH usage can be explained solely in terms of either politeness strategies or norm compliance. Discourse studies drawing on naturally occurring data demonstrate that speakers frequently alternate between AH and plain forms within the same interaction, indicating that honorific usage is locally negotiated rather than passively determined (Cook 1997, 1999, 2011; Okamoto 1997, 2010, 2011). From this perspective, speakers actively select speech styles in response to moment-by-moment interactional contingencies, and AH forms may index meanings such as public self-presentation, footing, or participation framework rather than politeness alone (e.g., Cook 1999).

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Although the mixed use of AH and plain forms in Japanese discourse is well documented, most existing studies have relied primarily on qualitative analysis. Quantitative work is limited, and few studies employ statistical modeling to examine whether honorific usage is systematically conditioned by contextual factors. For instance, Okamoto (2008) reports that a female employee in a local government office used AH forms in 48% of her main clauses and plain forms in 52% when speaking with a younger colleague. While this near-even distribution suggests the absence of a single dominant default form, it does not reveal whether form selection is random or determined by local contextual conditions.

This study addresses this gap by examining speech data from Japanese voice actor livestreams, a semi-public interactional setting in which speakers regularly alternate between presentational and conversational modes. Using a mixed-effects modeling approach, we investigate whether AH usage is predicted by section type and speaker role, and how it varies along the internal progression of a section. Our findings indicate that the distribution of AH and plain forms is not random but is systematically conditioned by contextual factors. In most contexts, the plain form functions as the default, while AH usage is significantly associated with particular interactional roles and section types. These results provide quantitative support for interactional accounts of honorific usage (e.g., Okamoto 2011), demonstrating that AH forms are deployed strategically as context-sensitive resources rather than passively reflecting politeness norms or static social relations.

2. Addressee honorifics and plain forms in Japanese. In Japanese, AH most commonly appears as the suffix *-masu* following verbs or *-desu* following nouns and adjectives. In contrast, the non-honorific plain form is morphologically unmarked, appearing without any additional suffix on the predicate. Whenever speakers of Japanese produce a sentence, they must choose either the AH form or the plain form at the end of the sentence (Jordan & Noda 1987). For example, (1) and (2) below are identical in semantic meaning; the only difference lies in the predicate suffix: (1a) carries the AH form *-masu*, while (1b) has the plain form *-u*.

(1a) sensei-ga hon-o yomi-masu. (AH)
 teacher-NOM book-ACC read
 ‘The teacher reads a book.’

(1b) sensei-ga hon-o yom-u. (plain form)
 teacher-NOM book-ACC read
 ‘The teacher reads a book.’

The AH form has long been analyzed as an honorific form that expresses politeness toward the addressee (e.g., Martin 1964; Comrie 1976; Ide 1989), whereas the plain form is considered non-polite or informal (e.g., Cook 2011).

3. Previous studies on addressee honorifics and politeness. According to Brown and Levinson’s (1987) politeness theory, speakers are assumed to universally orient to ‘face,’ which is defined as an individual’s public self-image. Face is conceptualized as having two components: negative face, the desire for freedom of action and freedom from imposition, and positive face, the desire for approval and appreciation from others. Within this framework, linguistic politeness is understood as arising from speakers’ strategic attempts to mitigate face-threatening acts (FTAs). The weight of FTAs is calculated based on social distance, relative power, and the degree of imposition. In Brown and Levinson’s model, Japanese honorifics are analyzed as

negative politeness strategies that express deference, a view supported by subsequent studies such as Fukada and Asato (2004). Since honorific forms index the addressee's higher social status, their use is interpreted as a means of reducing imposition and attending to the addressee's negative face.

Moreover, Brown and Levinson's theory treats politeness as the result of individual, strategic choice. That is, selecting an honorific form is interpreted as a deliberate strategy employed by the speaker to reduce the force of an FTA. This assumption allows honorifics to be incorporated into their universal typology of politeness strategies.

However, scholars such as Matsumoto (1988, 1989) and Ide (1989, 2005) have challenged Brown and Levinson's analysis of Japanese honorifics. First of all, they argue that the theory is grounded in a Western, individualistic conception of the self, and that its notion of face, particularly negative face as the desire for freedom from imposition, does not adequately account for honorific usage in Japanese interaction. According to these scholars, Japanese politeness is not primarily motivated by speakers' attempts to mitigate FTAs, but rather by adherence to socially prescribed norms associated with role relations, status differences, and situational appropriateness. Under this perspective, honorifics are not simply politeness strategies for mitigating face-threatening acts to the addressee's negative face. Ide (1982, 1989) conceptualizes norm-oriented Japanese politeness as *wakimae* ('discernment'), arguing that the use of honorifics in Japanese is often obligatory and automatic, even in the absence of FTAs (see also Ide & Yoshida 1999). Similarly, Matsumoto (1988, 1989) contends that Japanese speakers are more concerned with maintaining harmonious social relations and with being evaluated as acting appropriately within a given social context than with protecting individual autonomy and the territories of freedom. From their perspective, Japanese honorifics are linguistic resources that index social relations and demonstrate appropriateness within a specific context, rather than negative politeness strategies aimed at minimizing imposition.

In response to Brown and Levinson's analysis of honorifics as an individual strategic choice, Ide (1989) and Matsumoto (1989) argue that the use of honorifics is obligatory, governed by socially prescribed norms rather than by active, strategic decision-making. From their perspective, honorific usage is determined by the immediate social context and reflects speakers' recognition of social relations and their orientation toward acting appropriately.

Despite their different theoretical orientations, both Brown and Levinson and Ide and Matsumoto can be seen as sharing an underlying assumption about the relationship between honorifics and politeness, namely that honorific forms stand in a direct, one-to-one relationship with politeness. However, later studies such as Cook (1999, 2011) and Okamoto (1997, 1999, 2010) challenge this assumption and argue that honorific forms do not inherently index politeness.

Cook (1997, 1999, 2011), for example, shows that the Japanese AH form is used across a wide range of contexts, including those in which neither deference nor mitigation of FTA is at issue. For example, Cook's (1997) study of caregiver-child conversation demonstrates that the Japanese AH form is frequently used by caregivers to their children in situations such as serving food, teaching social norms, scolding, or engaging in role-play. In these contexts, the use of *masu* cannot be adequately explained as a marker of politeness or deference. In a recent study, Christensen and Chen (2022) show that video game players who record themselves playing games for YouTube frequently mix the *masu* form and the plain form when producing commentary monologues for their audiences, and that the sparse use of the AH form cannot be straightforwardly interpreted as indexing deference or social appropriateness. Thus, rather than

directly indexing politeness or social status, AH may index multiple, context-dependent meanings, such as formality, institutional role, or speaker self-presentation (e.g., Cook 1999, 2011). Similarly, Okamoto (1997, 1999, 2010) argues that honorific usage cannot be explained solely in terms of either strategic politeness or norm compliance, but instead reflects speakers' moment-by-moment negotiation of social context. From this interactional perspective, politeness is not encoded in honorific forms themselves, but is discursively constructed through their situated use, calling into question both Brown and Levinson's and Ide and Matsumoto's assumptions about a static one-to-one mapping between honorifics and politeness.

While earlier studies do not always make this point explicit, cases in which speakers mix the AH and plain forms suggest that there is generally a locally established default or baseline form within a given interactional frame. Against this baseline, the alternate form becomes marked or salient. A switch from the default, unmarked form to the marked form becomes meaningful only in relation to the interactionally established baseline. Cook (1999) demonstrates this pattern in adult interactional settings such as television interviews and neighborhood disputes, where speakers frequently alternate between the plain form and the *masu* form. In these interactions, one form generally functions as the locally established baseline, while shifts to the other form index changes in stance, footing, or mode of self-presentation. Crucially, the form that serves as the baseline varies across interactional contexts, indicating that neither the plain form nor the *masu* form constitutes a global default in Japanese discourses; rather, defaultness must be understood as locally and interactionally determined. In this study, we adopt the perspective that default forms are locally established and context-dependent, and analyze marked forms relative to the default in use in each interactional context.

Although studies such as Cook (1997, 1999) have documented extensive mixing of the plain and AH forms in Japanese discourse, most of this research has been qualitative in nature, and quantitative studies employing statistical modeling remain underrepresented. While qualitative studies have established that style shifts can index changes in mode of self or social stance, to the best of our knowledge, no studies have used statistical models to examine whether the occurrence of AH forms correlates with contextual factors such as the roles speakers assume.

Moreover, Okamoto (2008) reports that when a female employee in a local government office interacted with a younger colleague, she used the AH form in 48% of her main clauses and the plain form in 52%. While this near-equal distribution may suggest the absence of a dominant default form, the data do not indicate whether form selection is random or systematically conditioned by immediate contextual factors.

Therefore, a quantitative study is needed to investigate whether the distribution of AH and plain forms is shaped by local contextual variables. We propose that video recordings of Japanese voice actor livestreams provide an ideal site for conducting such an investigation.

4. Voice actor livestreams. We use YouTube video recordings of livestreams featuring Japanese voice actors as our data source. These livestreams are regularly broadcast online events in which idol-voice actors interact directly with viewers through live chat, talk segments, performances, and promotional activities related to their voice acting projects and associated commercial goods. In this performative, semi-public setting, we observe that voice actors tend to alternate between AH and plain forms in their conversations.

To minimize contextual variation, we focus on video recordings of events involving only two voice actresses and analyze three segments of these events: introductions, dice-rolling activities, and storytelling. In this section, one voice actress first assumes the role of host and introduces the format of the following dice-rolling and storytelling activities. Then, the other

voice actress rolls a die to select a conversation topic and shares a story related to that topic. During this storytelling phase, the other voice actress takes on the role of commentator. The roles then reverse, with the second voice actress rolling the die and telling a story. After several rounds of dice rolling and storytelling, the voice actress who initially served as host concludes the segment. Figure 1 presents the overall structure of the event episodes analyzed in this study.

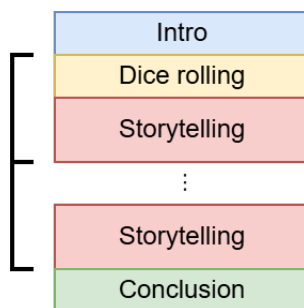


Figure 1. Overall structure of the episodes analyzed in this study

We focus on these three segments for two main reasons. First, in contrast to other promotional or advertising segments, the dice-rolling and storytelling segments are assumed to be considerably less scripted. Owing to the unpredictable nature of dice rolling, the voice actresses' speech in these segments is more likely to be impromptu and spontaneous. Second, the clear and repetitive structure of these segments facilitates a consistent analytical framework, making it easier to scale the analysis to larger sample sizes.

5. Research questions. This study aims to conduct a quantitative study examining the speech data from voice actor livestreams to answer the following questions:

- a. Do voice actresses use AH forms more frequently than plain forms in the introduction, dice-rolling, and storytelling sections?
- b. Is the use of AH forms predicted by contextual factors such as section type and speaker role?

6. Data collection and analysis. Following the data source and analytical focus introduced in Section 5, we collected a total of 14 episodes and transcribed the introduction, dice-rolling, and storytelling segments, amounting to approximately two hours of footage. These episodes feature sixteen voice actresses, whose ages range from 19 to 32 years, with a mean age of approximately 27 years. All events examined occurred between 2020 and 2025, and all video recordings were publicly released on YouTube.

Transcriptions were obtained using TurboScribe, an AI-powered transcription service, and then were checked manually to ensure accuracy. Occurrences of the AH form, including its variants, such as the past-tense forms *-mashita* and *-deshita*, the negative form *-masen*, and the volitional forms *-mashoo* and *-deshoo*, as well as the plain form, defined as any clause-final articulation that does not include an AH form, were manually identified and coded for analysis. AH occurrences appearing at the end of subordinate clauses, followed by the conjunctive parti-

cles such as *kara* ‘because’, *node* ‘because’, *shi* ‘and’, *ga* ‘but/and’, and *kedo/keredo/keredomo* ‘but’ were also included in the count. A total of 2,595 occurrences were identified and annotated.

We first grouped occurrences of AH and plain forms by section type and speaker role. Section type was divided into three categories: introduction/conclusion, dice rolling, and storytelling. Speaker role was classified into two roles: presenter, defined as the speaker who delivers the introduction and conclusion, rolls the die during the dice-rolling segment, and primarily shares personal stories and experiences during the storytelling segment; and commenter, defined as the other speaker, who primarily provides commentary on the presenter’s speech and asks follow-up questions. We then identified the default form for each combination of section type and speaker role. The default form is defined as the speech form that predominates over the alternative (i.e., accounts for more than 50% of occurrences) across all instances of a given section type–speaker role combination.

To further investigate whether individuals’ choice of the AH form or the plain form is predicted by the contextual factors of section type and speaker role, we constructed a generalized linear mixed model (GLMM) to model occurrences of AH and plain forms. As introduced earlier, when producing sentences, native Japanese speakers are always faced with a choice between ending each sentence with an AH form or a plain form. Therefore, the dependent variable, whether an AH or plain form is used, was modeled as a binary variable. Fixed effects included section type (introduction/conclusion, dice rolling, and storytelling), speaker role (presenter and commenter), and their interaction.

Random effects included individual speakers to control for inter-speaker variability among the examined voice actors. To further investigate how different levels of contextual factors affected the occurrence of AH forms, we conducted pairwise comparisons of the predicted means for each level using the estimated marginal means (EMMEANS) framework, with p -values adjusted with the Tukey method. Statistical significance is determined using a level of significance $\alpha = 0.05$.

In addition to the primary modeling analysis, we examined how the proportion of AH forms varies over the course of a section by comparing their frequencies across percentage progress within the section. This analysis aims to assess whether contextual factors also influence style choices over the internal progression of a section.

Data processing was performed using Python 3.12.9 with the following packages: NumPy (version 1.26.4; Harris et al. 2020), pandas (version 2.2.3; McKinney 2010), and Janome (version 0.5.0; Uchida 2023). Mixed-effects modeling and pairwise comparisons were conducted in R 4.3.1 using the following packages: tidyverse (version 2.0.0; Wickham et al. 2019), lme4 (version 1.1.37; Bates et al. 2015), and emmeans (version 1.11.0; Lenth & Piaskowski 2025).

7. Results. Figure 2 shows the proportion of AH forms across section types and speaker roles. The x-axis represents section type, and the y-axis shows the proportion of AH forms over all sections of the same type. The error bars indicate the standard error of the estimated proportion. Colors distinguish whether the articulator is the presenter or commenter for a given section. Statistical significance is marked by asterisks (*: p -value < 0.1, **: p -value < 0.01, ***: p -value < 0.001).

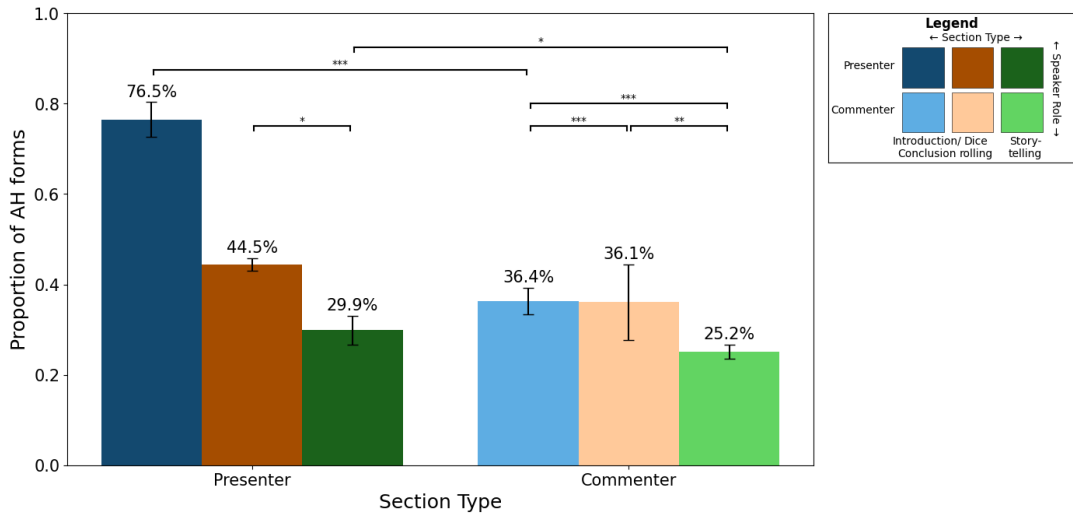


Figure 2. Proportions of AH forms across section types and speaker roles

As shown in Figure 2, across all episodes, only the presenter in the introduction and conclusion sections defaults to the AH form, using it 76.5% of the time. In all other contexts, the plain form is produced more frequently than the AH form and thus functions as the default. Table 1 presents the results of the GLMM predicting the use of the AH form across all utterances.

	OR	95% CI	<i>p</i> -value
Intercept	3.330	[1.653, 6.707]	0.0008***
Section type (ref: Introduction/Conclusion)			
Dice rolling	0.1921	[0.1142, 0.3231]	< 0.0001***
Storytelling	0.1174	[0.0732, 0.1885]	< 0.0001***
Speaker role (ref: Presenter)			
Commenter	0.1924	[0.0787, 0.4702]	0.0003***
Section type x Speaker role			
Dice rolling x Commenter	3.673	[1.390, 9.708]	0.0086**
Storytelling x Commenter	3.984	[1.591, 9.978]	0.0031**

Table 1. GLMM analysis of the correlates of AH usage in the full utterance sample (N = 2,595)

The intercept represents the baseline condition of presenters in the introduction and conclusion sections and indicates a significantly higher likelihood of AH usage ($OR = 3.33, p < .001$), suggesting that AH forms are strongly favored in this context. Section type has a significant effect on AH usage. Compared to the introduction/conclusion sections, AH forms are significantly less likely to occur in both the dice-rolling section ($OR = 0.19, p < .001$) and the storytelling section ($OR = 0.12, p < .001$). These odds ratios indicate that, for presenters, the probability of producing AH forms drops sharply once the interaction moves beyond the event's opening and closing segments. The speaker role also significantly predicts AH usage. Compared to presenters, commenters are significantly less likely to use AH forms overall ($OR = 0.19, p < .001$), suggesting that speaker role independently constrains speech-style choice.

Crucially, however, the significant interactions indicate that the effect of speaker role differs by section type. In both the dice-rolling section ($OR = 3.67, p < .01$) and the storytelling section ($OR = 3.98, p < .01$), commenters are significantly more likely to use AH forms than would be expected based on the additive effects of section type and speaker role alone. These interaction effects indicate that while commenters generally favor the plain form, their relative use of AH increases in non-introductory sections compared to presenters.

To sum up, the results indicate that AH usage is neither uniformly distributed across contexts nor randomly produced by speakers. Instead, it is systematically conditioned by both section type and speaker role, as well as their interaction. The introduction/conclusion sections constitute a distinct interactional context in which presenters strongly favor AH forms, whereas in other sections the plain form functions as the default. At the same time, commenters exhibit localized increases in AH usage in the dice-rolling and storytelling sections, which further underscores the context-sensitive nature of speech-style selection.

Further, we examined whether changes in the proportion of AH forms over the course of a section differ significantly across section types. Figure 3 shows the results.

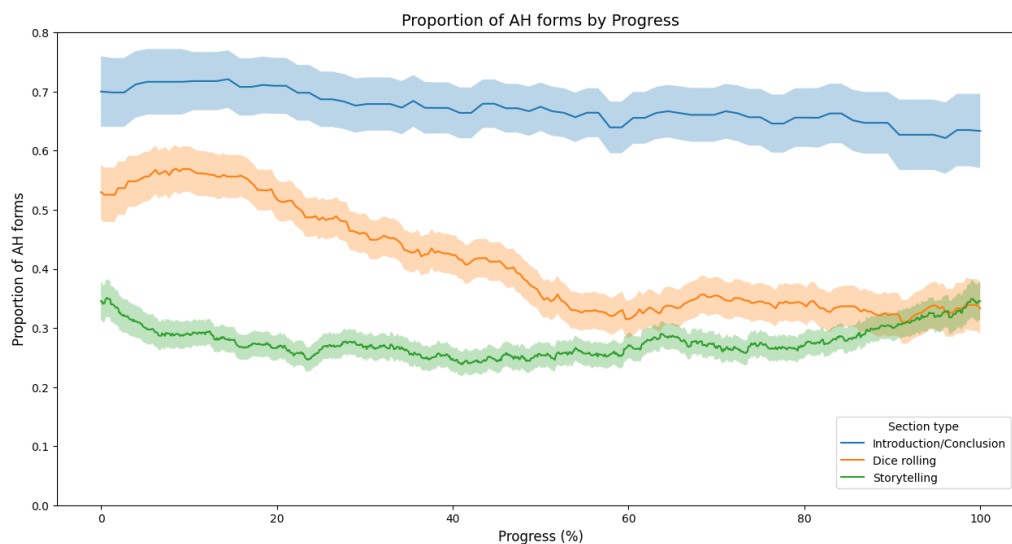


Figure 3. Proportion of AH forms along with the progression in a section

The horizontal axis indicates the progress in the section on a percentage scale, and the vertical axis shows the proportion of AH forms. The lines represent calculated proportions, while the shaded regions indicate the standard error. Different colors and hues distinguish section types.

As shown in Figure 3, the way in which the proportion of AH forms changes over the course of a section differs significantly across the section types. In the dice rolling section, the proportion of AH forms significantly decreases as the section progresses, indicating that speakers tend to use more plain forms toward the end of the section. As the interaction unfolds, speakers shift to reacting to contingent events, including dice rolls, and their speech becomes more spontaneous, a shift reflected in the increased use of the plain form.

Also noteworthy is the storytelling section, where the proportion of AH forms roughly follows a parabolic curve, staying high at the beginning and end of the section and lower in the middle. This indicates that, regardless of other contextual factors, speakers are more likely to use the AH form at the opening and closing of each storytelling segment. As the storytelling progresses, often after several rounds of back-and-forth questioning and commentary, both speakers may become more immersed in the interaction and shift from a public, presentational footing to a more private, conversational one, as also observed by Cook (1999).

Hence, the assumed intimacy of this interactional stance is reflected in an increased use of the plain form. Finally, near the end of the storytelling section, speakers appear to disengage from the conversational flow and orient once again to closing the segment, thereby returning to a public, presentational mode and increasing their use of AH forms.

By contrast, the introduction and conclusion sections do not exhibit a noticeable trend in the proportion of AH usage. A plausible reason is that the interactional context remains highly consistent throughout these sections, namely, the performance of introducing and concluding, resulting in a stable pattern of AH use.

8. Discussion. In this study, we examined whether AH usage occurs randomly or is predicted by contextual factors, drawing on speech data from Japanese voice actor livestream events. By combining quantitative mixed-effects modeling with an analysis of within-section progression, the results provide clear evidence that AH usage is neither consistent nor random. Instead, it is predicted by the interaction between section type, speaker role, and the unfolding structure of interaction. These findings contribute to ongoing debates on Japanese honorifics by offering statistical support for interactional and indexical accounts of honorific usage (e.g., Cook 1997, 1999, 2011; Okamoto 1997, 2010), while also refining our understanding of defaultness and markedness of AH and plain forms in Japanese.

One central finding of this study is that the plain form functions as the default speech style in most contexts examined, with a notable exception: presenters in the introduction and conclusion sections overwhelmingly favor the AH form. This finding suggests that default speech style is not solely determined by socially prescribed role relations or situation-based norms of appropriateness, as proposed by Ide (1989) and Matsumoto (1988), but is instead locally and interactionally established (Cook 1999). In the introduction and conclusion sections, the presentational footing is stable and sustained, and speakers consistently orient to the audience as a public addressee. Within this interactional frame, the AH form becomes the unmarked choice. In contrast, in the dice-rolling and storytelling sections, the interactional footing is more fluid. Here, the plain form predominates overall and thus functions as the default. Against this baseline, AH usage becomes locally marked and interactionally meaningful. These findings resonate with Cook's (1997, 1999) argument that the *masu* form does not inherently index politeness, but rather indexes social stances such as a mode of public self-presentation. In the present data, AH usage appears to be more closely tied to speakers' moment-by-moment orientation to the interactional frame: whether they are performing for an audience or engaging in a more conversational exchange.

In addition, the significant effects of speaker role, as well as its interaction with section type, further underscore the context-sensitive nature of AH usage. While commenters are overall less likely than presenters to use AH forms, their relative use of AH increases in the dice-rolling and storytelling sections. This finding suggests that commenters selectively deploy AH forms at particular moments, rather than passively adhering to a fixed speech style associated with their role. Such localized increases in AH usage can be interpreted as strategic shifts in footing (Goffman 1981), whereby commenters may temporarily orient to the audience or reframe their talk as public commentary rather than private interaction. This interpretation aligns with Okamoto's (2010) interactional approach as well, which emphasizes speakers' active negotiation of social meaning through speech-style choice. Rather than being passively determined by role relations or social norms, AH usage in these contexts reflects speakers' agency in managing stance, participation framework, and self-presentation in their discourses.

In this study, we also analyzed within-section progression, which provides further insight into how honorific usage is influenced by interactional dynamics over time. In the dice-rolling section, the steady decline in AH usage as the section progresses suggests a shift away from a structured, presentational mode toward more spontaneous, reactive talk. As speakers increasingly respond to contingent events such as dice outcomes, their speech becomes less oriented to the audience and more immersed in the immediate interaction, as reflected in the increased use of the plain form. In contrast, the storytelling section exhibits a different pattern: the proportion of AH forms follows an approximately parabolic curve, remaining relatively high at the beginning and end of the section and lower in the middle. This finding suggests that speakers initially frame storytelling as a public performance, then gradually transition into a more conversational footing as they engage in back-and-forth exchanges, before finally reorienting to a presentational mode as the segment draws to a close. Similar transitions from public to private footing and back have been documented in Cook's (1999) analysis of adult conversations, where style shifts index changes in mode of self rather than politeness *per se*. Finally, these observations stand in contrast to the relative stability of AH usage in the introduction and conclusion sections. Because the interactional context in these sections is highly consistent, little variation in speech style is observed, which in turn supports the claim that variation in AH usage is closely tied to changes in interactional structure. When the interactional structure is stable, speech-style selection likewise remains stable; conversely, when the interactional structure is fluid, greater variation in AH usage tends to emerge.

To summarize, our findings challenge accounts that treat honorifics as directly encoding politeness (e.g., Brown & Levinson 1987) or as being fully determined by socially prescribed norms (e.g., Ide 1989; Matsumoto 1988). Instead, the results align with more recent perspectives that conceptualize honorifics as indexical resources whose meanings are strategically and contextually constructed (e.g., Cook 2011; Okamoto 2010). AH usage indexes speakers' orientation to their interactional roles and immediate contexts. The strategic alternation between AH and plain forms thus reflects speakers' sensitivity to evolving participation frameworks rather than adherence to fixed politeness rules.

Methodologically, this study contributes to the literature by demonstrating how quantitative modeling can complement qualitative insights into honorific usage. By statistically confirming that AH usage is systematically conditioned by section type, speaker role, and interactional progression, the study provides empirical support for interactional accounts that have previously relied primarily on qualitative evidence.

9. Conclusion. This study investigated the distribution of AH and plain forms in Japanese voice actor livestreams to determine whether honorific usage can be predicted by contextual factors. By using a mixed-effects modeling approach and an analysis of within-section progression, we show that AH usage is neither random nor uniform. Instead, it is systematically conditioned by section type, speaker role, and the unfolding interactional structure of discourse.

In most interactional contexts examined, speakers primarily use the plain form, which therefore functions as the default speech style. By contrast, AH forms are used most frequently in the introduction and conclusion sections, where presenters orient explicitly to the audience. In sections where the plain form is the default, speakers dynamically alternate between AH and plain forms in ways that reflect shifts in stance, participation framework, and orientation to the audience. These patterns provide quantitative evidence that defaultness in speech style is locally and interactionally established, rather than determined solely by social norms or fixed role relations.

By situating honorific usage within the moment-by-moment progression of interaction, this study provides empirical support for interactional and indexical accounts of Japanese honorifics (e.g., Cook 1997, 1999, 2011; Okamoto 2010). The findings challenge approaches that treat honorifics as directly encoding politeness or as obligatorily governed by social conventions, instead showing that AH forms function as linguistic resources through which speakers strategically manage self-presentation in discourses.

Methodologically, this study contributes to the literature by demonstrating the value of quantitative statistical modeling for the study of Japanese honorifics, an area that has traditionally relied on qualitative analysis. By combining mixed-effects modeling with an analysis of within-section progression, the study offers a replicable framework for examining how linguistic forms index interactional dynamics over time. Future research may extend this approach to other interactional settings or media genres, as well as examine how additional factors, such as interlocutors' age differences and individual speaker styles, interact with honorific usage. Such work would further advance our understanding of Japanese honorifics as context-sensitive resources in conversations.

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