

# Constructionalization of the Japanese addressee-honorification system

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## 1 Introduction

- The Japanese addressee-honorific construction (henceforth AH), as defined in (1), underwent a major change in the 20th century, as seen in the contrast between (2) and (3).

(1) **Addressee-honorific construction:** the form-meaning pair of  $\langle X(\text{form}), AH(\text{meaning}) \rangle$ , where the form X is associated with the allocutive honorificity (Yamada 2019).

(2) The early 20th-century Japanese (Kawaguchi 2014; Yamada 2019; Ogawa et al. 2020)

a. VP	b. NP	c. AP <sub>na</sub> (NAP)	d. AP <sub>i</sub> (CAP)
<i>tobi-mas-u.</i>	<i>inu des-u.</i>	<i>kanrei des-u.</i>	<i>*tumetai des-u.</i>
fly-AH-PRS	dog COP.AH-PRS	cold COP.AH-PRS	cold COP.AH-PRS
‘(I) fly.’	‘(It) is a dog.’	‘(It) is cold.’	‘(It) is cold.’

(3) The 21st-century Japanese

a. VP	b. NP	c. AP <sub>na</sub> (NAP)	d. AP <sub>i</sub> (CAP)
<i>tobi-mas-u.</i>	<i>inu des-u.</i>	<i>kanrei des-u.</i>	<i>tumetai des-u.</i>
fly-AH-PRS	dog COP.AH-PRS	cold COP.AH-PRS	cold COP.AH-PRS
‘(I) fly.’	‘(It) is a dog.’	‘(It) is cold.’	‘(It) is cold.’

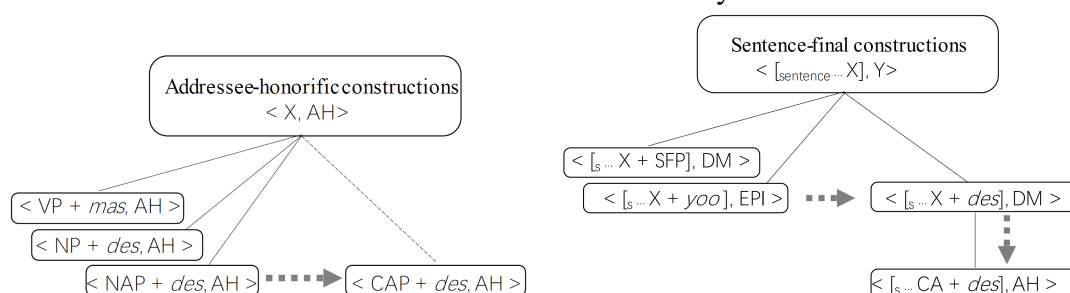
- The canonical adjective used to be disallowed in this construction; instead, the variant in (4) was recommended by prescriptive grammarians (Kawaguchi 2014; Yamada 2019).

- In fact, the conflict in the old grammar is still observed with the plain form, as shown in (5).

(4) <i>tumetoo gozai-mas-u.</i>	(5) <i>*tumetai da.</i>
coldly exist.AHU-AH-PRS	cold COP
‘(It) is cold.’	‘(It) is cold (intended).’

- Within the framework of Diachronic Construction Grammar (Traugott & Trousdale 2013), this study advocates an indirect extension model in (6)b in place of a direct extension in (6)a.

- (6) a. **Hypothesis 1:** Direct extension from AH constructions
- b. **Hypothesis 2:** Indirect extension mediated by sentence-final constructions



## 2 Previous literature: Constructionalist view of language change

- (7) Construction: a sign (i.e., a form-meaning pair).
- (8) Language change: a change in a sign (Traugott & Trousdale 2013: 1; Noël & Coleman 2021)
- Constructional changes:** “[c]hanges that affect features of an existing construction”
  - Constructionalization:** “[t]he creation of a form<sub>new</sub>-meaning<sub>new</sub> pairing.”
- (9) Criticism of a linear unidirectional change: Constructional Convergence Hypothesis & Construction Network Reconfiguration Hypothesis (Torrent 2015)



- \* Due to the similarity in meaning, the aforementioned constructional scheme sanctions the sentence-peripheral use of *des-*, creating a new node in constructional network.
- \* Before language change, *des* had never been used in the X position in [<sub>sentence</sub> ... X]; likewise, the meaning of allocutivity was not a member of the meaning of  $Y_{\text{Discourse}}$ .
- \* In this regard, a new form is analyzed as being paired with a new meaning, hence constructionalization.

## 4 Verifying the hypothesis

### 4.1 Qualitative supports

- **Prediction 1:** If H2 is on the right track, it is predicted that members of SFC cannot be embedded as in the case of CAP + *des-*, which is borne out as shown below.

(15)\*[[*ookii ne*]-*te*] *nagai-ne*.  
 big SFP-te long-SFP  
 ‘(It is) big and long, isn’t it?’

### 4.2 Quantitative supports

- **Prediction 2:** If H2 is on the right track, we should be able to see clear evidence of the SFC’s influence on the use of CAP + *des-*.
- In what follows, it is shown that this prediction is also borne out; by examining a historical corpus, this paper points out that the use of CAP + *des-* is facilitated by the use of sentence-final elements.

- **Data:** Corpus of Historical Japanese (version 2021.3; last accessed Nov 24, 2021)

- **Target:** The use of CAP + *des-* (as in (2)d/(3)d) and the use of CAP + *gozai mas* (as in (4))

(16) **Prescriptive form:** POS LIKE “Canonical Adjective%” AND FOLLOWING WORDS: LEXEME *gozar-* ON 1 WORDS FROM KEY AND FOLLOWING WORDS: LEXEME *-mas* ON 2 WORDS FROM KEY

(17) **New form:**

- a. POS LIKE “Canonical Adjective%” AND FOLLOWING WORDS: LEXEME *des-* ON 1 WORDS FROM KEY
- b. POS LIKE “Canonical Adjective%” AND FOLLOWING WORDS: LEXEME *-ta* ON 1 WORDS FROM KEY AND FOLLOWING WORDS: LEXEME *des-* ON 2 WORDS FROM KEY

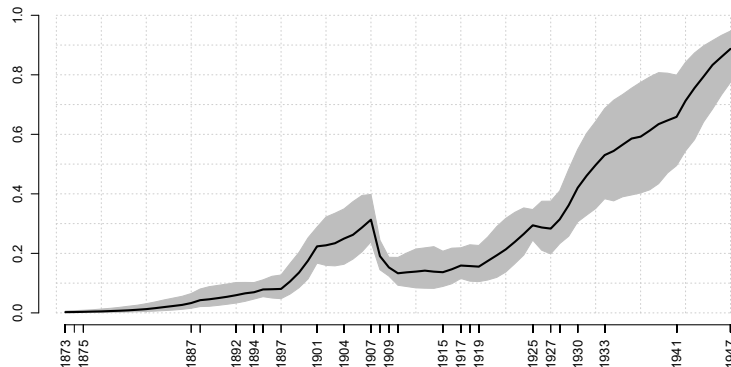
- **Statistical Model (State-Space Model, Hagiwara 2021):**

- (18) a. **Textbook**  $x_1$ : Dummy variable taking the value of 1 iff the sample is taken from a textbook, and 0 otherwise. [Fixed-effect]
- b. **Literature**  $x_2$ : Dummy variable taking the value of 1 iff the sample is taken from the literature, and 0 otherwise. [Fixed-effect]
- c. **Sentence-final particle**  $x_3$ : Dummy variable taking the value of 1 iff the AH is used with a sentence-final particle, and 0 otherwise. [Fixed-effect]
- d. **Epistemic modal suffix**  $x_4$ : Dummy variable taking the value of 1 iff the AH is used with an epistemic modal suffix *-oo*, and 0 otherwise. [Fixed-effect]
- e. **Tense**  $x_5$ : Dummy variable taking the value of 1 iff the AH is used in a past tense, and 0 otherwise. [Fixed-effect]
- f. **Idiosyncrasies among canonical adjectives**  $u_{01}, u_{02}, \dots, u_{032}$ : The idiosyncrasy of the  $j$ -th adjective, which is assumed to follow  $N(0, \tau^2)$ . [Random-effect]

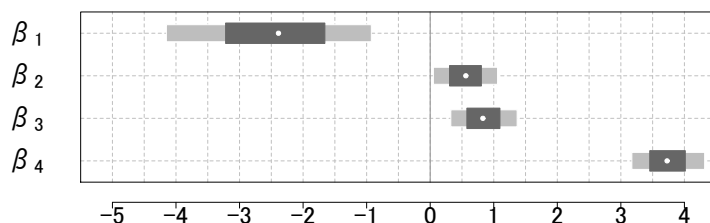
(19) Model:  $y_{ij}^{(t)} \sim \text{Bern}(\pi_{ij}^{(t)}); \pi_{ij}^{(t)} \sim \text{logistic}(\eta_{ij}^{(t)}); \eta_{ij}^{(t)} = \beta_0^{(t)} + \beta_1 x_{1i}^{(t)} + \beta_2 x_{2i}^{(t)} + \beta_3 x_{3i}^{(t)} + \beta_4 x_{4i}^{(t)} + u_{0j}; u_{0j} \sim N(0, \tau^2); \beta_0^{(t)} \sim N(\beta_0^{(t-1)}, \sigma_\zeta^2)$

- **Results:** The prediction is borne out.

(20) **Posterior inference on  $\{\beta_0^{(t)} : t \in \{1873, 1874, \dots, 1947\}\}$ :** The posterior median of  $\beta_0^{(t)}$  (the solid line) and its 95% credible intervals (the shaded gray area) for each year.



(21) **Posterior inference on the regression coefficients:**



- **Interpretations:**

(22) **Extralinguistic variables (Genre):** The first two are the genre effects ( $\beta_1$ : textbooks,  $\beta_2$ : novels): textbooks conservatively favor the old, recommended from, while novels seek to have the new construction.

(23) **Intralinguistic variables:** The last two variables are our main concern, which suggest that the pattern in CAP+des- is favored when used with a sentence-final particle ( $\beta_3$ ) and an epistemic marker ( $\beta_4$ ), corroborating the aforementioned prediction.

## References

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