

Abstract

Selecting appropriate referential expressions is essential for effective communication, yet it remains unclear what information second-language (L2) learners use when choosing referential forms. The present study examined the effects of grammatical role (previous subject vs. object) and predictability associated with verbs' implicit causality (IC) bias on first-language (L1) and L2 referential form choice by Japanese learners of English. Story-continuation data revealed that grammatical role consistently influenced learners' choice of referential forms across both languages. Conversely, IC-based predictability caused a subtle influence, limited to null-pronoun production in L1 Japanese. These findings suggest that mapping semantic expectations onto referential forms is difficult for L2 learners, consistent with the Interface Hypothesis (Sorace, 2011). This study highlights the value of instruction that helps learners consider the semantic likelihood of next mention when selecting referential expressions, thereby promoting more efficient and coherent L2 discourse.

Reference, or referring to a previously introduced entity (e.g., *she* refers to *Mary* in *Mary saw Bob because she*), is one of the most fundamental ways of making links between pieces of information. Establishing reference requires selecting appropriate referential forms, including a name (e.g., *Mary*), pronoun (e.g., *she*), and noun phrase (e.g., *the woman*). For example, an entity realized in a subject position is more likely to be pronominalized (e.g., *Mary saw Bob because she*) than an entity in a non-subject position (e.g., *Mary saw Bob because Bob*), because subjects are typically construed as the discourse topic and thus more prominent; prominent referents are preferentially mentioned with reduced expressions (e.g., a pronoun in English), on the assumption that addressees naturally interpret the pronominal expression as referring to it. Successful referential production hence optimizes communicative efficiency.

However, selecting appropriate referential forms is often difficult for second-language (L2) learners (e.g., Belletti et al., 2007; Contemori & Dussias, 2016; Quesada & Lozano, 2020). This difficulty is often explained by the fact that referential production involves integration of syntactic and discourse (semantic or pragmatic) information. The *Interface Hypothesis* (IH) proposes that domains residing in this syntactic-discourse interface are persistently problematic for L2 learners because of a high cognitive burden and inefficient processing in L2 (Sorace, 2011).

For Japanese learners of English as a foreign language (EFL), a growing body of work has been done on referential comprehension (e.g., pronoun interpretation; Hosoda, 2020), but only a few studies have addressed their referential production. Consequently, we still lack detailed empirical and theoretical evidence about the conditions under

which these learners experience difficulty in the choice of referential forms, as well as what instruction can support their referential production.

The present study addresses this gap by examining what information Japanese EFL learners use in referential production. More specifically, I examine how structural factors (subjecthood) and semantic factors (verbs' bias) affect referential form choice in learners' L1 (Japanese) and L2 (English). By doing so, I aim to (a) characterize L2-specific profiles of referential production and (b) identify the cause of learners' difficulty with referential form choice. Building on the empirical evidence, I seek to inform pedagogical interventions for effectively helping learners establish reference in L2.

LITERATURE REVIEW

Referential Production in L1

A widely accepted view in the field of psycholinguistic research is that the choice of referential expressions is guided by the *prominence* of discourse entities (also described as *salience*, *accessibility*, or *center of attention*; Arnold, 2001; Stevenson et al., 1994): Prominent entities are more highly activated in the speaker's and listener's mental model and are therefore more accessible. As a result, reduced forms, such as null pronouns in null-subject languages (e.g., Japanese) or overt pronouns in non-null-subject languages (e.g., English), are preferentially used for prominent referents, whereas more explicit forms (e.g., a proper name or full noun phrase) tend to be used for less prominent ones.

Two competing accounts have been proposed to explain what information speakers consider when choosing referential forms. *Discourse-* or *structural-oriented* accounts claim that speakers select

referential forms based primarily on the structural properties of discourse. Among these properties, grammatical role has been shown to exert a particularly robust influence (Arnold, 2001; Bott & Solstad, 2023; Rohde & Kehler, 2014; Rosa & Arnold, 2017): Previous subjects are more prominent than previous objects and consequently are more likely to be pronominalized. This subject bias has been observed across a range of languages, including Dutch (Bott & Solstad, 2023), English (Fukumura & van Gompel, 2010), Mandarin (Hwang et al., 2022), and Spanish (Fetterman et al., 2022).

On the other hand, *listener-oriented* or *predictability* accounts propose that speakers also consider how addressees are likely to interpret the message. A central construct in this view is referent predictability, defined as the likelihood that a particular entity will be mentioned next. One semantic factor known to influence predictability is verbs' *implicit causality* (IC) bias, which arises from the semantics of interpersonal verbs. For example, the fragment *Mary annoyed Lisa because...* typically elicits continuations about *Mary* (e.g., *Mary spoke loudly*), because *annoy* is a subject-biasing verb whose causal attribution falls on the subject. In contrast, *Mary punished Lisa because...* tends to elicit continuations about *Lisa*, because *punish* is an object-biasing verb. If IC bias affects next-mention predictions and speakers consider its predictability, the bias-consistent referent should be more prominent and thus more likely to be pronominalized than a bias-inconsistent referent.

However, empirical support for the predictability effect in production is mixed. Several studies have reported that predictability does not affect referential form choice, even when it robustly affects comprehension (e.g., Fukumura & van Gompel, 2010; Kehler et al., 2008). Predictability effects are also shown to be weaker and less consistent than grammatical-

role effects (Bott & Solstad, 2023; Hwang et al., 2022). One converging view in the literature is that predictability effects are less likely to emerge when the construction of rich mental models of discourse is difficult. Because predictability is rooted in the semantic-pragmatic context of discourse, speakers must enrich mental models of discourse—put simply, deeply comprehend the discourse situation—for predictability to affect production. Hence, predictability effects are attenuated or absent under conditions where cognitive load is high, or the task does not require detailed mental representations (Weatherford & Arnold, 2021; Ye & Arnold, 2025).

Referential Production in L2

The Interface Hypothesis proposes that processes at the interface of syntax and discourse semantics/pragmatics pose particular difficulty for L2 learners, due to high processing demands involved and reduced processing efficacy in L2 (Piñango & Burkhardt, 2005; Sorace, 2011). Consistent with this view, many studies report different referential production patterns for L2 learners, compared to native speakers. For example, learners with a non-null-subject L1 (e.g., English) often use explicit forms (e.g., a name or overt pronoun) more often than pragmatically required in a null-subject L2 (e.g., Spanish), compared to native speakers (e.g., Belletti et al., 2007; Quesada & Lozano, 2020). By contrast, learners with a null-subject L1 are reported to overuse pronouns in a non-null subject L2 (e.g., Contemori & Dussias, 2016; Contemori & Ivanova, 2021; Contemori et al., 2023). While these choices do not necessarily lead to a communicative breakdown, they can be perceived as redundant and represent a mild violation of pragmatic principles, such as the *Gricean Principle of Quantity* (Grice, 1975).

At the same time, there is a robust convergence on grammatical-role effects: Like native speakers, L2 learners typically use reduced forms for previous subjects and explicit forms for non-subjects. This pattern has been observed across learners with various L1s (e.g., Korean: Grüter et al., 2017; Mandarin: Cheng & Almor, 2019; Spanish: Contemori & Dussias, 2016) and across different experimental methodologies (Grüter et al., 2017; Cheng & Almor, 2019; Miyao, 2018).

In addition to grammatical role, referent predictability is known to guide L1 referential production (e.g., Bott & Solstad, 2023; Ye & Arnold, 2025). However, L2 production studies that directly test predictability are scarce. Although multiple L2 studies tested IC bias (e.g., Cheng & Almor, 2019; Hosoda, 2020, 2021), their primary focus was on pronoun *comprehension*, not on production. For L1-Japanese learners, IC bias has been shown to influence next-mention predictions (e.g., Hosoda, 2021, 2025), motivating a test of whether such predictability carries over to production in L2 English.

In summary, the L2 literature establishes clear grammatical-role effects but leaves open whether predictability modulates L2 referential form selection. The present study addresses this gap by simultaneously manipulating IC bias and grammatical role.

Properties of Japanese Overt Pronouns

Cross-linguistic influence from L1 is well documented in many areas of L2 processing, and reference is no exception (Miyao, 2018; Ueno & Kehler, 2016). Learners whose L1 is Japanese provide an especially informative case because Japanese overt pronouns have typologically distinctive properties. Japanese is a null-subject language, and discourse continuity is commonly maintained by a null pronoun. In contrast,

overt pronouns in Japanese are not sensitive to prominence: they do not systematically favor prominent over non-prominent referents or align with topic/focus structure (although, relative to a null pronoun, they weakly prefer less prominent referents; Kanno, 1997; Shoji et al., 2017; Ueno & Kehler, 2016).

A major factor behind these patterns is the scarcity of Japanese overt pronouns. Gundel et al. (1993) report that Japanese speakers employ null pronouns for about 70% of focused referents, whereas overt pronouns are used in only 3% of those cases. This stands in sharp contrast to other null-subject languages, such as Spanish and Mandarin, where overt pronouns are produced for 50% and 44% of focused referents, respectively.¹

Another distinctive property concerns the lexicalization of third-person forms: *Kanojo* (*she*) and *kare* (*he*) often function as lexical nouns meaning a *girlfriend* and *boyfriend*, respectively, rather than as purely referential pronouns. Reflecting this distribution, Noguchi (1997) analyzes Japanese overt pronouns as belonging to a non-functional noun class within the Minimalist framework, in contrast to English pronouns, which are typically treated as functional determiners.

To sum up, Japanese overt pronouns are infrequent, noun-like in status, and relatively insensitive to prominence and topicality. These characteristics set Japanese apart from other null-subject languages and make it a strong test case for studying cross-linguistic influence in L2 referential production.

¹ The low frequency of Japanese overt pronouns can be explained by the fact that Japanese originally lacked pronouns entirely; they were artificially introduced into the language system to accommodate translations of Western languages.

Goal and Research Questions of This Study

The goal of this study was to reveal whether, and if so, how grammatical role (previous subject vs. object) and predictability (IC-bias-consistent vs. IC-bias-inconsistent referents) influence referential form choice by Japanese EFL learners, and how these effects differ between L1-Japanese and L2-English production. The following research questions (RQs) were set:

RQ1. Does grammatical role influence Japanese EFL learners' referential form choice in L1 Japanese and L2 English?

RQ2. Does predictability influence Japanese EFL learners' referential form choice in L1 Japanese and L2 English?

To address these RQs, the present study reanalyzes the story-continuation data from Hosoda (2021) with a specific focus on referential production. Hosoda (2021) tested effects of IC bias on learners' next-mention predictions and found that (a) IC bias caused the next-mention predictions in both Japanese and English, and (b) effects of these predictions were significantly stronger in Japanese than in English. This study analyzes what referential forms learners produced, targeting their sensitivity to grammatical role and IC bias. This production-oriented analysis was beyond the scope of Hosoda (2021) and fills a gap in the literature.

Prediction

RQ1 (grammatical role)

Building on robust grammatical-role effects (e.g., Arnold, 2001; Bott & Solstad, 2023), the present study predicts that learners will be sensitive to grammatical role in both languages. Specifically, in L2 English, a higher rate of pronominalization is expected for previous

subjects than for previous objects. In L1 Japanese, a corresponding subject bias is expected for a null pronoun, which is typically used for a prominent referent in a null-subject language. Conversely, Japanese overt pronouns are expected to be produced infrequently and to show no clear grammatical-role preference, given their relative insensitivity to topicality or focus.

RQ2 (IC bias)

This study predicts that IC-based predictability effects on referential production (i.e., bias-consistent referents are more often pronominalized than bias-inconsistent referents) are more likely to emerge in L1 than in L2. This prediction stems from the assumption that richer mental representations, a prerequisite for predictability effects, are more likely in L1 than in L2 comprehension (e.g., Horiba, 2000). It also builds on Hosoda's (2021) finding that Japanese EFL learners show stronger IC-based next-mention predictions in L1 than in L2.

METHOD

Participants

Forty Japanese university students participated in this study (Female: $n = 16$; Male: $n = 24$; Age: 18-25 years old, $M = 21.13$, $SD = 1.30$). Their majors included education, engineering, humanities, linguistics, and nursing. They had studied English as a foreign language for six years or more in Japan. Their general English proficiency was estimated to be at CEFR A1 to B2 according to their self-reports: TOEIC Listening & Reading Test ($n = 24$, $M = 660.21$, $SD = 168.04$, $Min/Max = 380/940$) and the EIKEN test (Grade 3, $n = 2$; Grade Pre-2, $n = 3$; Grade 2, $n = 11$; Grade Pre-1, $n = 2$; Grade 1, $n = 1$). Thirty-one participants reported

at least one of the scores, while the other nine reported none.

Verbs

Fourteen IC subject-biasing verbs (e.g., *annoyed*) and 14 IC object-biasing verbs (e.g., *punished*; see Appendix for a full list of the verbs) were used. They were piloted in Hosoda (2020) to cause IC bias of similar strength in the same referential direction in participants' L1 (Japanese) and L2 (English). They were considered generally familiar to Japanese university students based on the fact that they were at rank 3000 or below in the *New JACET (Japan Association of College English Teachers) List of 8000 Basic Words* (JACET Basic Word Revision Committee, 2016): English words in this rank are introduced in junior high or high school in Japan.

Story-Continuation Task

Experimental stimuli were constructed with the 28 IC verbs in the formats of “NP1 verb-ed NP2 because ___” in English (e.g., “Mary respected Lisa because ___”), and “NP1 ha NP2 wo/ni verb-ed, nazenara ___” in Japanese (e.g., “Mary ha Lisa wo sonkeishiteita, nazenara ___”). The half stimuli appeared in L2 English, while the other half appeared in L1 Japanese. Stimuli had English or Japanese names of the same gender. The half stimuli had a female name, while the other half had a male name.

In the story-continuation task, participants were instructed to write a natural continuation to stimuli. They were also asked to avoid being humorous or worrying about spelling or grammar mistakes. Dictionary use was not allowed. The exact instruction (translated from Japanese) was as follows: “You will create continuations of stories in English. To

do so, please carefully read the English sentence to understand the story. Then, write a continuation of the story coming to mind on the right side of the sentence.” The word “English” was changed to “Japanese” in the Japanese condition.

Four item sets were constructed with 28 experimental items and 28 fillers (14 each for the L1 and L2 conditions). The fillers had the same structure as the experimental items except for verbs and conjunctions (“and” or “but” [“soshite” or “shikashi” in Japanese]). The language of the items and the gender of the NPs were counterbalanced across the sets. The presentation order of the items was randomized per participant.

Translation Task

A translation task was administered to assess participants’ semantic knowledge of the IC verbs. This task was necessary because IC effects cannot emerge unless the participant knew the meaning of the IC verbs. Participants translated from English to Japanese matrix clauses of the 14 items (e.g., “Mary respected Lisa”) that had been presented in English in the story-continuation task.

Procedure

Participants were tested in groups of one to four. I explained the study purpose and procedure and obtained written informed consent. The story-continuation task was conducted in L2 English and then in L1 Japanese. Afterward, participants reviewed the items and circled the character who they intended the continuation referred to. This procedure was intended to improve coding accuracy (Cheng & Almor, 2017). Participants then completed the translation task. The experiment took 60 min on average.

Coding

Story-Continuation Task

I excluded continuations that were uninterpretable (fewer than 2%) or whose corresponding translation item was coded as incorrect (17% of the L2 data). All remaining continuations were double-coded for (a) referent choice and (b) referential form.

For the choice of referents, two independent raters (the author and a trained assistant) coded whether each continuation referred to the previous subject or object of the stimulus. Raters consulted the character circled by the participant as a cue but confirmed that this choice was coherent in context. Continuations were coded as unclear if they were ambiguous or did not mention either prior referent (e.g., introduced a new entity, used a conjoined noun phrase such as *Mary* and *Lisa*, or used the third-person plural pronoun *they*). Unclear responses were excluded from analysis, accounting for 6% of the data. Inter-rater agreement was 92%. All disagreements were resolved through discussion.

For the choice of referential forms, the same raters coded continuations with a clear referent for whether the mention was a proper name (e.g., *Mary*) or a third-person pronoun (e.g., *she*). Items coded as unclear at the referent stage were not entered into this coding. Inter-rater agreement was 93%, with disagreements resolved through discussion.

Translation Task

Two raters (the author and a trained assistant) coded each translation as either correct or incorrect with reference to the intended verb meaning. Responses with any semantic ambiguity or mismatch in intended meaning were coded incorrect. Inter-rater agreement was 93%, and disagreements were resolved through discussion.

Statistical Analysis

I used a Bayesian multilevel regression model with a multinomial distribution to examine how production of referential expressions was affected by grammatical role and IC bias. For Japanese data, the response variable was referential expressions with three levels (null pronoun, pronoun, name). In the categorical-logit parameterization, name served as the reference category, resulting in one linear predictor for null pronoun vs. name and one for pronoun vs. name. The explanatory variables were referents' grammatical role (subject, object), IC bias (subject, object) and a Grammatical Role \times IC Bias interaction. They were sum-coded to allow for interpretation of main effects. The model also included by-participant and by-item random intercepts (Formula: Referential Expressions \sim Grammatical Role * IC Bias + (1 | participant) + (1 | item)).

For English data, the response variable was referential expressions with two levels (pronoun, name; name = reference). The explanatory variables and random-effects structure were the same as the model of the Japanese data (Formula: Referential Expressions \sim Grammatical Role * IC Bias + (1 | participant) + (1 | item)).

Models were estimated using Markov Chain Monte Carlo (MCMC) sampling with four chains \times 4,000 iterations (1,000 warmup). Sampling used Stan's No-U-Turn Sampler (NUTS) with default adaptation. Flat (improper) priors were used for population-level coefficients (class *b*). Weakly informative Student-t priors were placed on the intercepts and group-level (Student-t(3, 0, 2.5)). Convergence diagnostics were satisfactory ($\hat{R} \approx 1.00$ for all parameters; effective sample sizes were high).

RESULTS

Referential Form Choice in Japanese

In the Bayesian modeling, an effect is interpreted as having a credible influence on the data when its 95% credible interval (CrI) does not include zero. Accordingly, I report the estimated coefficient (Estimate), its standard error (Est. Error), and the lower and upper bounds of the 95% CrI. Production rates of names, null-pronouns, and pronouns in the Japanese condition are shown in Figure 1.

The Bayesian regression model (reference = name) showed that effects on null-pronoun production (vs. name) were credible for IC bias ($\beta = -1.50$, Est. Error = 0.78, 95% CrI [-3.32, -0.28]), grammatical role ($\beta = -2.59$, Est. Error = 0.76, 95% CrI [-4.39, -1.43]), and IC Bias \times Grammatical Role interaction ($\beta = -1.29$, Est. Error = 0.76, 95% CrI [-3.08, -0.15]). Overt pronoun production (vs. name) showed no credible effects (IC bias: $\beta = -0.01$, Est. Error = 0.38, 95% CrI [-0.74, 0.73]; grammatical role: $\beta = -0.06$, Est. Error = 0.37, 95% CrI [-0.79, 0.68]; IC Bias \times Grammatical Role interaction: $\beta = -0.16$, Est. Error = 0.38, 95% CrI [-0.95, 0.54]).

To interpret the IC Bias \times Grammatical Role interaction on null-pronoun production, Bayesian posterior contrasts were conducted. For object references, IC-object-biasing verbs yielded higher odds of producing a null pronoun than IC-subject-biasing verbs ($\Delta = 6.39$, 95% CrI [1.74, 14.1], $\Pr(\Delta > 0) = .998$). For subject references, the corresponding IC-bias contrast was not credible ($\Delta = 9.66$, 95% CrI [-22.5, 42.9], $\Pr(\Delta > 0) = .705$).

Contrasts additionally showed robust subject advantages in null-pronoun production: A null pronoun was produced more when referring

to previous subjects than when referring to previous objects after both IC-subject-biasing ($\Delta = 36.4$, 95% CrI [18.3, 57.3], $\Pr(\Delta > 0) = 1.00$) and IC-object-biasing verbs ($\Delta = 39.6$, 95% CrI [12.1, 68.8], $\Pr(\Delta > 0) = 1.00$).

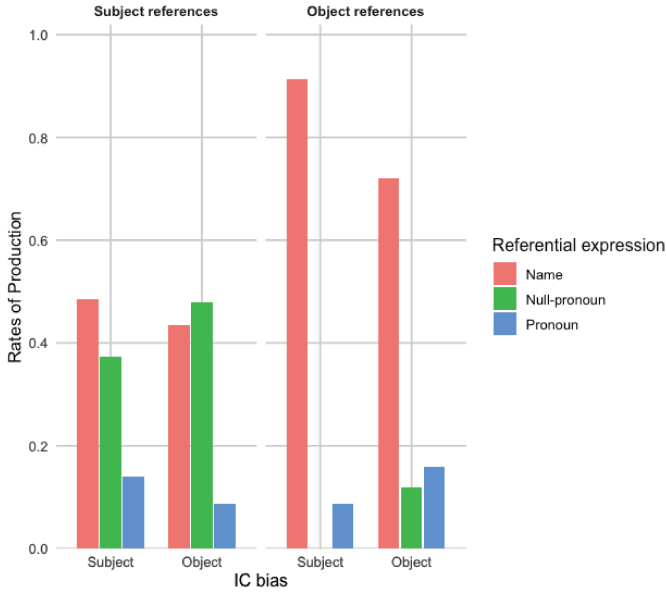


Figure 1

Production Rates of Names, Null-Pronouns, and Pronouns in the Japanese Condition

Referential Form Choice in English

Figure 2 displays production rates of names and pronouns in the English condition. The Bayesian regression showed a credible main effect of grammatical role ($\beta = -0.58$, Est. Error = 0.24, 95% CrI [-1.07, -0.13]), indicating higher odds of producing a pronoun for subject references than for object references. By contrast, a main effect of IC bias ($\beta = -0.44$, Est. Error = 0.24, 95% CrI [-0.92, 0.01]) and the IC

Bias \times Grammatical Role interaction were not credible ($\beta = -0.04$, Est. Error = 0.24, 95% CrI [-0.51, 0.42]).

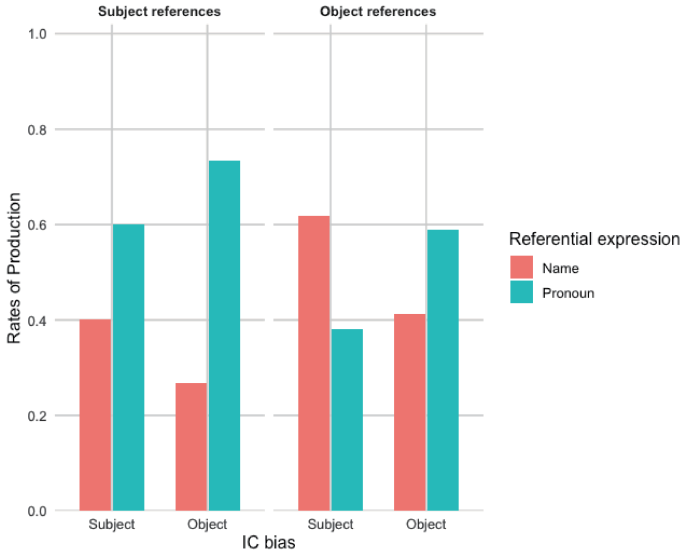


Figure 2

Production Rates of Names and Pronouns in the English Condition

DISCUSSION

The model showed that grammatical role exerted the predicted influence on referential form choice in both Japanese and English. In Japanese production, previous subjects were more likely to be referred to with null pronouns than previous objects, with the reverse pattern (object > subject references) observed for the use of names. By contrast, no grammatical-role effect was observed for overt pronouns, which

is consistent with accounts arguing that Japanese overt pronouns are insensitive to entity prominence.

In English production, subject preferences associated with grammatical role clearly surfaced in overt pronoun use. This finding suggests that properties of Japanese overt pronouns (i.e., their insensitivity to grammatical role, discussed above) did not negatively transfer to L2-English production. This result may be explained by the nature of the English pronominal system, which is relatively simple, consisting only of personal pronouns and lacking the more complex, discourse-sensitive pronominal contrasts found in languages such as German and Dutch.² It may therefore be relatively easy for learners to acquire subject preferences for English pronouns, resulting in the observed sensitivity to grammatical role in English (for similar discussion, see Cummings et al., 2017).

With respect to predictability associated with verbs' IC bias, a partial effect emerged in Japanese production. Specifically, participants produced more null pronouns for previous objects after object-biasing verbs than after subject-biasing verbs. This suggests that participants selected more reduced Japanese forms when the previous object was predictable from IC bias. This finding partly matches the prediction presented above that IC-based predictability is more likely to arise in learners' L1 than in their L2 and is also consistent with Hosoda's (2021) finding that IC robustly generated next-mention predictions in the L1 but not L2 condition.

However, this result must be interpreted with caution because

² German contrasts d-pronouns (e.g., *der*, *die*, and *das*) with personal pronouns (e.g., *er*, *sie*, *es*), and Dutch contrasts d-pronouns (e.g., *die*, *dat*) with personal pronouns (e.g., *hij*, *zij*), allowing speakers to signal nuances beyond simple person features.

participants produced no null pronouns for object references after subject-biasing verbs (see Figure 1). The predictability effect found in the present study should therefore be treated as tentative. Future research should employ a constrained-reference task, in which speakers are explicitly instructed to refer to either the subject or object, to obtain a more balanced dataset and re-evaluate the effect.

Predictability showed no credible effect in English production. Because predictability arises from discourse context, one must construct sufficiently detailed mental models for it to influence referential choice (e.g., Bott & Solstad, 2023). Under L2 processing, where cognitive resources for elaborating mental models are more limited (e.g., Horiba, 2000), learners may struggle to enrich mental representations of discourse deeply enough for predictability to guide referential form selection.

In addition, methodological factors may also have contributed to the lack of predictability effects. Specifically, the materials consisted of only a single sentence per item, providing minimal contextual support. Previous research has shown that predictability effects from IC bias are more likely to emerge when richer discourse contexts are provided or when relevant information is introduced in advance (e.g., Weatherford & Arnold, 2021; Ye & Arnold, 2025). The single-sentence context might not have allowed participants to construct mental models robust enough to guide referential choice in L2. Furthermore, the manipulation of language followed the within-participant design. Items were thus split between Japanese and English, leaving only six items per condition and reducing statistical power. Given these limitations, the present study cannot draw definitive conclusions concerning predictability effects. Future research should use richer context and larger item sets to determine whether predictability effects can be reliably observed in L2 production.

In summary, the present results suggest that predictability plays a more limited role than grammatical role in determining referential expressions, in terms of both scope and language. In both Japanese and English, learners consistently used grammatical role, increasing the production of reduced forms for previous subjects. By contrast, predictability showed only a subtle effect, limited to Japanese object references, and no credible effect in English. This indicates that mapping discourse-semantic expectations onto referential form is difficult for learners, consistent with the Interface Hypothesis (Sorace, 2011).

Given this difficulty, L2 referential expressions may not always match addressees' expectations about the next mention. Therefore, explicit training may be beneficial for helping learners incorporate semantic information into referential production. In writing and speaking instruction, teachers can emphasize that a semantically or pragmatically likely next mention should be expressed with a pronoun to increase discourse coherence and communicative efficiency; while using a name in such contexts does not immediately cause a communication breakdown, pronouns result in more natural and efficient discourse. Conversely, when referring to unexpected entities, learners should be encouraged to use names or fuller expressions to avoid ambiguity; such entities are not strongly activated in the addressee's mental model and are hence difficult to access with a reduced form. Training learners to consider not only structural properties but also the semantic likelihood of next mention may foster smoother communication and more effective referential choices.

CONCLUSION

The present study investigated whether and how Japanese EFL learners use grammatical role and predictability when selecting referential expressions in their L1 (Japanese) and L2 (English). Learners were highly sensitive to grammatical role across languages, increasing the use of reduced forms for previous subjects. By contrast, IC-based predictability had only a subtle effect, limited to null-pronoun use in L1 Japanese.

Taken together, these findings indicate that mapping discourse-semantic expectations onto referential form is a difficult domain for learners (Sorace, 2011), while they can stably use structural cues. Pedagogically, explicit instruction that highlights when a likely next-mention should be pronominalized, and conversely, when unexpected referents should be realized with fuller expressions may help learners produce more efficient and coherent discourse.

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Appendix

Appendix A: Verbs Used in This Study

Subject-Biasing Verbs		Object-Biasing Verbs	
telephoned	電話をした	employed	雇った
annoyed	苛立たせた	hated	憎んだ
apologized to	謝った	praised	ほめた
attracted	惹きつけた	noticed	気づいた
disappointed	失望させた	guided	案内した
confused	混乱させた	laughed at	笑った
upset	うろたえさせた	respected	尊敬した
lied to	嘘をついた	worried about	心配した
hurt	傷つけた	answered	答えた
shocked	ショックを与えた	loved	愛した
troubled	困らせた	thanked	感謝した
pleased	喜ばせた	liked	好んだ
bothered	悩ませた	admired	称賛した
approached	近づいた	punished	罰した