

## Challenges and Pedagogical Implications in Teaching the Japanese Spatial Expression “no ue” to English-speaking Learners: A Corpus-based Study Using I-JAS

Jiaan Xu

Postgraduate Program of Japanese Language and Literature, Faculty of  
Foreign Languages, Ningbo University, China

Author email: [jiaanxu3@gmail.com](mailto:jiaanxu3@gmail.com)

### Abstract

*This study addresses the insufficient attention paid to the Japanese spatial expression “no ue” in research on English-speaking learners, even though spatial particles and locative nouns have been widely studied in second language acquisition. It investigates the use and misuse of “no ue” with the goal of identifying pedagogical challenges and proposing instructional improvements. Using the International Corpus of Japanese as a Second Language (I-JAS) developed by the National Institute for Japanese Language and Linguistics, 49 examples of learner production—including both spoken and written data—containing “no ue” were extracted via the “Chunagon” search system. Among these, 21 instances were identified as erroneous, all of which were categorized into six error types; 19 representative cases are illustrated and discussed in detail based on lexical, syntactic, and semantic features. The results revealed frequent errors related to unnatural placement expressions, structural confusion, and semantic mismatches with the English preposition “on”. These errors stemmed from a combination of factors, including spatial concept misinterpretation, vocabulary misuse, syntactic misunderstanding, and first-language interference. By systematically analyzing these tendencies, this study not only contributes to existing research but also highlights its novelty by directly linking error patterns with pedagogical implications, such as improving the teaching of spatial nouns and particles, emphasizing contextual meaning, and incorporating contrastive approaches with English.*

**Keywords:** Japanese language education; spatial expressions; no ue; English-speaking learners; second language acquisition

## **INTRODUCTION**

Spatial expressions that convey location or position differ significantly across languages, posing notable challenges in second language acquisition. For instance, English and Chinese explicitly use prepositions or locational particles such as “in,” “on,” and “里 (inside),” which clearly distinguish spatial concepts like interior/exterior or upper/lower relationships. Japanese, however, employs case particles “ni” and “de” for spatial expressions without explicitly distinguishing between spatial categories such as IN (internal), ON (surface), or AT (point). Instead, the selection of these particles often depends on context or lexical meanings of the associated nouns. This has led researchers to describe Japanese spatial expressions as having an “unbounded” cognitive tendency, exhibiting less clearly defined boundaries and classifications compared to languages like English and Chinese (Mochizuki & Shin, 2016).

Despite this growing body of research, little attention has been given to the specific spatial expression “no ue,” particularly in the context of English-speaking learners. While numerous studies have addressed particle selection errors involving “ni” and “de,” the unique challenges posed by “no ue” have not been systematically examined. This lack of focused investigation constitutes a significant research gap, since “no ue” often serves as a direct but misleading equivalent to the English preposition “on,” making it especially prone to cross-linguistic transfer errors.

This cross-linguistic disparity frequently contributes to learner errors. For example, the overuse of the Japanese particle “no” is commonly observed among learners, especially in noun-modifying structures, with notable differences according to the learner's native language and word class involved (Suzuki, 2024). Such error patterns are not exclusive to learners of Japanese;

they are also observed among Japanese learners of English. Nakanishi (2021) reported frequent preposition errors in English essays by Japanese university students, noting that around 8.4% involved the preposition “on,” possibly influenced by the Japanese equivalents “~no ue ni/de.” These findings highlight that superficial lexical equivalents can lead to erroneous language transfers when the learner lacks understanding of appropriate usage contexts and collocational patterns.

Previous research has repeatedly addressed errors in Japanese spatial expressions, particularly the incorrect use of the particles “ni” and “de.” Sakoda and Hosoi (2018), utilizing the International Corpus of Japanese as a Second Language (I-JAS), found that beginner and intermediate learners commonly used “ni” following positional nouns such as “naka (inside),” “mae (front),” and “ue (above),” and “de” following place nouns like “kaikan (hall)” and “Tokyo.” They suggested that learners might memorize these combinations as lexical chunks, resulting in frequent errors such as “ryoushin wa furusato de (→ni) sunde imasu (My parents live in my hometown)” and “hi no ue ni (→de) sakana wo yakimasu (I grill fish over fire).” While traditionally attributed to first-language transfer, these errors appear common across learners regardless of native language, suggesting a shared general strategy in language acquisition. Nevertheless, Misawa (2021) noted potential mother-tongue influence among French-speaking learners, whose particle selection tendencies resembled those of English speakers, possibly due to similarities in prepositional systems. Further, Liu (2018) found first-language influence in collocation errors among advanced Chinese-speaking learners, and Suzuki (2022) demonstrated that Chinese speakers' excessive insertion of “no” in noun-modifying structures could result from high acceptability of the corresponding Chinese particle “的 (de).”

Xu, J. (2025). Japanese spatial expression “no ue”.

Despite extensive research on learner errors and native language influence concerning Japanese grammar, studies focusing specifically on the spatial expression “no ue” remain insufficient. The development of large-scale learner corpora—most notably I-JAS, which was made publicly available in 2016—has enabled comprehensive analyses of learner language use. I-JAS includes data from approximately 1,000 Japanese learners representing 12 native languages, comprising both spoken and written outputs, structured across various tasks, thereby facilitating multifaceted analyses of vocabulary and grammar (Sakoda et al., 2016). Konishi (2017) further demonstrated that vocabulary use by Japanese learners varied depending on the task type, indicating how learner output can differ across contexts even within the same corpus. Although particle errors in spatial expressions have been extensively examined, detailed studies on “no ue” among English-speaking learners are notably scarce. In doing so, this study advances previous research by extending the scope of spatial particle analysis to the underexplored case of “no ue,” and by highlighting pedagogical applications that directly inform classroom instruction and materials design.

Specifically, this research investigates contexts and patterns in which English-speaking learners use or misuse “no ue,” examines underlying factors such as semantic discrepancies with the English preposition “on” and mother-tongue interference, and suggests pedagogical improvements. Using the Chunagon search system, learner examples containing “no ue” were comprehensively extracted from I-JAS. These examples were contextually analyzed to identify typical error patterns, with special attention given to conceptual misunderstandings and semantic deviations from English equivalents. Ultimately, this study systematically identifies English-speaking

learners' difficulties with Japanese spatial expressions and provides targeted recommendations for instructional practice.

Previous research has employed qualitative analyses to examine learner errors from multiple angles. For instance, Morimoto (2016) analyzed intermediate-level compositions written by Japanese learners at a UK university and identified errors related to vocabulary selection, unnatural collocations and idiomatic expressions, katakana spelling, and direct translation from English. Morimoto emphasized that these errors stemmed not only from lexical mistakes but also from an overreliance on dictionaries and misalignment between English and Japanese word meanings, highlighting the need for improved instruction on dictionary use and lexical precision. Similarly, Oyama, Komachi, and Matsumoto (2016) proposed a hierarchical annotation scheme for classifying learner errors and applied machine learning techniques for automatic error categorization. Their framework aimed to address the limitations of earlier corpora, which often lacked structured error annotations, thereby improving both retrieval efficiency and educational feedback. These studies underscore the importance of analyzing learner errors from lexical, syntactic, and semantic perspectives—a multidimensional approach also adopted in this study.

## METHOD

This study investigates the misuse of the Japanese spatial expression “no ue” among English-speaking learners by extracting and analyzing learner-generated examples from the International Corpus of Japanese as a Second Language (I-JAS), using the Chunagon web-based corpus search system developed by the National Institute for Japanese Language and Linguistics. The

goal was to identify typical error patterns and understand the underlying causes of misuse in context.

This study was conducted using data from the “International Corpus of Japanese as a Second Language (I-JAS),” developed by the National Institute for Japanese Language and Linguistics (NINJAL), a member institute of the Inter-University Research Institute Corporation, National Institutes for the Humanities. I-JAS is a large-scale cross-sectional learner corpus that contains spoken and written data from approximately 1,000 learners of Japanese as a second language, representing 12 different L1 backgrounds. The data were collected from educational institutions both in Japan and abroad, allowing for comparisons based on proficiency level, L1 background, learning environment, and task type. Website: <https://www2.ninjal.ac.jp/jll/lhaj/ihome2.html> (Last accessed: June 25, 2025)

All processes of data extraction, classification, aggregation, and error analysis in this study were conducted by the author. Any potential inaccuracies or inconsistencies in the analysis are solely the responsibility of the author.

In this study, to clearly present the misuse of expressions, fillers (e.g., “ano,” “etto”), hesitations, and repetitions included in learner utterances were removed. Quoted examples were presented in a normalized form, limited to edits that did not compromise the speaker’s intent or the nature of the error, thereby improving analytical readability and precision.

The determination of “errors” in this study was based on grammatical consistency, pragmatic naturalness, and semantic appropriateness. Judgments were made by the author with full consideration of contextual factors.

The error and cause classifications proposed in this study were established by the author in alignment with the research objectives. These classifications are not intended to invalidate other existing frameworks.

Data were extracted using the “short-unit search” function of NINJAL’s Chuunagon corpus search system. The continuous phrase “no ue” was used as the search key. All extracted examples were reviewed and normalized by the author, considering their syntactic and contextual features.

This study was conducted in compliance with the I-JAS usage guidelines and was carried out solely for academic research purposes, without intent to identify individual learners or evaluate their proficiency.

Rather than using automated processing, this study conducted a meticulous manual analysis. The data were extracted using the “short-unit search” function in Chunagon, setting the query parameters to retrieve instances where “no” and “ue” appeared consecutively as separate morphological units. All examples were exported in CSV format and organized using Microsoft Excel. A total of 49 examples produced by English-speaking learners were analyzed. Among them, 21 were judged to be erroneous based on contextual appropriateness, lexical and syntactic naturalness, and plausibility as spatial expressions.

The data were drawn from the English-speaking learner subset of I-JAS. I-JAS provides detailed learner background information, including learning context (e.g., overseas or domestic classroom environments), proficiency indicators (SPOT/TTBJ, J-CAT), and a wide range of spoken and written tasks. While these learner profile variables are available, the present study did not incorporate them into the analysis and instead focused exclusively on actual learner productions of no ue. Nevertheless, acknowledging the availability of such metadata situates the representativeness of the sample and clarifies the scope of the present findings.

The 21 error instances were classified into six categories reflecting diverse sources of misuse. First, “unnatural placement or existence

Xu, J. (2025). Japanese spatial expression “no ue”.

expressions” encompassed cases where the physical positioning of objects or beings was implausible or spatially inappropriate, including various subtypes such as animal or object misplacement and inappropriate action-location pairings. Second, “structural confusion” referred to mismatches between subjects and predicates, illogical modifiers, and syntactic ambiguities. Third, “errors in spatial conceptualization” were identified where learners misunderstood spatial relations, likely due to differences in conceptual frameworks between English and Japanese. Fourth, “direct translations from English” described cases where “no ue” was inappropriately substituted for the English preposition “on.” Fifth, “lexical selection errors” involved the use of semantically inappropriate words that rendered the spatial expression ambiguous or unrealistic. Sixth, “particle misuse” included incorrect application or redundancy of case particles, particularly confusion between “ni” (indicating existence) and “de” (indicating action location).

These categories were developed with reference to prior frameworks, such as lexical errors, grammatical misuse, and translational interference, while also incorporating the semantic and conceptual challenges unique to “no ue.” Each instance was initially assigned a tentative category, which was then grouped into six higher-order categories to provide a comprehensive overview of the error tendencies.

All tokens were categorized under explicit operational definitions for the six error types. To enhance reliability, the coding process maintained an audit trail that recorded the original sentence, tentative label, and rationale for each classification. Although inter-rater validation was not implemented in this study, intra-rater consistency was checked through repeated reviews of the dataset. Any discrepancies identified during re-checking were resolved by refining the classification rules. While the present study focuses on qualitative



categorization, future research will incorporate multiple coders and quantitative measures, such as frequency ratios and comparisons with native-speaker data, to further strengthen objectivity and generalizability.

Through this qualitative analysis, the study aims to reveal the characteristic patterns and underlying factors of “no ue” misuse by English-speaking learners, thereby offering insights into effective instructional strategies for teaching Japanese spatial expressions.

## RESULTS AND DISCUSSION

### Overview of Error Trends and Classification Results

Among the 49 learner-produced examples of “no ue” collected from English-speaking participants in the I-JAS corpus, 21 instances were judged to be erroneous. These errors were classified into six overarching categories based on semantic and structural considerations. The classification and frequency of each error type are presented in Table 1.

Table 1. Classification and Frequency of Error Types Related to “no ue”

Error Type	Frequency
<b>(1) Unnatural Placement or Existence Expressions</b>	<b>9</b>
- Unnatural placement of animals	6
- Unnatural expression of action space	1
- Unnatural specification of action location	1
- Unnatural placement of objects	1
<b>(2) Structural Confusion</b>	<b>5</b>
- Ambiguity of referent	1
- Misunderstanding of syntactic structure	4
<b>(3) Misconception of Spatial Relationships</b>	<b>1</b>
<b>(4) Direct Translation from English</b>	<b>3</b>
<b>(5) Lexical Selection Error</b>	<b>1</b>
<b>(6) Particle Misuse</b>	<b>2</b>

As shown in Table 1, the most frequently observed category was “Unnatural Placement or Existence Expressions,” accounting for nine cases in total. This category includes six instances of “unnatural placement of animals,” and one instance each of “unnatural expression of action space,” “unnatural specification of action location,” and “unnatural placement of objects.” These errors reflect learners’ attempts to express spatial relationships that are implausible or unrealistic within the context of natural Japanese usage.

The second most common category was “Structural Confusion,” comprising five cases. Of these, four resulted from misunderstanding sentence structure, including mismatches between subjects and predicates and illogical modifier relationships. One additional case involved ambiguity in the referent of the expression, making the intended meaning difficult to interpret.

The remaining categories were less frequent but still meaningful. “Misconception of Spatial Relationships” was observed in one case, “Direct Translation from English” in three cases, “Lexical Selection Error” in one case, and “Particle Misuse” in two cases. While smaller in number, these categories reveal diverse challenges faced by learners, such as spatial conceptualization difficulties, negative transfer from English, and insufficient knowledge of Japanese case particles.

Taken together, these findings indicate that learner errors in using “no ue” cannot be attributed to a single cause. Instead, they stem from an interplay of lexical choice, syntactic understanding, conceptualization of space, and first-language influence. Although this study employed a qualitative, manual classification of errors, future work could incorporate quantitative comparisons—for example, calculating error frequency ratios against overall learner usage of “no ue” or comparing error rates with native-speaker data.

Such triangulation would further validate the robustness of the findings and complement the qualitative insights presented here.

The following section presents a more detailed analysis of each category, accompanied by representative examples.

## Representative Error Types and Analysis

### Error Type 1. Unnatural Placement or Existence Expressions

The most frequently observed error type was “Unnatural Placement or Existence Expressions,” accounting for nine instances. These errors occurred when the spatial expression “no ue” was mechanically applied to entities or actions for which such spatial relationships are implausible in real-world usage. The inconsistencies were observed at the levels of lexical meaning, pragmatics, and spatial conceptualization. Representative error examples are presented below.

- (1) 蜘蛛の（上で）箱を置いておきました

*I left the box (on) the spider.*

→ Correct: 蜘蛛の（そばに）箱を置いておきました。(*I left the box beside the spider.*) (Note: not on top of it.)

- (2) りんごの（上に）ミックスを置きました

*I placed the mix (on) the apple.*

→ Correct: りんごとミックスを一緒に皿に盛りました。／ミックスを皿に盛りました。(*I served the apple and the mix together on a plate. /The mix was served on a plate.*)

(Note: Although grammatically acceptable, the original sentence is pragmatically unnatural. The revision reflects a more realistic serving context.)

- (3) 猫はうちの（上に）あります

*The cat is (on) the house.*

→ Correct: 猫はうちの中にいます。 (*The cat is inside the house.*)

- (4) 家の（上に）猫があります

*There is a cat (on) the house.*

→ Correct: 家の屋根の上に猫がいます。 (*There is a cat on the roof of the house.*)

- (5) 天井の（上に）猫が二匹いて鳴いています

*There are two cats meowing (on) the ceiling.*

→ Correct: 屋根の上に猫が二匹いて鳴いています。 (*There are two cats meowing on the roof.*)

- (6) 屋根の（上に）猫が二つあります

*There are two cats (on) the roof.*

→ Correct: 屋根の上に猫が二匹います。 (*There are two cats on the roof.*)

- (7) テーブルの上にあります。屋根の（上に）猫が三つあります

*It is on the table. There are three cats (on) the roof.*

→ Correct: 屋根の上に猫が三匹います。 (*There are three cats on the roof.*)

These examples share a common trait: the noun preceding “no ue” refers to an entity or context where a literal spatial relationship is implausible or pragmatically unnatural. For instance, “on the spider” or “on the apple” are spatial relationships that rarely make sense in real-world settings, indicating a lack of understanding of spatial semantics and contextual appropriateness.

In some cases, such as “猫がある” or “猫が三つある,” the learners incorrectly used the inanimate existential verb “aru” for animate subjects and applied the numeral classifier “tsu” instead of counters appropriate for animals. These lexical and grammatical mismatches further reflect incomplete

acquisition of verb semantics and classifier use. Moreover, examples like “on the ceiling” or “on the house” suggest possible confusion with English expressions, indicating a misalignment in spatial recognition.

These errors appear to result from learners treating “no ue” as a fixed chunk and applying it without adequately evaluating contextual appropriateness. Mochizuki and Shin (2016) point out that, unlike English or Chinese, Japanese spatial expressions rely heavily on contextual and lexical semantics rather than explicit distinctions like IN, ON, or AT. As a result, even when learners formally map “no ue” to “on,” the resulting usage may be pragmatically or semantically inappropriate.

From a pedagogical perspective, it is essential to teach not only the chunked form “no ue” but also the properties of the nouns it modifies—such as animacy, mobility, and physical size—and to reinforce appropriate verb and classifier use. Using visual materials and real-world images to demonstrate natural usage of “X no ue ni \~ ga iru/aru” can help learners better connect spatial meaning with contextual use.

## Error Type 2. Structural Confusion

This category includes five instances where errors stemmed from structural confusion within the sentence. Typical issues include mismatches between subjects and predicates, ambiguous or illogical modifiers, inconsistent use of parallel elements, and incorrect particle selection. These problems result in sentences whose overall syntactic structure is unclear or pragmatically unnatural. Representative error examples are presented below.

(8) 川の（上は）橋があります

*There is a bridge (as for) the river.*

Xu, J. (2025). Japanese spatial expression “no ue”.

→ Correct: 川の上に橋があります。 (*There is a bridge over the river.*)

(9) 梯子の（上の時に）警官はケンさんを見ました

*At the time (of on) the ladder, the policeman saw Ken.*

→ Correct: 梯子の上にいる時に警官はケンさんを見ました。 (*While Ken was on the ladder, the policeman saw him.*)

(10) 家の（上に）寝ている猫や遊んでいる子供や橋などがあります

*There are sleeping cats, playing children, and a bridge (on) the house.*

→ Correct: 家の上に寝ている猫や遊んでいる子供がいます。 (*Sleeping cats and children can be seen on the house—though this assumes both share the same location, which may not be pragmatically natural depending on context.*)

(*Note: The phrase “a bridge” should be removed or rewritten due to contextual implausibility.*)

(11) お金が床の（上に）います

*The money is (on) the floor (with animate verb).*

→ Correct: お金が床の上にあります。 (*The money is on the floor.*)

(12) テーブルの（上で）お酒があります

*There is alcohol (on/at) the table.*

→ Correct: テーブルの上にお酒があります。 (*There is alcohol on the table.*)

These examples share the characteristic that the grammatical or semantic relationships between sentence components are unclear or mismatched. In (8) and (12), particles such as “wa” and “de” disrupt the intended spatial relationship, creating interpretive ambiguity. In (9), the modifying structure “の上の時に” is vague and fails to clearly convey the temporal condition or the subject's state.

In (10), the phrase lists multiple elements (a cat, children, and a bridge) as existing “on the house.” However, placing a bridge on a house is physically implausible, breaking the logical integrity of the parallel structure. This highlights the need for learners to assess whether all items in a list naturally share the same spatial or semantic condition.

In (11), the use of the animate verb “iru” for an inanimate object (money) indicates insufficient understanding of the distinction between “iru” (for animate beings) and “aru” (for inanimate objects).

Such structural confusion suggests that even when learners have partially acquired expressions involving “no ue” or existential constructions, they may still struggle with constructing coherent sentences. Since Japanese syntax is highly sensitive to word order and particle combinations, imitation of surface forms alone is insufficient for producing natural expressions. Morimoto (2016) also observed that Japanese learners often struggle with nuanced distinctions, collocations, and modifier structures in writing, noting that partial acquisition of vocabulary or grammar often fails to yield fluent or coherent compositions.

Based on these observations, pedagogical approaches should include training in sentence restructuring and syntactic analysis, using visual aids to clarify the relationships between subjects, predicates, and modifiers. Additionally, writing tasks involving parallel structures should emphasize semantic consistency among listed elements, which may help learners develop a more intuitive understanding of natural sentence formation.

### **Error Type 3. Misconception of Spatial Relationships**

This category includes one error related to a misunderstanding of spatial relationships. The error reflects a misinterpretation of the spatial

extent indicated by a noun phrase and a conceptual gap in how locational relations are structured in Japanese.

(13) 天井の（上で）猫が寝ていて

*A cat is sleeping (on) the ceiling.*

→ Correct: 屋根の上で猫が寝ていて

*(A cat is sleeping on the roof.)*

In this case, the learner likely intended to describe a cat sleeping on the roof, but used “天井の上” (on the ceiling) as a direct mapping from the English spatial frame. However, for native Japanese speakers, the space “above the ceiling” is not a typical or accessible location and thus sounds conceptually unnatural. The confusion likely stems from L1 interference where “ceiling” and “roof” are distinct in English (“ceiling” = interior, “roof” = exterior), but were conflated in production.

Such errors occur when learners interpret spatial terms based only on individual word meanings without fully grasping the spatial scope or conceptual framework in context. Effective instruction should include visual materials illustrating structural differences in buildings (e.g., ceiling vs. roof) and link them to accurate use of spatial nouns and directional expressions like “ue” and “shita.”

#### **Error Type 4. Direct Translation from English**

This category includes three instances of direct translation errors, in which English spatial expressions such as “on the house” were inappropriately rendered into Japanese using the “no ue” construction.



(14) 家の（上で）猫がいます

*A cat is (on) the house.*

→ Correct: 屋根の上で猫がいます。 (*A cat is on the roof.*)

(15) うちの（上に）猫があります

*There is a cat (on) the home.*

→ Correct: 屋根の上に猫がいます。 (*There is a cat on the roof.*)

(16) うちの（上に）猫が寝ています

*A cat is sleeping (on) the home.*

→ Correct: 屋根の上に猫が寝ています／うちの中で猫が寝ています。

(*A cat is sleeping on the roof / inside the home.*)

These examples demonstrate how learners directly mapped the English phrase “on the house” into Japanese, using forms like “ie no ue” or “uchi no ue.” While grammatically correct on the surface, such expressions are pragmatically unnatural in Japanese. In real-world usage, the intended location would typically be expressed as “on the roof” (屋根の上) or “inside the house” (家の中), not “on the house” itself.

This is a classic case of L1 transfer, where lexical and structural patterns from English are incorrectly applied to Japanese. As Suzuki (2022) notes in his research on particle overuse, structural transfers may coexist with phonological or syntactic influences, especially among learners from languages like Chinese or English.

Pedagogically, it is important to teach learners that grammatically correct expressions may be pragmatically or semantically unnatural. Comparative examples showing the typical usage ranges of “house,” “roof,” and “room” in both languages can help learners develop a more accurate spatial lexicon.

### Error Type 5. Lexical Selection Error

This category contains one error caused by a misinterpretation of lexical meaning, leading to an unnatural spatial expression.

(17) ニューサウスウェールズ州の（上で）クイーンズランド州があります

*Queensland is (on) New South Wales.*

→ Correct: ニューサウスウェールズ州の北にクイーンズランド州があります。 (*Queensland is located north of New South Wales.*)

Here, “no ue de” is used to indicate a geographic relation between two regions, but Japanese typically uses directional terms like “kita ni” (to the north) for such purposes. The error likely stems from equating “ue” with “above,” which in English can imply cardinal direction (north) but does not naturally carry the same connotation in Japanese.

This type of lexical selection error occurs when learners choose grammatically correct structures but insert words that misrepresent real-world relationships. The learner may have incorrectly assumed that “ue = upward = north,” influenced by English expressions such as “above” or “on top of.”

Instructionally, it is important to explicitly differentiate between abstract spatial metaphors and geographically accurate expressions, reinforcing directional terms like “north,” “south,” and their correct applications through contextual examples.

### Error Type 6. Particle Misuse

This category includes two instances in which incorrect or redundant case particles were used, disrupting the grammatical and semantic integrity of the sentence.

(18) 家のテーブル（で、の上で）ビールがあります

*There is beer (at, on) the house's table.*

→ Correct: 家のテーブルの上にビールがあります。 (*There is beer on the table in the house.*)

(19) 屋根の（上が）猫が二人あります

*There are two cats (on-subject) on the roof.*

→ Correct: 屋根の上に猫が二匹います。 (*There are two cats on the roof.*)

In (18), the redundant use of both “de” and “no ue de” results in an awkward and ungrammatical construction. In Japanese, the particle “ni” is generally used for indicating existence, while “de” is reserved for locations of action. The learner's failure to distinguish these usages led to an unnatural sentence.

In (19), the phrase “猫が二人あります” is problematic for several reasons: (1) “futari” is a human-specific counter, not suitable for animals; (2) “arimasu” is used for inanimate objects, whereas “imasu” should be used for living beings; and (3) “ue ga” is an incorrect use of the subject particle.

These examples illustrate how particle misuse often arises in structurally dense parts of sentences where multiple grammatical elements—particles, verbs, counters—interact. Mastery of these forms requires more than rote memorization; it necessitates conceptual understanding and contextual reinforcement.

From a teaching perspective, systematic training in case particle functions and verb-counter compatibility is crucial. Repeated practice with basic structures such as “[location] ni/de [object/person] ga imasu/arimasu” can improve learner accuracy and fluency in spatial expression.

### **Semantic Contrasts with the English Preposition “on” and Background of Errors**

The analysis of errors in the previous sections highlights significant semantic discrepancies between the English spatial preposition “on” and the Japanese expression “no ue.” In English, the preposition “on” is highly versatile: it frequently describes not only physical contact between two entities but also encompasses abstract image schemas such as “PATH,” “PROCESS,” or metaphorical extensions like “on duty” or “on time” (Mochizuki & Shin, 2016). By contrast, the Japanese expression “no ue” is far more restrictive, typically grounded in concrete spatial relationships involving direct contact or physical placement. This asymmetry often leads learners to overextend the range of “no ue” by mapping it directly onto the broader English “on.”

Several error examples in this study demonstrate such transfer. For instance, “ニューサウスウェールズ州の上でクイーンズランド州があります” (Example 17, “Queensland is on New South Wales”) reflects a literal rendering of the English “Queensland is above New South Wales.” In natural Japanese, however, geographical relationships are conventionally expressed through directional terms such as “北に (north of)” or “南に (south of),” rather than with “no ue.” Similarly, sentences such as “家の上で猫がいます” (Example 14), “うちの上に猫があります” (Example 15), and “うちの上に猫が寝ています” (Example 16) all illustrate direct syntactic and lexical

transfers from English forms like “on the house” or “on top of the house.” While superficially grammatical, such expressions are pragmatically unnatural in Japanese, where “屋根の上 (on the roof)” or “家の中 (inside the house)” would be the expected forms.

Notably, these findings both confirm and extend earlier research. Nakanishi (2021) reported that Japanese learners of English frequently misuse the preposition “on” due to influence from Japanese expressions such as “no ue ni/de.” The present study shows the inverse phenomenon: English-speaking learners of Japanese tend to misapply “no ue” under the influence of English “on.” This reciprocal pattern of transfer underscores the bidirectionality of cross-linguistic influence, supporting broader theories of L1 transfer in second language acquisition. Moreover, while Sakoda and Hosoi (2018) emphasized the chunk-based memorization of particle–noun combinations as a primary source of errors, the present analysis demonstrates that semantic overextension of “on” also plays a critical role, particularly in cases where learners attempt to extend “no ue” into metaphorical or geographical domains.

The classification of Example 17 as a lexical selection error further highlights the complexity of error categorization. Although the learner clearly drew on the English template “X is above Y,” the central pedagogical issue lies not merely in translation but in the misuse of spatial semantics. By clarifying such distinctions, this study adds nuance to previous descriptions and provides a sharper basis for targeted instruction.

From a pedagogical perspective, these contrasts call for explicit contrastive analysis in the classroom. Instructors should emphasize that while English “on” encompasses a wide range of physical and abstract relations, “no ue” in Japanese is more narrowly tied to concrete spatial contexts. Visual aids, real-world images, and side-by-side sentence comparisons can help learners

develop a more accurate understanding of usage boundaries. Furthermore, awareness-raising tasks that highlight differences in metaphorical extensions—such as comparing “on duty” in English with functional equivalents in Japanese—can prevent overgeneralization. In this way, the findings of the present study both corroborate earlier accounts of transfer-related difficulties and extend them by showing how semantic overextension interacts with structural and lexical choices in learner production.

### **Pedagogical Implications and Challenges**

The analysis of English-speaking learners' errors with the Japanese spatial expression “no ue” reveals multiple interacting factors, including structural confusion, unnatural spatial conceptualization, inappropriate lexical choices, and direct interference from English. These error patterns highlight significant challenges and emerging instructional needs in teaching spatial expressions within Japanese language education.

Firstly, examples such as “家の上に猫があります” (“There is a cat on the house”) and “天井の上で猫が寝ていて” (“A cat is sleeping on the ceiling”) indicate that learners tend to produce pragmatically unnatural expressions due to misconceptions about spatial cognition and grammatical structures. These cases underscore insufficient understanding of the interaction between spatial nouns, verbs, and particles, particularly the restricted usage range of “no ue” and the need for accurate distinctions between existential verbs such as “iru” (for animate objects) and “aru” (for inanimate objects).

Secondly, structural confusion was evident in sentences like “川の上は橋があります” (“As for the river, there is a bridge”) and “梯子の上の時に～” (“At the time of on the ladder”), where ambiguous subject–predicate and modifier relationships significantly impaired meaning comprehension. To

address this, explicit visualization of how “no ue” interacts with surrounding nouns or actions within sentence structures is recommended to clarify its semantic role.

Thirdly, errors arising from semantic mismatches between the English preposition “on” and the Japanese expression “no ue” reflect broader contrasts in spatial cognition between the two languages. Mochizuki and Shin (2016) highlight that Japanese spatial expressions rely heavily on contextual interpretation, while English prepositions exhibit wider semantic versatility. Nakanishi (2021) further shows that Japanese learners of English misuse “on” due to transfer from “no ue ni/de,” a phenomenon mirrored in this study’s data for English learners of Japanese. This reciprocal transfer strengthens the claim that language-specific conceptualizations of space are a persistent source of bidirectional learner errors.

Additionally, Morimoto (2016) emphasizes that errors in vocabulary and syntax often stem not only from incomplete grammatical knowledge but also from low awareness of contextual appropriateness. This aligns with present findings, where incorrect usage of existential verbs (“imasu/arimasu”) and case particles (“ni/de”) indicates difficulties in aligning form with pragmatically natural contexts.

In light of these findings, effective pedagogical approaches for teaching spatial expressions in Japanese should focus on three interconnected strategies. First, teachers should clearly delineate the contexts in which “no ue” is appropriately used, employing contrastive visual comparisons with other spatial nouns such as “naka,” “shita,” and “mae” to highlight important semantic differences. Second, task-based activities that contrast Japanese and English usage should be integrated into classroom practice, encouraging learners to recognize potential transfer issues and actively compare acceptable

expressions across the two languages. Third, the use of visual and experiential aids—including real-world images and picture cards—can help learners internalize natural usage patterns of “no ue” and related spatial expressions by linking abstract grammatical forms to tangible contexts.

Ultimately, these findings suggest that errors associated with “no ue” reflect deeper cognitive and semantic challenges beyond surface-level lexical or grammatical deficits. Future instructional practice should therefore integrate both semantic and syntactic perspectives, fostering not only formal accuracy but also contextual appropriateness. In addition, future research may enhance pedagogical recommendations by incorporating quantitative measures—for example, comparing error frequencies against native-speaker data or calculating error ratios across learner proficiency levels—to strengthen the empirical basis of instructional design.

## **CONCLUSION**

Data reveal that lexical misunderstanding, structural ambiguity, semantic misconceptions, and first language (L1) transfer generate “no ue” difficulties, not isolated grammatical gaps. Students overextended the English preposition “on” into Japanese, creating grammatically correct but pragmatically problematic sentences. These findings support Mochizuki and Shin (2016)'s discovery that Japanese spatial expressions are context-dependent and Nakanishi's (2021) findings on Japanese-English reciprocal transfer effects. The present study highlights how individual learner errors match and differ from previously observed tendencies, contributing to second language acquisition and Japanese pedagogy research. The study suggests teaching spatial expressions instead of words. To assist students understand subtle but important differences between Japanese and English space ideas,



use semantic awareness, contrastive analysis, and contextualized practice. Learners can overcome the errors with explicit teaching of animacy differences, existential verb usage, and particle selection, and visual and sensory support. These results demonstrate this study's novel strategy to turning corpus-based error analysis into classroom instruction recommendations. Quantitative comparisons like error frequency ratios against native-speaker data can increase study reliability. More spatial phrases like “no naka” (inside) and “no mae” (in front of) would assist learners understand spatial interactions across contexts. Cross-linguistic studies with learners from different first-language backgrounds could also determine if these mistakes are English-specific or universal. Finally, applied research relating corpus findings to pedagogical interventions would connect descriptive error analysis and effective classroom practice. This study tackles the unique challenges English-speaking learners face in learning “no ue,” places them in existing research, and offers pedagogical solutions to improve Japanese language teaching.

## REFERENCES

- Konishi, M. (2017). *Nihongo gakushusha to bogo washa no sanshutsu goi no so-i: I-JAS no kotonaru tasuku o mochiita hikaku* [Differences in vocabulary produced by Japanese learners and native speakers: A comparison using different I-JAS tasks]. *Kokuritsu Kokugo Kenkyujo Ronshu*, 13, 79–106.
- Liu, R. (2018). The use of noun-verb collocations by Chinese advanced learners of Japanese: The differences with Japanese native speakers and the influence of Chinese. *Nihongo Kyoiku*, 169, 31–45. [https://doi.org/10.20721/nihongokyoiku.169.0\\_31](https://doi.org/10.20721/nihongokyoiku.169.0_31)
- Xu, J. (2025). Japanese spatial expression “no ue”.

- Misawa, K. (2021). A study on French-speaking Japanese language learners' tendency to choose Japanese spatial expressions, "ni" and "de". *Nihongo Kyoiku Hoho Kenkyu Kaishi*, 28(1), 14–15. [https://doi.org/10.19022/jlem.28.1\\_14](https://doi.org/10.19022/jlem.28.1_14)
- Mochizuki, K., & Shin, A. (2016). Unboundedness in Japanese lexicon: Comparative analysis of compound verbs in Chinese and spatial lexicon in English. *Nihongo Gakushusha no Bogo Chiikisei o Fumaeta Nihongo Kyoiku Kenkyu*, 2, 43–66. <https://doi.org/10.15026/88247>
- Mochizuki, K., Shin, A., & Oyanagi, N. (2020). Acquisition of tense and aspect in cross-referential learners' corpora of English, Chinese and Japanese. *Nihongo Nihongaku Kenkyu*, 10, 137–152. <https://doi.org/10.15026/94619>
- Morimoto, K. (2016). Errors and problems in the use of vocabulary in compositions by intermediate learners of Japanese. *Nihongo Gakushusha no Bogo Chiikisei o Fumaeta Nihongo Kyoiku Kenkyu*, 2, 99–106. <https://doi.org/10.15026/88244>
- Naito, H. (2016). *Nihongo gakushusha ni okeru jujyohyogen no goyo kenkyu: Eigoken gakushusha o chushin ni* [Misuse of receptive expressions by Japanese learners: Focusing on English speakers]. *Nihon Bungaku Noto*, 51, 1–22. <https://doi.org/10.15026/94619>
- Nakanishi, J. (2021). A descriptive study of prepositional errors in Japanese learner corpus of English: Focusing on basic prepositions "at", "in", and "on". *Chubu Chiku Eigo Kyoiku Gakkai Kiyo*, 50, 113–120.
- Oyama, H., Komachi, M., & Matsumoto, Y. (2016). Hierarchical annotation and automatic error-type classification of Japanese language learners' writing. *Shizen Gengo Shori*, 23(2), 195–225. <https://doi.org/10.5715/jnlp.23.195>

- Sakoda, K. (2018). How to build and to use the learners' oral/written data, in the case of I-JAS: An investigation of language transfer in I-JAS data, focusing on expressions of request. *Learner Corpus Studies in Asia and the World*, 3, 75–85. <https://doi.org/10.24546/81010119>
- Sakoda, K. (2020). I-JAS tanjo no keii. *The background of compilation of I-JAS*. In K. Sakoda, S. Ishikawa, & J. Lee (Eds.), *Nihongo gakushusha kopasu I-JAS nyumon: Kenkyu kyoiku ni do tsukauka* [Introduction to the I-JAS: Application for research and teaching] (pp. 2–13). Kuroshio Shuppan.
- Sakoda, K., & Hosoi, Y. (2018). *International Corpus of Japanese as a Second Language (I-JAS): Nihongo gakushusha no gengo kenkyu to shido no tame ni* [I-JAS: For research and instruction on Japanese learners' language]. *Eigo Kopasu Kenkyu*, 25, 133–150.
- Sakoda, K., Konishi, M., Sasaki, A., Suga, W., & Hosoi, Y. (2016). International Corpus of Japanese as a Second Language. *Kokugoken Purojekuto Rebyu*, 6(3), 93–110.
- Suzuki, K. (2022). A note on the possibility of overused “no” in Japanese: The acceptance of “de” in Chinese. *Bungakubu Kiyo*, 36(1), 117–128. <https://doi.org/10.15034/00008096>
- Suzuki, K. (2024). Tendency of overuse of “no” in Japanese: An analysis by learners' first language and part-of-speech using I-JAS. *Jinbunken Kiyo*, 108, 1–13. <https://doi.org/10.24789/0002001895>
- Zhang, L. (2019). Analysis of misuse of “yōu” and “zài” in syntax representing existence by Japanese learners and suggestions for teaching methods. *Tohoku Daigaku Kodo Kyoyo Kyoiku Gakusei Shien Kiko Kiyo*, 5, 71–78.