

A corpus study of the Japanese noun linker ‘no’ in Spanish L1 speakers

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Abstract

The current study is a corpus study that investigates Spanish L1 learners of Japanese and their misuse of the possessive marker ‘no’ in speech production. The misuse of ‘no’ has been studied in mainly Chinese, English and Korean L1 speakers of Japanese across different proficiencies (e.g., Koyama, 2006) but not other L1 speakers. The results indicate that there is a developmental trend found where participants produce the most overuse around the intermediate proficiency and decline as they advance, and the number of overuses also vary depending on the target phrase due to the frequency of words and the nature of the tasks of the corpus. There are also chunking that played a role in the overuse of ‘no’.

Keywords: Japanese as a foreign language, Japanese noun linker ‘no’, Spanish L1 learners, developmental process, I-JAS corpus

Introduction

There are almost four million Japanese language learners in the world (The Japan Foundation, 2018) making it the second most learnt Asian language after Chinese, hence understanding how learners acquire the language is significant for more effective Japanese language education. The Japanese noun linker ‘no’ is a possessive marker (i.e., ‘s in English) that is taught at the entry level of Japanese. As minute as this marker may seem, however, its misuse is often observed beyond novice proficiencies, or at least in Chinese, Korean and English first language (L1) speakers.

Purpose of this study

The current study aims to investigate the misuse of the Japanese noun linker ‘no’ in Japanese foreign language learners with Spanish as their L1 using the corpus data of International Corpus of Japanese as a Second Language (I-JAS) to complement existing speculations of the cause of the misuse. The following are the research questions of this study:

1. Do Spanish L1 learners of Japanese misuse ‘no’?
2. If they do, is this due to a developmental trend?
3. Are the results similar to Koyama (2006)?

Literature Review

The Japanese noun linker ‘no’

The Japanese noun linker の (no) is a Japanese particle to indicate possession (English equivalent is ‘of’ or ‘’s’, e.g. 車の色 (*kuruma no iro*; the colour of the car). The study of ‘no’ stem from early first language studies observing Japanese L1 children and their language production (Clancy, 1985; Fujiwara, 1977; Iwabuchi & Muraichi, 1976; Nagano, 1960; Okubo, 1967; Yokoyama, 1990). They have found through observations that Japanese L1 children produce errors associated with ‘no’ on four types of phrases. That is, L1 learner underuse ‘no’ in the case of noun phrase (NP), and overuse ‘no’ in the true adjectival phrase (TAP), noun adjectival phrase (NAP) and verbal phrase (VP) as shown in Table 1 (adapted from Chan, 2014, p. 29). In the case of NAP, ‘na’ is replaced with ‘no’. The erroneous phrases are marked with *.

Table 1: Examples of the error of ‘no’ in the four target phrases

	NP	TAP	NAP	VP
Error	車 <u>の</u> 色*は赤です。	小さい <u>の</u> 犬*は可愛いです。	その <u>きれい</u> の <u>人</u> *は先生です。	寝ている <u>の</u> 猫*はブーちゃんです。
Romaji	<i>kuruma iro wa aka desu</i>	<i>chiisai no inu wa kawaii desu</i>	<i>sono kirei no hito wa sensei desu</i>	<i>neteieru no neko wa buuchan desu</i>
English translation	The colour the car is red	Small’s dogs are cute	The pretty’s person there is the teacher	The sleeping’s cat is bū-chan

The misuse of ‘no’ is also observable in second/foreign language learners of Japanese. An example of this is Koyama’s (2006) corpus study where he extracted oral errors of the target phrases from the KY corpus containing Oral Proficiency Interview¹ (OPI) data by a total of 90 Chinese, Korean and English L1 learners of Japanese. The total number of errors in each target phrase were counted and plotted based on the participants’ proficiency level ranging from novice-medium to superior (Figure 1).

¹ Interviews conducted by trained interviewers to measure the language proficiency of learners orally (for more information, see Young and He (1998) and Breiner-Sanders, Lowe Jr, Miles and Swender (1999))

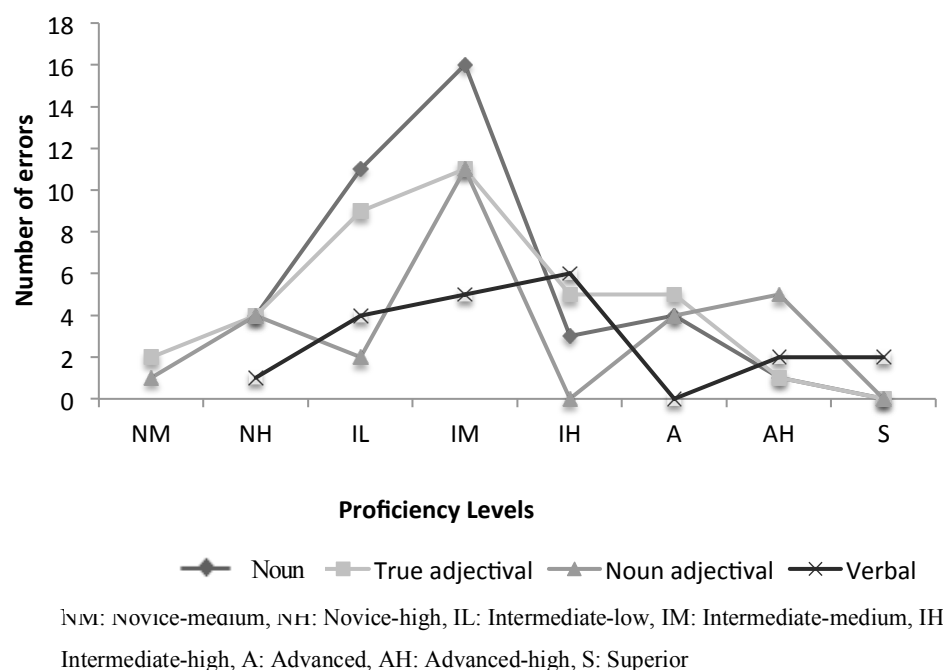


Figure 1. The total number of errors produced by learners of Japanese with different levels of proficiency (based on Koyama, 2006, p. 45-46)

Overall, L2 learners of Japanese begin the overuse of ‘no’ in TAP and NAP at Novice-medium, or beginner, proficiency and begin the underuse of ‘no’ in NP and overuse in VP one proficiency level later. The number of errors of each target phrase peaked at the intermediate proficiency level, largely declined at the advanced level and finally declined and mostly disappeared at the superior level.

There were also several studies that investigated L2 learners’ misuse of ‘no’ either through analysing corpus data (Sakoda, 1999) or through experimental research and found similar results to Koyama’s study (Chan, 2014; Okuno, 2005), where the misuses peak around the intermediate proficiency level and decline as they advance suggesting a general developmental trend. However, these studies have one similarity, that is the participants of the research were focussed mainly on Chinese, English and Korean L1 learners of Japanese. There is very limited research to date that investigated Japanese learners with other L1s, how they produce misuses of ‘no’ and whether this pattern of misuse is a general trend, i.e., a developmental trend general to all L2 learners.

Spanish L1 learners of Japanese

Spain has one of the highest numbers of Japanese foreign language learners within Europe (The Japan Foundation, 2018) and is not a cohort of L1 speakers that has been

previously studied, thus a better understanding of how they learn and use Japanese will provide useful insights for Japanese language pedagogy as well as provide new lights into the study of the development of ‘no’.

In Spanish, the possessive or ‘no’ equivalent is ‘de’ or ‘del’. Its usage is shown in Table 2 below. Spanish is similar to Japanese in the case of the possessive, whereby it is used to link two nouns and it is not used in adjectival and verbal phrases.

Table 2: Examples of the four target phrases in Spanish

	NP	TAP	NAP	VP
Japanese	車 <small>の</small> 色 <i>kuruma no iro</i>	小さい犬 <i>chiisai inu</i>	きれいな人 <i>kirei na hito</i>	寝ている猫 <i>neteieru neko</i>
Spanish	Color del coche	Perro pequeño	Persona bonita	Gato durmiendo
English Translation	Colour of the car	Small dog	Beautiful person	Sleeping cat

I-JAS Corpus

To investigate Spanish L1 learners of Japanese, this study will utilise the international corpus of Japanese as a Second Language (I-JAS)². I-JAS is a corpus comprising of written and spoken data of 1000 participants of twelve countries from a variety of language tasks, i.e., storytelling, interview, role play, picture description, story writing, essay and email writing task. Its Japanese language learners have twelve different L1 language backgrounds as well as learners and native speakers of Japanese from within Japan. Thus far, there are few corpuses with such large and diverse data for Japanese language learners and as data collection in person is not plausible during the current pandemic, this study will utilise the existing data from I-JAS.

Method

The corpus comprises of fifty Spanish L1 learners of Japanese and the current study will focus on the spoken production data, i.e., storytelling, interview, role play, picture description to minimise any variables differing to the Koyama (2006) study based on spoken data.

The data from the Spanish L1 language learners of Japanese were extracted using the following search criteria:

² For more details, see <https://chunagon.ninjal.ac.jp/static/ijas/about.html>

「品詞」の「中分類」が「助詞／格助詞」³

「書字形出現形」が「の」⁴

Each case of misuse is extracted and analysed based on the type of target phrase it occurred, the modified noun, and the learner's Japanese level.

Results

The numbers of participants that produced an overuse of 'no' across proficiency levels as determined by Simple Performance-Oriented Test (SPOT) are shown in Table 3. There were no participants from below 30 and above 79.

Table 3: The number of participants who produced overuse of 'no' per SPOT score range

SPOT score	30-39	40-49	50-59	60-69	70-79
Number of participants producing overuse	0 (n=1)	4 (n=10)	13 (n=24)	6 (n=10)	2 (n=5)

There are a total of 3533 cases of 'no' in which 136 are identified cases of misuse. There are 109 cases that are evidently misuse of 'no', while 27 cases are considered miscellaneous as the phrases were incomplete to clearly determine the misuse or that does not identify as any of the target phrases. For example, the first "good's" in "いいの、いいの魚" (good's, good's fish) is taken as a miscellaneous while the second "good's fish" is counted as a misuse; and 二日の働く (*futsuka no hataraku*; two day's working) where the modified is a verb rather than a noun. The number of misuses in the different phrases are indicated in Table 4.

Of the fifty participants, thirty-three produced one misuse and the number of misuses per participant range from one to thirty-eight.

Table 4: The total number of misuses and its examples per target phrase

	NP	TAP	NAP	VP
Total number of misuses	1	77	9	22
Examples	コーヒーの屋* <i>Koohii no ya</i> coffee's shop	高いの場所* <i>takai no basho</i> high's place	大変の病気* <i>taihen no byouki</i> hectic's illness	あるの日* <i>aru no hi</i> one's day

³ Translates to "part of speech in medium classification is particle/case particle"

⁴ Translates to "in the form of no"

The number of cases of misuse across the SPOT proficiency test of the four target phrases is indicated in Figure 2.

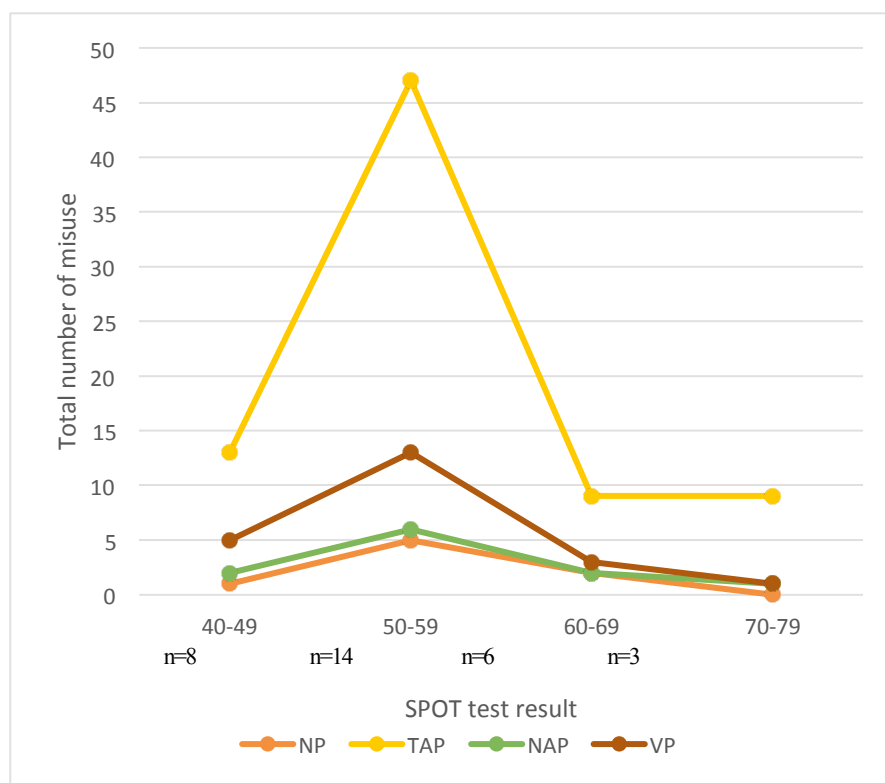


Figure 2. The total number of misuses of the four target phrases across SPOT scores

Within the 109 cases, there are 30 cases in which the misuse occurs with specific modified nouns, i.e. in grammatical points (see Table 5). The modified noun of the remaining 87 cases are not of any grammatical points, e.g. 新しいの人 (*atarashii no hito*; new's person), いいの歌 (*ii no uta*; good's song), 行ったの山 (*itta no yama*; went's mountain), わるいの子供 (*warui no kodomo*; bad's child) and きれいの町 (*kirei no machi*; beautiful's town).

Table 5: The number of misuses as categorised by grammar

Grammar	～ (の) ところ	～ (の) こと	～ (の) 中	～ (の) とき	～ (の) 方	～ (の) あと	～ (の) ため
Romaji	～ (no) <i>tokoro</i>	～ (no) <i>koto</i>	～ (no) <i>naka</i>	～ (no) <i>toki</i>	～ (no) <i>hou</i>	～ (no) <i>ato</i>	～ (no) <i>tame</i>
Number of misuses	5	5	1	9	6	1	6

Lastly, there is one case where the modifying part of speech is in its negative form compared to 108 cases in its affirmative form: 難しくないの本 (*muzukashikunai no hon*; not difficult's book).

Discussion

The results are summarised as below:

1. Spanish L1 learners produced overuse of 'no' across all four target phrases
2. The highest number of overuses is found in TAP, VP, NAP and NP respectively
3. Some overuse of 'no' occur in specific grammatical points

It is evident that Spanish L1 learners of Japanese produce the overuse of 'no' in all four target phrases. The SPOT scores thirty or below indicates beginner or novice level, thirty to sixty is intermediate and sixty and above is advanced and higher. That is, the highest number of overuses are found at the intermediate or high intermediate proficiency level. Although the proficiency test in I-JAS and KY corpus varies, assuming that proficiency tests are fairly standardised, both Koyama (2006) and this study suggest that the learners around the intermediate proficiency level produce the most misuses. Furthermore, Figure 1 and 2 show similar changes in the number of misuses across proficiency levels, i.e., maximum number of misuses around intermediate and reduces as the proficiency advances. In other words, Spanish L1 learners undergo a similar pattern of misuse to that of Chinese, English and Korean L1 learners of Japanese indicating that the misuse is more likely due to a general developmental trend. In other words, it is important for educators, particularly those teaching the intermediate Japanese proficiency, to understand that this is inevitable and perhaps even after multiple corrections that the misuse will remain, to prevent any potential resentment that may impact on the teaching and learning.

One interesting difference between the acquisition of L1 and L2 in relation to 'no' is that all Japanese L1 children experience specific developmental stages to finally acquire 'no' (Koyama, 2006), whereas there are roughly half of the L2 learners per proficiency who don't display any misuse of 'no'. Koyama (2006) did not indicate the number of participants who did not displayed the misuse, thus it is not clear whether his study also found this. This is perhaps further evidence to suggest that L1 and L2 acquisition is very cognitively different and/or that L2 learners may experience different acquisitional

processes in learning ‘no’. In addition, L2 learners also demonstrated an overuse of ‘no’ in NPs where this was not mentioned in L1 acquisition. Perhaps, there is an urge for learners to insert ‘no’ where possible and/or that there is confusion between ‘no’ as the possessive marker and the function of nominalisation where it is to be attached to true adjectives and verbs.

This study found that the number of misuses is highest in TAP, VP, NAP and NP respectively. Perhaps there are two reasons why this is the case. Firstly, again, there is an ‘urge’ to insert something between two words. In NAP, learners need to determine whether it is a ‘na’ or a ‘no’ inserted and, of course, learners need to insert ‘no’ to join two nouns, i.e., a conjunction is needed to modify a noun in both these cases, which is two of four types of phrases. This rule caused a habit of insertion whichever ‘parts of speech’ is the modifier, i.e., applied to TAP and VP, hence causing this tendency to overuse ‘no’. Secondly, the corpus spoken data are based on the four language tasks: storytelling, interview, role play and picture description. Storytelling and picture description task itself have a description focussed nature. The interviewers have a tendency to ask “what kind of” questions to elicit more information from the participants in the interview, e.g. “What kind of movie was it?”, which provoke descriptive answers. Thirdly, there are extensively more true adjectives taught and higher in frequency than noun adjectives particularly in the earlier proficiencies⁵. That is, with the more learnt vocabularies of true adjectives, under the tasks that elicit descriptions, learners are more likely to use true adjectives when describing or modifying the noun. In addition, VP are more difficult and are learnt later in the textbooks. As previously mentioned, due to the nature of the search criteria only overuse of ‘no’ can be identified hence the case of NP, i.e., underuse of ‘no’ cannot be counted like in Koyama’s study. In other words, due to the relative lack of vocabulary of noun adjectives, the more difficult production of VP, and the inability to identify underuse of ‘no’, it is perhaps reasonable that misuse of ‘no’ in TAP is more frequently produced increasing the probability of its misuse. Furthermore, VP is second highest as, again, noun adjectives are perhaps less familiar than verbs in the vocabularies learnt.

Through the analysis of each case of misuse, this study also found that some overuse of ‘no’ are in grammatical points, e.g., ～ (の) ため ((no) tame; for the sake of) and ～ (の) とき ((no) toki; when). Although the majority of the modified noun in the misuse are simple nouns, such as home, dog and people, the grammatical points have caused some

⁵ Determined by textbook series Genki and Minna no nihongo

level of chunking, i.e., learning ‘no tame’ or ‘no toki’ as a set rather than ‘no’ as an additional insertion when the modifying part of speech is a noun. Although chunking is a useful cognitive strategy for learning, it isn’t without side effects as in this case. Thus, it is important for educators to raise awareness on chunked information, such as through focussing learner’s attention to the target error and providing feedback accordingly.

Interestingly, there is one case where the modifying word appeared in a negative form compared to the 108 cases of affirmative forms. In Japanese, both affirmative and negative forms of the part of speech can grammatically modify a noun, e.g., 高くない木 (*takakunai ki*; not tall tree), きれいじゃない山 (*kirei janai yama*; not pretty mountain) and 走らない人 (*hashiranai hito*; not running person). However, its overuse of ‘no’ in this case have not been observed in past literatures. Perhaps, a reason may be because the affirmative form is more frequent than negative form in modifying nouns, or that the affirmative is the most basic form while the negative form is an additional alteration of the basic form. In other words, it requires extra cognitive capacity, which may not be readily available during second language tasks that already has a high cognitive demand. However, more investigation is required to understand this.

This study presented three main research questions and the answers are as follows:

1. Do Spanish L1 learners of Japanese misuse ‘no’?

Yes. Spanish L1 learners of Japanese overuse ‘no’ in all four target phrases with the overuse most observed in the TAP, VP, NAP and NP respectively.

2. If they do, is this due to a developmental trend?

Yes at first glance. The changes in the number of overuse peaks at around the intermediate Japanese proficiency and decline as the proficiency advances, which resembles Koyama’s (2006) and others’ research (e.g. Chan, 2014; Okuno, 2005) of learners with other L1s. However, only half of the participants in each proficiency group overuse ‘no’. If the cause is solely due to the developmental process, then maybe we should expect to observe misuse from more participants. Additionally chunking seems to also play a role, but this may or may not be part of the developmental trend.

3. Are the results similar to Koyama (2006)?

Yes and no. As mentioned above, the overall trend of the number of misuses across proficiency level is very similar to that presented in Koyama (2006), however not

only is there half the participants who did not show any misuse, there are also interesting cases like the overuse of ‘no’ in noun phrases and the negative form in the modifying, which was not present in Koyama (2006) or past literatures.

Limitations and future research

Although this study indicated insights into Spanish L1 learners of Japanese and their misuse of ‘no’, alike most corpus studies, it lacks the speculations into the socio-cultural perspectives learning, which also plays a significant role in language production. Secondly, most past literatures conducted experimental or corpus study which lacked qualitative insights. Additionally, each case of misuse was extracted based on I-JAS markings of error, however, the author noticed that a case of overuse lacked this marking, as such there may be other cases overlooked during data extraction. Lastly, due to limited resources, the current study only analysed the overuse of ‘no’, which lacked insights into the underuse in NPs, and did not investigate the correct use of ‘no’. Future research may address these to provide a bigger picture from different insightful perspectives to better understand the L2 learners and their learning of Japanese. It may also be interesting to research into chunking as a cause of the misuse and whether it is a part of the developmental process in acquiring ‘no’.

Conclusion

The current study is a corpus study examining the spoken data of Spanish L1 learners of Japanese to understand whether they misuse ‘no’, the trends of the misuse and whether it is similar to a past literature. Spanish L1 learners show overuse of ‘no’ similar to the past literature, where the misuse peaks around the intermediate proficiency and declines as proficiency advances, which suggests a developmental cause. However, further non-corpus studies are required to investigate this topic to paint the bigger picture.

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