## A Longitudinal Study of Japanese Students' L2 Oral Grammar

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#### **Abstract**

It is assumed that our educational lectures and materials are having some impact on students' knowledge and skills. This longitudinal study examined the reality of how Japanese L2 students' accuracy in English changed over an academic year. In April and May 2018, 23 Japanese students gave a self-introduction monologue, which was repeated again in early 2019. These L2 interactions by Japanese speakers formed the JUSFC2018 corpus and the JUSFC2019 corpus. Research questions related to whether or not there was a significant difference between in grammatical accuracy from the first interview session to the second year (regarding errors in clauses per 100 words, global errors and local errors, and in specific errors related to parts of speech) and what were the most frequently occurring errors in both corpora. Descriptive statistics showed marginal differences in error-free clauses per 100 words and with clauses with errors per 100 words. Similarly, while global errors did decline, local errors did increase; there was a 27.3 percent increase in local errors though the overall percentage in total words spoken decreased by half. For errors related to parts of speech, a t-test confirmed there was a significant difference between the two speech corpora. As for error reoccurrence, four types of errors were noted: incorrect phrasing, article omission, preposition omission, and errors related to plurals. No improvement in oral grammatical accuracy was noted, with some errors doubling or worsening significantly. This data highlights the difficulty of L2 teachers of having students selfedit themselves and paying more attention to being more accurate with their speech.



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#### Introduction

One of the important issues when evaluating students' language skills is in understanding that passive knowledge can be vastly different from student output. For example, standardized test scores on grammatical forms may reflect a level of consciousness (or the ability to discern the right answer) instead of how that student might be able to use these forms in impromptu speaking or writing. All too often, many educators lose sight of this distinction, and as a result, continue to rely on too many communicative-type tasks such as shadowing, fill-in-the-blanks, short-answer replies that avoid the realistic nature of communication (pragmatic norms, turn-taking, and the issue of actual production. Both teachers and students naturally assume that some degree of language learning will take place as a result of outside factors such as MEXT directives, and overall school curricula, as well as the various in-class tasks, tests, and presentations that are given over the school year.

This study seeks to provide a glimpse of how students' grammatical accuracy has improved regarding monologic speech. In the study, Japanese L2 students provide a 4 to 10-minute self-introductory monologue, in 2018 and another in early 2019 before the end of the academic year: the transcripts make up the JUSF2018 corpus and the JUSFC2019 corpus. The research questions focus on whether or not there was a significant difference between in grammatical accuracy from the first interview session to the second year (regarding errors in clauses per 100 words, global errors and local errors, and in specific errors related to parts of speech) and what were the most frequently occurring errors in both corpora. By better understanding the kinds of errors that students initially make in their spontaneous speech, and how these errors change (or do not change) over time, allows educators to better focus time and energy on issues relating to fossilization and editing. As Corder (1967, p. 167) notes, that "learners' errors can also provide to the researcher evidence of how language is learned or acquired, what strategies or procedures the learner is employing in the discovery of the language." In short, the issue of acquisition is a crucial issue for educators as it shows which forms students are effectively able to use and master in their L2 conversations.

### **Review of Literature**

## Sources and treatment of errors

Error correction in interlanguage has a long history. In 1971, Richards cited four significant types or causes of intralingual (developmental) errors: overgeneralization, ignorance of rule restrictions, incomplete application of rules, and false concepts hypothesized. Later Richards (1974) identified seven sources of errors, namely, (a) interference, (b) overgeneralization, (c) performance errors, (d) markers of transitional competence, (e) strategies of communication and assimilation, and (f) successions of approximative systems, (g) universal hierarchy of difficulty. Thus, researchers realized that at the beginning of language learning, performance would be impacted by the interlingual transfer from the native language. Researchers also identified two types of errors: performance errors (often made by learner's carelessness) and competence errors (mistakes due to inadequate learning), which were later termed mistakes by Gefen (1979). Selinker (1972) was the first to discuss the learner's "interlanguage" and the problem of fossilization, mainly how the L2 can

be influenced by the learner's native language, interlanguage, and target language. Errors are also categorized into omission, substitution, addition, and permutation (Corder 1973) and Chaaraoui (2017) found in his study on monologues the error types ranked as follows (1) 25 types of erroneous substitutions, (b) 23 types of erroneous omissions, (c) 11 erroneous additions, and (d) 6 erroneous permutations. This led Ellis (2003) to observe, "Form-focused instruction . . . needs to be in context. As the academic context is foreign, form-focused writing would be very helpful in making the L2 grammatical norms recognizable. Teaching English as a means of communication would be very productive as a great deal of errors can be corrected" (p.100).

Terrell (1991) presents evidence that direct grammar instruction did not guarantee L2 learners the ability to engage in spontaneous conversation freely. On the other hand, she demonstrates in her research that grammatical knowledge plays a significant role in the learners" overall language proficiency. Many researchers who are programmarians, such Ebsworth and Schweer (1997), promote that knowledge of accurate grammar helps accuracy and increases the speed of L2 learning and acquisition, and Terrell's study does reveal the strong relationship that grammar has with all language skills. However, in responding to errors, James (1998) proposed that educators use techniques to enhance the students' accuracy in expression. He also discussed the importance of students' affective factors in correction to avoid facethreatening issues. Touchie (1986) states that teachers should only correct errors affecting intelligibility, concentrating on global errors rather than on local errors. Furthermore, she argued that high frequency and generality errors should be corrected more often than less frequent errors, for example, plurals. The commonality of errors is another issue that should attract the attention of educators. A third issue is that of irritability, which, according to Touchie, relates to errors that may elicit ridicule from students in higher socioeconomic classes.

## **Preliminary Research**

Preliminary research focuses on the results of two studies. The first study (Long and Hatcho, 2018) studied intralingual and interlingual errors from L2 conversations Based on the Japanese University Student Corpus (JUSC). 1 An inventory taken from this corpus, containing 400 errors in context, was formed for teachers to rate the errors as being intralingual, interlingual, or undetermined. A second aim was to identify frequently occurring errors. The results from this study indicated that 35% of the 400 errors were deemed as being intralingual [859 responses], 51% were seen as interlingual [1233 responses], and 12.5% were undetermined [301 responses]. In addition, the primary errors were as follows: incorrect use of articles (381), incorrect verb tense form (162), incorrect use of prepositions (158), the omission of verbs (152), modifier errors (111), and incorrect subject-verb agreement (76). The study highlighted the commonality of particular errors and the issue related to fossilization. Regarding other kinds of errors, the misuse of plurals, deletion of words, and wording/rephrasing were the most common mistakes. In short, the researchers concluded that L1 is a factor in grammatical accuracy.

The second study focused on another corpus (in which this study is based) and examined grammatical accuracy in dialogic output. Results showed that global errors showed a significant decline, while local errors increased from 97 to 158 errors. As

for errors related to parts of speech, a t-test confirmed there was a significant difference (t (23) = 2.19366, p < 0.0386), between the two speech corpora, but with more error frequency occurring in the 2019 corpus. While the number of words spoken did increase by 549, the number of local errors increased by one-third, from 97 to 158. There was minimal change in errors concerning lexical phrases, articles, and propositions, modifiers; however, in regards to noun phrases, errors increased dramatically, from 4 to 13 for subject formation and using plural forms correctly, 14 to 21. Agreement was also problematic in verb phrasing.

# The Study

#### Rationale

The study aims to see if students progress in their grammatical accuracy as it relates to their verbal output. As tasks, homework assignments, and test scores are poor indicators as to students' actual performance; progress must be gauged only on actual spontaneous output. Thus, teachers need to examine errors in clauses per 100 words, global and local errors, and specific parts of speech.

## **Research Questions**

Question 1: Do error-free clauses and clauses with errors per 100 words change significantly over the year in monologic speech?

Question 2: In monologic speech, do global and local errors change significantly over the year?

Question 3: Do students become more accurate with specific grammatical forms and wording in their self-introductory monologues? Which forms showed the least improvement or worsened? Will the data in monologic output reflect similarities that were found in dialogic output?

# **Transcripts**

Twenty-seven Japanese students were asked to give a self-introduction monologue, which was then followed by a three-question dialogue. Based on the TOEIC scores of these participants, three groups were formed, with the first group having scores that ranged from 150 to 370, the second from 371 to 570, and the third from 571 to 770. The interactions were videotaped and transcribed, and the transcriptions make up the Japanese University Student Fluency Corpus (JUSFC2018), which has 23,539 words, and the JUSFC2019, which has 5,460 words.

These videotaped interviews were started in April and May 2018. Students did not know of the contents or questions of any topics beforehand. Students gave written permission for the videotapes to be used for research purposes and to be shown in conferences. Students were not paid for their interviews; coding of the transcripts reflects the Conversational Analysis Conventions. See Appendix A for three examples of transcripts from the three groups, starting at the lowest range.

#### Results

In examining the first research question, concerning Japanese L2 grammatical accuracy with error-free clauses, clauses with errors / 100 words over an academic year, results showed for the 2018 corpus that Japanese students averaged 5.5 error-free clauses and 2.7 clauses with errors. In the 2019 corpus, a decrease in proficiency was noted with error-free clauses averaging 8.7, along with an increase of 5.2 in clauses with errors, resulting in a 58.1 percent increase in error-free clauses and a 92.5 percent increase for clauses with errors, see table 1. As for the second research question, see table 2, concerning the question relating to global and local errors, results showed that for global errors, significant differences existed regarding both the differences in total errors from both corpora, and in the overall percentages of the averages of errors. While a decrease in global errors is noted in the 2019 corpus, and 27.3% increase is noted in local errors as well.

The last aim of this study was to examine whether students become more accurate regarding specific grammatical forms and phrasing and to identify which grammatical forms showed the least improvement or worsened. In the preliminary study, it was found that there was minimal change in errors concerning lexical phrases, articles, and prepositions, pronouns, and modifiers; however, in regards to noun phrases, errors increased dramatically, from 4 to 13 for subject formation and using plural forms correctly, 14 to 21. Agreement was also problematic (in the preliminary study) in regards to verb phrasing, with students making 11 errors in 2018 and 18 errors one year later. In the monologic output, similar data was found, with minimal changes being noted in the same categories (except for pronouns and articles) and errors relating to noun phrases, see table 3. T-tests for the use of L1 showed significance t(27) = 3.401, p < 0.0021, with a mean differences of -2.64, SD = 4.111. As for error reoccurrence, four types of errors were noted: incorrect phrasing, article omission, preposition omission, and errors related to plurals.

Table 1. Phase 1 Analysis: Clause Analysis

Monologues	2018 Monologues	2019	
1. Error-free clauses per 100 words	2088 words 5.5 clauses	2015 words 8.7 clauses	
2. Clauses with errors per 100 words	2.7 clauses	5.2 clauses	

Table 2. Phase 2 Analysis: Global / Local Errors

	Total	%	Total	<u>%</u>
Global Errors 0.03	6	0.28	2	
Local Errors 2.2	95	4.54	121	

Table 3. Phase 3 Analysis: Categorization of Errors

		Total	%	Total	%
Lexical phras	e choice				
0.29	Extraneous / incorrect phrasing Omission	1	12 0.04	20	16
0.03	Dangling misplaced modifier	0	0	0	0
Article errors					
0.67	Incorrect insertions Omission	0 30	0 1.43	0 37	0
0.67	Agreement	0	0	1	
0.01					
Prepositions	N.C.	-	0.22	0	0.1
	Misuse Incorrect insertion	5 0	0.23	8 1	0.1
0.01	Omission	11	0.52	10	0.1
Verb formation	on				
	Tense	3	0.14	8	0.1
0.10	Omission	4	0.19	6	
0.05	Agreement	0	0	3	
0.05	Form	3	0.14	7	
0.12	In compact work was as	2	0.00	2	
0.05	Incorrect verb usage	2	0.09	3	
Pronouns					
0.18	Misuse	3	0.14	10	
0.18	Omission	0	0	1	0.1
Nouns / noun				- 0	
0.36	Singular/plural errors	10	0.47	20	
	Subject formation	4	0.18	5	
0.09	Agreement: gender, number Omissions	0 1	0 0.04	0 2	0
0.03	Omissions	1	0.04	2	

Conjunctions / transitional signals

	Omission	0	0	0	0
	Incorrect insertions	0	0	0	0
	Misuse	0	0	1	
0.01					
Modifiers					
	Incorrect use of adjectives	5	0.23	5	
0.09					
	Incorrect use of Adverbs	1	0.04	3	
0.05	·	0	0		0.1
	Incorrect insertion	0	0	1	0.1
	Incorrect relative pronoun	0	0	1	0.1
Other					
0 02202	Affixation-related errors: misuse of				
	prefixes or suffixes	0	0	0	0
Total		101		140	2.5

#### Discussion

Concerning the aims of this paper, it was found that students' speech worsened over the school year. Similar results were found in both dialogic and monologic output. As to *why* students are showing no progress in their grammatical accuracy, the answer lies in the lack of attention given to communicative output and performance: knowledge of particular forms of any L2 does not necessarily reflect the subject's ability to use the forms correctly in spontaneous speech. The results also show the need for teaching students about the importance of *editing* their speech.

Educators also are challenged in giving feedback to 30 or more students in any one class. The one positive change was that global errors were reduced, so students were able to gain some level of mastery of English phrasing and usage. The data also points out that L2 educators in Japan need to work more with noun phrasing, articles, and pronouns with special attention given to articles, which do not exist in L1.

More practice will be needed to overcome the issue of knowledge of L2 not reflecting the correct usage in spontaneous speech. Perhaps attentive feedback from teachers will encourage students to notice their mistakes. The challenge is upon teachers as well as students in class sizes of 30 or more, which requires time-consuming dedication to edit their speech. Without such efforts, students' speech will not change or even worsen in some cases.

## Conclusion

The study points out the importance of understanding the overall issue of student progress. While test scores and homework tasks might indicate a student's familiarity and knowledge of a form or language issue, this may or may not be able to be adequately expressed in spontaneous interactions. We feel that these data represent a

broader problem with many L2 students throughout the world, as little attention is paid to grammatical accuracy in both dialogic and monologic output, and due to the difficulty of teachers providing this feedback. Thus, it is argued that the issue of fossilization requires more attention, along with students editing their speech. The data shows that the field of error analysis (EA) is still important and that educators need to stand back and to look more deeply at the students' progress over the school year.

## **Notes**

- 1. The Japanese University Student Corpus (JUSC) can be found at www.genderfluency.com.
- 2. This article is now under consideration with JALT's *The Language Teacher*.

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# Appendix A. Transcripts from the Japanese University Student Fluency Corpus 2019, 5,460 Words

Name: H. W. TOEIC score: 290 Monologue

Oh  $\uparrow$ , (7.8) (laughter) eh: (6.2) I belong to (.) shourijin kempo club and karate club, and ki-, *kidadorokon* there club is so fun. (4.8) but  $\uparrow$  (.) very busy (12.7) I continue to continue to do these (17.3) my hobby is in, my hobby,  $\uparrow$  I (11.2) in holiday, I: (2.6) I can bring game a TV game.

Name: K. O. TOEIC score: 470 Monologue

I'm nineteen years old; I'm going to (2.0) go abroad, (2.4) next month, in Australia, to study English, (1.8) but uh my English skill is very low so $\uparrow$  I want to (3.6) I want to  $\downarrow$  (2.4) skill I want to skill up skill up $\uparrow$  about English. (5.7) (laugh) so eh (1.3) I: ah: I study English every day to (6.1) go abroad.

Name: A. S. TOEIC score: 770 Monologue

I I'm from Fukuoka (.) city↑ and I'm nineteen years old. I: ↑ come to this school to: (1.8) study about machine, and I'm interested in space engineering, so I want I want to go to the space engineering course, but it is very: (1.3) high, it is very high (3.4) it is very difficult to go to the course, so I have to study hard \( \) now\( \) (laugh) I (2.0) uh\( \) I: (3.8) I: (3.4) I talk about my family \( \) I my my brother is (2.1) two two years older than me, so he is greatful in university, he go he\ goes to university in Tokyo so he (.) this \( \) spring he has to start job (laugh) (2.8) job: finding \( \) so so: this new year's vacation, he bought a new suit, ( ) (suit) because he has to work hard to get a better job, but he doesn't do anything about that, so my parents, (2.9) parents said said him a lot of things. (laugh) and and we I went to Taiwan in (3.0) summer vacation with my family, and then my mother broke her arms bone in Taiwan, he slipped, (2.2) it was raining, ↑ so he slipped in the road, and when he slipped, he broke her right arm's bone, and uh, we he of course she has she had to go the hospital, and we we called am- ambulance, and she went to the hospital. (laugh) It we went to Taiwan three days, but she broke her arm in day two\, so I we cannot enjoy Taiwan very much (laugh) and even now\(^\) she went to hospital to (.) to to do rehabilitation and she she (1.8) she is tired about that, she she said she she doesn't want to go Taiwan (laugh), so and uh (5.6) my cousin↑, my cousin↑ start starts to have (1.4) uh a pet dog, a very small dog, and it is about one kilogram, very small dog, and my cousin is nine vears old, and she always say she wants to have a dog but her parents (1.6) didn't say yes, because it is very difficult, and need many time to have a dog, so: but (3.2) last week, her parents bought a dog for her, and uh she is very happy now, she (2.1) she often comes to my home to get dinner together, but now she did she doesn't want to come to my home because she wants to play with her dog in her home. My my home is apartment, so dog can not come in my home, so she didn't she doesn't want to come my home. I I like dog, but I like dog, but (2.1) I I don't like to touch it. (laugh) I like just seeing, (laugh) so I I: (3.6) and her dog is very small, so I I'm very (2.9) ner- nerv- to touch it.