# Simultaneous Bilingual Language Acquisition: A Case Study of English-Japanese Bilingual Children in Christchurch\*

# Mineko Shirakawa University of Canterbury

# 1. Introduction/Background

This study is concerned with simultaneous bilingual language acquisition in Japanese and English by children aged between five and ten years old in a predominantly English speaking environment. Lauwereyns (2011) demonstrated that Japanese parents of children in New Zealand are concerned that their children's Japanese oral and literacy skills are lagging behind their English skills. The current study examined whether this concern is justified by comparing the Japanese and English narratives of children who were similar to those whose parents were studied in the Lauwereyns study.

## 2. Methodology

The participants were nine children aged between five and ten years old who have a native English speaking father and a native Japanese speaking mother, and are being raised in a 'one person - one language' environment in Christchurch, New Zealand. The narratives were generated using the wordless picture book 'Frog, where are you?' (Mayer, 1969) and the protocol developed by Berman and Slobin (1994) for examining narratives across languages. Each participant told the story twice, once in Japanese and once in English. The narratives were video- and audio-recorded, and transcribed and analyzed from the perspectives of the numbers of codable clauses, encoded components and grammatical errors. Vocabulary and sentence structure were also examined.

Narratives stimulated using 'Frog, where are you?' have been widely used internationally and have been found to deliver useful data on a wide range of languages. Importantly, the task of retelling the story encourages children to produce complete sentences to convey the plot. Casual conversation in all languages, by contrast, is characterised by incomplete utterances which may not provide clear evidence for the level of language development. This is particularly the case in Japanese where constituent ellipsis frequently happens in natural usage. Therefore, if we want to observe and compare children's command of the two languages, retelling a story is more appropriate.

#### 3. Results

#### 3.1. Number of codable clauses

A codable clause is the basic unit of analysis. Berman and Slobin (1994) defined it as 'any unit that contains a unified predicate, which expresses a single situation (activity, event, or state), including finite and non-finite verbs as well as adjectives. The number of codable clauses in the narratives gives an idea of the propositional complexity of the narratives and therefore indicates whether or not there is a difference in complexity between two narratives in different languages produced by the same child. It also enables us to compare the data in this study with other published studies. An example of codable clause analysis is given in Appendix A.

Figure 1 shows that all nine of the children's English narratives contained more clauses than their Japanese narratives. Berman and Slobin (1994) point out that 'children aged 5 to 9 years produce texts of much the same length across the languages, with an average of about 40 clauses per text', suggesting that the number of codable clauses can be compared on an equal basis cross-linguistically. The biggest difference in number of codable clauses is 17 in Participant H, then, 16 in D. The differences between the narratives of the youngest two children are relatively small.

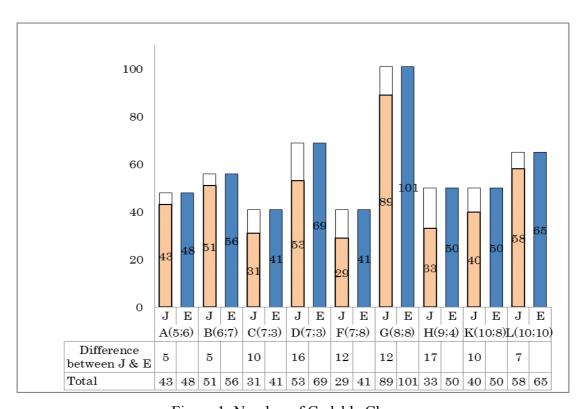


Figure 1: Number of Codable Clauses

## 3.2. Number of grammatical errors

Figure 2 shows the number of grammatical errors. The youngest participant A is the only one who made more errors in the English narrative than in the Japanese version. The other 8 children made more errors in their Japanese narratives than in the English narratives.

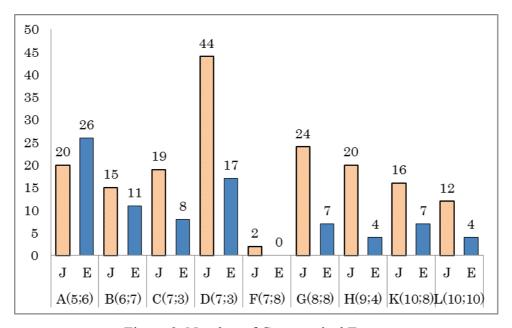


Figure 2: Number of Grammatical Errors

The errors counted in the English narratives are: (i) Article error (e.g. drop or wrong use of a/an/the/this etc.), (ii) Person and number agreement error (e.g. drop of plural -s, third person singular -s), (iii) Failure of the sequence of tense, (iv) Irregular past form error (e.g. holded), (v) Improper use of words (e.g. wrong prepositions such as a hole \*of the tree). The errors counted in the Japanese narratives are: (i) Particle error (drop or wrong use of -ga, -o, -ni, -wa etc.), (ii) Constituent ellipsis (subject and object drop) that makes the sentence ambiguous, (iii) Improper use of words (e.g. a passive morpheme in the active predicate).

# 3.3. Details of grammatical errors in Japanese narratives

Figure 3 shows the proportions of different types of grammatical errors in the Japanese narratives in detail. One third of the grammatical errors in the Japanese narratives were particle errors, and two thirds of the particle errors were instances of case particle drop.

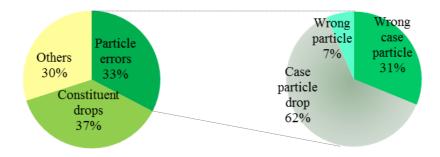


Figure 3: Details of Grammatical Errors in Japanese Narratives

Case particle drop is also a feature of the language of monolingual children. Suzuki (1999) found an asymmetry in case particle drop between the subject case particle -ga and the object case particle -o. The Japanese monolingual children in Suzuki's study dropped the case particle on objects more often than the case particle on subjects. Moreover, Suzuki found that case particle drop decreased with age, with the drop of the subject marker decreasing more markedly than the drop of the object marker.

The children in the present study, on the other hand, showed a range of patterns in case particle drop in their narratives. Two children dropped the object case more often than the subject case, four children dropped the subject case more often than the object case particle, two children dropped both particles quite evenly, and one child did not drop either particle.

The discrepancy between the results of Suzuki's study and the current one raises the question of whether the children being raised in Christchurch are actually child L2 or billingual L1 learners with respect to the case marking system in Japanese.

#### 3.4. Instances of code mixing

Figure 4 shows the number of instances of code mixing in the narratives of the children in this study. Seven of the nine children used English words in their Japanese narratives. By contrast, there was only one case of a Japanese word being used in an English narrative: from the youngest child A. Participant D, seven years old, used ten English words, *frog, moon, jar, chase, deer, lake, happy, listen, log,* and *climb* in the Japanese narrative. Interestingly, children often gave a paralinguistic signal such as a pause, hesitation, or eye contact for permission, when they used English words in the Japanese narrative. An example of code mixing is given in Appendix B.

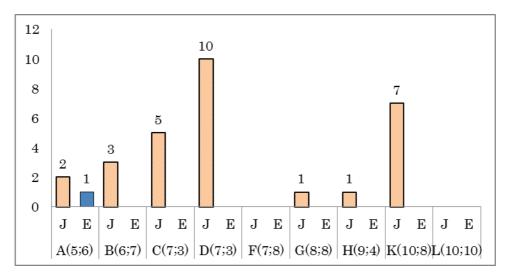


Figure 4: Instances of Code Mixing

#### 4. Conclusions

The findings of this study largely corroborate parental views of the children's bilingual acquisition. The collected narrative data and analysis in this study suggest that the older children show a gap in proficiency between the two languages that they are acquiring: they produced fewer grammatical errors and more complex sentences, and knew more of the relevant words in English than in Japanese. Younger participants showed more balanced levels of development between the two languages. The nature and patterning of the grammatical errors in the Japanese narratives suggest that the bilingually raised children in Christchurch may not follow the same course of acquisition as monolingual children in Japan with respect to the case marking system in Japanese.

#### References

Berman, R. A., and Slobin, D. I. (1994). *Relating events in narrative: A crosslinguistic development study*. Hillsdale, N.J: Lawrence Erlbaum Associates

Lauwereyns, S. S. (2011). Japanese-English bilingual development in New Zealand: Parental attitudes and children's literacy and communication skills. *New Zealand Studies in Applied Linguistics*, 2011, 17 (1) 49-69

Mayer, M. (1969). Frog, where are you? New York: Dial Books for Young Readers

Suzuki, T. (1999). *Two aspects of Japanese case in acquisition*. Doctoral dissertation. The University of Hawaii at Manoa

# Appendix A

#### Example of codable clause analysis

Participant A (5;6) looking at Figure 5 – Picture 1

- (1) English: 7 codable clauses, 2 encoded components, <u>boy awake</u> and <u>frog gone</u>

  When it is morning/ <u>he wake up</u>/ and he thought/ he wanted to say hello to that frog,/ but he forgot,/ and frog wasn't here,/ that's why.
- (2) Japanese: 3 codable clauses, 2 encoded components, boy awake and frog gone

  Soshite otokonoko-ga asa -ni naru-to/ oki -ta -ra/

  and boy -NOM morning-in turn-when wake.up-PAST-when

  kaeru-ga i -naku-nattei-mashi-ta.

  frog -NOM exist-NEG -turn -POL -PAST

  'When it is morning, when (the) boy woke up, (the) frog had gone.'

# Appendix B

# Example of code mixing

Participant D (7;3) looking at Figure 5 – Picture 19

- (3) Sorede {i} inu-to otoko *listen* shi-te-ta.and {} dog-and man listen do-ASP-PAST'And (the) dog and (the) man were listening.'
- (4) Sorede {log-no} log-de kikoe-ta.and {log-GEN} log-at hear-PAST'And (the boy) heard (something) at (the) log.'





Figure 5: Picture 1 and 19 in 'Frog, where are you?' (Mayer, 1969)

<sup>\*</sup> I would like to express my gratitude to Dr. Susan Foster-Cohen, my supervisor, for her guidance, and also to the nine children and their parents who participated in this study. I thank two anonymous reviewers for their helpful comments.