

The Distinction between Case Markers and Postpositions in Early Child Japanese: New Evidence for Children's Grammatical Conservatism

Koji Sugisaki
Mie University

1. Introduction

In Japanese, noun phrases are in most cases accompanied by postpositional particles. It is widely accepted that these postpositional particles can be divided into two subclasses: case markers such as the nominative *ga* and accusative *o*, and postpositions such as *kara* 'from' and *e* 'to'.

- (1) Ken-ga Tokyo-kara New York-e nimotu-o okutta.
Ken-NOM Tokyo-from New York-to package-ACC sent
'Ken sent a package from Tokyo to New York.'

The goal of this study is to examine the time course of acquisition of these two types of particles using longitudinal corpora for two Japanese-speaking children, and to demonstrate that these children distinguish between case markers and postpositions from the earliest observable stages. The findings of this study are consistent with the claim of children's "Grammatical Conservatism" (Snyder 2007, 2008, 2010), which argues that at least in their natural, spontaneous speech, children do not begin using a new syntactic structure until they have *both* determined that the structure is permitted in the adult language, *and* identified the adults' grammatical basis for it.

2. Case Markers and Postpositions in Japanese

Case markers and postpositions in Japanese share certain properties. For example, these postpositional particles appear immediately after a noun phrase, and nothing can

* I would like to thank Takuya Goro, Masatoshi Koizumi, William Snyder, and the audience at BUCLD 35 Poster Session for valuable comments. The usual disclaimers apply. This research was supported in part by a Grant-in-Aid for Young Scientists (B) from the Japan Society for the Promotion of Science (#21720174)

intervene between them despite the fact that Japanese has relatively free word order.

- (2) a. Kinoo Ken-ga kooen-e itta.
 yesterday Ken-NOM park-to went
 'Ken went to a park yesterday.'
- b. Ken-ga kinoo kooen-e itta.
 Ken-NOM yesterday park-to went
- c. Ken-ga kooen-e kinoo itta.
 Ken-NOM park-to yesterday went
- (3) a. * Ken-kinoo-ga kooen-e itta.
 Ken-yesterday-NOM park-to went
- b. * Ken-ga kooen-kinoo-e itta.
 Ken-NOM park-yesterday-to went

However, there are several syntactic phenomena that call for a distinction between case markers and postpositions. One such phenomenon is the distribution of floating numeral quantifiers (FNQ): As observed by Miyagawa (1989), while a floating numeral quantifier can be associated with a noun phrase accompanied by a case marker, it cannot take as its antecedent a noun phrase accompanied by a postposition.

- (4) a. San-nin-no gakusei-ga kita.
 three-CL-GEN student-NOM came.
 'Three students came.'
- b. Gakusei-ga san-nin kita. (FNQ)
 student-NOM three-CL came
- (5) a. Gakusei-ga san-dai-no kuruma-de kita.
 student-NOM three-CL-GEN car-in came
 'Students came in three cars.'
- b. * Gakusei-ga kuruma-de san-dai kita (FNQ)
 student-NOM car-in three-CL came

Another phenomenon that distinguishes between case markers and postpositions is the co-occurrence restriction with the topic marker *wa* and the focus particle *mo* 'also': While the topic marker *wa* and the focus particle *mo* 'also' can immediately follow

postpositions, they cannot appear immediately after case markers (Watanabe 2009):^{1,2}

(6) a.	Ken-ga	New York-e	nimotu-o	okutta.
	Ken-NOM	New York-to	package-ACC	sent
	'Ken sent a package to New York.'			
b. *	Ken-ga- <u>wa</u>	New York-e	nimotu-o	okutta.
	Ken-NOM-TOP	New York-to	package-ACC	sent
c. *	Ken-ga	New York-e	nimotu-o- <u>wa</u>	okutta.
	Ken-NOM	New York-to	package-ACC-TOP	sent
d.	Ken-ga	New York-e- <u>wa</u>	nimotu-o	okutta.
	Ken-NOM	New York-to-TOP	package-ACC	sent
e. *	Ken-ga- <u>mo</u>	New York-e	nimotu-o	okutta.
	Ken-NOM-also	New York-to	package-ACC	sent
f. *	Ken-ga	New York-e	nimotu-o- <u>mo</u>	okutta.
	Ken-NOM	New York-to	package-ACC-also	sent
g.	Ken-ga	New York-e- <u>mo</u>	nimotu-o	okutta.
	Ken-NOM	New York-to-also	package-ACC	sent

The existence of the syntactic phenomena that are sensitive to the distinction between these two types of particles has an immediate consequence for children's acquisition of Japanese: If we can show that Japanese-speaking children make adult-like judgments with respect to these phenomena, it would clearly indicate that these children already have the knowledge about the distinction between case markers and postpositions. An experimental study by Otsu (1994) is exactly one such attempt, which we will review in the next section.

1. Miyagawa (1989) provides a structural analysis of the contrast between case markers and postpositions concerning floating numeral quantifiers: While case markers directly cliticize onto a noun phrase, postpositions project a PP node, which in effect prohibits a noun phrase inside the PP from c-commanding the quantifier.

In contrast, the source of the co-occurrence restriction between case markers and *wa/mo* is not clear at this point, and has to be left for future research.

2. It has been argued in the theoretical literature that *ni* in Japanese has both the use as a dative case marker and the use as a postposition (e.g. Sadakane and Koizumi 1995, Miyagawa 1997). However, the topic marker *wa* and the focus particle *mo* 'also' are able to co-occur with either use of *ni*. In my transcript analysis, I will put aside *ni* that is arguably used as a dative case marker, and focus on *ni* that is clearly used as a postposition.

3. Case Markers and Postpositions in Child Japanese: A Previous Study

In order to determine whether Japanese-speaking children know the distinction between case markers and postpositions, Otsu (1994) conducted an experiment with five three-year-olds and five four-year-olds.³ The experiment made use of the contrast concerning floating numeral quantifiers illustrated in (4) and (5). In this experiment, each child was presented the following test sentences.

- (7) a. Kirinsan-ga san-biki ositeimasu.
giraffe-NOM three-CL pushing
'Three giraffes are pushing someone.'
- b. Raionsan-o san-biki ositeimasu.
lion-ACC three-CL pushing
'Someone is pushing three lions.'
- (8) a. Kirinsan-kara san-biki tyuu-o moratteimasu.
giraffe-from three-CL kiss-ACC receiving
'Three (unspecified animals) received a kiss from a/the giraffe(s).'
- b. Raionsan-no-mae-ni san-biki tatteimasu.
lion-GEN-front-at three-CL standing
'Three (unspecified animals) are standing in front of a/the lion(s).'

The task was an act-out: Each child was given five toy giraffes and five toy lions, and was told to act out what the sentences in (7) and (8) mean by picking up appropriate toy animals and manipulating them.

The results showed that children made no mistake when interpreting any of the test sentences in (7) and (8). When presented sentences in (7), children chose as the agent of *push* three giraffes for (7a) and as the patient three lions for (7b). Similarly, when presented sentences in (8), children chose as the recipient of *kiss* three lions for (8a) and as the agent of *stand* three giraffes for (8b). These results clearly indicate that Japanese-speaking three- and four-year-olds have the knowledge that a noun phrase with a postposition cannot function as the antecedent to a floating numeral quantifier, which suggests that these children are able to distinguish between case markers and postpositions.

3. See Matsuoka (1998) for a detailed study on the acquisition of Japanese case markers.

4. Case Markers and Postpositions in Child Japanese: A Transcript Analysis

Even though the results of Otsu's (1994) experiment convincingly demonstrate that the relevant distinction is already in the grammar of Japanese-speaking three-year-olds, a question remains as to whether younger children are also sensitive to the distinction between these two types of particles. In order to answer this question, I conducted a transcript analysis which investigates children's knowledge about the co-occurrence restriction between case markers and *wa/mo*, illustrated in (6). In this transcript analysis, two longitudinal corpora for Japanese from the CHILDES database (MacWhinney 2000) were examined, which provide a total sample of more than 42,000 lines of child speech. The corpora examined in this study are summarized in Table 1.

<i>Child</i>	<i>Age</i>	<i># of child utterances</i>	<i>Collected by</i>
Aki	2;06:15 - 3;00:00	12,415	Miyata (2004a)
Tai	1;09:03 - 3;01:29	29,980	Miyata (2004b)

(years;months:days)

Table 1: Corpora Analyzed

The CLAN program Combo, together with a file of Japanese case markers and postpositions, was used to identify potentially relevant child utterances, which were then searched by hand and checked against the original transcripts to exclude imitations, repetitions, and formulaic routines.⁴

The results are summarized in Table 2. Both Aki and Tai frequently produced "noun + case marker" and "noun + postposition" sequences. However, while the latter sequence was accompanied by *wa/mo* reasonably often, the "noun + case marker" sequence was almost never followed by these elements. The correlation between case markers/postpositions and the presence/absence of *wa/mo* was statistically significant for both children ($p < .05$ by two-tailed Fisher Exact Test). This sharp contrast between case markers and postpositions suggests that Japanese-speaking two-year-olds already have the knowledge that while postpositions can be immediately followed by *wa/mo*, case markers cannot. This finding in turn suggests that children distinguish between case markers and postpositions from the earliest observable stages.

4. The case markers included in the file were nominative *ga* and accusative *o*. The postpositions included in the file were *e* 'to', *de* 'in', *ni* 'at', *to* 'with', *kara* 'from', *made* 'through, till', *yori* 'than'.

Child	noun + case marker		noun + postposition	
	case marker only	case marker + <i>wa/mo</i>	postposition only	postposition + <i>wa/mo</i>
Aki	310	0	573	11
Tai	707	1	891	19
<i>TOTAL</i>	1017	1	1464	30

Table 2: The Number of Utterances in Children's Speech

5. Implications for Children's Grammatical Conservatism

There are a growing number of acquisition studies which indicate that children are "grammatically conservative": At least in their natural, spontaneous speech, children do not begin using a new syntactic structure until they have *both* determined that the structure is permitted in the adult language, *and* identified the adults' grammatical basis for it (e.g. Sugisaki and Snyder 2003, 2010, Snyder 2007, 2008, 2010, Rodríguez-Mondoñedo 2008). This claim of *Grammatical Conservatism* (GC) is based on the observation that, when we systematically examine the transcripts of a child's spontaneous speech, it is strikingly rare to find an actual error of "co-mission," where the child puts words or morphemes together in an ungrammatical way. Instead, the vast majority of errors are errors of omission, where required words or morphemes are simply omitted from the child's utterance. Thus, in their spontaneous speech, children appear to reserve judgment on points of grammatical variation, and refrain from actually putting elements together in ways that might turn out to be disallowed in the target language.

For example, in the acquisition of English verb-particle constructions illustrated in (9), children could in principle make co-mission errors as in (10).

- (9) a. Mary stood up.
b. Mary lifted the box up.
c. Mary lifted it up.
d. Mary lifted up the box.
- (10) a. * Mary lifted up it.
b. * Mary lifted up the box out.
c. * Mary lift up+ed the box.
d. * Mary will up+lift the box.

References

- Brown, Roger. 1973. *A First Language: The Early Stages*. Cambridge, Massachusetts: Harvard University Press.
- MacWhinney, Brian. 2000. *The CHILDES Project: Tools for Analyzing Talk*. Mahwah, NJ: Lawrence Erlbaum.
- Matsuoka, Kazumi. 1998. *The Acquisition of Japanese Case-particles and the Theory of Case Checking*. Doctoral dissertation, University of Connecticut, Storrs.
- Miyagawa, Shigeru. 1989. *Structure and Case Marking in Japanese*. San Diego: Academic Press.
- Miyagawa, Shigeru 1997. Against optional scrambling. *Linguistic Inquiry* 28, 1-25.
- Miyata, Susanne. 2004a. *Japanese: Aki Corpus*. Pittsburgh, PA: TalkBank. 1-59642-055-3.
- Miyata, Susanne. 2004b. *Japanese: Tai Corpus*. Pittsburgh, PA: TalkBank. 1-59642-057-X.
- Otsu, Yukio. 1994. Notes on the structural distinction between case markers and postpositions in the acquisition of Japanese grammar. In *Synchronic and Diachronic Approaches to Language*, ed. Shuji Chiba et al. Tokyo: Liber Press.
- Rodríguez-Mondoñedo, Miguel. 2008. The acquisition of differential object marking in Spanish. *Probus* 20: 111-145.
- Sadakane, Kumi, and Masatoshi Koizumi. 1995. On the nature of the “dative” particle *ni* in Japanese. *Linguistics* 33, 5-33.
- Snyder, William. 2007. *Child Language: The Parametric Approach*. New York: Oxford University Press.
- Snyder, William. 2008. Children's grammatical conservatism: Implications for linguistic theory. In *An Enterprise in the Cognitive Science of Language: A Festschrift for Yukio Otsu*, eds. Tetsuya Sano et al., 41-51. Tokyo: Hituzi Syobo.
- Snyder, William. 2010. Children's grammatical conservatism: Implications for syntactic theory. Plenary talk at BUCLD 35.
- Sugisaki, Koji, and William Snyder. 2003. Do parameters have default values?: Evidence from the acquisition of English and Spanish. In *The Proceedings of the Fourth Tokyo Conference on Psycholinguistics*, ed. Yukio Otsu, 215-237. Tokyo: Hituzi Syobo.
- Sugisaki, Koji, and William Snyder. 2010. Fragments in child English and Spanish. In *The Proceedings of the Eleventh Tokyo Conference on Psycholinguistics*, ed. Yukio Otsu, 253-268. Tokyo: Hituzi Syobo.
- Watanabe, Akira. 2009. *Seisei-Bunpo* [Syntax in Generative Grammar]. Tokyo: University of Tokyo Press.