

Children’s Grammatical Conservatism: Evidence from the Acquisition of Case Markers and Postpositions in Japanese*

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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 four 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 “Grammatical Conservatism” in children (Snyder 2007, 2008, 2011), 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 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*: While this element can immediately follow postpositions, it 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-wa New York-e nimotu-o okutta.
 Ken-NOM-TOP New York-to package-ACC sent
- c. * Ken-ga New York-e nimotu-o-wa okutta.
 Ken-NOM New York-to package-ACC-TOP sent

- | | | | | |
|----|---------|-----------------|-------------|---------|
| d. | Ken-ga | New York-e-wa | nimotu-o | okutta. |
| | Ken-NOM | New York-to-TOP | 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 of 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.

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 mistakes 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 with 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.

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 investigated children’s knowledge about the co-occurrence restriction between case markers and *wa*, illustrated in (6). In this transcript analysis, four longitudinal corpora for Japanese from the CHILDES database (MacWhinney 2000) were examined, which provide a total sample of more than 96,000 lines of child speech. The corpora examined in this study are summarized in Table 1.

<i>Child</i>	<i>Age</i>	<i># of files</i>	<i># of child utterances</i>	<i>Collected by</i>
Aki	1;05:07 - 3;00:00	56	22,026	Miyata (2004a)
Ryo	1;04:03 - 3;00:30	82	11,238	Miyata (2004b)
Tai	1;05:20 - 3;01:29	74	34,056	Miyata (2004c)
Jun	0;06:01 - 2;11:25	79	29,609	Ishii (2004)

(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. All these four children frequently produced “noun + case marker” and “noun + postposition” sequences. However, while the latter sequence was occasionally accompanied by the topic maker *wa*, the “noun + case marker” sequence was never followed by this element. The correlation between case markers/postpositions and the presence/absence of *wa* was statistically significant (at least marginally) for three children ($p < .05$ for Aki and Jun, $p = .05$ for Tai, by 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*, case markers cannot. This finding in turn suggests that children distinguish between case markers and postpositions from the earliest observable stages.

Child	noun + case marker		noun + postposition	
	case marker only	case marker + <i>wa</i>	postposition only	postposition + <i>wa</i>
Aki	310	0	573	8
Ryo	153	0	152	0
Tai	707	0	891	5
Jun	858	0	376	3
<i>TOTAL</i>	2028	0	1992	16

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, 2011; 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.

However, Snyder's (2007) near-exhaustive search for such errors in the longitudinal corpus for Sarah (Brown 1973) available in the CHILDES database revealed that Sarah made almost no co-mission errors: Sarah produced 102 examples of verb-particle constructions, and only one of them was unambiguously a grammatical error, which is provided in (11). Thus, the findings from the acquisition of English verb-particle construction provide us with clear evidence for GC in children's spontaneous speech.

(11) I [...] go down+ed. [Transcript 34, line 569, age 2;10:20]

The findings from the acquisition of case markers and postpositions in Japanese are consistent with the claim of children's GC. While Japanese-speaking children could in principle make co-mission errors as in (6b-c), in which case markers co-occur with *wa*, such an error was never observed: Children produced more than 2000 sentences which involved "noun + case marker" sequences, and none of them contained an error of the relevant type. Thus, the time course of the acquisition of case markers and postpositions in Japanese provides a new argument for children's GC.⁵

6. Conclusion

This study demonstrated that Japanese-speaking two-year-olds already have the knowledge that case markers cannot co-occur with the topic marker *wa*. The absence of co-mission errors in which case markers are immediately followed by *wa* not only suggests that children distinguish between case markers and postpositions from the earliest observable stage, but also constitutes a new piece of evidence from child Japanese for children's grammatical conservatism.

Notes

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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* 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 as a postposition (e.g. Sadakane and Koizumi 1995, Miyagawa 1997). However, the topic marker *wa* is able to co-occur with either use of *ni*. In my transcript analysis, I will put aside *ni* when it is arguably used as a dative case marker, and focus on *ni* when it is clearly used as a postposition.

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

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’, *yor*i ‘than’.

⁵ An important question then arises as to how GC is even possible. See Snyder (2007, 2008, 2011) for relevant discussion.

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