

# Case-dropping and Unaccusatives in Japanese Acquisition <sup>1</sup>

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Structural case is correctly assigned by children at an early stage in various languages (e.g., in Russian (Babyonyshev, 1993); in Dutch (Powers, 1995); in English (Schütze & Wexler, 1996)). An exception so far is Japanese, in which young children omit case-markers on overt NPs with high frequency. Although Japanese adults optionally omit case-markers in informal speech, they seem to do so far less often than children. For example, when characterizing the acquisition of case markers in Japanese, Clancy (1985, p. 387) suggests that “[t]he typical course of acquisition is from failure to use a particle where appropriate to a gradually increasing rate of production until the child’s frequency approximates adult usage”.

The high rate of omission of case markers by young children acquiring Japanese raises two questions. First, why do children omit case-markers more often than adults? And second, do children omit case-markers in constructions in which adults do not? The present paper addresses the second question. Our conclusion will be that a young Japanese child only omits case-markers in environments acceptable to adults, with one possible exception being arguments of unaccusative verbs.

## 1 Case markers in Japanese

In general, noun phrases (NPs) in Japanese require an overt case marker. (See Kuno, 1973; Tsujimura, 1996, for overviews of Japanese syntax in general and case marking in particular.) This paper will concentrate on the following three case markers. The nominative marker *ga* (Nom for short) is most commonly used on subject NPs, but also on the object NP of state verbs. The accusative marker *o* (Acc) is used on direct objects. Finally, the topic marker *wa* (Top) is used on topicalized constituents and replaces the case marker that would have been used in the absence of topicalization.

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Although obligatory in formal writing, case markers are often omitted in adults' informal speech. This paper investigates whether a young child's pattern of case-marker omission is qualitatively similar to that of adults'.

## 2 Case omission in Japanese adult speech

This section surveys some of the restrictions that apply during the omission of Nom, Acc and Top in adults' utterances. (In the rest of this paper a '#' indicates the omission of a case-marker.)

Note that given an NP whose case marker was omitted, it is not always clear what the exact omitted marker was because the NP may have been topicalized. For example, a subject NP without a case marker could suggest that Nom was dropped; however, if this NP was topicalized then the marker omitted must have been Top. Hence, we must determine the status of the NP in the discourse before hypothesizing about its omitted case marker. In the examples in this section, we often resort to *wh*-words in order to guarantee that Nom or Acc is in fact being dropped rather than Top, taking advantage of the fact that indefinites (of which *wh*-words are one of the few unambiguous instances in Japanese) cannot be topicalized.

In general, Nom cannot be dropped in subject NPs as indicated by the '\*' in (1b). But consider verbs, such as unaccusatives, whose subjects start as internal arguments of the verb (see Miyagawa, 1989, for unaccusativity tests in Japanese). As the '??' indicate in (2b) and (3b), Nom omission is less marked with unaccusative verbs such as *futta* and *kita*.

(1)

- a. Dare-ga neta-no?  
who-Nom slept?  
"Who slept?"
- b. \* Dare-# neta-no?

(2)

- a. A, ame-ga futta.  
oh, rain-Nom fell  
"Oh, it rained."
- b. ?? A, ame-# futta. (Tsujimura, 1996)

- (3)
- a. Dare-ga kita-no?  
 who-Nom came?  
 “Who came?”
  - b. ?? Dare-# kita-no?

The case-marker on an object NP, Acc in particular, can be dropped if the NP is adjacent to the verb (Saito, 1985; Takezawa, 1987; see also Grimshaw & Mester, 1988). It is likely that adjacency may be too strict a condition and that a relation such as c-command may suffice. However, this distinction will not have any bearing on the present study, hence we will adopt the adjacency version for simplicity. Compare Acc omission in (4b) to (5b). Because the NP *Mary* intervenes between the wh-word and the verb in (5b), Acc omission is ungrammatical in this case.

- (4)
- a. Nani-o yonda-no?  
 what-Acc read?  
 “What did you read?”
  - b. Nani-# yonda-no? (Saito, 1985)

- (5)
- a. Nani-o Mary-ga yonda-no?  
 “What did Mary read?”
  - b. \* Nani-# Mary-ga yonda-no?

The topic marker *wa* (Top) can always be dropped (Kuno, 1973; Saito, 1985). Consider the following instances in which the wh-words in examples (1b) and (5b) are replaced by definite NPs as in (6) and (7) respectively. As observed earlier, the wh-words in (1b) and (5b) could not have been topicalized because they are indefinites, thus those sentences necessarily involve the ungrammatical omission of Acc and Nom; whereas in (6b) and (7b), *John* and *this book* allow the topicalized interpretation, in which case, Top is the marker being dropped.

- (6)
- a. John-wa neta-no?  
John-Top slept?  
“Did John sleep?”
  - b. John-# neta-no?

- (7)
- a. Kono hon-wa Mary-ga yonda-no?  
this book-Top Mary-Nom read?  
“Did Mary read this book?”
  - b. Kono hon-# Mary-ga yonda-no?

### 3 Topicalization

We would like to determine if young children learning Japanese respect the restrictions outlined in the previous section when omitting Acc and Nom. However, in order to do that we have to eliminate instances in which the NP may have been topicalized. This section provides some observations about the topicalization process.

The use of Top we are interested in here is what Kuno (1973) refers to as the “theme of a sentence”. An NP can be the theme of a sentence if it is generic or it is already part of the present discourse setting.

“It seems that only objects and concepts that have been mentioned and recorded in the registry of the present discourse can become themes of sentences. Nouns of unique reference in this universe of discourse, such as *the sun*, *the moon*, *my wife*, *my children*, seem to be in the permanent registry.” (Kuno, 1973, p. 39).

Therefore, “mother”, “father”, one’s own name can always be themes. Moreover, demonstratives (in their deictic use) also seem to be amenable to topicalization. Wh-words, on the other hand, cannot be themes, hence they cannot be topicalized.

In short, by eliminating proper names (e.g., “mother”, “father”, names of people within the discourse), demonstratives and NPs that have been previously mentioned in the discourse, we guarantee that the remaining NPs are likely to be new information and hence may not have been topicalized. This class of new NPs (i.e., the NPs referring to entities not yet in the discourse registry) as well as wh-words are the environments in which Nom and Acc omission can be more clearly investigated.

#### 4 Constraints on case-marker omission

Summarizing the observations in the two previous sections, we obtain the following environments in which case-marker omission is clearly restricted and therefore they can be used to test whether a child is omitting case markers in circumstances in which an adult would not.

(I) Acc can only be omitted on wh-words or on NPs not yet in the discourse registry when they are adjacent to the verb.

(II) Nom cannot be dropped with wh-words.

(III) Nom cannot be dropped on subject NPs which are not yet in the discourse registry.

#### 5 Present study

The present study examined case omission in the transcripts of a child, Aki (age range: 2;3.0-3;0.0.; MacWhinney, 1991; Miyata, 1995), especially in those environments that restrict case omission in adult speech. Given the pattern of acquisition of case marking in other languages, the prediction is that also in Japanese young children should follow the restrictions observed in adult language.

##### 5.1 Analysis

Only utterances with at least an NP and a predicate were included; in particular the analysis did not include isolated NPs, hence excluding all files in which Aki was younger than 2 years and 3 months old.

NPs were separated into three categories, namely, Top, Acc and Nom according to the environment in which the NPs occurred. Whenever it could not be determined from the context whether an NP without case marker had been topicalized or not, we opted for the topicalized interpretation. Hence, all NPs classified as Nom or Acc are likely to have been new information in the discourse.

Moreover, for each case-marker category, NPs were further classified in the following four subcategories: “demonstratives” (e.g., *kore* “this”, *sore* “that”), “proper names” (e.g., *Aki*, *mother*, *father*, *grandmother*, brother’s name, experimenter’s name, some animal toys such as *kaba-chan* “little hippo”), “wh-words” (e.g., *nani* “what”, *dare* “who”) and “other NPs” (i.e., all other NPs except quantifiers).

#### 6 Results

The following tables present the percentage of case-marker omission

within each category. The numbers between parentheses indicate the number of omissions over the number of omissions plus the total number of overt uses of the case marker, in other words (*omissions / omissions+overt*).

As in previous studies, very few mistakes were observed with overt case markers (less than 2.5%). See Matsuoka (1998) for a detailed analysis of Aki’s mistakes.

Out of 43 quantifiers, only three had overt case marking. One was incorrect (with Top). In most environments, quantifiers do not require overt markers, therefore they are not included in the following tables.

### 6.1 Omission of the topic marker *wa*

Because Top can always be omitted, it cannot be used to gauge the child’s knowledge of the language. Rates of Top omission are provided in the following table for the sake of completeness and for comparison with the other case markers.

Demonstratives	Proper names	Other NPs	Total
80% (746/935)	88% (193/219)	73% (227/312)	80% (1166/1466)

Table 1: Rates of Top omission.

Examples of Top omission.

- *Ouchi-# kowai ne.* (“house scary”)
- *Kujira-# kore taberu.* (“whales this eat” — generic about “whales”)
- *Kore-# nani?* (“this what?”)
- *Are-# nan da, are?* (“that what is, that?”)
- *Akichan-# nemukunai.* (“[child’s own name] sleepy-not”)
- *Ree-chan-# dotchi-ni iru?* (“[brother’s name] where-at is?”)

### 6.2 Omission of the accusative marker *o*

The main restriction in Acc omission is that the NP has to be adjacent to the verb. Because most of the utterances contained few words, all direct objects considered here (with the exception of one wh-word occurrence) were next to the verb. Hence, it is not possible from the table below to ascertain that Aki knows the restriction described in (I) above. But the child nevertheless does not seem to violate the constraint.

Demonstratives	Proper names	Wh-words	Other NPs	Total
95% (158/166)	83% (5/6)	100% (75/75)	95% (181/190)	94% (412/437)

Table 2: Rates of Acc omission.

Examples of Acc omission.

- *Bakku-# shimasu.* (“reverse do”)
- *Denki-# kesu.* (“light turn-off”)
- *Darumasan-# tsukutta.* (“Dharma-doll made”)

### 6.3 Omission of the nominative marker *ga*

Because all instances of NPs that were old information were included in the Top omission table above, the NPs without case marker reported in the following table are likely to have been new information and hence they should not have been topicalized. As can be seen in the last column in Table 3, there were 57% of Nom omissions overall, which is lower than the omission of Top (80%) and Acc (94%). However, given the constraints in (II) and (III), the 57% observed is rather higher than what we would have expected. We provide some further analyses in the next section in order to investigate this high rate of Nom omission.

Demonstratives	Proper names	Wh	Other NPs	Total
63% (58/92)	63% (67/106)	28% (19/67)	61% (127/209)	57% (271/474)

Table 3: Rates of Nom omission.

Examples of Nom omission.

Not unaccusatives.

- *wanwan-# unten shiteru* (dog drive doing)
- *hikooki-# buubuun* (airplane [onomatopoeia])  
running-is)

Existentials.

- denchi-# nai (battery there-isn't)
  - motto densha-# atta (more trains there-are)
- Lexical unaccusatives (i.e., not existentials).
- koko basu-# kuruyo (here bus comes)
  - gohan-# haitteru (rice there's-inside)
  - ame-# furu node (rain falls because)
- Objective.
- Ree-chan ichigo-# hoshiino? ([brother's name] strawberry wants?)
- Proper names.
- a, Ree-chan-# kita ([brother's name] came)
  - Akichan-# hon miteru no ([own name] book looking)

## 7 Further analyses of Nom omission

In part, the higher than expected rate of Nom omission can perhaps be explained by the fact that children in Aki's age range often treat new information as old (Karmiloff-Smith, 1979), hence, it is conceivable that Aki is topicalizing new information (in other words, entities not yet in the discourse registry) and omitting Top. This may be particularly true with demonstratives and proper names, whose categorization as implicitly part of the discourse setting may lead the child to topicalize them in circumstances that an adult would not.

However, this observation still leaves us with the other two categories, namely wh-words (28% omission) and "other NPs" (61%). A more fine grained analysis of the 19 Nom omissions with wh-words reveals that 15 occurrences (namely, 6 with unaccusative verbs, 1 with a verb in the passive, 3 objects of stative verbs and 5 adjectival phrases) could be categorized as internal arguments of the predicate, in which case because the relevant NPs were adjacent to the verb (similar to the constraint for Acc omission), Nom omission is less marked. Thus, we argue that excluding NPs that may be internal arguments of the predicate, Aki respects the constrain described in (II).

Consider next the "other NPs" category classified according to the verb present in the utterance. Because of the high occurrence of existentials, we present them separated from other unaccusative verbs, which we refer to as "lexical unaccusatives" (e.g., *hairu* "enter", *deru* "go out", *kurru* "come").

The numbers in Table 4 suggest that Nom omission is most common with existentials and lexical unaccusatives. Moreover, in the "other verbs" subcategory, 5 omissions are with the objective use of Nom (i.e., as the object



Lexical unaccusatives	<i>aru</i> (there’s)	<i>nai</i> (there isn’t)	Other verbs
63% (47/75)	76% (25/33)	95% (42/44)	23% (13/57)

Table 4: Rates of Nom omission for “Other NPs” according to verb type.

argument of a state verb) and 2 with adjectival phrases. Hence, leaving only 6 utterances with Nom omission on an external argument.

Given this pattern of results, it seems that apart from unaccusative verbs (i.e., lexical unaccusatives and existentials), Aki obeys the constraint in (III).

## 8 Discussion

The overall results we obtain here agree with previous reports that young children learning Japanese make very few mistakes with overt markers but omit case markers with high frequency.

Moreover, we observed that in obligatory contexts Aki’s performance is very similar to adults’ in the following aspects. First, Aki does not violate the constraint that Acc can only be dropped on *wh*-words and new entities that are next to the verb. Second, Nom is rarely dropped with *wh*-words, ignoring environments where the argument can be construed as an object and is adjacent to the verb. And, setting aside proper names and demonstratives (for discourse reasons), the rate of Nom omission is low except with unaccusative verbs. In the following, we speculate why Aki allows Nom to drop with high frequency with unaccusative verbs.

Aki allows Nom to be dropped with unaccusative verbs rather frequently (possibly more often than adults). This may be because Aki is treating the complement of such verbs as objects and keeping them inside the VP, in which case, adjacency to the verb is enough to allow case-marker omission. This is in line with proposals that children in this age range have difficulty with A-chains (Borer & Wexler, 1987, 1992) and consequently with constructions such as passives and unaccusatives (see Babyonyshev, Fein, Ganger, Psetsky & Wexler, in press, for evidence on the acquisition of unaccusatives in Russian). However, in order to confirm this relation between A-chains and Nom omission on arguments of unaccusative verbs, further investigation is necessary. One first step would be to determine whether both phenomena coincide chronologically and not just partially overlap. Note that transcripts of Aki’s utterances after he is 3 years old are not available, thus from his data

alone we cannot guarantee that Nom omission with unaccusatives continues through the age range of difficulty with verbal passives.

## 9 Conclusion

Although the rate of omission may be higher than in adult speech, overall, the child investigated here seems to only drop case-markers in environments which an adult would find acceptable. One possible exception occurs with unaccusative verbs, but even this may stem from independent factors such as lack of A-chains at this stage.

The present result suggests that a young Japanese child knows the principles of structural case assignment in accordance with results in other languages.

## Notes

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