Case Errors in Child Japanese and the Implication for the Syntactic Theory

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1. Introduction

Agglutinating language-speaking children make Case errors at around the age when Optional Infinitives are observed in some of the European languages. This paper examines the errors in nominative Case assignment observed in Japanese acquisition.

Japanese subject NPs are typically marked by the nominative Case marker, -ga, as given in (1) and (2)¹ (Shibatani 1978, Saito 1985, among others).

(1)	a. Taro-ga	ringo-o	tabe-ta				
	-Nom	apple-Acc	eat -Past	'Taro ate an apple.'			
	b. Taro-ga kawa-de oyoi -da						
	-Nom river -at swim-Past 'Taro swam in the river.'						
	c. Hune-ga sizun-da ship -Nom sink -Past 'A ship sank.'						
(2)	a. Taro-ga H	lanako-ni ta	atak-are -ta				

-Nom -Dat hit -Pass-Past 'Taro was hit by Hanako.' b. Taro-ga Hanako-ni hatarak-ase -ta -Nom -Dat work -Cause-Past 'Taro made Hanako work.' morat-ta c. Taro-ga hahaoya-ni dakko-si -te hold -do-Ger Benef-Past -Nom -Dat 'Taro received a favor of holding him from his mother.'

Taro, the external argument of a transitive verb and an unergative verb in (1a) and (1b), respectively, *hune* (a ship), the internal argument of an unaccusative verb in (1c), and the subjects of the complex predicates, such as passives, causatives, and benefactives, given in (2), are all marked with the nominative Case -ga.

At an intermediate stage of Japanese acquisition, however, children sometimes erroneously mark

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the subject with the dative Case marker -ni, as shown in (3) and (4). In these examples, the constituents that appear in the subject position are not marked with nominative Case: They are erroneously marked with the dative Case -ni instead.

- (3) a. A-tyan-*ni tabe-tyau yo (2;7) (Adult form: A-tyan-ga)
 -Dat eat -perfect Mood 'A-tyan will eat (it) up.' (Suzuki 2002: 48)
 b. Taa-tyan-*ni dakko site age -ru (3;11) (Adult form: Taa-tyan-ga)
 -Dat hold do give-Pres
 'Taa-tyan will give (someone) a favor of holding him/her.' (Taa-tyan corpus)
- (4) Onee-tyan-*ni otoosan-ni sika -rare -ta (4;7-4;9) (Adult form: Onee-tyan-ga) sister -Dat father -Dat scold-Pass-Past '(My) sister was scolded by (my) father.' (Murasugi and Machida 1998: 381)

The objective of this article is to describe and explain the errors of nominative assignment in Japanese acquisition.² The data we consider come from previous studies (e.g., Suzuki 2002), a longitudinal observation in natural context and some experiments held by Murasugi and Machida (1998), four corpora of CHILDES, the Taa-tyan Corpus (The National Institute for Japanese Language 1982), and the MOKO database that University of Connecticut and Nanzan University have been creating. Based on the analysis of the empirical evidence available, we first reports the descriptive findings of the erroneous Case marking of *-ni* observed in simple sentences as given in (3) and in complex predicates as given in (4). Then, we argue that this type of Case error indicates the intermediate acquisition stage where children have the structure of VP-shell, the minimum requirement for θ -role assignment, the structure of TP and the EPP feature of T, but not the full system of nominative Case assignment of adult Japanese. We suggest that children employ the default inherent Case marker, *-ni*, on the subject NP, since the "Impersonal Parameter" (Ura 1996) is "unset".

2. Cross-linguistic Findings of the Erroneous Dative Subjects in Child Language

"Erroneous" dative subjects in children's production are, in fact, not unique to Japanese. It has been widely reported that 2-3 year-old English-speaking children sometimes wrongly use the objective (dative) pronoun for subjects (Huxley 1970, Radford 1999, Pierce 1992, among others).

- (5) a. Her too cold (2;1) (Pierce 1992)
 - c. Him is bear (3;3) (Huxley 1970)
- b. Her crying now (2;3)
- d. Does him fish? (2;2) (Pierce 1992)
- e. Him does go there (2;4) (Radford 1990)
- f. Her holding a balloon (2:0) (Pierce 1992)
- g. Him pulled out the telephone (3;2) (Huxley 1970) h. No me take it off (2;1) (Pierce 1992)
- i. Her would just break it (3;4) (Huxley 1970) j. Know what me keep for you? (3;0)
- k. No us buyed this in a shop (3;9) (Huxley 1970)

2-3 year-old French-speaking children also produce "erroneous" dative (oblique) subjects as the examples in (6) show. (Clark 1985, Pierce 1992, Radford 1999, among others.)

a. Moi dessiner la (6) mer (1;10) draw the sea 'I draw the sea.' (Pierce 1992) me dedans moi (2;3) b. Aller inside me 'I go inside.' (Pierce 1992) go c. Moi fais tout seul moi (2;1) me myself/me 'I do all by myself.' (Pierce 1992) do all by d. Toi le sais (4 years old) 'You know it.' (Clark 1985) you it know

² The subject NPs are not only erroneous marked by the dative Case -ni, but also sometimes by the genitive Case -no. In this paper, however, we do not go into the discussion on the genitive Case marking errors.

In this section, we compare three representative accounts of erroneous dative Case Marking: Agreement/Tense Omission Model (=ATOM, advanced by Schütze and Wexler 1996, Wexler 1998, among others), Rispoli's (1995) Paradigm Building of Pronoun, and Syea's (2007) Topic analysis.

Assuming independent Agr and T projections, ATOM suggests that children can optionally and independently underspecify the features in T and AgrS at the Root Infinitive stage.³ When agreement is fully specified in English, nominative Case must be assigned; when agreement is underspecified, nominative Case cannot be assigned, and the default Case, accusative Case, may arise. Six possibilities are explained under this model as shown in Table 1: Four from the combination of $\pm Agr$ and $\pm T$, plus two additional cases for the tense distinction between past and present.

able 1. Summary of possible marchies			
	Verb form	Subject	Examples
Tense = present, $+$ agreement	- <i>S</i>	NOM	He cries
Tense = present, $-agreement$	Optional Infinitive (OI) ⁴	ACC	Him cry
Tense = past, $+$ agreement	-ed	NOM	He cried
Tense = past, $-agreement$	-ed	ACC	Him cried
-Tense, +agreement	OI	NOM	He cry
-Tense, -agreement	OI	GEN	His cry

Table 1: Summary of possible INFL features for ATOM (Schütz	1997: 232)
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The Case-marking errors in question are found because the child produces the accusative (dative) as a default when the abstract features of agreement are absent from the child's syntactic representation.

The ATOM analysis and the Paradigm Building of Pronoun approach advanced by Rispoli (1995, among others) reach a different proposal concerning the relationship between finiteness marking and pronoun case errors: ATOM proposes that they are linked, whereas Rispoli does not find such a linkage. According to Rispoli (1995), out of 12,780 first person singular subjects produced by English-speaking children, 92% (11,791) were nominative, 6% (798) were objective (dative), and 1.5% (191) were genitive. The oblique pronouns were frequently extended to subjects, but the nominative pronouns were rarely extended to non-subject use. Rispoli also tested 12 children from 1;0 to 3;0 and reports that some young children preferred to replace I with me (me-children), whereas others preferred to replace I with my (my-children). Rispoli observes that the percentage of errors in which me replaced I (the me-error rate) was positively correlated with the correct production of me as an objective pronoun (the me-total). The *me* for I and *my* for I errors were antagonistic, with one of the patterns almost always dominating over the other, resulting in a clear individual difference between me-children and my-children.

These analyses, however, are called into question. As Radford (1999) and Syea (2007) correctly point out, ATOM does not explain the co-existence of oblique subjects and verbal agreement inflections; in fact, the detailed corpus analysis shows that they actually do exist, as in the examples given (5d) and (5e).⁵ On the other hand, it is obvious that "the lexical learning of pronouns" is not the

³ The ATOM model assumes that agreement and tense have distinct properties and play distinct roles in the licensing of a subject and inflection. It is also assumed that tense governs the overt vs. null status of subjects, while Agr licenses Case features on the subject.

⁴ Optional Infinitives (OIs) here refer to the Root Infinitives (RIs), or the non-finite verbal forms which children at around two years old use in matrix clauses, where they are not possible in their adult grammar. For some languages, children at around two optionally produce matrix non-finite verbs in place of finite verbs, while adults only allow non-finite verbs in embedded sentences, and hence, the RIs in those languages are also termed Optional Infinitives.

⁵ Radford (1999), based on the detailed analysis of the data reported in the previous literature as in (5), argues that oblique subjects are (default) objectives, my/its subjects function as strong nominative pronoun, and our subjects result from a lexical gap in the child's pronoun paradigm. We interpret his analysis as the one inheriting both spirits of ATOM and the Paradigm Building of Pronoun. We basically agree with his argument: The lexical items, in particular, nominals sharing common semantic features tend to be mixed up in the child's production at age one and two, and the readers would be reminded of examples of relevant child data, even anecdotal evidence. For instance, a Japanese-speaking child aged 2;9, walking on the street, found a patrol car, but could not remember the exact lexicon for it, and he tried out three possible related nominals, saying, "Kyuukyuusya-da, kyuukyuusya, syooboosya, kyuukyuusya, patOKAA! (=(That) is an ambulance car... an ambulance car... a fire truck...an ambulance car, A PATROL CAR! (the capitalized part indicates that it is stressed) (Transcription (by the first author) of Hazimete-no Otukai (The First Shopping Alone), Japanese TV program 1/3/2009). The pronoun errors would reflect the disturbance of T(I) -related elements as we will discuss later in this paper. However, Rispoli's

sole issue here, either. The erroneous dative Case is found with full nouns in Japanese, where the system of the morphological realization of Case is rich. The relevant examples are repeated below.

- (Adult form: A-tyan-ga) (3) a. A-tyan-***ni** tabe-tyau vo (2;7)-Dat eat -perfect Mood 'A-tyan will eat (it).' (Suzuki 2002: 48) b. Taa-tyan-*ni dakko site age -ru (3;11) (Adult form: Taa-tyan-ga) give-Pres -Dat hold do 'Taa-tyan will give (someone) a favor of holding him/her.' (Taa-tyan corpus)
- (4) Onee-tyan-*ni otoosan-ni sika -rare -ta (4;7-4;9) (Adult form: Onee-tyan-ga) sister -Dat father -Dat scold-Pass-Past '(My) sister was scolded by (my) father.' (Murasugi and Machida 1998: 381)

Japanese data calls the Topic analysis into question as well. Syea (2007), citing Gruber's insight, suggests that the emerging grammars are discourse-bound, and the oblique subjects are the default forms in the Topic (TopP spec) position. Pointing out that the subject NPs surface in the oblique form tend not to be indefinite or expletive, Syea (2007) proposes that the distribution of subjects is driven by their features ([+definite][+referential][+specific]), which can only be checked at the Topic position (à la the system proposed by Beghelli and Stowell 1997).

The Topic analysis in fact may well explain the fact that some of the Japanese-speaking children, at a very early stage, erroneously mark the NP, which should be marked with accusative/nominative Case in the adult grammar, with the topic marker -wa. However, this analysis does not seem to explain the dative Case errors in question: The topic marker, realized as -wa, is used in the adult way at the stage where the dative errors are observed. For example, a child, producing erroneous -wa and the "correct" -wa optionally at 2;1 as in (7a) and (7b), used the adult form consistently after 2;2 as shown in (7c).

- (7) a. To -*wa ai -ta. To -*wa ai -te (Adult form: To-ga (Nom)/ To-o (Acc)) (2;1) door-Top open-Past door-Top open-Imperative 'The door opened. Please open the door.'
 - b. Boku-wa tantaan si -ta yo (2;1)
 - I -Top onomatopoeia do-Past Mood 'I stepped on concrete and made the sound 'tantaan'.' c. koko-e boku-wa tuke-ru yo
 - here to I -Top put-Pres Mood (2;2) 'I will put (it) here.'

Then, how is the erroneous dative Case explained? In the next section, we attempt to describe and explain the optional errors of dative Case in Japanese acquisition. We report that Japanese-speaking children's erroneous dative subjects are found in simple sentences with transitive and unergative verbs at around age two, and in complex predicates even at around age four.

3. Descriptive Findings and the Previous Analyses of the Erroneous Dative Subjects in Japanese

3.1. The Erroneous Dative Subjects in Complex Predicates (Murasugi and Machida 1998)

Murasugi and Machida (1998) observed that a child, Yuko, a 4-year-old Japanese-speaking child, frequently marked the subject of complex predicates (e.g., passive (8a), causative (8b), and benefactive (8c)) with the dative Case -ni, instead of the nominative Case -ga, in the natural context at home.

(8) a. Onee-tyan-*ni otoosan-ni sika -rare -ta (4;7-4;9) (Adult form: Onee-tyan-ga) sister -Dat father -Dat scold-Pass-Past '(My) sister was scolded by (my) father.'

findings on the individual differences, and the counter examples such as (5d) and (5e) to ATOM as well, would be possibly interpreted as the children's immature lexical paradigm: The errors would be due to the deficits in connecting the exact pronominal form with lemma, <u>in addition to</u> the syntactic deficits of 2-year-old children acquiring such language as English which does not have a particularly large amount of agreement, although it is present.

b. Yu-tyan-*ni neko-tyan-ni osakana tabe-sase -ta (4;7-4;9) (Adult form:Yu-tyan-ga) -Dat cat -Dat fish eat -Cause-Past 'Yu-tyan made a cat eat fish.'
c. Yuko-tyan-*ni otoosan-ni dakko-si-te morat-ta (4;7-4;9) (Adult form: Yuko-tyan-ga) -Dat father -Dat hold -do-Ger Benef-past
'Yuko-tyan received a favor of holding her from her father.' (Murasugi and Machida 1998)

Interestingly, the child correctly assigned nominative Case on the subject NP in the simple sentences such as (9) in the same kind of context.⁶

(9) Yu-tyan-ga tabe-ta (4;7-4;9) Yuko -Nom eat -Past 'Yu-tyan ate (it).'

Murasugi and Machida (1998), based on the longitudinal observation in the natural context and on the comprehension and the production tasks, argue that Case errors such as (8) reflect the acquisition stage where the child assumes the minimal structure for θ -role assignment, i.e., VP-shell. At this stage, the child knows the structure of VP-shell and the basic system of nominative Case assignment.



In the adult grammar, the subject X has to move to TP spec to get nominative Case as shown in (10a). However, the child assumes the minimal structure for θ -role assignment, i.e., VP-shell for the complex predicates, and hence, the subject NP (X in (10b)) in complex predicates remains inside the VP without moving to the TP spec (X_i in (10a)). As a result, it cannot get the nominative Case from Tense. Hence, the default inherent Case marker, realized as dative -ni, is assigned to the subject NP in (10b).

This proposal is also supported by experimental evidence. Murasugi and Machida (1998) first examine the frequency of errors by repetition task with 47 test sentences containing complex predicates (16 passives, 14 causatives, and 17 benefactives), some of which are shown below.

(11) a. Okaasan-ga home-rare -ta Yu-tyan-ni (passive) Mommy-Nom Yuko -Dat praise-Pass-Past 'Mommy was praised by Yuko.' b. Yu-tyan-ga nekotyan-ni osakana-o tabe-sase -ta (causative) Yuko-Nom cat -Dat fish -Acc eat -Cause-Past 'Yuko fed the cat with a fish.' c. Yu-tyan-ga Aririn-ni koinobori -0 tukut-te morat-ta (benefactive) Yuko-Nom Aririn-Dat a carp streamer-Acc make-Ger Benef-Past

'Yuko received a favor of making a carp streamer from Aririn.' (Murasugi and Machida 1998: 405)

As shown in Table 2, 38 out of 47 test sentences (81%) contained an erroneous matrix subject marked

⁶ Generally speaking, the dative Case marker *-ni* is acquired early, even when the copulative morphological forms (e.g., -(r)are) of the complex predicates are not fully acquired.

⁽i) a. Tyuutyuu-san-ni kam-*e -ta (Sumihare, 2;1) (Adult form: kam-*are*-ta) mouse -Dat bite -Pass-Past '(I was) bitten by a mouse.'

b. Otootyan-ni oko -*re -ta (Sumihare, 2;2) (Adult form: oko-*rare*-ta)

daddy -Dat scold-Pass-Past '(I was) scolded by Daddy.' (Noji 1973-1977)

⁽ia) and (ib) indicate that the suffixal morphemes in complex predicates require some time to be acquired, but the agents are appropriately marked with the dative Case -ni even at age two.

with -ni. Examples in (12) show some of the responses observed in the experiment.

	Complex predicates: Passive (n=16), Causative (n=14), Benefactive (n=17)				
Nominative	5	11%			
*Dative	38	81%			
Others	4	8%			
SUM	47	100%			

Table 2: Frequency of the Nominative-and Dative-Case-marked Subjects in the Sentence containing Complex Predicates

- (12) a. Aririn-*ni Yu-tyan-ni kam-rare-ta (4;7-4;9) (Adult form: Aririn-ga) Aririn-Dat Yuko -Dat bite-Pass-Past 'Aririn was bitten by Yuko.'
 b. Aririn-*ni Yu-tyan-ni pazyama-o kigae -* φ -ta (4;7-4;9) (Adult form: Aririn-ga)
 - Aririn-Dat Yuko -Dat pajamas-Acc change-Cause-Past 'Aririn helped Yuko to change into pajamas.'
 - c. Yu-tyan-***ni** Aririn-ni orimami(=origami)-o tukut-te morat-ta (4;7-4;9) Yuko -Dat Aririn-Dat origami -Acc make-Ger Benef-Past 'Yuko received a favor of making *origami* from Aririn.' (Adult form:Yu-tyan-ga)

As the errors were found at high frequency in the experimental context as well as in the natural context, Murasugi and Machida (1998) consider that the errors reflect the intermediate stage of Japanese acquisition.

Then, in order to examine whether or not these errors are due to Case deficits, they tested the child with the canonical Case markers in simple sentences such as (13) by using a repetition task.

(13) Nekotyan-ga banana-o tabe-ta cat -Nom banana-Acc eat -Past 'A cat ate a banana.'

The child never produced erroneous dative subjects in the simple sentences. Together with the fact that few dative errors were observed for the simple sentences in the natural context, they conjecture that the problem is not due to deficits with nominative Case marking *per se*.

This conclusion is further supported by the examination of Case-drop phenomenon. It is well known that in adult Japanese, the nominative Case markers on objects can be dropped, but those on subjects cannot be. (Kuno 1973, Saito 1983, among others.)

(14)	a. Taro-wa okasi-(g		(ga)	tabe	e-tai					
		-Top	snack-	Nom	eat	-war	nt'	Taro wants	to eat snacks.'	
	b.	Dare-*(ga)	ki	-ta	no?					
		who -*(Nom) com	e-Pas	t 🤇	2	'Who	came?'	(Saito 1983:	252)

An experiment with repetition task showed that the child dropped the nominative Case on the object as in (15); but never on the subject as in (16).

- (15) a. Yu-tyan-wa (4;7) 'What does Yuko understand?' nani ϕ waka -ru no? Yuko -Top what understand-Pre Q (Test sentence: Yu-tyan-ga nani-ga wakaru no?) ϕ nomi-tain de b. Yu-tyan-da (=ga) omizu (4;7)drink-want 'Yuko wants to drink water.' Yuko-Nom water (Murasugi and Machida 1998) (Test sentence: Yu-tyan-ga omizu-ga nomi-tain desyo.)
- (16) Yu-tyan-da (=ga) otetyudai tyu-ru (4;7-4;9) 'Yuko will help you.'
 Yuko -Nom help do -Pres (Test sentence: Yu-tyan-ga otetudai suru.)

The contrast exemplified in (15) and (16) indicates that the child drops nominative Case only where the adult grammar allows, and hence, the child has the knowledge of the abstract properties of the Case system. This conclusion is further confirmed by the repetition task with the accusative Case

marker -o (which can be dropped) and the postposition -de (which cannot be dropped) in such examples as (17).

(17) a. Yu-tyan-wa suisai -*(de) e -(o) kak -u Yuko -Top watercolors-with picture-Acc draw-Pres 'Yuko draws a picture with water colors.'
b. Yu-tyan-wa beddo-*(de) ne -ru Yuko -Top bed -in sleep-Pres 'Yuko sleeps in the bed.'

The child dropped the accusative Case -o as shown in (18a), but not the postposition -de as in (18b), just like adults do.

(18) a. Suisai -de e - φ kak -u (4;7-4;9)watercolours-with picture-(Acc) draw-Pres '(Yuko) draws a picture with watercolors.' b. Yu-tyan-wa beddo-de ne -ru (4;7-4;9)bed -in sleep-Pres 'Yuko sleeps in the bed.' Yuko -Top

Then, in order to see if the dative Case errors in question are due to the unavailability of the structure of VP-shell in complex predicates, the child's interpretation of such complex predicates as given in (19) were examined by picture identification task with 18 test sentences (6 each for passives, causatives, and benefactives). The child, in fact, interpreted the agent of the matrix verb and that of the embedded verb in the adult way for almost all of the test sentences.

- (19) a. Wantyan-ga nekotyan-ni tatak-are -ta (passive) doggy -Nom cat -Dat hit -Pass-Past 'A doggy was hit by a cat.' b. Wantyan-ga Kitty-tyan-ni pantu -(s)ase-ta (causative) -0 hak -Dat underwear-Acc doggy -Nom Kitty put on-Cause-Past 'A doggy helped Hello Kitty to put on her underwear.'
 - c. Kitty-tyan-ga wantyan-ni hon -o yon -de morat-ta (benefactive) Kitty -Nom doggy -Dat book-Acc read-Ger Benef-Past 'Hello Kitty received a favor of reading a book from the doggy.'

The results briefly summarized above, among others, led them to conjecture that the child has knowledge of θ -role assignment with complex predicates and VP-shell structure as well.⁷

Murasugi and Machida (1998), hence, propose that the subject NP in complex predicate sentences erroneously marked with the dative Case -ni by the 4-year-old child are not due to deficits of nominative Case assignment. Based on the assumption that an external argument is assigned the nominative Case -ga by Tense at TP spec, they conclude that the child assumes the minimal structure for θ -role assignment, i.e., VP-shell for the complex predicates, and hence, the subject NP in complex predicates remains inside the VP without moving to the TP spec. As a result, it cannot get the nominative Case from Tense. Hence, the default inherent Case marker, realized as dative -ni, is assigned to the subject NP.

3.2. The Erroneous Dative Subjects in Simple Sentences (Watanabe 2008)

Watanabe (2008), based on a detailed corpus analysis of five Japanese-speaking children, Tai (1;5 -3;1, Miyata 2004a), Aki (1;5-3;1, Miyata 2004b), Ryo (1;4-3;0, Miyata 2004c), Jun (0;6-3;8, Ishii 2004), and Moko (1;8-2;4), reports that erroneous dative subjects are found in simple sentences as well. Here, she proposes an interesting generalization for the dative Case errors in question: The erroneous dative subjects are found with transitive and unergative verbs as given in (20) and (21)⁸, respectively, but never with unaccusative verbs.

⁷ Chomsky (1995) proposes that thematic roles are conceived of as assigned to XP positions within a VP-shell.

⁸ The examples in (20a) and (20b) are originally reported in Suzuki (2002).

- (20) a. A-tyan-*ni tabe-tyau yo (2;7) (Adult form: A-tyan-ga)
 -Dat eat -perfect Mood 'A-tyan will eat (it) up.'
 b. Mama -*ni suupu ire -ta no (2;9) (Adult form: Mama-ga)
 mother-Dat soup pour-Past Mood 'Mother poured (the) soup (into the cup).'
 - c. Dare -*ni tukut-ta no? (2;10) (Adult form: Dare-ga)
 - who -Dat make-Past Q 'Who made (this)?'
 - d. Ozii-tyan -***ni** Kat-taa (3;0) (Adult form: ozii-tyan-*ga*) grandfather-Dat buy-Past 'Grandfather bought (it).'
- (21) a. Kore-wa neko-tyan-***ni** tori-ni-ik-u-nda-tte. Neko-tyan-***ni** ikunda-tte (2;3) this -Top cat -Dat fetch-for -Comp cat -Dat go -Comp 'This is what the cat will fetch. The cat will go (there).' (Adult form: neko-tyan-*ga*)
 - b. Papa -***ni** it -ta (2;3) (Adult form: Papa-*ga*) father-Dat go-Past 'Daddy went away.'
 - c. Kangaruu-***ni** basu (2;5) (Adult form: Kangaruu-*ga*) kangaroo -Dat bus 'The kangaroo got on the bus.'
 - d. Piipo -***ni** it -ta kara (2;4) (Adult form: Piipo-*ga*) onomatopeia (ambulance car)-Dat go-Past because 'Because the ambulance car went by.'

As shown in (22), subjects are "correctly" marked with -ga when the verb is unaccusative.

(22) a. Boosi-ga (2;2)ton-da -Nom fly-Past 'The cap flew away.' cap buubuu-ga -ta b. ookii (2;2)ki big -Nom come-Past 'A big car came.' car

Watanabe (2008) examined 1403 sentences with unaccusative verbs in the corpora available, but no erroneous dative subject with the unaccusative verbs was found.

Watanabe (2008) also points out that the erroneous dative on subjects is optional. The children making dative Case errors in (20) and (21), sometimes "correctly" assigned the nominative Case marker -ga on the subject of unergative and transitive verbs. Some examples are given in (23).⁹

(Miyata 2004b) (23) a. Taish (=Taisho)-ga naran -de(i)-ru (Tai 2:0) 'Taisho is in line.' Tai -Nom be-in-line-Asp -Pres (Tai 1;9) b. Mikkii-tyan-ga ato huk -u Mickey -Nom rest wipe-Pres 'Mickey will wipe the rest.'

In (23), the nominative Case marker -ga is produced in the adult way even at around age two. Watanabe (2008) finds similar examples like (20) through (23), and argues that children, at around the age two, consider the nominative Case assignment to be optional.

The uniqueness of the unaccusative verbs can also be observed in Sumihare's utterances. As we see in the contrast given in (24), nominative -ga is produced earlier with the unaccusative verbs than with other types of verb.

(24) a. Benzyo-no to -ga hazuri-te -ru yo (Sumihare 2:0) (Noji 1973-1977) toilet -Gen door-Nom off -Asp-Pres Mood 'The door of the toilet has been off.' b. Kaatvan-* ϕ uta -u (Sumihiare 2;0) (Adult (natural) form in the context: Kaatyan-ga) 'Mommy sings.' Mommy sing-Pres

The subject NP of the unaccusative verb is correctly marked with -ga in (24a), while -ga is

⁹ Nominative -ga is produced earlier with unaccusative verbs than with other types of verb as in (i).
(i) Kore-ga ai -te -ru (Tai 1;7) (Miyata 2004b)
-Nom open-Asp-Pres 'This is open.'

(erroneously) omitted in the sentence with unergative verb in (24b) by the same child at age two.

Then, why is it that Japanese-speaking children produce erroneous dative subjects with transitive and unergative verbs, but not with unaccusative verbs? Watanabe's analysis is as follows. Suppose that the nominative Case -ga is assigned by T in sentences with transitive and unergative verbs, while it is assigned by the unaccusative verb in VP, as Kuno (1973) and Yatsushiro (1999) argue. Then, the erroneous dative Case can be elegantly explained in line with Murasugi and Machida (1998).¹⁰ As for the sentences with transitive and unergative verbs, Watanabe (2008) maintains that children set the minimal structure for θ -role assignment, and the subject stays *in situ*, without moving to the TP spec position. Then, the default inherent Case -ni is assigned to the VP-internal subject. As for sentences with unaccusative verbs, since the unaccusative verb can license nominative Case inside the VP, the subject can get nominative Case in the base position. Thus, subjects in unaccusative sentences are correctly marked with -ga, even though they do not move to TP spec.

4. Reanalysis of the Dative Subject Errors

The previous section overviewed the descriptive data of dative errors in Japanese, and the analyses proposed for the errors in simple and complex predicate sentences. What is crucial in this issue is that the nominative Case assignment is also available at the time when the dative errors are found, which would mean that the problem does not reside in neither nominative Case marking *per se* nor the child's ignorance of the specific verb forms that take dative subject.¹¹ As Murasugi and Machida (1998) note, the analyses shown above leave a learnability problem: It is not clear why it is the case that the subject, which can get the default inherent Case -ni inside VP, has to be moved to the TP spec position to get the nominative Case -ga in the adult Japanese. The key to answer the question seems to reside in the reason regarding why the inherent Case assignment in the base position is not sufficient for the subject.

Suppose that the adult Japanese requires the nominative Case to be obligatorily assigned, and whether or not the nominative Case assignment is obligatory is parameterized among languages, i.e., it is obligatory in Japanese-type languages, but it is not, for example, in Malayalam type languages. That is, T has a nominative Case-feature to be checked off obligatorily in adult Japanese, but during the stage where children make erroneous dative subjects, the nominative Case-feature on T remains unchecked, and hence, the default Case *-ni* appears. Then, as far as the simple sentences are concerned, one possible account would be that the dative Case errors are produced, because the value of the "Impersonal Parameter"¹² (Ura 1996, Safir's NOM-drop parameter)), or a parameter concerning the checking of the nominative Case of T, is not set yet at the stage in question. According to Ura (1996), if

¹⁰ Watanabe (2008) argues, adopting the EPP parameter, that the EPP feature in adult Japanese is strong and subjects have to move to TP spec, but Japanese-speaking children initially consider the EPP feature to be weak. As a result, subjects remain in VP and the default Case *-ni* is assigned to the subjects.

¹¹ In Japanese, a dative subject may occur when the predicate in the clause is stative as in *Taro-ni eigo-ga dekiru* 'Taroo understands English.' or *Taro-ni eigo-ga hana-er-u* 'Taro can speak English.' We do not completely deny the possibility that the dative errors in question also reflect the stage where children do not know which verbs take dative subjects, as children's Case errors may not necessarily occur because of a single reason. In that case, we would expect that accusative Case errors are produced also at a young stage. In fact, there is evidence that this might be the case. Some children, at age 2, fail to mark the object NP with accusative Case:

⁽i) Akatyan -*ga ture-te ik -u (Sumihare 2;2) (Adult form: Akatyan-o)

baby -Nom take-Ger go-Pres '(A lady) takes her baby (to somewhere).'

⁽ii) Taitai-*ga tot -ta (Sumihare 2;2) (Adult form: Taitai-*o*)

fish -Nom catch-Past '(I) caught fish.'

However, as we have seen so far, erroneous dative subjects in children's production are not unique to Japanese, and there is a clear difference between unaccusative verbs and other types of verb that the erroneous dative subjects are found with. Hence, we will not pursue that line of argument here. This problem is left for our future study.

¹² Impersonal Parameter attempts to explain why some languages allow Impersonal constructions, but some languages do not. In some languages, there may sometimes happen a case where there is no element with nominative Case in a tensed clause. For example, in impersonal passive (Perlmutter and Postal 1984), if an intransitive clause is passivized together with the demotion of SUBJ, it gives rise to a situation where no nominative element appears in the clause. See Ura (1996) for further discussion.

the Impersonal Parameter is set as negative in a language L, the finite T in L always has a nominative Case-feature to be checked off. The parametric value in the adult Japanese is [-impersonal], and hence, T has a nominative Case-feature to be checked off. However, there is a stage where the nominative Case-feature on T remains unchecked in the course of acquisition. Then, the default Case *-ni* appears to Case-mark the subject NP, and hence, children produce erroneous dative subjects.

Unlike the parameter that has a subset-superset character, the Impersonal Parameter would be initially labeled as "unset," and remains so until the child receives clear evidence for one of the settings. In Japanese, a [-impersonal] discourse-pro language, a (phonologically) overt expletive is not found in the adult grammar. In the input available to the children, there is no clear positive evidence that their target language is a [-impersonal] language. As a result, the erroneous dative subjects in question would be produced because the [+/-impersonal] parametric value is "unset" at the stage. Then, children produce utterances conforming to the [-impersonal] value, but sometimes ones conforming to the [+impersonal] value, and wait for the specific setting of an as-yet unset parameter. The frequent the (multiple) nominative subjects and nominative objects in adult Japanese would help the Japanese-speaking children to attain the [-impersonal] value, even without using the NP-Dat(ni) NP-Acc(o) array that helps them to set the [+impersonal] value in Tamil (but not available in Japanese) as the indirect negative evidence.¹³

Given the fact that expletives are acquired at a later stage of language acquisition,¹⁴ then, it is predicted that similar intermediate stage would be found also in the acquisition of other languages. Our limited exploration of the cross-linguistic data discussed in Section 2 suggests that it could be the case. As for a [-impersonal] language, English, out of 46 erroneous dative subjects reported by Radford (1999), 29 (63%) were with transitives, 10 (22%) were with unergatives, but 0 (0%) were with unaccusatives, and 8 (15%) were with a copula. On the other hand, in French, a [+impersonal] language, we found dative errors in the child utterances¹⁵ with unaccusative verbs, and children make widespread use of pronoun (such as *moi* and *toi*) in both dislocation and nondislocation constructions: "Toi venir (You come)" and "Est tombe moi (is fallen me (I fell down))," the latter example of which, in particular, would shed a light on the future analysis along this line.

Suppose dative Case errors are due to the underspecification of some feature in AgrS (T). Then, we are reminded of the insights of the underspecification hypothesis of ATOM for RIs briefly discussed in Section 2. It has been widely argued that some kind of disturbance of TP is related to RIs. Around the age when Optional Infinitives are observed in the European languages, the optional Case marking is observed in Japanese instead. If the analysis presented above is on the right track, then the insight of ATOM is maintained in Japanese as well.

Our research, however, suggests that the acquisition stage of the underspecification of AgrS (T) is an independent issue of verb forms, as far as the Japanese-type languages are concerned. Japanese-speaking children, at around two, do not show a significant use of non-finite main verbs, which is typical at the RI stage in such languages as Dutch and English (Sano 1995, Kato et al 2003).¹⁶ Rather, the analysis of the child data of Japanese, a discourse pro-drop agglutinating language, has allowed us to detect that the RI analogues are found at a much earlier stage, even at age one in

¹³ See Snyder (2007), among others, for the issues on parameter setting.

¹⁴ Culicover (2000) argues that the referential pronouns are acquired earlier than expletive pronouns, as the former has a correlate in conceptual structure, while the latter simply satisfies a formal grammatical requirement. According to his analysis of French corpus, expletive il, for instance, appears no earlier than 2;8.

¹⁵ See Pierce (1992), Syea (2007), and Clark (1985), among others, for the erroneous dative Case errors in French.

¹⁶ Murasugi and Fuji (2008a) point out that the erroneous use of RI analogue V-*ta* forms instead of V-*ru* or V-*tei-ru* forms remains even after RI analogue stage, at around 2;2 through 2;6. Some of the examples are given in (i).

⁽i) Kaatyan buranko timawa -na (=simawana). Ame-ga hut-*ta yo (2;4) (Adult form: hut-*te-i-ru*)

Mommy swing put back-Mood rain -Nom fall-Past Mood

^{&#}x27;Mommy, we have to put the swing inside the house. It's raining.'

Context: Since it was raining, Sumihare asked Mommy to bring the swing back to the house.

There are at least two possible accounts for the fact available. One is, in line with Phillips' (1995) insights, to consider that these are due to the performance errors. The other is to regard them as the "Optional Infinitives." As the frequency of the Japanese erroneous V-ta forms found at age two (after the RI analogue stage) are much lower than the errors found in OIs at age two, we support the former analysis here. (See also Sano 1995, among others.)

Japanese¹⁷(and Korean¹⁸). Children before the age of two employ the past-tense form of verbs as "default" for the non-adult-like contexts with typical semantic properties of RIs, such as Modal Reference effects and Eventivity Constraint¹⁹) as shown in (25).

(25) a. Atti. Atti. Atti (1;6)(irrealis/volition) (Adult form: ik-*u*, ik-*e*, or ik*i*-*tai*) i -ta there there there go-Past 'I want to go there / Go there.' (irrealis/volition) b. Tii si -ta (1;7)(Adult form: si-ta-i) onomatopoeia (pee) do-Past 'I want to pee.' c. Baba (1;8)(request) (Adult form: pai-si-te) pai -ta 'Please throw (this) away.' mud onomatopoeia (throw away)-Past (Murasugi, Fuji and Hashimoto 2007, Murasugi and Fuji 2008b)

The context for (25a) is as follows: Sumihare's father (Noji, the observer) tried to go back home, but Sumihare pointed to a different direction, and produced "*atti* (there)" twice and "*atti i-ta* (there go-Past)" angrily again. Noji notes that Sumihare's *i-ta* means *ik-u* (go-Pres) at this stage, because Sumihare cannot say *ik-u* (Noji 1973-1977 I: 195). Noji also writes crucial comments for (25b), which convinces us of the Modal Reference Effects at the early stage of Japanese acquisition: Sumihare used *tii-si-ta* in a volition context when he wanted to pee. As for (25c), Sumihare produced *pai-ta*, attaching *-ta* on the onomatopoeia *pai* (to throw away), in order to ask his mother to remove mud from a potato.

Crucially, it is <u>after</u> the very early non-finite verb stage (or RI analogue stage) is over when children acquiring Japanese make Case errors such as (3) and (4). The Case errors are not found in the RI analogue stage, but rather, they are found <u>after then</u>, i.e., after the complex verbal conjugations (the realization of T (or I)) start to be productively produced. The age that the optional Case errors are observed roughly corresponds to the age that the Optional Infinitives are observed in some languages, and the correspondence would be possibly analyzed as the children's deficits of AgrS (T).

5. Conclusion

In this paper, based on a descriptive study of erroneous dative subjects that Japanese-speaking children produce and the previous analyses proposed for the errors, we argued that they are due to deficits in AgrS (T), and suggested a hypothesis based on the Impersonal Parameter Setting. The Optional Case errors are observed at around the age when Optional Infinitives are observed in some languages. Under this hypothesis, the errors frequently found in complex predicates by the elder child discussed by Murasugi and Machida (1998) would be reanalyzed due to the performance limitation. The elder children's Case errors that are observed only in complex structures, but not in simplex structure, would suggest that the grammatical "errors" young children make are prolonged (or resumed) in complex structures at the elder stage of language acquisition.

truck bucket do-INF

¹⁷ It has been observed that children speaking the agglutinative languages, e.g., Tamil, Korean, Romanian, Arabic, and Turkish-speaking children acquire the verb inflections at a very early stage. Murasugi, Fuji and Hashimoto (2007) and Murasugi and Fuji (2008a,b) argue that the early emergence of RI analogues in such languages as Japanese is explained by a morphological parameter, the Stem Parameter. Children acquiring Japanese, where verbs cannot surface as bare stems ([-stem] language), use the surrogate nonfinite form as the first verbs.

¹⁸ Kim and Phillips (1998) argue that the overuse of the default mood-inflection '-e' in the earliest speech of a Korean child parallels RIs in other languages. See Murasugi and Fuji (2008b) for arguments for the parallelism observed in RI analogue stages in Japanese and Korean.

¹⁹ RIs typically have a modal or irrealis meaning, expressing volition or request (The Modal Reference Effects proposed by Hoekstra and Hyams 1998, among others). Observe the example in (i) from Dutch.

⁽i) vrachtwagen emmer doen (2;4) (Dutch)

Context: Matthijs (speaker) wants the investigator to put the truck in the bucket. (Blom and Wijnen 2000) It has been also observed that RIs are largely restricted to eventive predicates, while finite verbs can either be eventive or stative. This is termed Eventivity Constraint (Hoekstra and Hyams 1998). These early verbs are incompatible with auxiliary, and tend to receive a modal meaning with overwhelming frequency.

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