# On the context-dependent pragmatic strategies of Japanese self-diminutive shift\*

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**Abstract.** In Japanese, the phonological shift from [s] to [tf] triggers an implicature that "a speaker is uttering like a baby" and, depending on context, it can further induce the speaker's emotion of (i) solidarity or (ii) emotional dependence. I argue that the Japanese diminutive shift shifts the speaker's degree of maturity to the bottom at the level of conventional implicature (CI) and that the speaker's emotion is determined by to whom the sentence is uttered. If the addressee is an adult, the diminutive shift triggers an emotion of solidarity. This paper shows that there is a type, "interpersonal expressive," whose emotive meanings are dependent on the hearer.

Keywords: Diminutive shift, context dependency, solidarity, emotional dependency, conventional implicature

#### 1. Introduction

Studies of child language acquisition have shown that, in the early stages of acquisition of Japanese as a first language, babies have a tendency to pronounce [tf] (or [f]) instead of [s] (e.g., Murata 1970). Interestingly, this phonological error committed by babies has been conventionalized in adult grammar as a device for creating a flavor of baby talk (e.g., Okazaki and Minami 2011). For example, when the performative honorific suffix *desu* in (1a) (Harada 1976; Potts and Kawahara 2005) becomes *dechu*, as in (1b), the sentence implies that the speaker is talking to the addressee in a polite way and that the speaker is behaving like a baby:

(1)	a.	Kore-wa This-TOP	boku-no I-GEN		de <b>s</b> u. -PERF.HON	(Normal polite speech)
		At-issue: T	his is my b	ook.		
		Implicature	: I am talki	ng to you in	a polite way.	
	b.	Kore-wa	boku-no	hon-de <b>ch</b> u		(Baby polite speech)
		This-TOP	I-GEN	book-PER	F.HON.DIM	
		At-issue: This is my book.				
		Implicature: I am talking to you in a polite way $\land$ I am talking to you like a baby.				

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Note that the diminutive shift from [s] to [tʃ]] is fully productive or rule-based. We can create a diminutive form from any lexical items that contain the consonant [s], as shown in:

(2)	a.	juusu juice 'juice'	b.	juu <b>ch</b> u juice.DIM 'juice' (the speaker is utter	( <i>Noun</i> ) ring the word like a baby)
(3)	a.	asobu play 'to play'	b.	play.DIM	( <i>Verb</i> ) tering the word like a baby)
(4)	a.	oi <b>sh</b> ii delicious 'delicious'	b.	delicious.DIM	( <i>Adjective</i> ) uttering the word like a baby)
(5)	a.	sosite and 'and then'	b.	and.DIM / and.DIM	( <i>Function word</i> ) uttering the word like a baby)

In terms of use, diminutive shifts can be used for one of the following two purposes/strategies:

(6) The pragmatic strategy of diminutive shiftsa. To show the speaker's emotion of solodality with the addresseeb. To show the speaker's emotional dependency toward the addressee

Typically, the first strategy is used when the speaker wants to show solidarity with a "baby" addressee. The second strategy is used when the speaker wants to show an emotional dependency toward an "adult" addressee. In principle, sentence (1) can be used in both situations if an appropriate context is set up.

However, not all diminutive utterances are appropriate for both pragmatic strategies. For example, the following sentence is only appropriate in the context of emotional dependency:

(7) Koohii-kudachai. (The context of emotional dependency)
 Coffee-give.POLITE.DIM
 'Please give me coffee.'

On the other hand, the following sentence seems only appropriate in the context of solidarity with a baby:

(8) Oichii-dechu-ka? (The context of solidarity with a baby)
 Delicious.DIM-PRED.POLITE.DIM-Q
 'Is it delicious?'

Furthermore, if the addressee is neither an adult nor a baby (such as a child of 10 years), it is not appropriate for an adult speaker to use the diminutive utterance. For example, (1b), (7), and (8) are all inappropriate in such a situation. The following questions will naturally arise from the above observations:

- (9) a. How can we analyze the meaning and use of diminutive shifts?
  - b. Where do the speaker's emotions of solidarity and emotional dependency come from and how is the speaker's emotion specified?
  - c. How can we explain an environment in which diminutive shifts can/cannot be used?

The purpose of this paper is to investigate the meaning and use of Japanese diminutive shifts and to try to answer these questions. My main arguments are as follows: I will first argue that the phonological shift from [s] to [tf] shifts the speaker's degree of maturity to the bottom and conventionally implicates that the diminutivized speaker utters a given word or a given proposition. This will create a new context between the speaker and the addressee.

I will then argue that the speaker's emotion is pragmatically determined by to whom the sentence is uttered: if the addressee is a baby, the utterance with a diminutive shift creates a pragmatic feeling of solidarity; if the addressee is an adult, the diminutive utterance creates a feeling of emotional dependency toward the addressee.

The important point is that there are cases in which the use of the diminutive shift is considered to be inappropriate. I will argue that the diminutive shift is sensitive to the preparatory condition of an at-issue speech act and the economy-oriented markedness principle: do not use a marked expression if there is no reason.

The theoretical implications of this paper are that the Japanese diminutive shift is a "context shifting operator" that enables the speaker to reconstruct a relative relationship with the addressee, and that there is a type, "interpersonal expressive," in natural language whose emotive meanings are dependent on the hearer.

#### 2. Self-diminutive shift and object-diminutive shift

Sawada (2013) claims that in Japanese there are two types of diminutivization (which has to do with the phonological shift from [s] to [tJ]), a self-diminutive shift and an object-diminutive shift. Sawada (2013) argues that while self-diminutive shift is fully productive, the object diminutive shift only occurs in the name suffix *san*, as shown in (10):

(10) a. Hanako-san

At-issue: Hanako Implicature: I have a positive feeling toward Hanako.

- b. Hanako-**ch**an

At-issue: Hanako Implicature: I have a positive feeling toward Hanako  $\land$  I am treating her like a child.

When *san* becomes *chan*, the speaker implies that he/she has a positive feeling toward Hanako and that he/she is treating **Hanako** like a child. This is significantly different from the diminutive shift in (1)–(8), where the phonological shift alters the degree of maturity of the speaker. Sawada (2013) then claims that the self-diminutive shift is productive/rule-based, whereas the object-diminutive shift is lexicalized.<sup>1</sup> In this paper we will solely focus on the self-diminutive shift.

#### 3. The pragmatic status of the self-diminutive shift in Japanese

Before moving on to the formal analysis of the self-diminutive shift and its context-dependent properties, let us consider the semantic status of meaning triggered by diminutive shifts. I argue that the phonological shift from [s] to [tf] triggers a conventional implicature (CI) that "the speaker is uttering to you like a baby." For example, if we use the diminutive performative honorific *dechu* instead of the ordinary performative honorific *desu*, it triggers the CI that the speaker is speaking like a baby:

(11)	a.	Kore-wa	boku-no	hon-desu.	(Normal polite talk)	
		This-TOP	I-GEN	book-PERF.HON		
		At-issue: This is my book.				
		CI: I am talking to you in a polite way.				
	b.	Kore-wa	boku-no	hon-de <b>ch</b> u.	(Baby polite talk)	
		This-TOP	I-GEN	book-PERF.HON.DIM		
		At-issue: Th	is is my book.			
		CI: I am talking to you in a polite way $\land$ I am talking to you like a baby.				

Notice that the performative honorific *desu* also has a CI meaning: that the speaker is talking to the addressee in a polite way. I will discuss the compositionality of *dechu* in Section 4. Notice also that I am assuming that the pragmatic effect of solidarity or emotional dependency themselves are not part of the CI meaning of diminutive shifts. We will discuss the source of solidarity and emotional dependency in Section 7.

Let us now check whether the CI meaning triggered by a diminutive shift (i.e., the meaning "I am talking to you like a baby") is really a CI. In the Gricean theory of meaning, CIs are

Intended CI: I have a positive feeling  $\wedge$  I am treating Hanako like a child.

(from [s] to [**f**]; cf. *Hanako-chan*)

(from [s] to [**f**]; cf. desu)

At-issue: Hanako

<sup>&</sup>lt;sup>1</sup> The fact that the self-diminutive shift can also be expressed by a shift from [s] to [f] (e.g., Hamano 1998; Mester and Itô 1989) supports the idea that self-diminutivization is rule-based:

<sup>(</sup>i) Kore-wa hon-deshu.

This-TOP book-PERF.HON.DIM

At-issue: This is a book.

CI: I am talking to you in a polite way  $\wedge$  I am talking to you like a baby.

Note that the phonological shift from [s] to [f] does not apply to object diminutivization, at least in the case of Stand Japanese:

<sup>(</sup>ii) ?? Hanako-shan

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considered to be part of the meaning of words, but these meanings are not part of "what is said" (e.g. Grice 1975; Potts 2005, 2007; Horn 2008, 2013; McCready 2009, 2010; Sawada 2010; Gutzmann 2011, 2012, 2013). Furthermore, it is often assumed that CIs have a semantic property of speaker-orientedness (by default) (Potts 2005, 2007).

Several pieces of evidence show that the meaning created by a diminutive shift is not part of "what is said." First, the diminutive meaning cannot be challenged. For example, if we utter *iya, chigau-yo* "No, that's false!" after (11b), the negative response can only target the at-issue part of the sentence.

Second, the meaning created by a diminutive shift cannot be in the scope of any logical operators, such as questions:

(12) Juuchu nomi-tai-no? (cf. *juusu* 'juice') (Question) Juice.DIM drink-want-Q At-issue: Do you want to drink juice? CI: I am uttering the word *juusu* 'juice' like a baby.

The fact that diminutive meaning does not interact with logical operators makes it similar to a presupposition. However, I argue that the meaning created by the diminutive shift is a CI rather than a presupposition. As we can see in (13), unlike presupposition, the diminutive meaning *can* project beyond presupposition plugs like *sinzi-teiru* 'believe':

(13) Hanako-chan-wa [uchagi-wa tomodachi-da]-to omo-teiru.
Hanako-chan-TOP rabbit.DIM-TOP friend-PRED-that think-TEIRU
At-issue: Hanako thinks that a rabbit is her friend.
CI from uchagi: I am uttering the word usagi 'rabbit' like a baby.

Even though self-diminutivization is embedded under the presupposition plug *omou* 'think' (verbs of thinking), it can project to the matrix level. Although the status and the existence of CIs are under debate, based on the above discussions, I will take the position that the meaning triggered by diminutivization is a CI (see Schlenker 2012 and Potts 2013 for detailed discussions on the theoretical status of CIs and presuppositions).

#### 4. The meaning of the diminutive shift in Japanese

#### 4.1. Compositionality of the diminutive shift

Let us consider the meaning of the diminutive shift in a more theoretical way. The question is how the meanings of the two kinds of diminutivization are interpreted. Building on Mester and Itô's (1989) analysis of mimetic palatalization, I will argue that diminutive forms are morphologically complex. Let us consider this idea based on the following example:

(14) Kore-wa hon-de**ch**u. (cf. *desu*)

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CI: I am talking to you in a polite way  $\land$  I am speaking to you like a baby.

In this approach, the form *dechu* in (14) is considered to be derived by lexical association from a diminutive morpheme DIM, which has a phonological feature of [+delay release]:

# (15) a. [+delay release] DIMINUTIVE b. *desu*

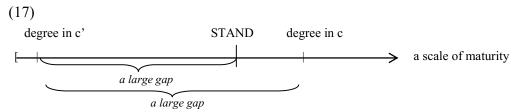
The bearer of the DIM morpheme is the voiceless alveolar fricative [s].

Then what is the meaning of the DIM morpheme? I propose that the main function of the diminutive morpheme is to shift a given context c to a new context c' such that the speaker's maturity is extremely low at the level of conventional implicature (CI). More specifically, we can formalize the meaning of DIM in (16) as follows:

(16)  $[[DIM_{PERF,HON}]]^c = \lambda F \lambda p. F(p) = 1 \land c'$  such that  $\exists d[d <! STAND_{mature} \land mature(sp) = d \land d <!$  the degree of sp's maturity in c]  $\land$  sp utters p

The symbol "<!" stands for "less than a standard by significant degree" (Kennedy and McNally 2005). The DIM morpheme in (16) conventionally implicates that: (i) there is a degree d such that the degree of maturity of the speaker (sp) is less than a contextual standard by a large amount; (ii) d is much lower than the speaker's maturity in c (i.e., the sp's actual degree of maturity); and (iii) the speaker utters p. The second component diminutive state ensures that an (adult) speaker behaves like a baby.

The following figure visually shows the first and the second component of DIM:



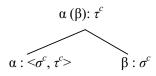
In the above figure, the actual degree is situated above the contextual standard of maturity. One might wonder whether the actual degree must always have to be situated above the standard. Intuitively, it seems possible for a child (e.g., a 10-year-old child) to use a diminutive shift. This suggests that if there is a large gap between the diminutivized degree of the speaker and the actual degree of the speaker, the speaker does not have to be mature.

Let us not consider how the diminutive morpheme DIM is combined with other elements in the sentence. In the case of (14), DIM will combine with the performative honorific *desu*, which will also induce a CI meaning. Regarding the meaning of the performative honorific *desu*, I will assume, following the discussion and analysis in Potts and Kawahara (2004), that it has a CI meaning in (18a). Thus, if DIM and *desu* are combined, we get the meaning shown in (18b):

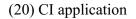
(18) a. [[desu]]<sup>c</sup>=λp. c'' such that **sp** utters p in a polite way
b. [[DIM<sub>PERF.HON</sub>]]<sup>c</sup>([[desu]])=λp. c'' such that **sp** utters p in a polite way = 1 ∧ c' such that ∃d[d <! STAND<sub>mature</sub> ∧ mature(sp) = d ∧ d <! the degree of sp's maturity in c] ∧ sp utters p</li>

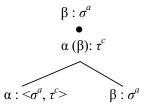
Note that here an expressive (CI) applies to an expressive (CI). In order to distinguish this application from the ordinary semantic composition, I assume the following compositional rule (cf. McCready (2010) and Gutzmann (2011, 2012)):

(19) Pure expressive application



The superscript *c* stands for CI type. This rule says that  $\alpha$  that is of type  $\langle \sigma^c, \gamma^c \rangle$ , takes a  $\beta$  of type  $\sigma^c$ , and returns  $\gamma^c$ . Dim(desu) is then combined with the at-issue proposition via a CI function application (Potts 2005) in (20):





The superscript *a* stands for at-issue type. The CI function application says that an  $\alpha$  that is of type  $\langle \sigma^a, \gamma^c \rangle$  takes a  $\beta$  of type  $\sigma^a$  and returns  $\gamma^c$ .<sup>2</sup> Notice that the at-issue argument  $\beta$  in (20) can

(Potts 2005: 55)

<sup>&</sup>lt;sup>2</sup> Following Potts (2005), I assume the following type system for CI:

<sup>(</sup>i)  $e^a$ ,  $t^a$ ,  $s^a$  are basic at-issue types for  $\mathcal{L}_{CI}$ .

<sup>(</sup>ii)  $e^c$ ,  $t^c$ ,  $s^c$  are basic CI types for  $\mathcal{L}_{CI}$ .

<sup>(</sup>iii) If  $\sigma$  and  $\tau$  are at-issue types for  $\mathcal{L}_{CI}$ , then  $\langle \sigma, \tau \rangle$  is an at-issue type for  $\mathcal{L}_{CI}$ .

<sup>(</sup>iv) If  $\sigma$  is an at-issue type for  $\mathcal{L}_{CI}$  and  $\tau$  is a CI type for  $\mathcal{L}_{CI}$ , then  $\langle \sigma, \tau \rangle$  is a CI type for  $\mathcal{L}_{CI}$ .

<sup>(</sup>v) If  $\sigma$  and  $\tau$  are at-issue types for  $\mathcal{L}_{CI}$ , then  $\langle \sigma \times \tau \rangle$  is a product type for  $\mathcal{L}_{CI}$ .

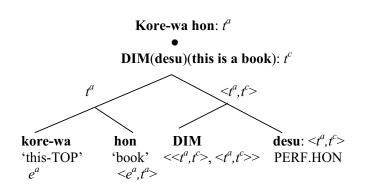
<sup>(</sup>vi) The full set of types for  $\mathcal{L}_{CI}$  is the union of the at-issue types and CI types for  $\mathcal{L}_{CI}$ .

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be consumed twice. This rule ensures that the at-issue dimension is always insensitive to the presence of adjoined CI operators (Potts 2005: 65).

Thus if we apply the above rules to the example (14), we get the logical structure:

(21)



Note that morphologically, the diminutive form *dechu* combines with the noun *hon*. However, in the logical structure it takes a proposition as its argument.

4.2. The self-diminutive shift in other categories

Recall that the self-diminutive shift is productive:

(22) a.	. a <b>s</b> obu play 'to play'	<ul> <li>b. a<b>ch</b>obu</li> <li>play.DIM</li> <li>'to play' (the spea</li> </ul>	( <i>Verb</i> ) ker is uttering the word like a baby)
(23) a.	oi <b>sh</b> ii delicious 'delicious'	<ul> <li>b. oi<b>ch</b>ii</li> <li>delicious.DIM</li> <li>'delicious' (the sp</li> </ul>	( <i>Adjective</i> ) beaker is uttering the word like a baby)

We can analyze the meaning of these examples basically in the same way as the case of the diminutive honorific *dechu*. We can assume that the diminutive forms in (22) and (23) are also morphologically complex. For example, *oichii* can be decomposed as DIM plus *oishii*. This means that we should consider that DIM morpheme is polymorphic as in (24):

(24) a. 
$$[[DIM_{ADJ}]]^{c} = \lambda G \langle e^{a}, d^{a} \rangle$$
. c' such that  $\exists d[d \langle !STAND_{mature} \land mature(sp) = d \land d \langle !$  the degree of maturity of sp in c]  $\land$  sp utters G  
b.  $[[DIM_{VERB.INTR}]]^{c} = \lambda P \langle e^{a}, t^{a} \rangle$ . c' such that  $\exists d[d \langle !STAND_{mature} \land mature(sp) = d \land d \langle !$  the degree of maturity of sp in c]  $\land$  sp utters P

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Notice that because of the phonological component of DIM, the actual pronunciations of G and P are different (i.e., phonologically shifted). The crucial point here is that in non-honorific diminutive forms like (22) and (23), the meaning of diminutivization only scopes over a word. These diminutivizations are "metalinguistic" (e.g., Horn 1989) in the sense that the speaker only targets a particular word and pronounces it like a baby. This clearly contrasts with the case of diminutivization of the performative honorific.

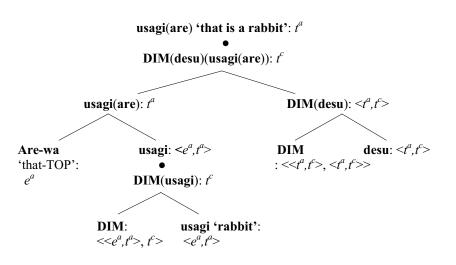
# 5. Scope of self-diminutivization

We have so far considered cases where diminutivization occurs only once within a single utterance. However, as the following example shows, multiple occurrences of diminutive shifts can exist in a single sentence (Sawada 2013):

(25) Are-wa uchagi -dechu. (cf. usagi = 'rabbit') That-TOP rabbit.DIM-PERF.HON.DIM At-issue: That is a rabbit.
CI: I am talking to you in a polite way and I am talking to you like a baby.

In (25), diminutivization occurs twice within the same sentence; i.e., in the noun *usagi* and in the performative honorific suffix *desu*. We can represent the logical structure of (25) as follows:

(26)



Note, however, that we don't have to always diminutivize every potential target within a sentence. Compare the following examples (for the sake of simplicity, here I neglect the politeness meaning of *desu*):

(27) a. U <b>s</b> agi-wa	7) a. U <b>s</b> agi-wa kawaii-de <b>ch</b> u.		kawaii-de <b>s</b> u.
rabbit-TOP cute-PERF.HON.DIM		rabbit.DIM-TOP	cute-PERF.HON
At-issue: A ra	abbit is cute.	At-issue: A rabbit is	cute.
CI: The speal	ker is talking like a baby.	CI: I am uttering the	e word <i>usagi</i> like a baby.

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In the above examples, (27a) is natural baby talk but (27b) is not, because the diminutivization in the latter case only targets the noun part, while the entire mode of speaking is adult talk. Thus, an inconsistency or discrepancy exists in terms of the mode of speaking. On the other hand, (27a) is considered natural baby talk because diminutivization is achieved on a performative honorific, which affects the entire mode of speaking. Based on the above asymmetry, I propose the following generalization:

(28) The semantic scope of a diminutive shift can differ depending on where it arises.

# 6. An alternative view: the word-based approach

We have so far considered that diminutive forms are morphologically complex. However, there is also an alternative approach where the diminutivized word is a single word. In this approach, the diminutivied honorific *dechu* itself has a complex meaning:

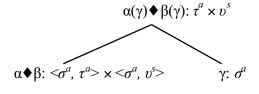
(29)  $[[dechu]]: \langle t^a, t^c \rangle$ =  $\lambda p. p = 1$  and I am uttering p in a polite way  $\wedge$  I am uttering p like a baby.

The important point is that, in this approach, the non-honorific diminutivized forms are considered to be "mixed content" (e.g., McCready 2010; Gutzmann 2011) in that they contain both an at-issue meaning and a CI meaning. For example, under the word-based approach, the meaning of *achobu* 'play.diminutive' and *uchagi* 'rabbit. diminutive' can be defined as follows:

(30) [[achobu]]: <e<sup>a</sup>, t<sup>a</sup>> × t<sup>s</sup> = λx. play(x) ◆ I am talking like a baby (cf. asobu 'to play')
(31) [[uchagi]]: <e<sup>a</sup>, t<sup>a</sup>> × t<sup>s</sup> = λx. rabbit(x) ◆ I am talking like a baby (cf. usagi 'rabbit')

The left side of  $\blacklozenge$  is the at-issue component and the right side of  $\blacklozenge$  is the CI component. In this view, *achobu* and *uchagi* themselves are not pure context-shifting operators. In order to compute these meanings, however, we need to introduce an additional compositional rule and type: mixed application and shunting type (McCready 2010):

(32) Mixed application



(McCready 2010: 20)

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Superscript *s* stands for a shunting type, which is used for resource-sensitive CI application. This rule is different from Potts' CI application in that the at-issue argument does not pass up to the higher level. In the above rule, the at-issue argument of  $\alpha \blacklozenge \beta$  is shunted.<sup>3</sup> Furthermore, following McCready (2010: 20), I assume that the following rule applies for the final interpretation of CI part of mixed content:

(33) Final interpretation rule: Interpret  $\alpha \blacklozenge \beta$ :  $\sigma^a \times t^s$  as follows:

 $\alpha: \sigma^a$ •  $\beta: t^s$ 

Thus the word-based approach would analyze the meaning of (34) as in (35):

(34) Are-wa uchagi-dechu.
That-TOP rabbit.DIM-PRED.POL.DIM
At-issue: That is a rabbit.
CI: I am uttering like a baby. (via uchagi, dechu)

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(35)

rabbit(that): t^a

dechu(rabbit(that)): t^c

dechu: < t^a, t^c >

Are-wa 'that-TOP'

:e^a

\lambda x. rabbit(x) \bullet I am uttering like a baby

<math>: < e^a, t^c > < x < t^c >
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(v) If  $\sigma$ ,  $\tau$  and  $\zeta$  are at-issue types for  $\mathcal{L}^{+S}$ , CI and v is a shunting type for  $\mathcal{L}^{+S}$ , CI, then  $\langle \sigma, \tau \rangle \times \langle \zeta, v \rangle$  is a mixed type for  $\mathcal{L}^{+S}$ , CI.

<sup>&</sup>lt;sup>3</sup> Following McCready (2010), I assume the following type system for shunting types and mixed content: (i)  $e^s$ ,  $t^s$ ,  $s^s$  are basic shunting types for  $\mathcal{L}^{+\$}$ , <sub>CI</sub>.

<sup>(</sup>ii) If  $\sigma$  is an at-issue type for  $\mathcal{L}^{+S}$ , CI and  $\tau$  is a shunting type for  $\mathcal{L}^{+S}$ , CI, then  $\langle \sigma, \tau \rangle$  is a shunting type for  $\mathcal{L}^{+S}$ , CI. (iii) If  $\sigma$  is a shunting type for  $\mathcal{L}^{+S}$ , CI and  $\tau$  is a shunting type for  $\mathcal{L}^{+S}$ , CI, then  $\langle \sigma, \tau \rangle$  is a shunting type for  $\mathcal{L}^{+S}$ , CI.

The following clauses are added to the  $\mathcal{L}^{+S}$ , CI:

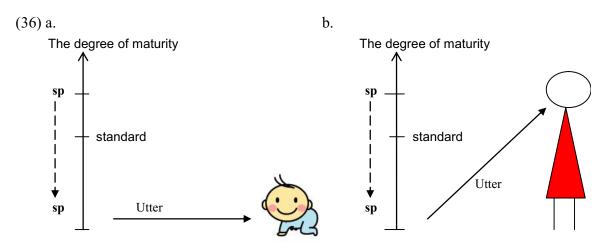
<sup>(</sup>iv) If  $\sigma$  and  $\tau$  are at-issue types for  $\mathcal{L}^{+S}$ , <sub>CI</sub>, and  $\zeta$  and v are shunting types for  $\mathcal{L}^{+S}$ , <sub>CI</sub>, then  $\sigma \times \zeta$ ,  $\langle \sigma, \tau \rangle \times \zeta$ ,  $\sigma \times \langle \zeta, v \rangle$  are mixed types for  $\mathcal{L}^{+S}$ , <sub>CI</sub>.

The question is which approach is better. Although the word-based approach also works, the decompositional approach seems to be more suitable for capturing the relationship between a phonological shift and a contextual shift. It will be necessary for the word-based approach to posit a phonological rule independently. Because of space, I will not go into the discussion on what each approach theoretically means. I would like to leave the issue for future research.

# 7. Context-dependency of self-diminutive shift: interpersonal context-dependency

#### 7.1. Two kinds of emotions

Based on the above discussions, let us now consider the context-dependent properties of the Japanese diminutive shift. The diminutive shift creates a new relationship between a speaker and an addressee, and in the actual conversation diminutive shift can be used for either expressing the emotion of solidarity or emotional dependence. I argue that the speaker's emotion is automatically determined by to whom the sentence is uttered. If the addressee is a baby, the diminutive shift creates an emotion of solidarity as in (36a), and if the addressee is an adult, it creates an emotion of dependence, as shown in (36b):



This means that the speaker's emotion is purely context-dependent and it is based on the hearer.

7.2. Situation where the addressee is neither an adult nor a baby

An interesting point is that if the addressee is neither an adult nor a baby, the diminutive sentence sounds inappropriate. For example, we cannot utter (37) to a 10-year-old:

(37) Oichii-dechu-ka?

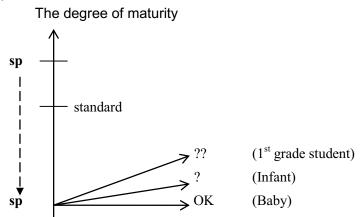
Delicious-PRED.POLITE.DIM-Q At-issue: Is it delicious? CI: The speaker is uttering the question like a baby. In order to clarify the idea that the addressee cannot be a person who is neither an adult nor a baby, I conducted a brief survey regarding the acceptability of (37). In the questionnaire, I set up three kinds of situations where (i) an addressee = a baby (who can only talk a little), (ii) addressee = an infant (who can talk freely), and (iii) an addressee = a  $1^{st}$  grade elementary student. I then asked native speakers how natural the sentence would be in each situation. (Participants are all native speakers of Japanese (Age: 18–22). The following table shows the result of their judgments:

(38) Acceptability of (37), survey conducted on January $17^{th}$
---

					1
	Very natural	Slightly	Can't say	Slightly odd	Very odd
		natural			
A: An addressee = $a$	5	2		1	
baby (who can only talk					
a little)					
B: An addressee = an				5	2
infant (who can talk					
freely)					
C: An addressee = a $1^{st}$				1	7
grade elementary					
student					

The following figure visualizes the above result:

(39)



The above results clearly show that if (i) the addressee is slightly greater than a diminutivized speaker, the resulting diminutive utterance sounds odd. This situation fits neither (i) an emotional dependence nor (ii) solidarity. I would like to explain this based on the following economy-based M-Principle (cf. Levinson (2000)'s M-principle/Horn (1989)'s division of pragmatic labor):

(40) Economy-oriented M-Principle: Do not use a marked expression if there is no reason.

In the context of (37), there seem to be no special reason to use diminutive shift. (It neither fits the situation of solidarity nor the situation of emotional dependency. Thus, the economy-based M-Principle forces the speaker not to use a diminutive shift.

7.3. The diminutive utterance that only has an effect of emotional dependency

The following utterances can naturally be used to show the speaker's emotional dependency toward the addressee, but they cannot be used for expressing solidarity to a baby:

(41)	Koohii-kudachai. Coffee-give.POL 'Please give me c	ITE.DIM	(Request)	
(42)	Koohii tuku-te	kure-machu-ka?	(Indirect speech act, reque	s

(42) Koohii tuku-te kure-machu-ka? (Indirect speech act, request)Coffee make-TE give-PRED.POL.DIM-Q'Can you make a coffee?'

This is because the utterances will violate the "preparatory" conditions of an at-issue speech act; i.e., request, if we posit a satiation that the addressee of the utterances is a baby. According to Searle (1969), the speech act of requesting has the following felicity condition:

(43)	Felicity condition for request (Searle 1969: 62)				
	[where $S = specential specific specif$	[where $S =$ speaker, $H =$ hearer, $A =$ the future action, $P =$ the proposition expressed in the			
	speech act, e = the linguistic expression]				
	Preparatory 1: H is able to do A. S believes H is able to do A.				
		2: It is not obvious to both S and H that H will do A in the normal course			
	of events of his own accord.				
	Sincerity	S wants H to do A.			
	Essential	Counts as an attempt to get H to do A.			

The crucial part is the preparatory condition 1. This condition forces us to assume that the addressee, who is a baby, can make coffee. However, this is inconsistent with our world knowledge: babies cannot make coffee by themselves. This suggests that the specification of pragmatic effects (solidarity, emotional dependence) is regulated by the felicity condition of an at-issue speech act.

7.4. The diminutive utterence that only has an effect of solidarity

Contrary to the examples in (41) and (42), the following sentences seem only appropriate in the context of solidarity with a baby:

(44) Konna koto-o si-tara dame-dechu-yo. Such thing-ACC do-COND bed-PRED.POL.DIM-YO 'It is bad to do such a thing.'

I propose that this example cannot be used in the context of emotional dependency toward an addressee because they violate the proposed economy-oriented M-Principle. Intuitively, it does not make sense to warn the adult addressee based on the diminutive mode because there seems to be no reason to show emotional dependency in the context of warning. Typically, warning like (44) is uttered by the elderly or people who are superior to the addressee in terms of social relationship, and there seems to be no reason to reconstruct a relative relationship between the speaker and the addressee (although if we posit a special context, such reconstruction might be possible).

# 8. The difference with the context-dependency of other expressives

Let us now compare the context-dependent meaning of diminutive shift with that of other expressives like *bastard* and *man*. Potts (2007) and McCready (2009, 2012) claim that the meanings of *bastard* and *man* are context dependent in that their emotion can be either a positive emotion or a negative emotion, depending on context. Observe the following examples:

(45) a. Man, I got an A on my calculus test!! (positive)b. Man, I wrecked my ear this morning. (negative) (McCready 2009: 675)

McCready (2009) claims that when the content is something that is ordinarily understood as positive (such as getting an "A" on a test), *man* expresses a positive emotion, and when the content is negative, *man* expresses a negative emotion. McCready (2009) further argues that whether this attitude is understood as positive or negative is completely dependent on who utters the sentence. Observe the following example:

(46) Man, George Bush won again. (McCready 2009: 675)

McCready (2009) explains the above example as follows. If this sentence is uttered (in 2004) by a deep Republican supporter, then the use of *man* by such a speaker indicates that a positive attitude is held. On the other hand, if the speaker is a rabid Democrat, the attitude in question will be understood as negative.<sup>4</sup>

The context-dependency of Japanese diminutive shift is different from that of *man* in that the emotive meaning of diminutive shift is dependent on to whom a sentence is uttered, not on who utters the sentence. If the addressee is an adult, the diminutive shift triggers an emotion of dependency, while if the addressee is a baby, the diminutive shift triggers an emotion of solidarity. The diminutive shift in Japanese strongly suggests that there is a type, "interpersonal expressive," whose emotive meaning is dependent on the hearer.

<sup>&</sup>lt;sup>4</sup> McCready (2009) claims that the meaning of *man* is also world-dependent.

#### 9. Conclusions

In this paper, we have investigated the context-dependent properties of Japanese diminutive shift and claimed that the Japanese diminutive shift triggers a conventional implicature (CI) that "a speaker is uttering like a baby." More specifically, I have argued that the main function of the Japanese diminutive shift is to shift a speaker's degree of maturity to the bottom (at the level of CI), which then reconstructs the relative relationship between the speaker and the addressee.

I then focused on the context-dependent-dependent strategies of diminutives where diminutive shift can be used for conveying either a speaker's emotion of (i) solidarity or (ii) emotional dependence, and argued that the speaker's emotions of "solidarity" and "emotional dependence" are determined by who the addressee is.

We also consider the context in which the diminutive shift can and cannot be used, and claim that the use of the diminutive shift is sensitive to the preparatory condition of an at-issue speech act and the economy-oriented markedness principle: Do not use a marked expression if there is no reason.

The theoretical implications of this paper are that the Japanese diminutive shift is a "context shifting operator" that enables the speaker to reconstruct the relative relationship between a speaker and a hearer, and that there is a type, "interpersonal expressive," whose emotive meanings are dependent on the hearer. I hope this paper provided new perspectives for the context-dependency of expressives, and the relationship between scalarity and a mode of speaking.

For future study, I would like to further investigate the following two points. First, this paper only focuses on the phonology-based diminutive, but many languages have diminutive morphemes/affixes (e.g., *ino* in Italian) and these morphemes tend to express various kinds of meanings, including small size, affection, approximation, intensification, imitation, politeness, etc. (e.g., Dressler and Merlini Barbaresi 1987, 1994; Wierzbicka 1991; Sifianou 1992; Jurafsky 1996; Mendoza 2005; Matsumoto 1985; Sawada 2010). For example, Dressler and Merlini Barbaresi (1987, 2001) claim that diminutive morphemes have both the semantic feature of [smallness] and a pragmatic feature of [non-seriousness]. They further argue that the pragmatic meaning is more basic than the semantic meaning of [smallness]. On the other hand, Jurafsky (1996), based on diachronic and synchronic data of various languages, proposes that diminutives arise from semantic or pragmatic links with children. It would be interesting to consider the similarities and differences between Japanese diminutive shifts and the phenomenon of diminutives in other languages.

Second, it would be worthwhile to consider the diminutive shift from a general phenomenon of context shifting or indexical shifting. It is widely known that there is a phenomenon of indexical shifting in natural language. For example, in some languages sentences with the form *John said that I am hungry* may report John's self-report of hunger. Anand and Nevin (2004) account for

the indexical shifting phenomenon by assuming that indexical shifting is driven by "contextshifting operators," which overwrite the context parameter of the interpretation function with the intentional index parameter. Although the Japanese diminutive shift does not trigger an indexical shifting in terms of a person, it still shifts the quality of the speaker (first person). There seems to be some similarity between a diminutive shift and indexical shifting.

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