The meanings of positive polarity minimizers in Japanese: a unified approach

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Observe the following sentence:

(1) Kono doa-wa　　{*chotto/sukoshi*}　ai-teiru.　　　(NPIs = *chitto-mo/sukoshi-mo +-nai* 'neg')
　　This　door-TOP　a little　　　　　open-PERF
　　'This door is a little open.'

(1) contains an absolute gradable adjective (e.g. Kennedy 2007), which posits a minimum standard. Thus, (1) is interpreted as, 'The degree of openness of this door exceeds the minimum standard by a small amount.' (Note that *sukoshi* and *chotto* in (1) are PPIs. If (1) is negated, the sentence becomes ungrammatical. However, if the particle *mo* is attached to *sukoshi/chotto*, the resulting compound behaves as an NPI, and the negative version of (1) becomes grammatical.)
　　Interestingly, *chotto*, but not *sukoshi*, can also appear in an environment where there is no gradable predicate it can combine with:

(2){*Chotto*/*sukoshi} kaimono-ni　i-te　　ku-ru.　　　　　　(Assertion)
　　CHOTTO　　　　shopping-to　go-TE　come-NON.PAST
　　'lit. *Chotto* I will go shopping.'

Matsumoto (1985) observes that this type of *chotto* is used to weaken the degree of illocutionary force. I will call the type of minimizer in (1) an amount minimizer and the type of minimizer in (2) an expressive minimizer.
　　The purpose of this paper is to investigate the semantics/pragmatics of the amount minimizer and the expressive minimizer and provide a formal analysis that captures the symmetrical and asymmetrical relationships between them in a principled way. I will argue that the two kinds of minimizers are semantically parallel in that their interpretations are derived by a single lexical item. However, I will also argue that there is an asymmetrical relationship between them—i.e., the richness of their degree morphology. It will be shown that this asymmetry can naturally be explained by positing that there is a natural extension from a semantic scale to a pragmatic scale, but not vice versa.

Diagnostics for distinguishing between the two kinds of minimizers: Two pieces of evidence suggest that the amount minimizer and the expressive minimizer are logically/dimensionally different. First, unlike the amount minimizer seen in (1), the expressive minimizer seen in (2) can appear with negation. (Recall that the amount minimizers cannot appear with negation):

(3){*Chotto*/*sukoshi} jikan-ga　　　nai-desu.　　　　　(*Chotto* = the expressive minimizer)
　　A little　　　　　time-NOM　　NEG-PRED.POL
　　At-issue: 'I don't have time.'　　CI: The degree of commitment of the assertion is low.

If *mo* is attached to *chotto/sukoshi* in (3), the sentence means 'I don't have time at all.' Additionally, in (1) the negative response, 'No, that's not right' can target the meaning (i.e. amount) created by the minimizers, whereas in (2) such a negative response could not target the meaning created by the minimizer *chotto*. These evidence suggest that the two types of minimizers are compositionally and dimensionally different (Potts 2005).

In light of the above argument, how can we analyze the meanings of the two types of minimizers? I argue that although the amount minimizer and the expressive minimizer are different in terms of function, their meanings are derived by the same lexical item:

(4) $[\![sukoshi/chotto]\!] = \lambda G_{<d<X,t>>}\lambda X.\exists d[d >\approx STAND \wedge G(d)(X)]$

(where X is either an individual of type <e> or a speech act force of type <a>, and *sukoshi* always specifiies X as an individual.)

For example, if we combine the amount minimizer with the gradable predicate *ai-teiru* (i.e. $\lambda d\lambda x.open(x)=d$), we get the following truth condition:

(5) $[\![chotto/sukoshi]\!]([\![ai\text{-}teiru]\!]) = \lambda x.\exists d[d >\approx STAND \wedge open(x) = d]$

In words, (5) says that the degree of openness of *x* is slightly greater than a minimum standard. (Note that if the amount minimizer combines with a relative gradable adjective like *takai* 'expensive', STAND in (4) is interpreted as a contextual standard; e.g. Kennedy 2007).

The meaning of the expressive *chotto* can also be derived from (4). The semantic structure of (3) is shown in (6). (I assume that an illocutionary operator combines with a sentence radical meaning, e.g. Krifka (2001). The superscript c stands for conventional implicature (CI)):

(6)
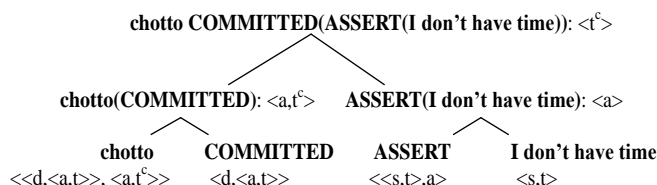
The expressive *chotto* takes a null gradable predicate COMMITTED and an illocutionary force and returns a CI. Note that since COMMITTED is an absolute gradable predicate that posits a minimum standard, STAND in (4) is interpreted as a minimum standard. This argument shows that there is a parallelism between scale structure in the adjectival domain and the speech act domain, and the semantic status of *chotto* varies according its modification structure. **Ambiguity**: Note that the expressive *chotto* does not have to be at a sentence initial position:

(7) Kono hon-wa   {*sukoshi/chotto*}   takai
     This   book-TOP   a little   expensive
     a. The degree of expensiveness of this book is slightly greater than a standard.
     b. This book is expensive. (The degree of commitment of the assertion is slightly greater than a minimum.) (with *chotto*)

The following example supports the idea that (7) with *chotto* has an expressive reading:

(8) Kono   doa-wa   {chotto/*sukoshi}   simat-tei-masu.   (Please use another door.)
     This   door-TOP   CHOTTO   close-PERF-POLITE
     'This door is closed.' (CI: The degree of commitment of the assertion is slightly greater than a minimum.)

(8) does not have an amount reading because the predicate *simat-teiru* 'closed' is an upper-closed scale adjective, which posits a maximum standard. It is impossible to measure the degree of 'closedness' from the maximum point. However, (8) with *chotto* has an expressive reading. This suggests that syntactically expressive minimizers do not always have to be at a sentence initial position. **Conclusion:** The theoretical implication is that there is a parallelism between the

adjectival domain and the speech act domain in terms of scale structure. This idea naturally explains the difference between the amount minimizers and the expressive minimizers in terms of the level of attachment. I explain the difference between *chotto* and *sukoshi* by positing that there is a natural extension from a semantic scale to a pragmatic scale, but not vice versa.

Selected References: Kennedy, C. 2007. Vagueness and grammar: the semantics of relative and absolute gradable adjectives. *L&P* 30. **Krifka, M**. 2001. Quantifying into question acts. *NLS* 9. **Matsumoto, Y**. 1985. A sort of speech act qualification in Japanese: *chotto*. *Journal of Asian Culture* IX. **Potts, C**. 2005. *The Logic of Conventional Implicatures*.OUP.