Interactions of discourse particles and sentence mood operators: Japanese *ne* in contrast with German *ja* under the framework of multidimensional semantics

**Introduction.** In the literature, a German discourse particle (*Modalpartikel* in German) *ja* and Japanese discourse particle (*Shūjōshi* in Japanese) *ne* seem to have been analyzed in a similar way: They are modifiers on propositional content *p* and indicate common-ground status of *p* (cf. Repp 2013 for *ja* and McCreedy 2009 for *ne* among many others). This analysis correctly predicts that the particles are incompatible with breaking-news contexts (1), but it cannot explain why Japanese *ne* is felicitous in questions (2b), answers (3B’), and denial contexts (4B’), where *p* cannot be in the common ground.

**Analysis.** Using the framework of multidimensional semantics devised by Gutzmann (2015), I analyze *ne* as a modifier on sentence mood. Inspired by Truckenbrodt (2006), Gutzmann suggests that each sentence mood has a flavor of deontic interpretation and proposes a mood operator DEONT whose type is \(<\langle s,t\rangle,c,u\rangle\) (u is a use-conditional type). I assume two variants of DEONT, namely DEONT$_S$ and DEONT$_H$, and define them as in (5). The use-conditional meaning of *ne* is presented in (6), and (7) shows the result of the use-conditional semantic calculation of an utterance with *ne*. *Ne* takes a mood operator DEONT$_S$ and proposition *p* as its arguments and gives use-condition \(\text{DEONT}_S(p) \land \text{DEONT}_H(p)\). By definitions of DEONT$_S$ and DEONT$_H$, the use-condition of *ne*(DEONT$_S$)(p) has four possibilities (8a-d). This analysis correctly predicts that *ne* is infelicitous in (1), but not in (2)-(4): (1) does not fulfill any condition in (8), while (2) can fulfill (8b) or (8d), and (3) and (4) fulfill (8c). On top of that, I show that (8b) and (8d) reflect Hashimoto’s (1993) informal descriptions of *ka ne*, which pointed out that *ka ne* is ambiguous between two interpretations. As for *ja*, following Gutzmann (2015), I adopt an ordinary view which treats *ja* as a modifier on proposition *p* (cf. Kratzer 1999, Zimmermann 2011), which predicts that *ja*(p) in (1)-(4) are infelicitous because *p* cannot be in CG in these examples.

1. (Happy young dad to passer-by:)
   a. #Ich habe *ja* eine Tochter. b. #Musume-ga umareta ne.
   I have *ja* a daughter daughter-NOM was born ne
   ‘I have a daughter, y’know.’ ‘I have a daughter, y’know.’

2. a. *Kommst Peter *ja* gleich? b. Peter-wa kimasu ka ne?
   comes Peter ja soon Peter-TOP come Q ne
   a rough translation of (2b): ‘Maybe you don’t know the answer; but will Peter come?’

3. A: Where were you at the time of the murder?
   B: Ich war (#*ja*) zu Hause. B’; [Sono toki]-wa ie ni imashita ne.
   ‘I was at home at that time.’

4. A: Well, then, Peter was at home at the time of the murder, wasn’t he?
   B: Das ist (#*ja*) nicht wahr. B’;Iya, chigau ne. (Peter-wa sono toki hankougenba ni ita.)
   ‘No, it is not the case. (Peter was at the scene of the murder at the time.)’

5. a. \([\text{DEONT}_S]\) = \(\lambda p_s \lambda c.\) there is a \(d \in \mathcal{D}_S\) such that \(d\) is suitable for *p* in *c* and \(d\) holds for *p* in the world of *c*, where \(\mathcal{D}_S\) is a set of use-conditional deontic speaker-predicates \(\mathcal{D}_S = \{\lambda p.\) the speaker of *c* wants to share *p*, \(\lambda p.\) the speaker of *c* wants to know whether *p}\)
   b. \([\text{DEONT}_H]\) = \(\lambda p_s \lambda c.\) there is a \(d \in \mathcal{D}_H\) such that \(d\) is suitable for *p* in *c* and \(d\) holds for *p* in the world of *c*, where \(\mathcal{D}_H\) is a set of use-conditional deontic hearer-predicates \(\mathcal{D}_H = \{\lambda p.\) the hearer of *c* wants to share *p*, \(\lambda p.\) the hearer of *c* wants to know whether *p}\)

6. \([ne]\) = \(\lambda D_{st,cu} \lambda p_{st}.\) \(D(p) \land \text{DEONT}_H(p)\)

7. \([ne]\) = \(\[\text{DEONT}_S\](p) = \text{DEONT}_S(p) \land \text{DEONT}_H(p)\)

8. a. The speaker wants to share *p* and the hearer wants to share *p*.
   b. The speaker wants to know whether *p* and the hearer wants to know whether *p*.
   c. The speaker wants to share *p* and the hearer wants to know whether *p*.
   d. The speaker wants to know whether *p* and the hearer wants to share *p*. 