Exhaustification and pejorativity: 
The case of Japanese *nanka*

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1 Introduction

*The phenomenon:*

(1)  

katatsumuri -nanka tabe-taku-nai  
nail NANKA eat-want-NEG  
‘I don’t want to eat snails (ugh)’

This talk in 5 bullet points:

- General extenders in Japanese have a pejorative use
- Explainable using alternatives and exhaustification
- Pejorativity is the “last resort” when alternatives can’t be exhausted
- What bits of affect filter into the grammar?
- Diachronic view: subjectification of scalar items (Beltrama, 2014, 2016)

2 Descriptive work on *nanka*

- The availability of the pejorative use of extenders in Japanese has been widely documented (Kinjo, 1996; Suzuki, 1998a,b)
- Not entirely clear why pejorativity should derive from extenders, semantically speaking

2.1 *nanka* is ambiguous

(2)  

jon-wa miitobooru -nanka mottekita  
john-TOP meatball NANKA brought  

a. ‘John brought meatballs (and other things like that)’  
(EXTENDER use)

b. ‘Ugh, John brought meatballs (that’s disgusting/stupid/etc.)’  
(PEJORATIVE use)

2.2 It’s not just *nanka*

(3)  

-nante  

a. tanjooobi-purezento-wa wain-nante ii-to-omou  
birthday-present-TOP wine-NANTE good-that-think  
‘As for their birthday gift, I think wine (and things like that) would be good’

b. wain-nante kirai-da  
wine-NANTE hate-COP  
‘I hate wine (wine is stupid)’

(4)  

-nado  

a. shokuzen-ni sarada-nado doodesu -ka?  
premeal-DAT salad-NADO how.about.HON Q  
‘How about a salad (or things like that) before your meal?’

b. sarada-nado iran!  
salad-NADO need.NEG  
‘I don’t need a salad (salad is stupid)’

(5)  

-tari  

a. kinoo-wa omiyage-o kat-tari shita  
yesterday-TOP souvenir-ACC buy-TARI do.PAST  
‘Yesterday, we bought souvenirs (and did other things like that)’
b. dooshite kyuuni kuruma-o kat-tari shitanda?
   why suddenly car-ACC buy-TARI do.PAST.COP
   ‘Why did you suddenly buy a car? (That’s stupid)’

2.3 In a nutshell

1. Extender reading: ‘things like X’

2. Pejorative reading: ‘I think very low of X’

3 A formal representation of ‘X and things like X’

3.1 Assumption: Alternatives
cf., Focus (Rooth, 1992)

(6) I want meatballs for dinner.

(7) $\text{ALT}_C(\text{meatballs}) = \{ \text{lasagna, steak, grilled chicken,}
                                  \text{pizza, curry, escargot … } \}$

3.2 The extender meaning

EQUVALECE ALTERNATIVES:

(8) $[\text{John brought meatballs NANKA}]$
a. $[\text{John brought meatballs}]^\text{EQ-ALT}$
   b. $[\text{John brought meatballs}]^\text{Eq-alt}$

\[
\pi(p | \mu) = \mu(\text{John brought meatballs})
\]

\[
\mu = \text{probability measure}
\]

\[
\begin{align*}
\text{John brought salad,} \\
\text{John brought lasagna,} \\
\text{John brought deviled eggs} \\
\end{align*}
\]

3.3 Is this the source of the pejorativity?

Is nanka offensive because the speaker is saying that the NP is a part of a large set of things like it, which might be interpreted as indifference? No, I don’t think so.

(10) koogi-nanka tsuretekita
corgi-NANKA bring.PAST
   ‘Ugh, they brought a (fucking) corgi’
   NOT: ‘He brought a corgi or whatever’

Proposal: The pejorativity comes from the exhaustification of the alternatives.

4 Exhaustification

You can’t induce alternatives for the sake of inducing them. You gotta say something about them. For example, $[\text{meatballs}]^P$ roughly means ‘meatballs, but not the meatball alternatives’ (Rooth, 1992).
More examples of exhaustification:

(11) The party was so wild, people were dancing in the [hallway]!
  a. {living room, dining room, bedroom, kitchen}
  b. EVEN in the hallway: ‘hallway was the least likely’

(12) Well, [Steve]F finished the homework
  a. {Bob, Mary, Bill, Sarah}
  b. ONLY Steve: ‘not Bob, Mary, Bill, or Sarah’

Two covert exhaustification operators EVEN and ONLY (Chierchia, 2013):

\[
\begin{align*}
(13) \quad [O]_C & = \lambda p.p \land \forall q \in [p]^{ALT}_C \left[ p \neq q \rightarrow \neg q \right] \\
& \text{‘Any alternative to } p \text{ that isn’t entailed by } p \text{ is false’}
\end{align*}
\]

\[
\begin{align*}
(14) \quad [E]_C & = \lambda p.p \land \forall q \in [p]^{ALT}_C \left[ \mu(p) \leq_c \mu(q) \land \text{small}_C(\mu(p)) \right] \\
& \text{(} \mu = \text{probability measure)}
\end{align*}
\]

‘the probability of } p \text{’s alternatives is greater than or equal to that of } p \text{, which has low probability’}

Original formulation of } E^1 \text{ doesn’t include the last conjunct, } \text{small}(\mu(p)). \text{ But I think it’s necessary:}

\[
\begin{align*}
(15) \quad a. \text{ (Colloquium organizers Cara and Alicia’s attendance likelihood is 100%. Ai, 95%).} \\
& \text{ ‘Today’s colloquium was so important, [Ai]F came to it. († rude)!}
\end{align*}
\]

b. (Kali lives out-of-state, so he hardly ever shows up to department events. Probability = 2%?)

Today’s colloquium was so important, [Kali]F came to it.

“Or equal to” is also an explicit addition I’ve made. You can imagine that (15b) would still be felicitous if another person in the alternative set also had a 2% chance of coming.

Of course } ALT \text{ in the case of } nanka \text{ would be } EQ-ALT.

4.1 Exhaustifying equivalence alternatives

Problem: We run into issues if we exhaustify } nanka’s equivalence alternatives via } O \text{ and } E.

Alternatives:

\[
\begin{align*}
(16) \quad [\text{John brought meatballs NANKA}] & = 1 \text{ iff John brought meatballs} \\
& \text{a. } = 1 \text{ iff John brought meatballs} \\
& \text{b. } [\text{John brought meatballs}]^{EQ-ALT} = \{ p \mid \mu(p) = \mu(\text{John brought meatballs}) \}
\end{align*}
\]

ONLY doesn’t work:

\[
\begin{align*}
(17) \quad [O]_C (\text{John brought meatballs NANKA}) & = 1 \text{ iff j brought meatballs} \\
& \text{a. } = 1 \text{ iff j brought meatballs} \\
& \text{b. } \forall q \in [\text{j brought mb’s}]^{EQ-ALT}_C \left[ j \text{ brought mb’s} \neq q \rightarrow \neg q \right]
\end{align*}
\]

\[\Delta \text{ Problem:}
\]

\begin{itemize}
  \item ONLY: ‘John brought meatballs, but not other potluck things — no salad, no lasagna, no deviled eggs’
  \item = the probability of him having brought salad, lasagna, and deviled eggs is 0%
  \item } nanka: ‘meatballs and their alternatives all have the same probability’
  \item \ldots which means } his probability of bringing meatballs must also be 0%.
\end{itemize}
EVEN doesn’t work either:

\[ (18) \quad [E]_C (\text{John brought meatballs NANKA}) = 1 \iff \text{John brought meatballs} \land \forall q \in [j \text{ brought mb’s}]^{\text{EQ-ALT}}_C \left\{ \mu(j \text{ brought mb’s}) \leq_C \mu(q) \land \text{small}_C(\mu(j \text{ brought mb’s})) \right\} \]

\[ \triangle \quad \text{Problem:} \]

\[ \begin{align*} & \text{EVEN: ‘nothing was more unlikely than John bringing meatballs (amongst potluck dishes).’} \\
& \text{nanka: ‘the alternatives (e.g., \text{bringing salad, lasagna, or deviled eggs}) have the same probability as John bringing meatballs’} \\
& \text{This makes the} \leq \text{ reduce to} =! \\
& \text{…which makes the sentence mean ‘John brought meatballs, which was very unexpected, but him bringing any other potluck dish was also very unexpected’} \]

4.2 Remedy 1: Just tack it on (extender use)

One option would be to just not do anything about the equivalence alternatives besides assert the existence of it. We could imagine some sort of default extender operator:

\[ (19) \quad \begin{align*} & \text{a. } [\text{EXT}^\text{ALT}]_C = \lambda p. p \land \exists q \in [p]^{\text{EQ-ALT}}_C[q] \\
& \text{b. } [\text{EXT}^\text{ALT}]_C (j \text{ brought mb’s NANKA}) = 1 \iff \text{John brought meatballs} \land \exists q \in [j \text{ brought mb’s}]^{\text{EQ-ALT}}_C[q] \end{align*} \]

Quite literally, ‘meatballs and things like that.’ This gets us the extender use of nanka.

4.3 Remedy 2: Subjectify the scale (pejorative use)

\[ \text{O is unfixable: it straight-up creates a contradiction.} \]

If you really must exhaustify via \( E \), you can try to get away from the probability scale, which is what is causing the weirdness.

**Subjectifying the scale:**

\[ (20) \quad [E_{\text{SUBJ}}]_C = \lambda p. p \land \forall q \in [p]^{\text{EQ-ALT}}_C[\mu(p) \leq_C \mu(q) \land \text{small}_C(\mu(p))] \]

\[ \star (\mu = \text{approval measure}) \]

Take two:

\[ (21) \quad \begin{align*} & [E_{\text{SUBJ}}]_C (\text{John brought meatballs NANKA}) = 1 \iff \text{John brought meatballs} \land \forall q \in [j \text{ brought mb’s}]^{\text{EQ-ALT}}_C[\mu(j \text{ brought mb’s}) \leq_C \mu(q) \land \text{small}_C(\mu(j \text{ brought mb’s}))] \\
& \quad (\mu = \text{approval measure}) \end{align*} \]

‘Nothing is worse than John bringing meatballs’

In other words: ‘ugh’.

5 Formal approaches to social meaning

**Relating this to language variation and change:**

- Language likes to subjectify meaning over time (Traugott, 1989)
- Subjectification of scalar items, in fact, is a known phenomenon:

\[ (22) \quad \begin{align*} & \text{a. He is so tall} \\
& \text{b. That is so not funny} \quad (\text{Irwin, 2014}) \end{align*} \]

\[ (23) \quad \begin{align*} & \text{a. The glass is totally full} \\
& \text{b. We totally won the game} \quad (\text{Beltrama, 2014, 2016}) \end{align*} \]
Some issues this raises:

• “Subjectification” is heterogenous
• Subjectified lexical (degree) scale = speaker commitment scale
• Subjectified probability scale = approval scale
• Why??

★ How do different scales interrelate conceptually and semantically?

6 Beyond Japanese

Extenders and indifference:

(24) a. Add chocolate chips or whatever (you want) to the mixture (cf., Dayal, 1997; von Fintel, 2000)
   b. I saw your blog or whatever/whatevs

a. ?? Add chocolate chips or whatevs (you want) to the mixture
   b. I saw your blog or whatevs

Related:

(25) Beltrama (2014, 2016)

a. The tank is totally full (Lexical scale)  
   Paraphrase: ‘The tank is full to the brim’
   b. Dinosaurs are totally extinct (Precision scale)  
   Paraphrase: ‘Dinosaurs are absolutely extinct’
   c. We totally won the game (Subjectified scale)  
   Paraphrase: ‘I’m telling you, we won the game’

(26) Taniguchi (2016, forthcoming)

a. The tank is totes full (*Lexical / ✓ Subjectified)  
   Paraphrase: ‘I’m telling you, the tank is full’

b. Dinosaurs are totes extinct (*Precision / ✓ Subjectified)  
   Paraphrase: ‘I’m telling you, dinosaurs are extinct’

c. We totes won the game (✓ Subjectified scale)  
   Paraphrase: ‘I’m telling you, we won the game’

Other things like ‘things like that’:

(27) a. I would never do such a thing
   b. Don’t compare me to the likes of you

7 The spontaneous pejorativity of language

• How much we (dis)approve of something is seemingly a social artifact...
• ...BUT affect actually filters into the grammar to play an automatic and crucial role in saving an otherwise defunct computation

• The case of nanka presents a grammatical view of the role of pejorativity in natural language

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References

Beltrama, Andrea. 2014. From totally dark to totally old: The formal semantics of subjectification.