Bias meaning

Biased Qeustions, Givenness, and Direct Evidentiality

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Adjective Predicate

- When the predicate of the construction is an adjective, there are two intonational patterns used by the young speakers of the Tokyo dialect.
- (2) ano umi aoku nai?
 that sea blue NEG
 'That sea is blue, isn't it?/lsn't that sea blue?'
 (Bias: I think that sea is blue.)

- A Japanese negative sentence uttered with a rising intonation expresses a biased question.
- Intuitively, it has a function similar to English tag questions or negative bias questions [Romero, 2005, Nilsenova, 2002].
- (1) a. Where is Mary?
 - b. heya ni i nai?
 room in exist NEG
 'She is in her room, isn't she?'/'lsn't she in her room?'
 (Bias: I think she is in her room.)
 - c. #heya ni iru?
 room in exist
 #'She is in her room?'

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Rise with Accents

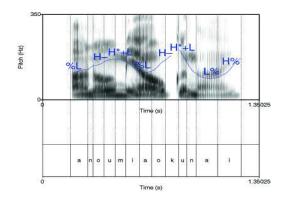


Figure: Rise with Accents

%LH- = AP-initial rise, H*+L=accentual fall, L%H%=(incredulity rise)

Rise with Deaccentuation

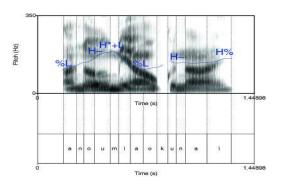


Figure: Rise with Deaccentuation

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Negation

- These two variants are not completely interchangeable.
- First, the presence of negation is necessary for deaccentuation to occur.
- (4) koko samui?
 - a. √ koko samu'i? (Rise with Accents)
 - b. *koko samui? (Rise with Deaccentuation)

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Two accent patterns

(3) ano u'mi aoku nai?
that sea blue NEG
'That sea is blue, isn't it?/Isn't that sea blue?'

a. ano u'mi a'oku nai? L%H*+L L%H% (Rise with Accents)

o. ano u'mi aoku nai?

%LH- H% (Rise with Deaccentuation) New!

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Iterated Negation

"Kon'ya wa Boogie Back" Kenji Ozawa featuring Schadaraparr (1994) sample

(5) a. yoku nai? kore.
good NEG this
'Isn't it good? This one.'

b. kore yoku nai?

this good NEG 'Isn't this good?'

c. yoku naku naku naku naku naku nai? good NEG NEG NEG NEG NEG NEG 'Isn't this not not not not not good?'

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Emotive Content

- Second, the deaccented versions often express a variety of strong emotive meanings compared to the normal rise versions.
- (2) is understood as an exclamation (surprise).
- (3-b) is perceived as a complaint.
- (2) Ano umi aoku nai?
 that sea blue NEG
 'That sea is blue, isn't it?'
 ('and it's amazing how blue it is')

(Rise with Deaccentuation)

(3-b) koko samuku nai?

here cold NEG

'It's cold here, isn't it?'/'Isn't it cold here?'

('It's too bad that it's cold here') (Rise with Deaccentuation)

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Distributional Difference

- Third, there is an asymmetry in the distribution with respect to context types.
- Both can be used when both the speaker and the addressee are acknowledging the coldness of the room.
- (3-b) Context: both interlocutors are in a cold room.

koko samuku nai?

'It's cold here, isn't it?'/'Isn't it cold here?'

- a. ✓ sa'muku nai↑ (Rise with Accents)
- b. ✓ samuku nai↑ (Rise with Deaccentuation)

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Digression: Parallel Intuition in English

- The preposed negative question uttered with Falling intonation seem to convey similar emotive effects (originally pointed out by Maribel Romero, p.c.).
- (6) a. Don't you look nice today ↓
 - b. (Oh dear,) Isn't it cold here↓

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Room for Doubt

- Rise with Deaccentuation is infelicitous when the speaker doesn't have evidence for p,
- I.e., when evidence for p is available for both of the interlocutors.
- (7) Context: B has just won a lottery. A has never won a lottery in her life.

A: takarakuji atat tara ureshiku nai? lottery won COMP happy NEG 'Aren't you happy, since you won a lottery?'

(i) √ureshi'ku nai↑ (Rise with Accents)

(ii) #ureshiku nai↑ (Rise with Deaccentuation)

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Interim Summary 1: Basic Observations

• There are two intonational variants for Japanese biased questions:

Rise with Accents used by all speakers of the Tokyo dialect. Rise with Deaccentuation used by young speakers.

- Rise with Deaccentuation often (but not always) tones up emotive content.
- The asymmetry of distribution:

Rise with Accents can be used as long as the speaker is biased toward the positive answer.

Rise with Deaccentuation requires the context where evidence is available for both of the interlocutors.

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English preposed negation

- A preposed negation question necessarily carries an epistemic implicature that the speaker believed or at least expected that the positive answer is correct.
- (8) Isn't Jane coming?
 Positive epistemic implicature: The speaker believes or at least expects that Jane is coming. (Romero and Han, 2004)

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Research Questions

- Why does Rise with Deaccentuation often (but not always) express emotive content?
- Why does Rise with Accents have a wider distribution than Rise with Deaccentuation?

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Japanese Biased Questions

Assumption

Regardless of the presense/absense of deaccentuation, a question of the form p-nai? gives rise to the Bias implicature [see Aihara, 2007].

- (1) a. Where is Mary?
 - b. heya ni i nai?
 room in exist NEG
 'She is in her room, isn't she?'/'lsn't she in her room?'
 (Bias: I think she is in her room.)
 - c. #heya ni iru?
 room in exist
 #'She is in her room?'

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Bias Implicature

• In terms of Lewisian subjective probability [Lewis, 1986], the speaker's degree of belief is at least above chance.

- The implicature of p-nai?: The speaker has a Bias toward p.
- $C_{A,c}(p) > .5$

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Deaccenting in Japanese

• The accentual rises of Given materials in post-FOCUS positions are reduced [Deguchi and Kitagawa, 2002, Ishihara, 2002, 2003].

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Deaccenting Rule

- Many researchers have recognized the importance of deaccenting rules [Ladd, 1980, Brown, 1983, Terken and Hirschberg, 1994, Schwarzschild, 1999].
- In particular, in English, given materials in the discourse are deaccented [Brown, 1983, Terken and Hirschberg, 1994].

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Post-FOCUS Reduction in Japanese

(10)Naoya-ga nani-o nomiya-de nonda no? Naoya-NOM what-ACC bar-LOC drank Q 'What did Naoya drink at the bar?' [Ishihara, 2002]

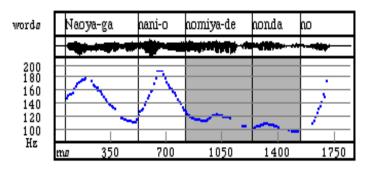


Figure: Ishihara 2002, p. 4

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What's next?

Toward a unified analysis of Givenness

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- Deaccenting marks Givenness in Information Structure.
- In biased questions, deaccenting seems to indicate that evidence is available for both the speaker and the addressee
- Can we generalize these two instances of deaccenting?

Our Proposal 1

Define Givenness in terms of Publicity.

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Givenness in Information Structure

- The given material corresponds to the issue that is publicly committed (or assumed to be committed).
- (11) a. Who came to the party?
 - b. [Focus John] [Given came to the party].
 - Given: Someone came to the party.
 - Question under Discussion (QUD): Who came to the party?
 - Both the speaker and the addressee are committed to the issue, 'Who came to the party?'

Givenness in Biased Questions

• The given material corresponds to the information that has publicly available evidence.

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- (3-b) koko samuku nai?
 here cold NEG
 'lt's cold here, isn't it?'/'lsn't it cold here?'
 - I know that evidence is publicly available.
 - Don't you think that this evidence is clear enough to conclude that 'it is cold', to make it as a public commitment?

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Barker (to appear): Clarity and the grammar of skepticism

(12) It is clear that Abby is a doctor. (Barker, to appear)

Why ever assert clarity? Because doing so reveals information about the epistemic standard of evidence that is operative in a discourse. (Barker, to appear; p18)

- Why do we question something Given?
- Deaccentuation in biased questions, i.e., specifying Givenness, gives rise to a meta-linguistic talk about the standard for the justification of evidence.

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Deaccenting: Lexicalized Givenness

Our Proposal 2

Deaccentuation has gained a grammaticalized meaning, Givenness.

- Deaccenting marks Givenness in the discourse.
- We go one step further:
 (At least in the context of biased questions,) deaccenting is conventionalized to mean Givenness as its lexical specification.

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Interim Summary 3: Givenness as Publicity

- Givenness observed in different constructions can be generalized in terms of Publicity
 - Public commitment to a certain issue. (QUD)
 - Justification from public evidence.

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Post-Focus Reduction

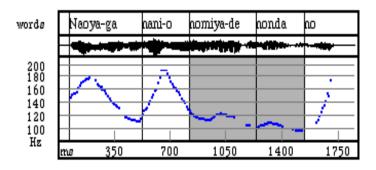


Figure: Ishihara 2002, p. 4

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Deaccentuation

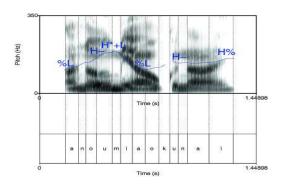


Figure: Rise with Deaccentuation

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Emotive Meanings

 By defining the lexical meaning of deaccentuation, we can account for why Rise with Deacentuation induces emotive meanings.

(3-b) koko samuku nai?

here cold NEG

'It's cold here, isn't it?'/'Isn't it cold here?'
(Complaint: 'It's too bad that it's cold here')

(Disc with December)

(Rise with Deaccentuation)

(2) Ano umi aoku nai?

that sea blue NEG

'That sea is blue, isn't it?'

(Surprise: 'and it's amazing how blue it is')

(Rise with Deaccentuation)

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Scale

- If p is Given, the speaker is ready to add p to the common ground.
- It follows that the speaker strongly suspects p $(C_{A,c}=.98)$.
- We argue that this Givenness implicature and the Bias implicature form a scale.

Subjective Probability Scale

Given ⊂ Bias

i.e., if p is Given, it is entailed that p is Biased.

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The motivation of superfluous questions

- When the speaker asks a question with deaccentuation, the speaker is inquiring something which is already Given (publicly evident).
- The speaker is not seeking for information.
- What is communicated is the high reliability of evidence in the common ground.
- Question: The speaker is trying to elicit some reaction from the addressee.
- The speaker is expressing a personal opinion (emotion) expecting that the addressee will accommodate the opinion into the common ground as well.
- See also Egg's [2007] discussion on rhetorical questions.

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When Givenness is not marked,...

- The speaker only has a mere bias toward p.
- The speaker wonders whether the addressee wants to make p as a joint commitment.
- Emotive meanings are less prominent.

 Our claim: deaccentuation in biased question has a lexicalized meaning, Givenness.

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Interim Summary 4: Grammaticalized Givenness in

Uttering a biased question with RwD

 \rightarrow Inquiring something Given.

Asking a superfluous question

→ Expressing emotive implicatures.

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Scale

Subjective Probability Scale

Given ⊂ Bias

i.e., if p is Given, it is entailed that p is Biased.

- (2) Context:Both interlocutors are in front of the beautiful blue sea.
 - a. ano u'mi aoku nai?

that sea blue NEG

'That sea is blue, isn't it?/Isn't that sea blue?'

- (i) √ano u'mi a'oku nai↑ (Rise with Accents)
- (ii) √ano u'mi aoku nai↑ (Rise with Deaccentuation)

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Room for Doubt

BQ

(7) Context: B has just won a lottery. A has never won a lottery in her life.

A: #takarakuji atat tara ureshiku nai?
lottery won COMP happy NEG
'Aren't you happy, since you won a lottery?'(Rise with Deaccentuation)

- Deaccentuation requires p to be already Given (public evidence).
- If the context is such that there is still room for doubt in adding p to the common ground, the use of Rise with Deaccentuation is illicit.
- Rise with Accents exhibits a broader distribution than Rise with Deaccentuation.

Interim Summary 4: Asymmetry Explained

RwD possible only with Direct Evidence

- Our claim: Deaccenting grammatically marks Givenness.
- Givenness and Bias form a scale in terms of Subjective Probability, Given ⊂ Bias.
- By defining the lexical specification for deaccenting, we account for the asymmetry of the distribution:

RwD Given

RwA Bias (including Given)

- (2) a. Context: Both the speaker and the addressee stand in front of the beautiful sea.
 - b. Ano umi aoku nai?

that sea blue NEG

'That sea is blue, isn't it?'/'Isn't that sea blue?'

- (i) ✓ Ano umi ao'ku nai↑ (Rise with Accents)
- (ii) ✓ Ano umi aoku nai↑ (Rise with Deaccentuation)

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Evidential Effects: Indirect Evidence

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Evidential Effects: Hearsay Evidence

- (13) a. Indirect Evidence Context: Yao Ming is a huge guy. I've never seen his son, but, guessing from Yao Ming's height,...
 - b. Yao-Ming-no musuko tte **ookiku nai** Yao.Ming-GEN son TOP big NEG 'Yao Ming's son is big, isn't he?'
 - (i) ✓ ooki'ku nai↑ (Rise with Accents)
 - (ii) #ookiku nai↑ (Rise with Deaccentuation)

- (14) a. Hearsay Evidence Context: The speaker has never been to Canada, but she heard that it's cold over there.
 - b. kanada tte samuku nai

Canada TOP cold NEG

'Canada is cold, isn't it?'

- (i) √ samu'ku nai↑ (Rise with Accents)
- (ii) #samuku nai↑ (Rise with Deaccentuation)

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Digression: Parallel Intuition in English again

Falling accent is inappropriate (Chris Potts, p.c.).

If the speaker has never been to Canada, a tag question with

- (15) a. Canada is cold, isn't it
 - b. Canada is cold, isn't it↓

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Bias-Evidence

(9) The implicature of p-*nai*?: The speaker has a Bias toward p.

Having a bias toward p implies that the speaker has at least some kind of (possibly weak) evidence for p.

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Summary of the Evidential Data

Rise with Deaccentuation

RwD is licit only when the speaker has direct (sensory) evidence. RwD is not compatible with inference derived from indirect evidence, nor from hearsay evidence.

Rise with Accents

RwA can be used in all contexts as long as the speaker is expressing his/her bias.

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What happens if you deaccent on the biased Q?

- With deaccentuation, the scale proposed above specifies a stronger implicature (i.e., higher on the scale), resulting in direct evidentiality.
- Indeed, in the literature of evidentiality, direct evidence is placed higher on the scale than indirect evidence and hearsay evidence.
- (16) a. Direct Evidence ⊂ (generic) Evidence.
 - b. Direct Evidence > Indirect, Hearsay Evidence [Adapted from Willett, 1988, Faller, 2002]

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Conclusion

 We have documented and analyzed two intonational patterns in Japanese.

- Rise with Accents
- Rise with Deaccentuation
- Givenness is characterized in terms of Publicity
 - Public commitment to a certain issue
 - Publicly available evidence
- Deaccentuation in a biased question is grammaticalized.

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Not always

- Note that this emotive content is not a lexically specified meaning of deaccentuation.
- (17) Context: A and B are looking for a smart person to recommend to NASA.
 - A: No one here is smart. We cannot recommend anyone to NASA.
 - B: e? Hanako-san-tte atama yoku nai?
 Intj Hanako-SUF-TOP head good NEG
 'Wait! Isn't Hanako smart?' (Rise with Deaccentuation)

Conclusion

- When the predicate in the rising negative question is deaccented, the sentence presupposes that the positive proposition is already Given.
- Rise with Deaccentuation tends to induce various emotive contents as an accomodation of the speaker's personal opinions
- By positing a scale for Givenness, Given ⊂ Bias, we account for the asymmetry in the distribution of deaccented and non-deaccented biased questions.
- Finally, the clarity scale determined for Givenness further supports the scale which has been proposed for evidenitiality.

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When Givenness is not marked

- Inference from the private knowledge is sufficient to license biased statement.
- (7) Context: B has just won a lottery. A has never won a lottery in her life.
 - A: takarakuji atat tara ureshi'ku nai?
 lottery won COMP happy NEG
 'Aren't you happy, since you won a lottery?'(Rise with Accents)
 - From what I know, I infer that it's fun to win a lottery.
 - Will you make it as your commitment or not?
 - There is no meta-talk concerning justification from the evidence.

References I

Masahiko Aihara. (Un)biased Negative Yes-No Questions in Japanese. a handout from the 38th Meeting of the North East Linguistic Society (NELS 38), October 26-28, University of Ottawa, 2007.

- Gillian Brown. Prosodic structure and the given/new distinction. In Cutler and Ladd, editors, *Prosody: Models and Measurements*, chapter 6. Springer Verlag, 1983.
- Masanori Deguchi and Yoshihisa Kitagawa. Prosody and Wh-questions. In *Proceedings of the Thirty-second Annual Meeting of the North-Eastern Linguistic Society*, pages 73–92, 2002.
- Markus Egg. Meaning and use of rhetorical questions. In Maria Aloni, Paul Dekker, and Floris Roelofson, editors, *Proceedings of 16th Amsterdam Colloquium*, 2007.

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Introduction Data RQ Preliminaries Proposals Asymm

References III

- Marie Nilsenova. A game-theoretical approach to the meaning of intonation in rising declaratives and negative polar questions. In
 B. Bel and I. Marlien, editors, *Proceedings of Speech Prosody 2002*, Aix-en-Provence, France, 2002.
- Janet Pierrehumbert and Mary E. Beckman. *Japanese Tone Structure*. MIT Press, Cambridge, MA, 1988.
- M. Romero. Biased *Yes/No* questions, *really*, and answers. University of Pennsylvania, 2005.
- M. Romero and C.-H. Han. On negative yes/no questions. *Linguistics and Philosophy*, 27(5):609–658, 2004.
- Mats Rooth. Indefinites, adverbs of quantification and focus semantics. In Gregory N. Carlson and Francis Jeffry Pelletier, editors, *The Generic Book*. Chicago University Press, Chicago, 1995.

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References II

- Martina Faller. Semantics and Pragmatics of Evidentials in Cuzco Quechua. PhD thesis, Stanford University, 2002.
- Irene Heim. Artikel und definitheit. In Arnim von Stechow and Dieter Wunderlich, editors, *Semantik*, pages 487–536. de Gruyter, Berlin, 1991.
- Shinichiro Ishihara. *Intonation and interface condition*. PhD thesis, Massachusetts Institute of Technology, 2003.
- Shinichiro Ishihara. Syntax-Phonology Interface of Wh-Constructions in Japanese. In Yukio Otsu, editor, *Proceedings of TCP 2002*, pages 165–189, Tokyo, 2002. Hituzi Syobo.
- Robert D. Ladd. *The structure of intonational meaning: Evidence from English*. Indiana University Press, Bloomington, 1980.
- David: Lewis. *Philosophical Papers*,, volume 2. Oxford University Press, New York, 1986.

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References IV

- Matts Rooth. *Association with Focus*. PhD thesis, University of Massachusetts at Amherst, 1985.
- Uli Sauerland. Impicated presuppositions. a handout presented at Polarity, Scalar Phenomena, Implicatures, University of Milan Bicocca, June 18-20, 2003, ZAS Berlin, 2006.
- Roger Schwarzschild. GIVENness, AVOIDF and other constraints on the placement of accent. *Natural Language Semantics*, 7:141–177, 1999.
- J. Terken and J Hirschberg. Deaccentuation of words representing 'given' information: Effects of persistence of grammatical role and surface position. *Language and Speech*, 37:125–145, 1994.
- T. Willett. A cross-linguistic survey of the grammaticalization of evidentiality. *Studies in Language*, 12(1), 1988.