

Social meaning in dynamic semantics

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- (1) a. Robin brought a pie [paɪ]
b. Robin brought a pie [pa:]

Formal semantics/pragmatics × sociolinguistics interface

- ▶ Social meaning as non-truth-conditional meaning
- ▶ Formal model of (in)felicitous uses of socially indexing expressions

Social meaning

- (2) A: Robin brought a **pie** [pa:]
B: Nice — oh btw I didn't know you were from the South!
A: Haha yep, I'm from Peachtree City, Georgia
B: What kind of pie?

Social meaning

- (3) A: Robin brought a **pie** [pa:]
B: Nice — oh btw I didn't know you were from the South!
A: Haha yep, I'm from Peachtree City, Georgia
B: What kind of pie?
A: Key **lime** [la:m]. Oh **Riley** [ra:li] brought a cherry **pie** [pa:] too

Social meaning

- (4) A: Robin brought a **pie** [pa:]
B: Nice — oh btw I didn't know you were from the South!
A: Haha yep, I'm from Peachtree City, Georgia
B: What kind of pie?
A: Key **lime** [la:m]. Oh **Riley** [ra:li] brought a cherry **pie** [pa:] too
B: # I get it, you're southern! 🙄



My questions

1. Does social meaning have a place in formal semantics?
2. What makes social meaning special compared to other kinds of non-truth-conditional meaning?

1. Secondary entailments
2. Social meaning as a secondary entailment
3. Analysis
4. Conclusion

Outline

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Primary entailment

- (5) a. Ai is from Michigan
b. It is not the case that Ai is from Michigan

Secondary entailments

- ▶ Entailment that is not at-issue
- ▶ Further subtypes based on...
 - ↳ Whether this secondary entailment concerns what must be the case BEFORE you say this sentence (= **prerequisite**) , or AFTER you say this sentence (= **update**)

Secondary entailment - presupposition

- (6) a. Ai's fiancé is from Michigan
b. It is not the case that **Ai's fiancé** is from Michigan
 ➡ Presupp: 'Ai has a fiancé'

➡ Prerequisite

Secondary entailment - Conventional implicature

Conventional implicature (CI):

- ▶ Not an implicature; an entailment
- ▶ Conversational implicature: secondary meaning varies from context to context

(7) A: This book is bad!
B: Well the author is a woman (rude)

(8) A: This book is great!
B: Well the author is a woman (not rude)

- ▶ **Conventional implicature:** secondary meaning doesn't vary from context to context
- ▶ Unlike a presupposition, the secondary meaning is **independent** of the primary entailment

(Grice 1975; Potts 2005)

Secondary entailment - supplements (CI)

- (9) a. Ai, who is from Michigan, currently lives in Ottawa
b. It is not the case that Ai, **who is from Michigan**, **currently lives in Ottawa**
- ➡ CI: ‘**Ai is from Michigan**’

➡ Update

(AnderBois et al. 2010; Potts 2005)

Secondary entailment - epithets (CI)

- (10) a. That bastard Gary lives in Paris
b. It is not the case that **that bastard Gary lives in Paris**
 ↳ CI: **'I hate Gary'**

➔ Prerequisite

(Potts 2005; 2007)

- ▶ (Similar analysis for honorifics in Japanese (Potts and Kawahara 2004; Potts 2007; McCready 2014))

Re: (non-)redundancy



★ Prereq vs. update explains (non-)redundancy

▶ **UPDATE** \leadsto **Redundant**:

(11) # Ai is from Georgia. Ai is from Georgia.
(**primary entailment**)

(12) # Ai, who is from Georgia, visited Anna in Germany.
Anna was happy to see Ai, who is from Georgia.
(**CI - supplemental**)

▶ **PREREQUISITE** \leadsto **Not redundant**:

(13) Ai's fiancé visited Stefan in Germany. They went out to eat. Ai's fiancé paid.
(**presupposition**)

(14) That bastard Gary visited Anna in Germany. Anna yelled at him and told him to go home. The bastard deserved it.
(**CI - epithet**)

Normal cat: Meow
Texan Cat: Meowdy



Source: <https://me.me/i/normal-cat-meow-texan-cat-meowdy-none-195677000af043f7a29c01a5468f02ec>

Outline

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Social meaning

It *is* a secondary entailment

(Smith et al. 2010)

(15) a. Robin brought a pie [pa:]

b. It is not the case that Robin brought a **pie** [pa:]

↳ SM: 'I'm from
the South'

(16) Riley [ɹa:li] brought a pie [pa:]

(not redundant)



↳ Prerequisite

Social meaning

It *is* a secondary entailment

(Smith et al. 2010)

(17) a. Robin brought a pie [pa:]

b. It is not the case that Robin brought a **pie** [pa:]

↳ SM: 'I'm from
the South'

(18) Riley [ɹa:li] brought a pie [pa:]

(not redundant)



↳ Prerequisite

↷ **bastard-like**

Is social meaning just a kind of CI then?
(cf., Burnett 2019; Smith et al. 2010; Levinson 1979)

Is social meaning just a kind of CI then?
(cf., Burnett 2019; Smith et al. 2010; Levinson 1979)



No.

Speaker vs. hearer orientation

(19) That bastard Gary ‘I hate Gary’

(20) Pie [pa:] ‘I’m from the South, I’m nice, I’m unintelligent ...’

(cf., Allbritten 2011; Eckert 2008)

1. **Epithet**: successful conveyal of ★ depends on **speaker**
2. **SM**: successful conveyal of ★ depends on **hearer**
 - ➡ What the hearer thinks of you in the first place affects what the variable means (cf., Podesva et al. 2015; among others)
3. **Primary entailment, presupposition, and supplements**: successful conveyal depends on **world facts**

(Burnett 2019)

Summary of properties of social meaning

Puzzles of social meaning:

1. Non-at-issue (secondary entailment)
2. Not redundant when repeated
3. A “field” of meanings
4. Interpretation depends on what the hearer thinks of you in the first place

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Why even connect this to formal semantics/pragmatics?

- ▶ Assertions update the **context** (Stalnaker 1978; Farkas and Bruce 2010; among others)
- ▶ **Context**: a tuple (ordered set) of discourse parts
 - ➔ e.g., common ground (CG), context set (CS), discourse commitments (DC), QUD, etc.
- ▶ Assertion of p :
 1. 'Let's discuss p '
 2. 'I believe p '
 3. 'I hope to add p to the CG' (Farkas and Bruce 2010)

Why even connect this to formal semantics/pragmatics?

Primary entailments, presuppositions, supplements:

- ➔ Help answer the question “what kind of world do we live in?”
- ➔ Concern the **common ground** (CG) and the **context set** (CS) in discourse (Stalnaker 1978)
- ➔ The more propositions you have in the CG, the smaller the CS gets
- ➔ Assertions are about how the discourse **context** is affected wrt these parts

Why even connect this to formal semantics/pragmatics?

Social meaning:

- ★ You are also doing something to the discourse context with social meaning
- ➔ Helps answer the question “who am I to other people in this world?”
- ➔ Has a counterpart that is like the CS: “The set of all possible personas”
- ➔ The more socially indexing items you use, the more we know which of these personas belong to you



Social meaning: analysis

(21) *The indexical field of [a:]*:

$$\begin{aligned}\mathcal{F}_{a:} &= \lambda f_{\langle e, st \rangle} [R(f, \llbracket \text{southern} \rrbracket)] \\ &= \text{'the set of all properties related to } \llbracket \text{southern} \rrbracket \text{' } \\ &= \left\{ \begin{array}{l} \lambda x \lambda w. \text{southern}_w(x), \lambda x \lambda w. \neg \text{intelligent}_w(x), \\ \lambda x \lambda w. \text{nice}_w(x) \dots \end{array} \right\}\end{aligned}$$

Social meaning: analysis

(22) *The indexical set:*

$$\mathcal{I} = \lambda f_{\langle e, st \rangle} [\exists w \in W_{\text{ADDR}}^{\text{EPI}} [f(\text{SPKR})(w)]]$$

= ‘The set of all properties that the speaker has in at least one world compatible with the addressee’s knowledge’

= ‘The set of properties that the speaker could have, according to the addressee’

$$= \left\{ \begin{array}{l} \lambda x \lambda w. \mathbf{southern}_w(x), \lambda x \lambda w. \mathbf{intelligent}_w(x), \\ \lambda x \lambda w. \mathbf{nice}_w(x), \lambda x \lambda w. \neg \mathbf{nice}_w(x), \lambda x \lambda w. \mathbf{feminine}_w(x) \end{array} \right\}$$



Social meaning: analysis

$$(23) \quad \mathcal{F}_{a:} = \left\{ \begin{array}{l} \lambda x \lambda w. \mathbf{southern}_w(x), \lambda x \lambda w. \neg \mathbf{intelligent}_w(x), \\ \lambda x \lambda w. \mathbf{nice}_w(x) \dots \end{array} \right\}$$

$$(24) \quad \mathcal{I} = \left\{ \begin{array}{l} \lambda x \lambda w. \mathbf{southern}_w(x), \lambda x \lambda w. \mathbf{intelligent}_w(x), \\ \lambda x \lambda w. \mathbf{nice}_w(x), \lambda x \lambda w. \neg \mathbf{nice}_w(x), \lambda x \lambda w. \mathbf{feminine}_w(x) \end{array} \right\}$$

$$(25) \quad \mathcal{F}_{a:} \cap \mathcal{I} = \left\{ \lambda x \lambda w. \mathbf{southern}_w(x), \lambda x \lambda w. \mathbf{nice}_w(x) \right\}$$

- ➔ What [a:] means depends on what the hearer thinks about you in the first place
- ➔ cf., μ_R, V_R, σ in Burnett (2019)

Social meaning: multidimensional and dynamic semantics

- ▶ Re: this idea that sentential meaning can be framed in terms of what you're doing to the context
- ▶ **Context change potential (CCP)** (cf., Heim 1982)
 - ➔ relation between input context (C) and output context (C')

(26) $[[\text{pa:}]]$

a. $= \lambda x \lambda w [\text{pie}_w(x)]$ (at-issue meaning)

b. $= \lambda C \lambda C' \left[\begin{array}{l} (\mathcal{F}_{\text{a:}} \cap \mathcal{I}) \subseteq \mathcal{P}_{\text{SPKR}}^C \wedge \\ C = C' \text{ otherwise} \end{array} \right]$ (social meaning)

➔ **the use condition**
of $[\text{pa:}]$

(cf., Gutzmann 2013)



Social meaning: multidimensional and dynamic semantics

$$(27) \mathcal{F}_a \cap \mathcal{I} = \{ \lambda x \lambda w. \text{southern}_w(x), \lambda x \lambda w. \text{nice}_w(x) \}$$

$$(28) \lambda C \lambda C' \left[\begin{array}{l} (\mathcal{F}_a \cap \mathcal{I}) \subseteq \mathcal{P}_{\text{SPKR}}^C \wedge \\ C = C' \text{ otherwise} \end{array} \right]$$

$$(29) \mathcal{P}_{\text{SPKR}} = \text{the set of the speaker's perceived personas so far in the discourse (expressed via } \mathcal{F} \cap \mathcal{I} \text{ or non-linguistic means)}$$
$$= \left\{ \begin{array}{l} \lambda x \lambda w. \text{southern}_w(x), \lambda x \lambda w. \text{nice}_w(x), \lambda x \lambda w. \text{intelligent}_w(x), \\ \lambda x \lambda w. \text{feminine}_w(x), \lambda x \lambda w. \text{young}_w(x) \dots \end{array} \right\}$$

➔ What (28) says: ‘ $\{ \lambda x \lambda w. \text{southern}_w(x), \lambda x \lambda w. \text{nice}_w(x) \}$ better be a subset of ★ before you say [pa:]’

➔ = ‘You better have established (linguistically or otherwise) that you have **this persona** if you’re going to speak this way’



Some thoughts

- ▶ Very first time [a:] is used, this is accommodated (cf., Potts 2007)
- ▶ I feel like the first order meaning vs. the higher order meanings have different effects on the context
- ▶ Accommodation and style shifting?

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Re: My questions

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2. What makes social meaning special compared to other kinds of non-truth-conditional meaning?

My answers

- 1. Does social meaning have a place in formal semantics?**
 - ➔ Yes: it shares properties with other secondary entailments, and it makes sense to analyze it as a type of context change potential
- 2. What makes social meaning special compared to other kinds of non-truth-conditional meaning?**
 - ➔ It's a restriction on the input context like some secondary entailments, but it is inherently hearer-oriented

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Thank you!

Social Meaning Games vs. present work

Burnett (2019):

- ▶ Social Meaning Games (SMG)
- ▶ Model that can, e.g., predict how often a certain variant will be used in certain contexts

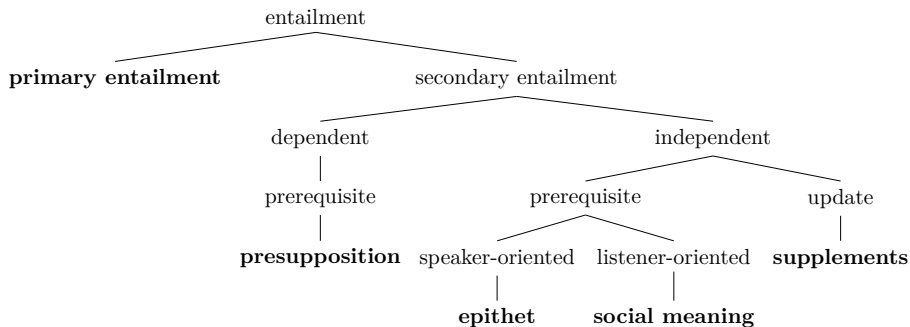
Present work:

- ▶ Borrows tools from formal **non-truth-conditional** (particularly dynamic and multidimensional) **semantics** (cf., Stalnaker 1978; Heim 1982; Potts 2005; Gutzmann 2013; among many more)
- ▶ Model that can, e.g., predict certain semantic/pragmatic effects that social meaning has

Definitely some overlaps:

- ▶ e.g., capturing the listener-orientedness of social meaning

Typology of meanings



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