Socio-pragmatic analyses of functional morphemes

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Analysis pattern

$$\left(\text{Semantic meaning} +\right)$$

$$\text{Pragmatic reasoning} +$$

$$\text{Social context} \Rightarrow$$

$$\text{Social meaning}$$

Some socio-pragmatic analyses

1. Affective uses of demonstratives (Acton and Potts 2014)
2. Plural definites and stance (Acton 2019)
3. *Need to* and stance (Glass 2015)
4. Direct object omission (Glass 2021)
5. Rising declaratives, politeness, and common ground (Jeong 2018, 2021)
6. Intensification without degrees (Beltrama and Bochnak 2015)
7. Scalar implicature in face-threatening situations (Bonnefon et al. 2009)
8. Imprecision and speaker identity (Beltrama and Schwarz 2020)
9. Meaning, register, and social meaning of honorifics (McCready 2019)
10. Dogwhistles (Henderson and McCready 2018)
11. French grammatical gender in parlimentary debates (Burnett and Bonami 2019)
12. Social meaning as secondary entailments (Smith et al. 2010)

See also Beltrama 2020

Plan for today

1. Some informative socio-pragmatic analyses
2. Themes and lessons
3. English singular *some*
4. Big open questions and avenues for inquiry

Informative analyses

Glass (2021): Object omission

1. Reddit study (832 transitive verbs; 82 subreddits):
   a. *How long have you been lifting* ☁️*?*
   b. *Auburn can't catch* ☁️*.*
   c. *Most of my people scatter* ☁️ *on their own.*
2. Semantics: these verbs require an internal argument
3. Pragmatics: the object can be omitted only if it's recoverable.
4. Social: Recoverability is assured only where common ground is rich: in-group membership.
5. Pragmatics: Object omission is marked due to this specialization.
6. Thus, object omission signals, evokes, and strengthens group ties.

Acton and Potts (2014): Affective demonstratives

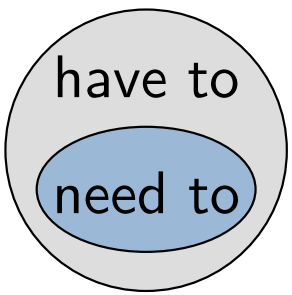
1. Studies of social media interactions and talk-show appearances:
   a. *This Henry Kissinger is really something!* (Lakoff 1974)
   b. "*those hearts and minds of the people in the region*" (Biden)
   c. "*all of our constitutional rights, including that freedom of speech*" (Sarah Palin)
2. Semantics: *Dem X* presupposes that the speaker has in mind a unique *X*, and that the discourse participants can adopt the speaker's perspective to identify that referent.
3. Pragmatics: *Dem X* is marked if *the X* or *X* should suffice.
4. Social: Presumption that discourse participants will adopt the speaker's perspective.
5. Palin's speech is divisive: for some, it strengthens common ground, whereas for others it is full of false presuppositions.

Glass (2015): Modals of obligation

1. a. *You have to admire her.*
   b. *You need to admire her.*

2. Finding: *need to* usage correlates with power and authority: caregivers, advisors, experts giving advice (and one very presumptuous but powerless fictional character)

3. Semantics: *have to* is consistent with any kind of obligation, whereas *need to* relates to internal needs and priorities.



4. Pragmatics: using a general form will tend to convey its specific alternatives are inappropriate.

5. Social: Using *you need to* presupposes that one is licensed to make statements about the addressee's needs and priorities.

Jeong (2021): Assertive rising declaratives and politeness

1. A: Does Jesse have any siblings?
   B: She has a half brother?
2. a. Pete: Hello! My name is Pete?
   b. Steve: Is that a question?
   c. Pete: N...No. I was just trying to be polite?
3. A: Did you even read the article?
   B: I wrote it?

- Semantics: Rising declaratives assert their content and raise a metalinguistic issue (MLI).
- MLI for (1)–(3): Is this relevant information for you?
- Pragmatics of this MLI:
  - Mundane for (1)
  - Politeness strategy for (2)
  - Implausible for (3)
- Social: Speakers vary in how willing and able they are to recognize the politenss strategy

Themes and lessons

Social meaning as primary evidence

1. "I lift" signals something about social identity that "I lift weights" does not.
2. Phrases like "cravin' that straight talk" can be especially divisive.
3. "You need to finish your slides" conveys stance information more reliably than "You have to finish your slides".
4. Assertive rising declaratives are recruited to do a wide range of socio-pragmatic jobs, some of which are in variation.

Semprag assumptions as ingredients

1. Seemingly redundant elements take on significance.
2. Invoking common ground can strengthen group ties.
3. Semprag assumptions needn't do all the work if we consider social factors as well.
4. Meaningful ingredients can be conventional, iconic, merely associative, ...

Analysis pattern

Semantic meaning +

Pragmatic reasoning +

Social context ⇒

Social meaning

Other observations

1. The "nuts and bolts" of language: frequent, flexible, rich in alternatives.
2. Lots of corpus evidence – complex observational data that we can study qualitatively and quantitatively.
3. Analyses recall traditional sociolinguistic variables, but often with a role for semantic meaning.
4. *Intentional* at some level, whereas traditional sociolinguistic variables might be more diverse in this sense.

English singular *some*

Proceedings of SALT 30: 22–42, 2020

A probabilistic pragmatics for English singular *some*[*]

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`https://osf.io/3wqzc/`

Basic paradigm

(1) I met a friend.

(2) 😟 I met some friend.

(3) I met some friends.

Recipe for the analysis

1. Singular *some* is truth-conditionally identical to *a*.
2. Singular *some* is more marked than *a*.
3. All referential expressions engage with modes of identification.
4. In our pragmatic model, it follows from (2) and (3) that singular *some* signals: "I am not engaging with fine-grained modes of identification."
5. In contexts where the speaker can and should engage with fine-grained modes of identification, this creates negative affectivity.

😟 I met some friend.

Some indefinite cousins

- Bulgarian quotative indefinites (Koev 2017)
- German *irgendein* (Aloni and Port 2015)
- Italian *un qualche* (Aloni and Port 2015)
- Spanish *algún* (Alonso-Ovalle and Menéndez-Benito 2003, 2010, 2011; Martí 2015)

Speaker non-identifiability

Farkas (2002:70):

(4) Susan rented some movie for us yesterday.

a. It was really long.

b. #It was *The Maltese Falcon*.

Weir (2012:182):

(5) You are lost. You know that the city you're in has only two squares. You keep coming across both squares. You can tell them apart because one has a fountain and the other doesn't. You end up in the fountainless square in the city. Your friend phones you:

Friend: Where are you?

You: I'm in a/#some square in the city.

Speaker identifiable singular *some*

(6) I saw some statue in Italy, and the expression on the guy's face blew me away. Like, I could read and recognize an emotion because some one 400 years ago felt how I do, and he made a stone the right shape so people could look at it and know exactly how he felt.

(7) *Context: Rachel is checked into the motel and is standing next to the motel when she says*:
Rachel: To be honest, I came here to win someone back, and it didn't happen. So, my big grand gesture ends here, as I sleep alone in some roadside motel.

Speaker identified singular *some*

(8) The guitar player is some kid I know [...] and he shreds the guitar with reckless abandon and a creepy smile on his face.

(9) Lorelei: It's embarrassing to ask my friend to turn around and get some kid at the middle school.
Patricia: What do you mean, some kid? He's your brother.

(10) Some guy I used to date texted me: "'I miss spending time together".

Proper names and singular *some*

(11) In Julian Assange's world we are the bad guys – not the Russians, not the Iranians, not the North Koreans. I hope the president-elect will get his information and trust the American patriots who work in the intelligence community who swear an oath and allegiance to the constitution and not some guy hiding from the law with a record of undercutting and undermining American democracy.

(12) He's some creepy, rich overpaid football player, I mean come on [...] Michael Vick killed dogs, and he did [it] in a heartless and cruel way.

Singular *some* and discourse anaphora

(13) While I was at the airport, some relative of mine pointed at some people in the distance and whispered they were Syrians. I said 'Syrians' out loud a bit louder than I should have and the relative looked around to see if someone had overheard us. Yeah, the Syrians were kind of feared in Lebanon ...

(14) And some relative of mine has an amazing green house and a flower arranging place and she has a huge trash can there too [...] so I kinda based it off hers.

Taking stock

We can't simply say that singular *some* requires that the speaker can't identify the referent, but identification still seems relevant.

(11) In Julian Assange's world we are the bad guys – not the Russians, not the Iranians, not the North Koreans. I hope the president-elect will get his information and trust the American patriots who work in the intelligence community who swear an oath and allegiance to the constitution and not some guy hiding from the law with a record of undercutting and undermining American democracy.

Singular *some* and its alternatives

1. *a(n)* is 26× more frequent in CoCA than singular *some*
2. *a(n)* cannot take plural complements, so *some NP* is pragmatically unopposed where *NP* is plural.
3. Bare plurals are arguably too semantically different to be alternatives for singular *some* (Carlson 1977).
4. Plural *some* is 2× more frequent in CoCA as singular *some*.
5. *someone* and *something* are distributionally different from *a one/person* and *a thing*.

Singular *some* is a marked form in competition with *a(n)*.

Progress on the basic paradigm

(1)	I met a friend.	unmarked
(2)	😟I met some friend.	synonymous with ‘a’; marked
(3)	I met some friends.	no alternatives

Modes of identification

Identification questions (Boër and Lycan 1975)

(15) Who is Cassius Clay?

a. Muhammad Ali.

b. The person on the left in the photo.

c. The heavyweight boxing champion of the 1970s.

Informational needs (Aloni and Port 2015)

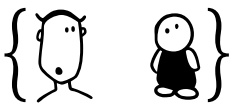
(16) I'm looking for a professor.

a. She's the department chair, but I don't know her name.

b. Her last name is Smith, but I don't know what she looks like.

Conceptual covers

A conceptual cover provides a unique way of referring to every entity in every possible world.

The band: 

	role cover		name cover	
	the guitarist	**the singer**	**jesse**	**sandy**
w_1				
w_2				

Aloni 2000

Questions as modes of identification

1. a. Who$_{\textbf{role}}$ signed your album?
   b. The guitarist signed my album.
2. a. Who$_{\textbf{name}}$ signed your album?
   b. Jesse signed my album.
3. a. Did a musician sign your album?
   b. Yes, a musician signed my album.
4. a. Did Jesse sign your album?
   b. Yes, Jesse signed my album.

$$\left\{\begin{array}{c}\textbf{who role},\\ \textbf{did the guitarist}\end{array}\right\}$$
$$\Uparrow$$
the guitarist

$$\left\{\begin{array}{c}\textbf{who role},\\ \textbf{who name},\\ \textbf{did a musician}\end{array}\right\}$$
$$\Uparrow$$
a musician

Probabilistic pragmatic analysis

Costs		**who name**	**who role**	**?musician**	**?Sandy**	**?the guitarist**
$$	some musician	✓	✓	✓		
$	a musician	✓	✓	✓		
$$$	Sandy	✓			✓	
$$$	the guitarist		✓			✓

Bergen et al.'s (2016) Rational Speech Acts model
with joint inference about asserted content and modes of identification

Costs		**who name**	**who role**	**?musician**	**?Sandy?**	**?the guitarist**
$$	some musician	0.0	0.0	1.0		
$	a musician	0.5	0.5	0.0		
$$$	Sandy	0.0			1.0	
$$$	the guitarist		0.0			1.0

appendix with full formal analysis

Stable pragmatic effect of singular *some*

(1) I met a friend.

unmarked; specific modes

(2) 😟I met some friend.

synonymous with 'a'; marked; non-specific modes

(3) I met some friends.

no alternatives

Source of negative affectivity

1. In contexts where the speaker can and should engage specific modes of identification, invoking a non-specific mode can convey negative attitudes:
   a. Lack of interest in identity
   b. Lack of interest in sharing with addressee
   c. Lack of relevance
2. Where these conditions aren't met, negativity is absent:

(6) I saw some statue in Italy, and the expression on the guy's face blew me away.

(17) Every x can be paired with some y.

(18) Let f be some function such that ...

Conclusions

Socio-pragmatic analysis pattern

$$\Big(\text{Semantic meaning} +\Big)$$

$$\text{Pragmatic reasoning} +$$

$$\text{Social context} \Rightarrow$$

$$\text{Social meaning}$$

Singular *some*

Semantics: Synonymous singular *some* and *a*

Pragmatics: Singular *some* is marked, signals non-specific modes

Social: Signaling non-specific modes can be affective ⇒

Singular *some* is perceived as negative

Big open questions and avenues for inquiry

1. Role for semantic conventions
2. Feedback loops: semantic/pragmatic/social/semantic/ ...
3. Agency and intentionality (Acton 2021)
4. Replace more standard semprag assumptions with those from sociolinguistics?
5. Qualitative and quantitative corpus work, and other methods
6. Sociological barriers to interdisciplinary work?
7. Important empirical phenomena we should be pursuing?

Thanks!

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Probabilistic pragmatic analysis

1. Scenario
2. Semantic grammar
3. Example denotations
4. Answerhood
5. Lexical Uncertainty RSA
6. Primary simulation
7. Simulation without *a* as an alternative

Scenario

W	⟦**the guitarist**⟧	⟦**the drummer**⟧	⟦**the singer**⟧	⟦**jesse**⟧	⟦**sandy**⟧	⟦**dani**⟧
w_1	*j* (signed)	*s*	*d*	*j*	*s*	*d*
w_2	*j*	*s* (signed)	*d*	*j*	*s*	*d*
w_3	*j*	*s*	*d* (signed)	*j*	*s*	*d*
w_4	*j*	*s*	*d*	*j*	*s*	*d*
w_5	*d* (signed)	*j*	*s*	*j*	*s*	*d*
w_6	*d*	*j* (signed)	*s*	*j*	*s*	*d*
w_7	*d*	*j*	*s* (signed)	*j*	*s*	*d*
w_8	*d*	*j*	*s*	*j*	*s*	*d*
w_9	*s* (signed)	*d*	*j*	*j*	*s*	*d*
w_{10}	*s*	*d* (signed)	*j*	*j*	*s*	*d*
w_{11}	*s*	*d*	*j* (signed)	*j*	*s*	*d*
w_{12}	*s*	*d*	*j*	*j*	*s*	*d*

Semantic grammar

1. $[\![\textbf{jesse}]\!] = \lambda w\ j \quad [\![\textbf{dani}]\!] = \lambda w\ d \quad [\![\textbf{sandy}]\!] = \lambda w\ s$
2. $[\![\textbf{the guitarist}]\!] = \lambda w \begin{cases} j & \text{if } w \in \{w_1, w_2, w_3, w_4\} \\ d & \text{if } w \in \{w_5, w_6, w_7, w_8\} \\ s & \text{if } w \in \{w_9, w_{10}, w_{11}, w_{12}\} \end{cases}$
3. $[\![\textbf{ifa}]\!] = \lambda f\ \lambda c\ \{w \in W : w \in f(c(w))\}$
4. $[\![\textbf{a}]\!] = [\![\textbf{some}]\!] = \lambda f\ \lambda g\ \{w \in W : \exists x\ (w \in f(x) \cap g(x))\}$
5. $[\![\textbf{?}]\!] = \lambda p\ \{p, W - p\}$
6. Covers: $\forall x \in D$ and $\forall w \in W, !\exists c \in C : c(w) = x$
7. $[\![\textbf{who}]\!] = \lambda C\ \lambda f \left\{ \langle w, w' \rangle \in W \times W : \begin{array}{c} \{c \in C : w \in [\![\textbf{ifa}]\!](f)(c)\} \\ = \\ \{c \in C : w' \in [\![\textbf{ifa}]\!](f)(c)\} \end{array} \right\}$

Example denotations

1. $[\![\textbf{name cover}]\!] = \{[\![\textbf{jesse}]\!], [\![\textbf{sandy}]\!], [\![\textbf{dani}]\!]\}$
2. $[\![\textbf{role cover}]\!] = \{[\![\textbf{the guitarist}]\!], [\![\textbf{the singer}]\!], [\![\textbf{the drummer}]\!]\}$
3. $$[\![\textbf{?jesse(signed)}]\!] = \left\{ \begin{matrix} \{w_1, w_6, w_{11}\} \\ \{w_2, w_3, w_4, w_5, w_7, w_8, w_9, w_{10}, w_{12}\} \end{matrix} \right\} = \left\{ \begin{matrix} [\![\textbf{signed(jesse)}]\!] \\ [\![\textbf{¬signed(jesse)}]\!] \end{matrix} \right\}$$
4. $$[\![\textbf{?a(musician)(signed)}]\!] = \left\{ \begin{matrix} \{w_1, w_2, w_3, w_5, w_6, w_7, w_9, w_{10}, w_{11}\} \\ \{w_4, w_8, w_{12}\} \end{matrix} \right\} = \left\{ \begin{matrix} [\![\textbf{a(musician)(signed)}]\!] \\ [\![\textbf{¬a(musician)(signed)}]\!] \end{matrix} \right\}$$
5. $$[\![\textbf{who(name cover)(signed)}]\!] = \left\{ \begin{matrix} \{w_1, w_6, w_{11}\} \\ \{w_2, w_7, w_9\} \\ \{w_3, w_5, w_{10}\} \\ \{w_4, w_8, w_{12}\} \end{matrix} \right\} = \left\{ \begin{matrix} [\![\textbf{ifa(signed)(jesse)}]\!] \\ [\![\textbf{ifa(signed)(sandy)}]\!] \\ [\![\textbf{ifa(signed)(dani)}]\!] \\ [\![\textbf{¬a(musician)(signed)}]\!] \end{matrix} \right\}$$
6. $$[\![\textbf{who(role cover)(signed)}]\!] = \left\{ \begin{matrix} \{w_1, w_5, w_9\} \\ \{w_2, w_6, w_{10}\} \\ \{w_3, w_7, w_{11}\} \\ \{w_4, w_8, w_{12}\} \end{matrix} \right\} = \left\{ \begin{matrix} [\![\textbf{ifa(signed)(the guitarist)}]\!] \\ [\![\textbf{ifa(signed)(the singer)}]\!] \\ [\![\textbf{ifa(signed)(the drummer)}]\!] \\ [\![\textbf{¬a(musician)(signed)}]\!] \end{matrix} \right\}$$

Answerhood

A proposition $p \subseteq W$ answers a question $q \subseteq \wp(W)$ iff there is a set $x \subseteq q$ such that $\bigcup_x = p$.

	⟦who name⟧	⟦who role⟧	⟦?a⟧	⟦?jesse⟧	⟦?sandy⟧	⟦?dani⟧	⟦?guitarist⟧	⟦?singer⟧	⟦?drummer⟧
some	1	1	1	0	0	0	0	0	0
a	1	1	1	0	0	0	0	0	0
jesse	1	0	0	1	0	0	0	0	0
sandy	1	0	0	0	1	0	0	0	0
dani	1	0	0	0	0	1	0	0	0
the guitarist	0	1	0	0	0	0	1	0	0
the singer	0	1	0	0	0	0	0	1	0
the drummer	0	1	0	0	0	0	0	0	1

Lexical Uncertainty RSA

Literal listener

$$l_0(q \mid m, A) = \frac{A(m, q) \cdot P(q)}{\sum_{q' \in Q} A(m, q') \cdot P(q')}$$

Pragmatic speaker

$$s_1(m \mid q, A) = \frac{\exp\left(\alpha\left(\log l_0(q \mid m, A) - Cost(m)\right)\right)}{\sum_{m' \in M} \exp\left(\alpha\left(\log l_0(q \mid m', A) - Cost(m')\right)\right)}$$

Pragmatic listener

$$L_1(q \mid m) = \frac{P(q) \sum_A s_1(m \mid q, A) P_{\mathbf{A}}(A)}{\sum_{q' \in \mathbf{Q}} P(q') \sum_A s_1(m \mid q', A) P_{\mathbf{A}}(A)}$$

Recursive agents

S_n and L_n can then be defined recursively using minor variants of the above.

Primary simulation

L_4 with *a* available as an alternative. The costs of messages are given in the rightmost column, and the (flat) prior over questions is given in the bottom row. Gray highlights the most probable questions for each message.

Cost		⟦who name⟧	⟦who role⟧	⟦?a⟧	⟦?jesse⟧	⟦?sandy⟧	⟦?dani⟧	⟦?guitarist⟧	⟦?singer⟧	⟦?drummer⟧
0.5	some	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
0	a	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	jesse	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
1	sandy	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
1	dani	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
1	the guitarist	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
1	the singer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
1	the drummer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
	P	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11

Simulation without *a* as an alternative

Cost		⟦who name⟧	⟦who role⟧	⟦?a⟧	⟦?jesse⟧	⟦?sandy⟧	⟦?dani⟧	⟦?guitarist⟧	⟦?singer⟧	⟦?drummer⟧
0.5	some	0.33	0.33	0.33	0.0	0.0	0.0	0.0	0.0	0.0
1	jesse	0.00	0.00	0.00	1.0	0.0	0.0	0.0	0.0	0.0
1	sandy	0.00	0.00	0.00	0.0	1.0	0.0	0.0	0.0	0.0
1	dani	0.00	0.00	0.00	0.0	0.0	1.0	0.0	0.0	0.0
1	the guitarist	0.00	0.00	0.00	0.0	0.0	0.0	1.0	0.0	0.0
1	the singer	0.00	0.00	0.00	0.0	0.0	0.0	0.0	1.0	0.0
1	the drummer	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	1.0
	P	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11