The semantics of attitude markers and other illocutionary content*

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0 Overview

0.1 Broad goals

• A typology of meaning... two traditions
  – “not-at-issue” content, e.g. presupposition, conventional implicature (Stalnaker, 1978; Potts, 2005)
  – “illocutionary” content (semantically encoded information about the illocutionary act), e.g. illocutionary force or mood (Searle, 1969; Vanderveken, 1990)

• Are these the same category of meaning (the complement of at-issue content)?

• If not, how should we represent and distinguish them in our compositional semantic theories?

0.2 Immediate goals

• examine a particular semantic phenomenon: “attitude markers”, which implicitly mark the speaker’s attitude towards some propositional content of the utterance (e.g. alas, exclamation intonation)

• make the case for a distinction between not-at-issue content that seems descriptive and not-at-issue content that seems illocutionary (à la Kaplan’s (1997) expressive content, see also McCready 2012).

• analyze attitude markers (and illocutionary content generally) in a compositional update semantics

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1 Attitude markers: an overview

- Attitude markers encode:
  (a) the speaker’s attitude;
  (b) towards some propositional content of the utterance they are encoded in;
  (c) in not-at-issue content, i.e. in content that can’t be directly denied; be targeted by truth-conditional operators; or address the QUD (van Kuppevelt, 1995, 1996; Roberts, 1996; Simons et al., 2010).

- core data: lexical items like *alas, fortunately*; exclamation intonation\(^1\) and other mirative markers

\(^1\)In English, exclamation intonation on sentence exclamations is typically a steady Rise, abrupt Fall contour (Cruttenden, 1986) with features of emphasis like lengthening (Bartels, 1999). See Rett 2011 for details.

(1) a. John arrived on time.
   b. *(Wow,)* John arrived on time!
   c. Alas, John arrived on time.

  * alas’ content is not at-issue: it cannot be denied (2), nor can it scope under negation (3)

(2) A: Alas, Sue won the race.
   B: That’s not true, Alex did!
   B’:#That’s not true, you’re glad Sue won!

(3) a. Alas, John did not arrive on time.
   b. Alas, it is not the case that John arrived on time.

- other attitude markers (for a larger list, see Rett 2012, 2016)

  * in Finnish, a sentential particle pää\(^2\)

(4) a. Tällä on paljon kukk-ia.
    here be-3RD.SG a.lot flower-PRT.INDF.PL
    ‘There are lots of flowers here.’

b. Tällä pä on paljon kukk-ia.
    here PA be-3RD.SG a.lot flower-PRT.INDF.PL
    ‘(Wow,) There are lots of flowers here!’

* in Mandarin, two sentential adverbs (Wu, 2008)

(5) Zhangsan guoran /jingran lai le.
    Zhangsan GUORAN /JINGRAN come PST
    ‘Zhangsan came (as expected/not expected by the speaker).’

  * in dozens of other languages, tense/aspect and evidentiality markers are co-opted to mark mirativity in certain contexts (DeLancey, 1997, 2001; Rett and Murray, 2013)

(6) Moto jo-mu-e. Tsaifikasi (Dickinson, 2000)
    motorcycle be-IND-DECL
    ‘It is apparently a motorcycle.’ or ‘(Wow,) It’s a motorcycle!’

- Crucially not attitude markers according to this characterization:

  - *not satisfying (a)*: evidentials, utterance modifiers (e.g. *frankly*, Potts 2003), speaker certainty markers (Ettinger and Malamud, 2015), and other non-attitude discourse particles (Zimmermann, 2011) target propositions but do not encode information about the speaker’s attitude

  - *not satisfying (b)*: appositives, and many Pottsian expressives (e.g. *that bastard John*) can reflect a speaker’s attitude, but target sub-propositions (exception: *damn*)

  - *not satisfying (c)*: (speaker-oriented) propositional attitude verbs (e.g. *I’m surprised*), which encode at-issue content

\(^2\)Thanks to Peter Sutton (p.c.) for drawing my attention to pää, and to Tuomo Tisala (p.c.) for his judgments.
2 What distinguishes attitude markers

- three core claims here:
  1. Attitude markers encode illocutionary content, i.e. not-at-issue content about how the speaker is using the utterance;
  2. Illocutionary content is distinct from canonical not-at-issue content;
  3. Attitude markers are encoders of illocutionary content because they contribute a) not-at-issue information b) about the speaker’s attitude c) towards a proposition associated with the utterance.

- the relevant comparison class: “canonical encoders of not-at-issue content”, e.g.:

(7) a. John’s sisters live in Melbourne. [presupposition trigger]
   b. John met with that bastard Bill. [Pottsian expressive]
   c. John, an avid cyclist, won the race. [appositive]
   d. Frankly, John doesn’t deserve to win. [utterance modifier]
   e. Allegedly, John cheated on his taxes. [evidential adverb]

2.1 Acceptability across illocutionary mood types

- Canonical encoders of not-at-issue content can occur with other illocutionary mood, e.g. interrogative

(8) a. Where do John’s sisters live?
   b. Where did John meet with that bastard Bill?
   c. When did John, an avid cyclist, win the race?

- Attitude markers, in contrast, are unacceptable in constituent questions

(9) a. *Alas/Fortunately/Unfortunately, who lost the race?
   b. *Who lost the race, alas/fortunately/unfortunately?

  - true of exclamation intonation, arguably for prosodic reasons
  - also true of Finnish pää, arguably not for prosodic reasons
  - also true of the mirative interpretation – but not the evidential interpretation – of Cheyenne mirative evidentials (Rett and Murray, 2013), where ‘%’ signifies that an interpretation is unavailable

(10) a. Mó=é-x-hó’ tâhevá-hoo’ o Añohe?
    y/n=3-REM.PST-win-NAR.3SG Hawk
    ‘Given the stories you heard, did Hawk win?’
   b. %Mó=é-hó’ tâhevá-hoo’ o Añohe?
    y/n=3-win-NAR.3SG Hawk
    Intended: ‘Given your surprise, did Hawk win?’ / ‘Did Hawk really win?!’

- They are also generally unacceptable in polar questions, although alas behaves exceptionally in this respect: it can target the biased proposition (not the question) in polar questions

(11) a. *(Un)fortunately, did John lose the race?
    b. *Did John lose the race, *(un)fortunately?
    c. Alas, did John lose the race?

- None are acceptable in imperatives, etc.

- I ultimately predict that encoders of illocutionary content can but need not have a restrictive distribution across illocutionary mood, which makes this an imperfect test for the distinction (pickiness entails illocutionary content, but non-pickiness does not entail descriptive content)
2.2 Differences in scope

- Attitude markers and canonical encoders of not-at-issue content behave similarly in their ability to scope locally in e.g. conjunctions (12), and to target content encoded in canonically not-at-issue environments (13)

(12)  
   a. Apparently/Alas, John and Mary attended the party.
   b. John and, apparently/alas, Mary attended the party.

(13)  
   a. Apparently/Alas John, who won the lottery, lost the race.
   b. John, who apparently/alas won the lottery, lost the race.

- But is at least one context – antecedents of conditionals – in which they target different propositions

  - Canonical encoders of not-at-issue content that target propositions, whether they occur sentence-initially or embedded in the antecedent, range over the entire conditional

(14)  
   a. Frankly, if the mayor is convicted, she must resign from office.
   b. If, frankly, the mayor is convicted, she must resign from office.

(15)  
   a. Apparently, if the mayor is convicted, she must resign from office.
   b. If, apparently, the mayor is convicted, she must resign from office.

(16)  
   a. Allegedly, if they didn’t follow protocol, they’ll be fired.
   b. If, allegedly, they didn’t follow protocol, they’ll be fired.

  * Supporting evidence: the evidential adverb apparently is incompatible with speaker-oriented volitional claims in the consequent, regardless of where the adverb occurs

(17)  
   a. #Apparently, if the mayor is convicted, I will run for office.
   b. #If, apparently, the mayor is convicted, I will run for office.

  - Attitude markers, in contrast, locally target the antecedent when they are embedded in it

(18)  
   a. Alas, if the mayor is convicted, she must resign from office.
   b. If, alas, the mayor is convicted, she must resign from office.

  * Supporting evidence: antecedent-embedded alas is compatible with non-dismaying information encoded in the consequent

(19)  
   a. #Alas, if the mayor is convicted, at least we’ll have a chance to get a better one.
   b. If, alas, the mayor is convicted, at least we’ll have a chance to get a better one.

- Caveat: Attitude markers (like other encoders of speaker-oriented not-at-issue content) can receive a non-speaker-oriented reading via pragmatic mechanisms (Harris and Potts, 2009). (Example: Fan of Team A to fan of Team B: Alas, Team B has been disqualified.)

2.3 Moore’s Paradox

- The content encoded in attitude markers is best treated as illocutionary content because it can result in Moore’s Paradox (but standard not-at-issue content cannot).

- Standard example of Moore’s Paradox:

(20)  
   #It’s raining, but I don’t believe it’s raining.

- In contrast to the contradictory:

(21)  
   #\_It’s raining, but it isn’t raining.
An appealing explanation of Moore’s Paradox (Searle, 1969, 65): it results when the speaker denies the content of a sincerity condition on her utterance.

Murray (2010): Cheyenne speakers reported a difference in the quality of the unacceptability of the denial of evidential content (22) and mirative (23) content.

(22) #É-hó’táheva-séstse Áneohe naa hovánee’e é-sáa-né-he-∅.
3-win-RPT.3SG Hawk but nobody 3-NEG-that-say-MODₐ-DIR
Intended: ‘Hawk won, it’s said, but nobody said that.’

evidential interpretation

(23) #É-hoo’kóhó-neho! Ná-nééšé-héne’ena tsé-to’sé-hešé-hoo’koho.
3-rain-nar.sg.iman 1-continue-know.s.t CNJ-going.to-how-rain
Intended: ‘It’s raining! ... # I knew it was going to rain.’

mirative interpretation

This is replicable as a sorting task; the difference is between contradiction (#) and infelicity (#).

Recall these interpretations are encoded by the same polysemous morpheme in Cheyenne.

I was able to replicate these intuitions in a sorting task involving attitude markers and canonical encoders of not-at-issue content in English, but only to some extent.

(24) a. #Allegedly, John lost the race, but no one alleged he did.
b. #Alas, John lost the race, but I’m not disappointed he did.

Not everyone differentiated between contradiction and Moore’s Paradox.

Those who did reported (24-a) patterned with contradiction, and (24-b) with Moore’s Paradox.

Another diagnostic for Moore’s Paradox (Yalcin, 2007) provides clearer judgments:

Moore’s Paradox is suspended in these conditional or suppositional contexts.

(25) a. Suppose it is raining, but I do not believe that it is raining.
b. If it is raining but I don’t believe it, then there is something I do not believe.

So is the content encoded by attitude markers (26-b), but not e.g. evidential adverbials (26-a).

(26) a. #Suppose that, allegedly, John lost the race, but no one alleged that he did.
b. Suppose that, alas, John lost the race, but that I’m not disappointed he did.

2.4 Interim summary

Attitude markers encode not-at-issue content about the speaker’s attitude towards some propositional content of the utterance they occur in.

Prima facie, this makes them parallel to a number of other encoders of not-at-issue content that scope over propositions: evidentials; speaker certainty markers; utterance modifiers; and some discourse particles, expressives, and appositives.

But they differ from these other elements in that: (a) they are incompatible with non-declarative mood; (b) they take obligatorily narrow scope in the antecedents of conditionals; and (b) they are susceptible to Moore’s Paradox.

I’ll argue that, because they mean what they do, attitude markers encode their content at the illocutionary level, in the sincerity conditions of an utterance (Searle and Vanderveken, 1985)...
3 Modeling illocutionary content

• “Illocutionary content” is not-at-issue meaning, encoded lexically or prosodically in an utterance, pertaining to how the speaker is using the utterance in the context.

• I model illocutionary content (including sincerity conditions) with Gunlogson’s Discourse Commitments.

• Attitude markers behave the way they do because they encode illocutionary content, and thereby restrict a speaker’s Discourse Commitments, rather than the Common Ground.

3.1 A formal foundation

• I need a framework that can compositionally model both the contribution of canonical encoders of not-at-issue content and illocutionary mood.

• Two notable options: Farkas and Bruce (2010) and Murray (2010, 2014)/Murray and Starr (2016).

• Farkas and Bruce’s model of a discourse structure $K$ includes:

  1. the **common ground** (CG), the set of propositions believed by all the discourse participants (for the purpose of the conversation);
  2. sets of **discourse commitments** ($DC$): for each participant $x$, the set of propositions $x$ has publicly committed to during the conversation;
  3. the **Table** $T$, modeling discourse salience;
  4. the **projection set** ($ps$), the set of beliefs that are being considered for addition into the CG.

• They adopt their treatment of illocutionary mood from Krifka (2001).

• They do not, however, differentiate between at-issue and not-at-issue content; I borrow from Murray (2010, 2014) to do this (in lines (27)-(iv) and (28)-(iii) respectively).

\begin{enumerate}
  \item **Declarative operator** ($D$), for sentences $S_p$ with at-issue content $p$ and not-at-issue content $q$:
    \begin{align*}
    D(S_p, a, K_i) &= K_o \text{ such that} \\
    (i) &\quad DC_{a,o} = DC_{a,i} \cup \{p\} \\
    (ii) &\quad T_o = \text{push}(\langle S_p; \{p\}, T_i \rangle) \\
    (iii) &\quad ps_o = ps_i \cup \{p\} \\
    (iv) &\quad CG_o = CG_i \cup \{q\} 
    \end{align*}
  \item **Polar question operator** ($PQ$), for an interrogative sentence $S_{p?}$ with at-issue content $p$, $\neg p$ and not-at-issue content $q$:
    \begin{align*}
    PQ(S_{p?}, K_i) &= K_o \text{ such that} \\
    (i) &\quad T_o = \text{push}(\langle S_{p?}; \{p, \neg p\}, T_i \rangle) \\
    (ii) &\quad ps_o = ps_i \cup \{p, \neg p\} \\
    (iii) &\quad CG_o = CG_i \cup \{q\} 
    \end{align*}
\end{enumerate}

3.2 Sincerity conditions in an update semantics

• To my knowledge, no existing treatment of illocutionary mood explicitly represents sincerity conditions.

  \begin{itemize}
  \item It’s possible that Searle’s e.g. sincerity condition on assertion (that the speaker believes the descriptive content of the utterance) is derivable pragmatically, perhaps with Gricean maxims.
  \item But I think they’re better modeled as part of the semantic content of an utterance, encoded in illocutionary mood.
  \item This could help explain Moore’s Paradox (as Searle, 1969, suggests); it would also be useful for accounts of things said to modify the sincerity conditions of utterances (“illocutionary mood/force modifiers”; Vanderveken, 1990; Faller, 2002).
  \end{itemize}
My claim (following Searle and Vanderveken, 1985): attitude markers effectively restrict the sincerity conditions of an utterance. This accounts for:

- The intuition that a sentence with an attitude marker can be uttered insincerely with respect to that attitude marker
- The tight relationship between attitude markers and declarative mood
- The ability of an attitude marker to affect the essential conditions of an utterance (Searle, 1969, 57), making them equivalent to Kaplan’s (1997) expressive content (see also McCready, 2012)

I will, however, model sincerity conditions using Gunlogson’s (2001) notion of Discourse Commitments

- Originally proposed to address speaker bias in rising declaratives
- Originally characterized in terms of the speaker’s beliefs (and “public in the sense that the participant is mutually recognized as committed to them” (42)).

(29) Gunlogson’s Discourse Commitments
Let \( DC_a \) and \( DC_b \) be sets of propositions representing the public beliefs of \( a \) and \( b \), respectively, with respect to a discourse in which \( a \) and \( b \) are the participants, where:

a. \( p \) is a public belief of \( a \) iff ‘\( a \) believes \( p \)’ is a mutual belief of \( a \) and \( b \)

b. \( p \) is a public belief of \( b \) iff ‘\( b \) believes \( p \)’ is a mutual belief of \( a \) and \( b \)

- In other words, I treat public commitment as a proxy for belief, for the purpose of modeling (sincere) conversation (see also ‘BDI’ in Asher and Lascarides 2008; see Portner 2016 for discussion)

To use DCs to model the content of attitude markers, however, I’ll need to generalize them to propositional attitudes other than belief (inspired by Portner, 2006)

(30) Flavored Discourse Commitments
Let \( DC_a \) be a set of pairs representing the public commitments of \( a \) with respect to a discourse in which \( a \) and \( b \) are the participants, where:

a. \( \langle \text{believes}, p \rangle \) is a public commitment of \( a \) iff ‘\( a \) believes \( p \)’ is a mutual belief of \( a \) and \( b \);

b. \( \langle \text{is-disappointed}, p \rangle \) is a public commitment of \( a \) iff ‘\( a \) is disappointed that \( p \)’ is a mutual belief of \( a \) and \( b \); and

c. \( \langle \text{is-surprised}, p \rangle \) is a public commitment of \( a \) iff ‘\( a \) is surprised that \( p \)’ is a mutual belief of \( a \) and \( b \).

As a result, I’ll need to reformalize the sincerity condition on assertion

(31) Declarative operator (\( D \)), for sentences \( S_p \) with at-issue content \( p \) and not-at-issue content \( q \):
\[
D(S_p, a, K_i) = K_o \text{ such that}
\]
\begin{enumerate}
  
  (i) \( DC_{a,o} = DC_{a,i} \cup \langle \text{believes}, p \rangle \)
  
  (ii) \( T_o = \text{push}(\langle S_p; \{p\}; T_i) \)
  
  (iii) \( ps_o = ps_i \uplus \{p\} \)
  
  (iv) \( CG_o = CG_i \cup \{q\} \)
\end{enumerate}

3.3 A semantics for attitude markers
(32) [Alas, John lost the race] = \( D(A(S, a, w_{\text{Alas}}, K_i)) = K_o \) such that
\begin{enumerate}
  
  (i) \( DC_{a,o} = DC_{a,i} \cup \langle \text{believes}, p \rangle \)
  
  (ii) \( T_o = \text{push}(\langle S; p \rangle; T_i) \)
  
  (iii) \( ps_o = ps_i \uplus \{p\} \)
  
  (iv) \( CG_o = CG_i \cup \{q\} \)
  
  (v) \( DC_{a,o} = DC_{a,i} \cup \langle \text{is-disappointed}, p \rangle \)
\end{enumerate}
(33) _Alas_ (A), for clauses C with the ordinary focus-semantic value p:
\[ A(S, a, K_i) = K_o \text{ such that} \]
(i) \[ DC_{a,o} = DC_{a,i} \cup \langle \text{is-disappointed}, p \rangle \]
(ii) \[ T_o = \text{push}(S; \{p\}; T_i) \]

- Attitude markers differ from illocutionary mood, like the declarative in (31), in that:
  1. they do not update the projection set ps (i.e. they’re not assertoric on their own);
  2. they update the DC with a propositional attitude other than belief

- Attitude markers differ from encoders of descriptive not-at-issue content, in that:
  - they do not update the Common Ground;
  - they encode (speaker-oriented) propositional attitudes;
  - they are anaphoric on the at-issue content p of the utterance

- This treatment explains:
  - The fact that attitude markers behave like the sincerity condition on assertion in being Moore’s Paradoxical... the explanation is that negating one’s Discourse Commitments is infelicitous, while negating one’s ps or CG updates is contradictory (à la Searle, 1969)
  - The fact that attitude markers are only compatible with declarative mood (although it does not require that all illocutionary content only be compatible with declarative mood)
    * (33) requires that _alas_ modify clauses with propositional content; this is the same semantic restriction as the one on declarative mood
    * This has intuitive underpinnings, as attitude markers encode propositional attitudes (and even explicitly encoded propositional attitudes can’t modify non-proposition-denoting elements)

(34) *Has John arrived on time, which disappointed me?*

* It does, however, correctly predict that attitude markers can be embedded in e.g. questions...
(35) What does Sue, who alas couldn’t be here today, think about the proposal?

* ...and can modify tag questions (Romero and Han, 2004) and other biased questions

(36) Alas, John has arrived on time, hasn’t he?

- The fact that attitude markers are unacceptable in “alternative-projecting” disjunctive declaratives (Alonso-Ovalle, 2006; Groenendijk, 2009)...

(37) a. #Alas, John rode his bike or arrived on time.
    b. #(Wow,) John rode his bike or arrived on time!

- ...But not in declaratives that denote single disjunctive propositions (these are intontationally distinct in English and lexically distinct in other languages; Winans to appear).

(38) Context: John and Mary’s family is no longer a two-income family
Sentence: Alas, John lost his job or Mary lost hers.

- I analyze attitude markers as anaphoric to the focus-semantic value of the clause they modify
  - A focus-semantic value is a proposition that includes the negation of the clause’s focus alternatives
  - This accounts for the focus-sensitivity of attitude markers (see also Rett, 2011)

(39) a. Alas, JOHN_F got a dog.
b. Alas, John got a DOG$^F$.

- Given the connection between focus and discourse coherence (Rooth, 1992, 1996; Roberts, 1996), we can also use this focus-sensitivity to account for the scope restrictions of attitude markers in conditionals
  * (33) specifies that attitude markers apply to the same proposition that is added to the Table
  * This predicts that attitude markers can range over not-at-issue content as well as at-issue content (or some combination of the two):
    
    (40) John’s tennis coach, alas not his dentist, extracted his tooth.
  
  * It also predicts that, when embedded, attitude markers take narrow scope when the narrow-scope proposition is generally the most salient in the local context.
    
    (41) If, alas, the mayor is convicted, she must resign from office.
  
- This account requires clausal, rather than sentential, dynamic update
  * It must also allow for lexical variation with respect to a) the ability of the attitude marker to be anaphoric on speaker bias in questions (cf. (11)) and b) the inability of attitude markers like damn to be embedded.
    
    (42) *If, damn, the mayor is convicted, she’ll have to resign!

4 Conclusions

- A summary of the main points here:
  
  - Attitude markers encode a) not-at-issue information b) about the speaker’s attitude c) towards an at-issue proposition associated with the utterance
  
  - They differ from other not-at-issue encoders in that they encode content pertaining to how the speaker is using the utterance in the context
  
  - As a result, attitude markers form a natural class within the group of encoders of not-at-issue content. They:
    * can be picky about the illocutionary mood of the clause they occur in;
    * must scope locally in certain contexts;
    * are Moore’s-Paradoxical when used in an utterance in which their content is denied
  
  - The content of attitude markers, like the sincerity conditions on speech acts, can be modeled as Discourse Commitments. Among other things, this predicts their ability to be used insincerely.

- Some possible extensions:
  
  - At some point, propositions in the DC enter into the CG (precisely how is unexplained here).
  
  - What accounts for the anaphoric differences within the class of attitude markers? (I.e. Why can’t damn be embedded, and why does alas sound better in polar questions than unfortunately?)
  
  - There is some debate in the literature about whether evidentials operate at the illocutionary level (Faller, 2002) or whether they encode not-at-issue content (Murray, 2010). From the perspective of the current proposal, it seems possible that languages could reasonably differ on whether the content encoded by evidentials is better modeled in Discourse Commitments or as a Common Ground update.

  - There could also, ostensibly, be crosslinguistic variation with respect to whether speaker certainty markers or utterance modifiers are encoded in illocutionary content.
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References