On the dynamics of update

Chris Barker, *New York University Linguistics*

reporting on joint work with Dan Harris

Yale, Version of November 13, 2025

Some starting assumptions

1. Semantic interpretation depends on context
2. Common ground is an element of that context
3. Dynamic theories conceive of expression meanings as function that can change context (Context Change Potentials, aka CCPs)
4. In particular, dynamic theories suppose some expression meanings can update the common ground

Revisions:
3. meanings can *temporarily* change context;
4. they do not update the common ground

Goals

- ▶ Skepticism of grammar updating the common ground
- ▶ Slogan (Egan and Sundell): all update is goat update
- ▶ Research question: to what extent can dynamic theories give up modifying the common ground?

Preview: completely

Inspo: Harris 2020

> *According to a popular family of theories, assertions and other communicative acts should be understood as attempts to change the context of a conversation. Contexts, on this view, are publicly shared bodies of information that evolve over the course of a conversation and that play a range of semantic and pragmatic roles. I argue that this view is mistaken: **performing a communicative act requires aiming to change the mind of one's addressee, but not necessarily the context**.*

The title of Harris' paper: We talk to people, not contexts

Wait a minute, CCPs are not crazy

▶ Good model of computer programming languages (explicit inspiration for DPL, e.g., Harel et al. 1984)

▶ Some speech acts are plausibly modeled as CCPs, e.g., performatives (Szabolcsi 1982):

    (1)   You're fired!

function that maps a context set to a context set in which the action expressed by the utterance has taken place

And dynamic theories do important work!

Presupposition projection:

- (2) John's children are smart.
- (3) John has children, and • his children are smart.

Donkey anaphora:

- (4) If a[1] farmer beats a[2] donkey, • she[1] owns it[2].

Epistemic coherence:

- (5) #It is raining, and • it might not be raining.

Verum focus (Granchelli p.c.: vf must be locally unsettled):

- (6) #If it's raining, • it IS raining.
- (7) If it's raining—and • it IS raining—we'll get wet.
- (8) If it's raining, we'll get wet. And • it IS raining.

Strategy

Analogy between

- ► Local entailments vs. belief
  both modeled by sets of worlds

- ► Quantificational binding and donkey anaphora
  vs. discourse anaphora
  both modeled by assignment functions

View: temporary grammatical manipulation of information
and of anaphora is an essential part of semantic
composition, but updating of information and of referential
intentions is part of non-linguistic rational action

Cresswell 2002

Defining common ground

A proposition *p* is **common ground** for a group *G* iff

1. Every member of *G* believes *p*
2. (1) is common ground for *G*

(Harmon 77, Clark and Marshall 81, Yalcin 2024)

Variants:

▶ Instead of belief,
  ▶ acceptance (Stalnaker 2014, Lederman 2014)
  ▶ knowledge (Yalcin 2024)
▶ Instead of infinitely iterated mutual belief,
  ▶ Finite levels (Bach & Harnish: 2; Lederman 2014: 1)
  ▶ One-sided (see Clark and Marshall): *x* ∈ *G* believes...
  ▶ Alternating belief (Harris and Rubio-Fernandez):
    speaker believes the listener believes...

Happy to discuss any of these that don't get addressed

What motivates assuming common ground?

- ▶ Meaning: Grice, Schiffer: recognition of intentions
- ▶ Presupposition: Karttunen 77: the set of propositions the speaker and addressee can take for granted at that point in the discourse
  - ▶ Hypothesis: a speaker can felicitously presuppose *p* only if it is common ground at the point in the discourse at which it is presupposed
- ▶ Reference: Clark and Marshall 81 (descriptions) "under what conditions does [the speaker] have good reason to believe that [the addressee] won't get the wrong referent or have to ask for clarification?"
  - ▶ *Monkey Business* scenario

No doubt common ground is *sufficient* for these purposes.

Claims

Stalnaker 1970: *it is important that the participants in a single context have the same set of presuppositions* **if misunderstanding is to be avoided**. *This is why presupposition involves not only taking the truth of somehing for granted, but also assuming that others do the same...*

The shared presuppositions of the participants in a linguistic situation are perhaps **the most important constituent of a context**.

Schiller 2024: *The basic idea is something like the following: conversations are* **goal-directed activities of joint inquiry**, *and the function of assertion is to contribute to an information register of which we avail ourselves in collaborating on a common question. Call this set of information the conversational* <u>common ground</u>.

Simple dynamic semantic theory (Heim 1983)

► Model the common ground as the **context set**: the set of worlds compatible with all propositions in the common ground

Heim 1983:400: What are CCPs? Intuitively, they are instructions specifying certain operations of context change. The CCP of "It is raining," for instance, is the instruction to conjoin the current context with the proposition that it is raining. (If we construe propositions as sets of possible worlds, as we will here, "conjoin" means "intersect.")

How CCPs get useful work done

> The **local context** of an expression is the global (utterance) context updated with the net at-issue commitments of the portion of the utterance that has been evaluated so far.

Karttunen 1974, Heim 1983, Schlenker 2009, inter alia:

- ▶ Notation: $c + S$: 'c updated by the CCP of S', where c is a context set and S is a clause
- ▶ $c + \ulcorner A \text{ and } B \urcorner = (c + A) + B$
- ▶ First update with the left conjunct, then with the right
- ▶ The *local context* for the evaluation of B is $c + A$

(9) John's children are tall.

(10) John has children, and • John's children are tall.

Objections to CCPs

- ► Schlenker 2007 et seq.: the "explanatory challenge"
- ► Lore: if embedded clauses denote CCPs, how does that work exactly?

  (11) Amy doubts [that it's raining]$_{CCP}$.

  Glanzberg (p.c.): "Who could have an attitude towards *that*??"

Well-explored engineering solution: compute dynamic effects in a way that is cleanly separated from the truth conditional content (Shan 2001, Barker and Shan 2014, Mandelkern 2024, Bumford and Charlow 2025)

Today's objection

- ► CCPs do not do what they think they do!

 Lederman 2014:43-4: "dynamic" semanticists argue that the common ground plays an even more central role in communication than Stalnaker believes it does. These theorists have developed the hypothesis that the value of a sentence is **a function from common grounds to common grounds** (often in this setting called "contexts").

CCPs do not output a common ground!

- ▶ Say the input context set doesn't entail that it's raining
- ▶ After an utterance of *It's raining*, the output does
- ▶ If the output were common ground, it would entail that the speaker and the listener believe that it is raining, and that they believe that they believe it, and so on
- ▶ Most input context sets will not entail these beliefs
- ▶ The content of the utterance does not entail them
- ▶ So the derived output context doesn't entail them either

Pace Mandelbaum 2013. Thinking is believing. *Inquiry* **57.1**:55-96: "the mere activation of a mentally represented truth-apt proposition leads to immediately believing it."

How to get to common ground

- ▶ The beliefs of the participants must change
- ▶ Normally, this happens as a result of the speech act
- ▶ If things go according to plan, the new beliefs make the proposition that it's raining common ground
- ▶ Technically, this means making non-rain worlds inaccessible to (the transitive closure of) every participant's doxastic accessibility relation
- ▶ Since this is not part of the CCP, it must be accomplished through some independent update mechanism

If there is a general update mechanism at play, why not let it add the content of the utterance too? That is, why have CCPs adjust the context set at all?

Should local contexts be common grounds?

If CCPs routinely added metabeliefs, we would expect to detect them semantically via entailments or presuppositions

   (12)   John has children, and you believe that he has children.

   (13)   John has children, and your belief that he has children will be helpful.

Intuitions:

- ▶ In (12), the right conjunct is not entailed by its local context
- ▶ In (13), the local context of the right conjunct does not entail the presupposition triggered by the possessive

So: NO!

More data: disjunction

- $c + \ulcorner \neg A \urcorner = c - (c + A)$ where '$-$' is set subtraction
- $c + \ulcorner A \text{ or } B \urcorner = (c + A) + ((c + (\neg A)) + B)$

(14) Either this building doesn't have a bathroom, or it's upstairs.

(15) Either this building doesn't have a bathroom, or you believe it does have a bathroom.

(16) Either this building doesn't have a bathroom, or your belief that it has a bathroom will be helpful.

cf. $p \vee q \equiv p \vee (\neg p \vee q)$

More data: conditionals

(17)   If John has children, then his children are smart.

(18)   If John has children, then you believe that he has children.

(19)   If John has children, then your belief that he has children will be helpful.

(18) is not a tautology, and (19) presupposes the listener believes John has children whether he does or not!

CCPs compute compositional commitments

- ▶ They **do** compute net commitments of the starting context set with the incremental truth conditions of the part of the expression evaluated so far.
- ▶ They do **not** add the beliefs and meta beliefs required to turn a set of worlds into a common ground.

Can we separate meta beliefs from content?

Maybe...

- ▶ ... CCPs update the information under discussion
- ▶ ... meta beliefs about the information under discussion are managed separately

Unlikely:

- ▶ Other information about the discourse situation affects evaluation (and so is presumably common ground)
  - ▶ The manifest occurrence of the utterance
  - ▶ Goats
  - ▶ Vague standards

The strongest case for automatic update

Maybe only not-at-issue content gets automatically added to the common ground

- ► Simons et al. 2010:
    - ► content is at-issue only if the speaker intends for that content to address the Question Under Discussion
    - ► projection correlates with at-issueness
    - ► If entailment-cancelling operators (negation, epistemics, etc.) have traction on a piece of content, it's at-issue

Murray 2014, AnderBois et al. 2015

[Deniability test for at-issueness]

(20)   a.   A: Sue doesn't know that it's raining.

          b.   B: You're wrong, look, she's carrying an umbrella.

          c.   B′: #You're wrong, look, the ground is dry.

(21)   a.   A: Sue, who is a genius, can solve the problem.

          b.   B: You're wrong, no one can solve this problem.

          c.   B′: #You're wrong, Sue is not that smart.

Murray 2009: "the at-issue component of an assertion, which is negotiable, is treated as a proposal to update the common ground. The not-at-issue component of an assertion, which is not negotiable, is added directly to the common ground."

Cheyenne (Plains Algonquian)

a. *É-hoo'koho-Ø*.
   3-rain-DIR
   'It's raining, I'm sure.'

b. *É-hoo'kóhó-**nése***.
   3-rain-RPT.SG.B
   'It's raining, I hear.'

c. *É-hoo'kó'hó-**neho***.
   3-rain-NAR.SG.B
   'It rained, it is said.'

d. ***Mó**-hoo'kóhó-**hané-he***.
   CNJ-rain-MOD$_B$-Y/N
   'It's raining, I gather.'

Non-negotiable update? No.

(22) It's raining, I hear.

- ► Add to directly to the common ground:
  Someone told the speaker that it's raining.
- ► Proffer for consideration:
  It's raining.

Hmm...

- ► If the reportative fact is non-negotiable
- ► And common ground is mutual belief
- ► then use of a reportative compels belief in the occurrence of an unobserved speech act

Motivating acceptance instead of belief

- ▶ First step: suggestion: it is natural for not-at-issue content to not be challenged
- ▶ Perhaps to varying degrees
  - ▶ Presupposition: Hey, wait a minute...
  - ▶ Appositives: By the way, actually...
  - ▶ Evidentials: [maximally unobjectionable]
- ▶ Perhaps evidentials are automatically enrolled in a common ground that is grounded in **acceptance** (e.g., Stalnaker 2014): acceptance for the purposes of the conversation (does not entail belief)

Acceptance? No.

Insinuation (Camp 2018):

(23) Can't we take care of this right here?

- ▶ The participants in a bribery attempt mutually believe that the speaker is offering to bribe the listener.
- ▶ But that fact is not put on the official record, i.e., not part of the official common ground
- ▶ This preserves some measure of deniability
- ▶ Decisions about what to say and how to interpret it depend both on what is accepted as common ground and what the participants actually believe
- ▶ We need both acceptance and belief

Double-tracking: Berstler 2025 (multiple talks)

A minor role for common ground

> *Simons 2025: Perhaps surprisingly, an interpretation of contexts as common ground, if ever even adopted, **plays no role** in the workings of context change theories.*

(24)   Ann is sick.

(25)   It is clear that Ann is sick.

► Clarity presupposes some body of evidence is common ground

The multiple-perspectives view

Heller and Brown-Schmitt 2014, Simons 2025

- ▶ The speaker guesses at the beliefs of the listeners
- ▶ The listeners guess at the beliefs of the speaker
- ▶ In complicated situations, the speaker may need to guess at what the listener believes are the speaker's beliefs... [and so on up the hierarchy]
- ▶ If things go wrong, negotiate
- ▶ Master questions:
  - ▶ Why did the speaker chose to say what they said?
  - ▶ Why did the listener interpret what the speaker said in the way that they did?

Additional element: dispositions

- ▶ The participants also model each other's intentions and linguistic dispositions (Lewis 2014, MacFarlane 2016)
- ▶ Insinuation and double-tracking are situations in which the speaker judges that the listener intends to behave as if their belief state is different than it actually is
- ▶ With the right motivation, the speaker will choose to say something that appears to conform to what the listener pretends to believe, at the same time the speaker is actually targeting the genuine beliefs

Anaphora

Anaphora leads a double life:

- ▶ half in the mental world (attention, intention)
- ▶ half in the world of experience: existence must be locally entailed
- ▶ Linguistic factors promote, impeded, force, or forbid

(26)   Enzo doesn't have a BLACK Maserati. It's RED.

- ▶ For presupposition, we have a natural way of representing both mental states and states of affairs, namely, set of worlds
- ▶ Harris (p.c.): We need a way of grammataically representing anaphoric potential that spans both the mental world and the world of experience

Hofmann, Elliott, Mandelkern, Chatain, Loder

Anaphora 2

Assignment functions:

(27) $[\![\text{He}_i \text{ sat}]\!]^g = \textbf{sat}(g(i))$

▶ Evaluation relative to an assignment function g
▶ g can model some agent's referential intentions

Quantificational binding:

(28) $[\![\text{Everyone}^i \text{ says he}_i \text{ sat}]\!]^g$

$= \forall u.\textbf{says}([\![\text{he}_i \text{ sat}]\!]^{g[i \mapsto u]})(u)$

▶ Standard first order logic technique:
the quantifier *shifts the local context* of its scope

Indefinites and donkey anaphora (briefly)

- Contexts contain pairs $\langle w, g \rangle$ of worlds and assign's.
- Assignments are sequences of objects: $[\![x_2]\!]^{abcd} = c$.
- Concatenation: $ab \cdot cd = abcd$
- Length: $/abcd/ = 4$

(29) $\quad c + \ulcorner [a\,P]\,Q \urcorner = (\{\langle w, g \cdot u \rangle \mid \langle w, g \rangle \in c\} + \ulcorner P(x_{/g/}) \urcorner)$
$$+ \ulcorner Q(x_{/g/}) \urcorner$$

(30) $\quad c + \ulcorner \text{if } A, B \urcorner = \{\langle w, g \rangle \in c \mid \forall h.(\langle w, g \cdot \boxed{h} \rangle \in c + A) \rightarrow$
$$\exists h'.\langle w, g \cdot \boxed{h} \cdot h' \rangle \in (c + A) + B\}$$

(31) $\quad c + $ if someone knocked, they$_0$ left =
all points $\langle w, g \rangle \in c$ such that if g can be extended
with an individual u who knocked in w, u left in w.

(This is a mash up of Heim 83 and Dekker 94.)

What donkey anaphora (traditionally) shows

- In (30), *h* is a set of witnesses for the indefinites in the antecedent, and *h* must also available for pronominal reference in the consequent (see boxes)
- So in some cases, *local anaphoric context* must reflect updates from an earlier expression
- Notably, for donkey anaphora
  - from the antecedent of a conditional to its consequent
  - from the restriction of a quantificational determiner to its nuclear scope (*every farmer who owns a donkey...*)
- This is required merely in order to get the truth conditions right

NB, there are popular theories of donkey anaphora that arguably do not involve explicit regulation of an anaphoric stance, including Elbourne 2005.

Pulling back

- ▶ Quantificational binding shows that pronoun evaluation must sometimes be grammatically controlled [Reader]

- ▶ Donkey anaphora shows that grammatical control over anaphora must persist in a way that affects downstream evaluation [State]

(32) Every farmer who owns a donkey treats **her donkey** well.

- ▶ Likewise, per case grammatical control over local presupposition satisfaction.

Update does not track CCP

Update can be partial:

(33) I've appointed a wonderful person to my cabinet.
[listener witholds belief wrt the adjective]

(34) That brilliant genius is coming to lunch.
[speaker intends a subconstituent to be sarcastic]

Update can happen mid-utterance:

*Stalnaker 73: If one asserts a proposition us-
ing a conjunctive sentence ... the presuppositions
will change in the middle of the assertion. The
first conjunct will be added to the initial presuppo-
sitions before the second conjunct is asserted.*

And—goats!

Application: asymmetric acceptance

- ▶ Assume verum focus must be locally unsettled

(35)   a. This chili might contain beans.
       b. This chili DOES contain beans!

(36)   a. This chili definitely contains beans.
       b. #This chili DOES contain beans!

(37)   a. This chili is tasty.
       b. This chili IS tasty!

Interpretation: for predicates of personal taste, even when an assertion is accepted, it can justify updating the beliefs of the speaker without settling the beliefs of the listener.

Proposal for context update

- All update is goat update
- Update whenever you want to
- As you see fit
- Try to be rational (norm)
- Or not

Issue: unit of composition: utterance? speech act?

Conclusion

- ▶ CCPs do not track mutual belief or common ground
- ▶ Better to use one-sided beliefs to characterize pragmatic choices anyway
- ▶ We do need to track incremental entailments during composition
- ▶ Dynamic theories do this superbly
- ▶ All update is goat update

THANKS!

AnderBois, Scott, Adrian Brasoveanu, and Robert Henderson. 2015. At-issue
        proposals and appositive impositions in discourse. Journal of Semantics 32.1.
        93-138. https://doi.org/10.1093/jos/fft014

Bach, Kent and Robert Harnish. 1979. Linguistic communication and speech acts. MIT
        Press.

Barker, Chris and Chung-chieh Shan. 2014. Continuations and natural language.
        Oxford University Press.

Bumford, Dylan and Simon Charlow. 2025. Effect-driven interpretation. Cambridge
        University Press.

Camp, Elisabeth. 2018. Insinuation, CommonGround, and the Conversational Record.
        In Daniel Fogal, Daniel W. Harris & Matt Moss, New Work on Speech Acts.
        Oxford, GB: Oxford University Press. pp. 40–66.

Chatain, Keny. 2025. Reducing pronoun accessibility to presupposition satisfaction.
        Journal of Semantics. https://doi.org/10.1093/jos/ffaf006

Chierchia, Gennaro. 1992. Anaphora and Dynamic Binding. Linguistics and
        Philosophy 15: 111-183.

Chierchia, Gennaro. 1995. Dynamics of Meaning. Anaphora, Presupposition and the
        Theory of Grammar. University of Chicago Press.

Clark, H. H., & Marshall, C. R. (1981). Definite reference and mutual knowledge. In A.
        K. Joshi, B. Webber, & I. Sag (Eds.), Elements of discourse understanding (pp.
        10-63). Cambridge: Cambridge University Press.

Cresswell, Max. 2002. Static semantics for dynamic discourse. Linguistics and
        Philosophy 25. 545–571. https://doi.org/10.1023/A:1020834910542

Dekker, Paul. 1994/2012. Predicate logic with anaphora. In Mandy Harvey and Lynn
        Samelmann (eds). Proceedings of SALT 4 79–95.
        https://doi.org/10.3765/salt.v4i0.2459 Reprinted in Paul Dekker. 2012.
        Dynamic Semantics. 7-47. Springer.
        https://doi.org/10.1007/978-94-007-4869-9_2

Dekker, Paul. 2004. Grounding dynamic semantics. In Anne Bezuidenhout & Marga Reimer (eds.), Descriptions and Beyond, Oxford University Press.

Egan, Andy and Tim Sundell. ms. All update is goat update. June 7 2024. https://www.timsundell.com/s/All-Update-is-Goat-Update-6724.pdf

Elliott, Patrick. 2020. Towards a principled logic of anaphora. https://ling.auf.net/lingbuzz/005562

Elliott, Patrick and Amir Anvari. 2025. A quadrivalent approach to anaphora. https://www.patrickdelliott.com/pdf/dip.pdf

Groenendijk, Jeroen and Martin Stokhof. 1991. Dynamic Predicate Logic. Linguistics and Philosophy 14: 39-100. https://doi.org/10.1007

Harel, David, Dexter Kozen, and Jerzy Tiuryn. 1984. Dynamic logic. Handbook of Philosophical Logic 497–604. https://doi.org/10.1007/978-94-009-6259-0_10

Harman, G. 1977. "Review of Linguistic Behavior by Jonathan Bennett." Language 53:417-24.

Harris, Daniel. 2019. We talk to people, not contexts. Philosophical Studies 177. 2713–2733. https://doi.org/10.1007/s11098-019-01335-8

Harris, Daniel. 2020. Semantics without semantic content. Mind and Language 1-25. https://doi.org/10.1111/mila.12290

Harris, Daniel and Paula Rubio-Fernandez. In Press. Common Ground: Between Formal Pragmatics and Psycholinguistics. Annual Review of Linguistics.

Heim, Irene. 1983/1988/2008. On the Projection Problem for Presuppositions. Written in 1983 for WCFFL2; published in the proceedings of WCCFL in 1988; reprinted in Paul Portner and Barbara Partee (eds). 2008. Formal Semantics. 249–260. https://doi.org/10.1002/9780470758335.ch10

Heller, Daphna and Brown-Schmidt, S. 2023. The multiple perspectives theory of mental states in communication. Cognitive Science, 47.7.

Hofmann, Lisa. 2025. Anaphoric accessibility with flat update. Semantics & Pragmatics 18.3: 1–69. https://doi.org/10.3765/sp.18.3

Karttunen, Lauri. 1974. Presupposition and linguistic context. Theoretical linguistics, 1(1), 181–194. 43

Karttunen, Lauri and Peters, Stanley, 1977, "Requiem for presupposition", in BLS3, Proceedings of the Third Annual Meeting of the Berkeley Linguistic Society, Berkeley: California: 266–278.

Lederman, Harvey. 2014. A theory of common ground Dissertation, Oxford University.

Lederman, H. (2018). Common knowledge. In M. Jankovic & K. Ludwig (Eds.), The Routledge handbook of collective intentionality (pp. 181–195). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9781315768571-18

Lewis, Karen. 2012. Discourse dynamics, pragmatics, and indefinites. Philosophical Studies 158. 313–342. https://doi.org/10.1007/s11098-012-9882-y

MacFarlane, John. 2016. Vagueness as Indecision. Aristotelian Society Supplementary Volume 90 (1):255-283.

Mandelkern, Matthew. 2019. Bounded Modality. The Philosophical Review 128.1: 1–61. https://doi.org/10.1215/00318108-7213001

Mandelkern, Matthew. 2024. Bounded Meaning. Oxford University Press.

Murray, Sarah. 2009. A Hamblin semantics for evidentials. In Ed Cormany, Satoshi Ito, and David Lutz (eds). *Proceedings of SALT 19*. 324–341. https://doi.org/10.3765/salt.v19i0.2543

Murray, Sarah. 2014. Varieties of update. Semantics and Pragmatics 7.2. 1–51. http://dx.doi.org/10.3765/sp.7.2 https://semprag.org/index.php/sp/article/view/sp.7.2

Muskens, Reinhard. 1996. Combining Montague semantics and discourse representation. Linguistics and Philosophy 19. 143–186. https://doi.org/10.1007/BF00635836

Nouwen, Rick, Adrian Brasoveanu, Jan van Eijck, and Albert Visser. 2022. Dynamic Semantics. *The Stanford Encyclopedia of Philosophy (Fall 2022 Edition)*, Edward N. Zalta & Uri Nodelman (eds). https://plato.stanford.edu/

archives/fall2022/entries/dynamic-semantics/.

Schiffer, Stephen. 1972. Meaning. Oxford: Clarendon Press.

Schiller, Henry. 2025. Directing Thought. Ergo 12.23: 581-603.

Shan, Chung-chieh. 2001. Monads for natural language semantics. In Proceedings of the ESSLLI-2001 student session, ed. Kristina Striegnitz, 285–298. Helsinki: 13th European Summer School in Logic, Language and Information. https://doi.org/10.48550/arXiv.cs/0205026

Simons, Mandy. 2025. Availability without common ground. Linguistics and Philosophy. 48:179–211.

Simons, Mandy, Judith Tonhauser, David Beaver, and Craige Roberts. 2011. What projects and why. Proceedings of Semantics and Linguistic Theory (SALT). 22:309–27.

Stalnaker, Robert. 1970. Pragmatics. Synthese 22:272-289.

Stalnaker, Robert. 1973. Presupposition. *Journal of Philosophical Logic* 2:447–457.

Stalnaker, Robert. 2014. Content. Oxford University Press.

Stojnic, Una, Matthew Stone, and Ernie Lepore. 2017. Discourse and logical form: pronouns, attention and coherence. Linguistics and Philosophy 40. 519–547. https://doi.org/10.1007/s10988-017-9207-x

Szabolcsi, Anna. 1982. Model theoretic semantics of performatives. In Ferenc Kiefer, Hungarian General Linguistics. Benjamins.

Yalcin, Seth. 2024. Defining common ground. Lingusitics and Philosophy. 47:1045–1070.

[Dynamic discontent: Mandelkern 2024]

Mandelkern argues against dynamic semantics.

- ▶ desirable logical validities are lost (e.g., *If p, then p*)
- ▶ dynamic semantics incorrectly "predicts" order asymmetries in epistemic incoherence judgments
- ▶ Pragmatics:

    - ▶ p. 85 "A natural thought about the pragmatic theory that should go with dynamic semantics is simply that, when *p* is asserted and accepted at a context *c*, we apply [*p*] to *c*, so that the posterior context is *c*[*p*]" [in our notation $c + p$].
    - ▶ Assume $c + \ulcorner \Box p \urcorner = \{w \in c | \forall w \in c : p(w)\}$
    - ▶ Then if *p* is unsettled in *c*, $c + \Box p = \{\}$

- ▶ The simple treatment of conditionals for donkey anaphora is material implication

[Knowledge? No.]

- Yalcin 2024 argues that common ground is grounded on knowledge, not belief.

- This takes us even farther from an account of evidentials and insinuation

- Gettier case:

  - Ann thinks the person talking to her is Bill, but it's actually Mal. Mal says, 'I'm tired.'
  - Bill thinks he's talking to Ann, but he's actually talking to a mop. Bill says, 'I'm tired.'
  - Ann and Bill have all the beliefs required for the proposition that Bill is tired to be common ground.
  - But a mistake has been made: communication has not occurred.

[Abandoning common ground?]

- Yalcin: if communication requires common ground, then common ground must be based on knowledge, not belief.
- Yes. But only if we're modeling communication.
- Most conversation is mind-reading, with lots of lucky guesses
- Ann and Bill did not communicate, yet their beliefs and dispositions are exactly as they would want them to be if communication had occurred.

[Yalcin case resolved]

- There *is* mutual belief

- There is no communication

- That is not a problem, because common ground (and therefore mutual belief) is not an essential element of communication

- Accurate guesses about others' beliefs (and dispositions) is sufficient to explain lx behavior

- In any case, allows accurate predictions about why speakers say what they say, and how listeners interpret what they hear