

Expressivism about Logical Vocabulary and the Philosophy of Language

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What I will argue

1. Logical expressivism, in Brandom's version, brings a whole philosophy of language with it: pragmatics first, semantics from pragmatics, logic as an expressive device.
2. That package looks like it forces a revisionist attitude toward formal semantics as practiced. It does not.
3. There is a formal path — through RLLR's equivalence results and the current fortunes of truth-maker semantics — by which an inferentialist meta-semantics can keep empirical semantics exactly as it found it. The representationalist reading of the formalism becomes an *optional* commitment.

Preliminaries

- Methodological naturalism, in the sense of Price's subject naturalism: linguistics counts as an empirical science; philosophy should be useful to it when possible.
- Logical expressivism: logical vocabulary earns its place by what it lets a linguistic practice *say* — implicit inferential endorsements become explicit, discussable, revisable.
- A language of only empirical statements (Brandom 1994) can *do* inference but cannot *state* an inferential endorsement. Same spirit as the expressive arguments about negation in Price (1990) and Restall (2005).

The worked example: RLLR

Hlobil & Brandom (2025), three systems built to expressivist specification:

- **NMMS** — normative-pragmatic “flavor”; logical vocabulary via sequent rules over a *material base*.
- **Truth-maker semantics** (ch. 5) — alethic “flavor”.
- **Implication-space semantics** (ch. 6) — reason-relation “flavor”.

The material base: if the community takes “Vladimir is a cat” to imply “Vladimir is an animal”, the system takes that at face value. Logical vocabulary is added *on top*; it does not correct the base.

Philosophy of language as first philosophy

- Logical vocabulary is not what makes meaning possible; it removes an expressive roadblock. Analogy: Austin (1975) on explicit performatives — “I assert”, “I promise” expand the granularity of the attitudes a speaker can adopt.
- What is basic is not a semantics but a **normative pragmatics**: assertion, inference, and the attitudes speakers take to both.
- The same order of explanation is already at work in this room’s neighborhood: Ripley (2021) treats paradox as a problem for a theory of meaning; the theory of meaning in play is Restall’s (2005, 2008) — bounds on positions, assertion and denial as basic.

Representationalism

- Atomic semantic values stipulated for sub-sentential expressions.
- Compositional rules deliver sentence-level values.
- Consequence defined from sentence-level values.
- Philosophical underwriting: an account of reference, basic word–world relations.

The inferentialist order of explanation runs the other way: “inference” and “assertion” as primitives, reference as a defined term. Both cannot be foundational at once.

Semantics and meta-semantics

Semantics systematic resolution of meaning relations for a language or fragment; answerable to productivity, hence to compositionality. Montague (1974), Partee, Kratzer (2012).

Meta-semantics the philosophical study of that theory's primitives — where do the basic assignments come from, what does compositionality explain.

Logical expressivism + normative pragmatics + semantic inferentialism = a *meta-semantic* package. The three RLLR systems are auxiliary devices of that package.

The apparent consequence

If the meta-semantics is inferentialist, “reference” cannot mean what the representationalist means by it. That much is true.

One more step — that an inferentialist theory of reference cannot *serve* empirical semantics — yields extreme revisionism about the practice of logicians and linguists.

I think that further step is false. The rest of the talk gives reasons for that claim.

What semanticists say their theory does

- Yalcin (in Ball & Rabern 2018): semantics as model-based science. Semantic values are posits of a model answerable to speakers' judgments of truth, implication, difference.
- On that self-understanding, atomic assignments need empirical adequacy, not a prior account of reference.
- That is all an inferentialist meta-semantics asks of them.

Inside the field already

- Yalcin (2011): nonfactualism about epistemic modals.
- Goldstein (2019): conditional assertion.
- Accounts like these usually come in dynamic clothing — update effects, context change. The dynamics is not what makes them congenial: Rothschild & Yalcin (2016) distinguish three senses of “dynamic”, and most dynamic semantics is representationalist on my usage. What matters is what the models answer to.
- Where I differ from Yalcin’s instrumentalism: the frame the models hang from is a normative pragmatics. That is where the explanatory buck stops.

The indicative conditional, part one: Kratzer

The history of the conditional is the story of a syntactic mistake.

(Kratzer 2012 [1991], p. 106)

- No two-place if–then connective at logical form. If-clauses restrict operators — overt or covert, possibly at a distance.
- “If the lights are on, Roger is home” = (must: the lights are on)(Roger is home).
- Gibbard’s (1981) collapse proof assumes the two-place operator; on the restrictor view there is nothing for the proof to collapse.

The indicative conditional, part two: the dispute over grain

- Fine (2012a, 2012b): worlds-based accounts validate substitution of logically equivalent antecedents; that fails. Exact states and transitions instead of closeness of worlds — a thesis about the grain of antecedent content, arguably orthogonal to Kratzer's thesis about logical form.
- Khoo & Mandelkern (2019): the triviality results do not separate the natural-language conditional from a genuine connective.
- Gillies (2004): the epistemic data handled with if-clauses as context-shifters.
- Stalnaker (2011): conditional propositions against conditional-assertion accounts.
- Experimental adjudication, in the counterfactual domain: Ciardelli, Zhang & Champollion (2018) — truth-conditionally equivalent antecedents behave differently.

The frontier of empirical semantics is, in practice, a dispute among imported philosophical semantics. None of them is compulsory for the practice of empirical modelling (as per current practice).

Representationalism functions there as an optional gloss on the models, and not as a load-bearing part of the theory. One can keep a notion of representation and reference that is defined in terms of more basic concepts without loss for empirical semantics.

- Fine (2017) offers truth-maker semantics to linguistics; Moltmann (2020) applies it to attitude verbs and modals; Champollion (2025) surveys the adoption from inside the field.
- Precedent: possible worlds made the same trip, from modal logic into semantics, in the seventies (Partee 2015).
- The trip began without a Montague-style compositional fragment in place.

The compatibilist sketch

- If truth-maker semantics earns its empirical keep, the equivalence results give reason-relation semantics the same path into the linguists' toolkit.
- The choice between the representational and the inferential reading of those models is then an optional theoretical commitment, settled — if at all — by meta-semantic argument. The practice of semanticists is undisturbed either way.
- The inferentialist meta-semantics *frames* empirical semantics; it does not compete with it.

- The RLLR equivalences are propositional, relative to specific modalized state spaces.
- Neither framework has a compositional fragment for quantified, intensional natural language.
- Given the precedent, this is the shape of a research program, not a refutation.

it will be of particular importance to distinguish the subclass of inferential relationships that preserve content ... and not merely truth.

(Fine 2017, p. 566)

Some of the intuitions formal semantics answers to are inferential. Where the linguist's evidence is inferential, an inferentialist approach seems broadly compatible with the kind of evidence used in semantic modelling.

What the path is for

- Philosophy of logic and empirical formal semantics currently work in relative mutual indifference.
- The meta-vocabulary gives the crossing a definite shape: Elements in WordNet-style databases and categorial grammar frameworks translate into material sequents to some extent. “Vladimir is a cat” $\mid \sim \mathfrak{B}$ “Vladimir is an animal”, an entry in an empirically testable material base $\mathfrak{B}$ for something like NMMS.
- The logical vocabulary on top is where philosophy of logic operates while empirical work feeds the construction of material bases. Each discipline keeps its own standards of adequacy.

Some more reasons: Language models and their problems

- Language models exhibit “inferential capacities” (NLI is one task form); the formal projects (such as so-called “natural logics”, Sánchez Valencia 1991) meant to account for such inferential relations have largely been abandoned.
- The meta-vocabulary supports a path that runs both ways: empirical resources into material bases, logical theory back into testable predictions.
- If something like this works, one would know how to go about these endeavors without unnecessary interference.

Summary

1. Brandom's logical expressivism is a meta-semantic package with normative pragmatics at its base.
2. Empirical formal semantics does not carry a mandatory representationalist meta-semantic; its own frontier debates show it litigating grain and the semantics–pragmatics border with imported philosophical tools.
3. RLLR's equivalence results plus the truth-maker crossing give the inferentialist a formal route to those debates. Representationalism becomes optional; the practice of empirical modelling stays as it is.

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