Research Statement

Ryan Simonelli

We might say *that Mars is a sphere* or say of Mars *that it's red*. Such italicized phrases denote conceptual and semantic contents: the sorts of things we think or say, or think or say about things. My work aims to provide a "normative functionalist" account of such contents, articulating their conceptual and semantic significance in terms of the norms governing the use of linguistic expressions, be they sentences, such as "Mars is a sphere," or predicates, such as "red." Such theories have garnered a rather shady reputation in recent analytic philosophy, with many philosophers unclear about their motivations and skeptical as to whether one can actually be worked out in detail. Responsive to both of these concerns, my research program has two main branches:

1. **Metaphysical and Epistemological Motivations:** My work philosophically motivates a normative functionalist theory of meaning by showing how a theory of this sort can yield solutions to longstanding philosophical problems. Most notably, I argue that only such an approach can yield a philosophically satisfying account of our knowledge of traditionally contentious metaphysical entities such as properties, relations, and propositions.

2. **Concrete, Formal Development:** My work spells out a normative functionalist theory of meaning in formal detail, drawing on the tools of formal logic and constructing new formal tools where existing ones are lacking. Much of this work has involved developing new kinds of proof systems distinctively suited to normative functionalist—and specifically, inferentialist—semantics.

My dissertation project, *Meaning and the World* (University of Chicago, 2022) was my initial pursuit of this two-pronged research program, and over the past few years, I have continued to pursue it across a number of journal articles and book chapters, spanning a number of fields and engaging with disparate philosophical literatures and traditions.

Let me start with what I take to be the main motivation. Contemporary philosophy widely appeals to metaphysical entities such as properties, relations, and propositions in articulating the contents of our mental states and the linguistic expressions we utter. However, as things stand, there is no accepted account of the nature of these entities or our knowledge of them; the traditional metaphysical and epistemological problems associated with such entities have been ignored rather than solved. My work aims to rectify this. In "An Act-Based Approach to Assertibles and Instantiables" (*Ergo*, forthcoming), my jumping-off point is one recent approach to the metaphysics of propositions, in which they are understood as types of linguistic acts. I show how, by adopting a normative functionalist approach to meaning, this approach can be radicalized so as to no longer appeal to primitive properties and relations. On this account, not just the contents of sentences but also predicates can be understood in terms of the act one performs in using those linguistic expressions. I have another paper in progress, "Properties without Problems" (draft currently undergoing substantial revisions) in which I focus more on the nature of properties themselves, articulating the modal structuralist metaphysics of them that complements the normative functionalist epistemology. One upshot of the approach to metaphysics that I develop is that it opens up the door for "pragmatic transcendental arguments" in which essential structural features of metaphysical entities are explained in terms of the necessary structure of discursive practice. In "Why Must Incompatibility Be Symmetric" (*Philosophical Quarterly* 2023), I apply this method to "pragmatically deduce" one essential structural feature of properties and

states of affairs—the incompatibility relation that might obtain between such entities must be symmetric. In general, to put it in terminology from the German philosophical tradition, my work in metaphysics aims to provide a framework for a "critical turn" in analytic metaphysics.

The above work is predicated on the thought that a normative functionalist approach to content can be made to work. Though many have proposed that meaning should be understood in terms of the norms governing use, there is still no consensus on the general shape that such a theory of meaning should take. Within the broader class of normative functionalist theories of meaning, I develop, more specifically, an *inferentialist* account of semantic content, understanding content in terms of the specifically inferential rules governing the use of linguistic expressions. Here, one fundamental question concerns what sorts of "inferential rules" ought to be included in an inferentialist theory. In "How to Be a Hyper-Inferentialist" (*Synthese*, 2023), I defend an ambitious form of inferentialism known as "hyper-inferentialism" according to which the only normative relations that figure into an inferentialist theory are those relating uses of sentences to other uses of sentences. I argue, first, that standard approaches to "inferentialism" which admit "quasi-inferential rules" relating uses of sentences to perceptual circumstances are viciously circular, and, second, that this approach to inferentialism can incorporate the aspects of content that are typically thought to require appeal to "quasi-inferential rules." I further develop this general approach to meaning in "In Defense of Immodesty" (under review), responding to a number of arguments made by John McDowell that our semantic ambitions can only be "modest" ones, and that no non-circular account of conceptual content is possible. Thus, my approach is an ambitious one that aims to non-circularly account for conceptual content entirely in terms of inferential role. Only such an account, I claim, can yield the metaphysical and epistemological fruits stated above.

Of course, the devil is always in the detail, and so I have done substantial work in formal semantics and philosophical logic (often in collaboration with the "Research on Logical Expressivism (ROLE)" working group, led by Robert Brandom and Ulf Hlobil) to develop a novel formal semantic framework in which the details of an inferentialist theory of meaning can be concretely spelled out. Here, my work engages with technical work in the field of philosophical logic that has come to be known as "proof-theoretic semantics," initiated by the logician Gerhard Gentzen in the 1930s, according to which the meaning of specifically *logical* expressions can be understood in terms of the rules governing their use in a formal proof system. My project has been to develop new kinds of proof systems that are capable of formally codifying the inferential rules governing the use of *all* expressions, logical and non-logical, and hence the meanings of all such expressions. There are two notable features of the systems I've developed:

1. **Bilateralism:** The systems are *bilateral*, understanding inferential relations as obtaining, in the first instance, between *speech acts*, where the typification of such acts minimally includes the opposite speech acts of *assertion* and *denial*. Bilateralism enables a straightforward inferential account of semantic relations such as incompatibility and logical operations such as negation.

2. **Substructurality:** The systems are *substructural*, not imposing structural constraints typically imposed on proof systems such as monotonicity (adding a premise never defeats a good inference) and transitivity. Substructurality is essential if we want to model the inferential relations obtaining between not just logical expressions but content words as well.[1]

My main proposal for a proof system distinctively capable of serving as a basis for an inferentialist semantics can be found in my paper "Bringing Bilateralisms Together" (*Australasian Journal of Philosophy*, forthcoming), where I unify two bilateral approaches to logic and propose a new

[1]For instance, it seems that asserting "This is beer" commits one to asserting "This is alcoholic," but asserting "This is beer" along with "This is O'Doul's" does not. Thus, we must reject monotonicity.

kind of bilateral framework that permits radically substructural consequence relations.[2] In "The Consequentiality of Explicitation" (under review), I situate this proof system in the context of a dynamic framework—a kind of "update semantics"—that models how discourse is updated upon a speaker's making of an assertion or denial. This system is motivated as a response to examples previously articulated in my paper "Considering the Exceptions" (*Synthese* 2022), which, as I show there, pose problems for standard approaches in semantics.[3]

Though my work in philosophical logic has mainly been oriented with the philosophical aim stated above, I have also done work in philosophical logic proper, and, in particular, proof-theory, developing some of the more technical aspects of the distinctive approach to logic. In "A General Schema for Bilateral Proof Rules," (*Journal of Philosophical Logic*, 2024) I introduce a new notation for formulating bilateral systems that enables one to abstract away from the specific opposite "stances" of assertion and denial and just conceive of the systems in terms of the opposition between stances. Proving an analogue to a Cut-Elimination theorem serves as my main example for showing how this notation enables one to do logic at a higher level of generality in a way that is both technically convenient and conceptually illuminating. In "Generalized Bilateral Harmony" (*The 2023 Logica Yearbook*, College Publications, 2025) I deploy the same generalized approach to bilateralism to articulate, at the schematic level, a new criterion of bilateral harmony for natural deduction systems. More recently, I have also worked to develop this bilateral approach to certain nonclassical logics. In "'Yes,' 'No,' Neither, and Both" (revise and resubmit (with minor revisions) at *Synthese*), I show how extending bilateral approach I've developed to the subclassical logics K3 and LP offers a new perspective on the recently prominent "non-transitive" approach to semantic paradoxes such as the liar. I further develop bilateral systems for this family of logics in "There is a Logical Negation: 'Yes,' 'No,' Both, Neither" (*Australasian Journal of Logic*, forthcoming), showing, in response to an influential paper by Jc Beall, how these bilateral systems enable one to maintain an inferentialist account of the content of logical negation, even if one endorses the radically subclassical logic FDE.

I plan to continue publishing papers pursuing the two branches of my research program. In addition, I currently have two book projects in the works, corresponding to these two branches. The first book project, entitled *Linguistically Turned* aims to justify the core commitments underlying my philosophical project to a broad philosophical audience, much broader than that typically addressed in my papers. This past summer, I was awarded an artist residency at the Poor Farm Experiment to work on this book, during which I time I completed a draft of the first chapter and began work on the second. This second book project, entitled *Articulating Meanings*, will be the first textbook systematically developing an inferentialist semantic theory for natural language, aiming to give advanced undergraduates and graduate students the resources to pursue inferentialist semantics for themselves. I will be using drafts of this textbook as part of the course material for an advanced seminar on inferentalism that I will be teaching at Wuhan University this coming Spring. In addition to these book projects of my own, Ulf Hlobil and I are also editing a new volume (a special issue of *Topoi*) entitled *Expressivism about Logic*, containing work by notable proponents of inferentialism and expressivism, such as Robert Brandom and Luca Incurvati, as well as a number of emerging scholars working on these issues.

[2]This framework builds upon the work of our ROLE group, recently presented in Hlobil and Brandom's *Reasons for Logic, Logic for Reasons*, but goes beyond it in important ways, both conceptually and technically.

[3]Consider, for instance, that asserting "This is beer" seems to commit one to "This is alcoholic," and asserting "This is beer" along with "This is alcoholic" seems to commit one to denying "This is O'Doul's." But asserting "This is beer" does not, by itself, seem to commit one to denying "This is O'Doul's." Intuitively, making the commitment to asserting "This is alcoholic" *explicit* by actually asserting it results in one taking on a *new implicit commitment*, namely, that of denying "This is O'Doul's."

My work primarily aims to move contemporary philosophy forward. However, I see my project as historically grounded, and so I also have interests developing certain threads in the history of philosophy that influence my work. Though I have a number of historical interests, I'll discuss what I take to be the two most significant ones. The first is in the history of analytic philosophy. Though I often engage with such authors as Frege and Wittgenstein in my work, the majority of my historical work in the history of analytic philosophy has focused on the philosophy of Wilfrid Sellars. In a number of papers—most notably, "Sellars's Ontological Nominalism" (*European Journal of Philosophy*, 2022), "Sellars's Two Worlds" (*Reading Kant with Sellars*, Routledge 2025—I have developed a reading of the overarching shape of Sellars's philosophy that has enabled me to respond, on Sellars's behalf, to criticisms of aspects of his view by his two most influential successors at Pittsburgh, most notably, Robert Brandom and John McDowell. The key to this reading is what Brandom has dubbed (in discussing my reading) "conceptual phenomenalism," according to which general conceptual contents such as properties and relations exist but do so only as "phenomenal" entities in the Kantian sense. In "Nominalism as Conceptual Phenomenalism" (revise and resubmit in *Journal of Contemporary Chinese Philosophy*), I clarify and defend my reading in response to a recent criticism of it by Chen Liang.[4] The second historical project worth noting involves engagement with the Madhyamaka tradition in Indian Buddhist philosophy, the most notable figure of which is the 2nd century philosopher Nāgārjuna. Currently, my main project is a paper entitled "Against Conceptual Svabhāva," where I draw on arguments from the Madhyamaka tradition (which I believe are quite powerful and little-known in the contemporary landscape), to criticize a widely held class of views about conceptual content in which contents are intrinsically intelligible, independent of our normative practices of using language. I will present this work at an upcoming conference on inferentialism and Buddhist metaphysics in Hanoi, Vietnam this spring, and I hope to publish the paper shortly after.

Finally, in recent years I have begun working seriously on the philosophy of artificial intelligence, focusing on questions of whether we could regard large language models like ChatGPT as "understanding what they're saying" or, indeed, saying things at all. On a number of occasions, I have presented a talk entitled "Sapience without Sentience: An Inferentialist Approach to LLMs," in which I consider the following argument pertaining to inferentialism and LLMs: if, as inferentialism claims, grasping a concept really just is mastering the inferential rules, then, given that training on massive amounts of linguistic data seems in principle sufficient for mastering inferential rules, it would seem that LLMs could, in principle, possess all concepts. One might think that the idea of LLMs genuinely possessing all concepts is so implausible that this argument constitutes a *reductio ad absurdum* of inferentialism. I respond to this worry by distinguishing sapience, in the sense of conceptual understanding, from sentience, conscious awareness, and arguing that LLMs could in principle possess the former without the latter. I am currently writing up this presentation as a paper, and plan to submit it soon, after which I plan to continue thinking about and working on philosophical issues pertaining to AI as the technology continues to rapidly develop.

[4]Responding to Liang's paper—written in Chinese and published in the leading Chinese-language philosophy journal—is an important philosophical task in its own right, but it is also part of a broader effort on my part to foster dialogue between Chinese and international scholars working on Sellars.