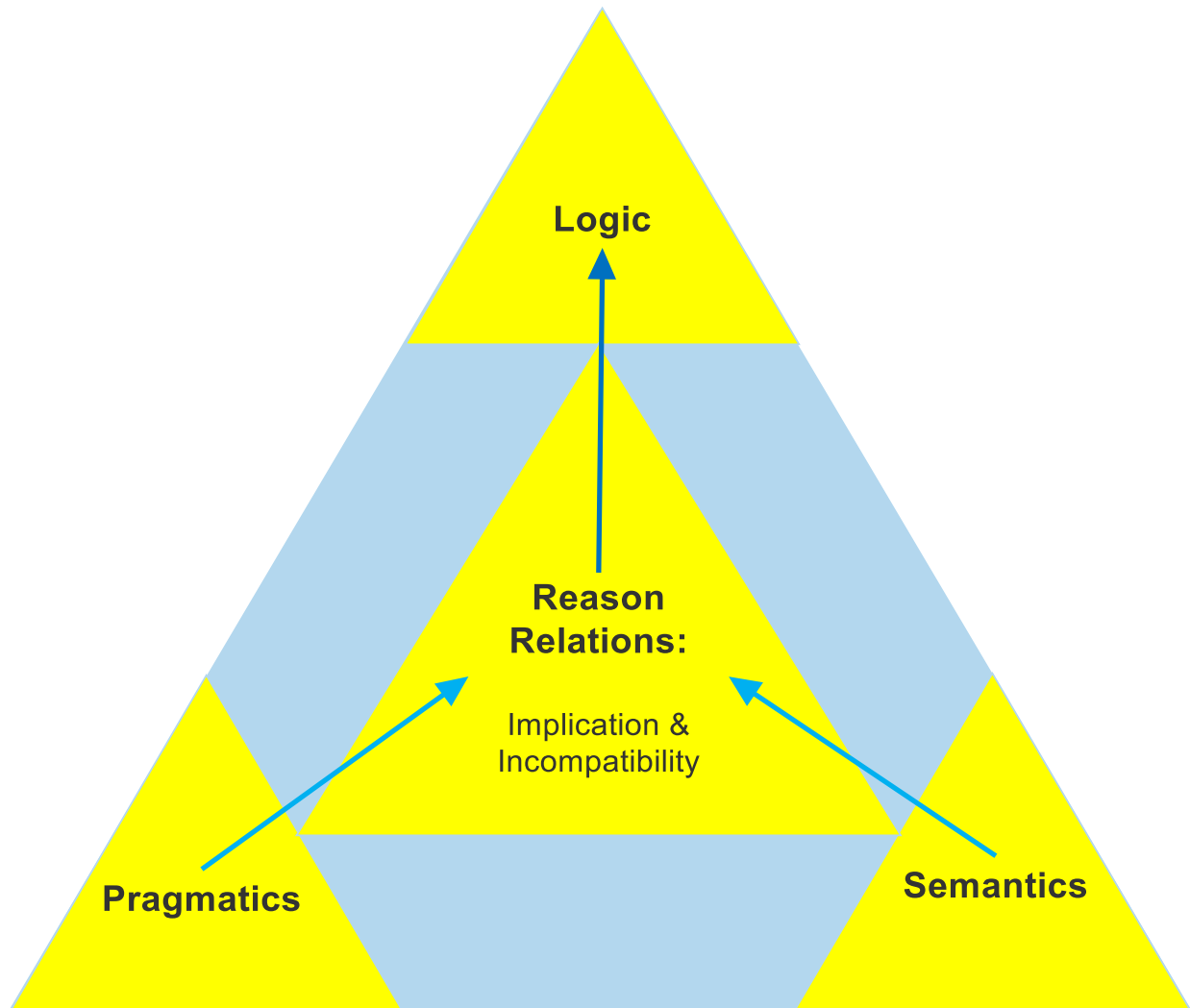


Seminar Introduction Notes

I. Introduction

“Philosophy of Language. Metavocabularies of Reason: Pragmatics, Semantics, and Logic”

Mandala of the Metavocabularies of Reason



This is officially a seminar in the philosophy of language.

This mandala of the metavocabularies of reason is an image of an answer.

Today I want to say what the question is, or, better, the questions are, to which it *is* an answer.

I will be addressing the fundamental, overarching question:

What is language?

We want to understand *language, discursive practice* (comprising talking and thinking), and (so) *apperception*: consciousness in the sense of *sapience* rather than *sentience*.

This is being able to say or think *that* things are *thus-and-so*, where “thus-and-so” specifies a *propositional* content.

Sapience in this sense is to be distinguished from **sentience**: being *aware* in a sense that amounts to being *awake*, which is something we share with at least a great number of our fellow non-human animals.

But the subtitle of the course is “**Metavocabularies of Reason.**”

That is also accurate, but I admit that it is not at all clear to begin with what I mean by that phrase.

And insofar as the phrase does at least vaguely convey a topic, it is not at all clear what it might have to do with the nature of language.

At the most general level, the phrase is meant to indicate that in inquiring about language in general one must address a whole host of related topics.

One must ask a number of other “What is...?” questions, and articulate one’s understanding of language in terms of its relation to the answers to these other questions.

At a slightly finer grain, the further subtitle “Pragmatics, Semantics, and Logic” offers a general indication of what some of these subsidiary associated topics are.

- The topic of *pragmatics*, in a broad sense, is the *use* of linguistic expressions. Its foundational question is “What is **discursive practice**? What distinguishes it from non- or pre-discursive practices?” I will reject the idea of substituting for this one a question that focuses rather on *individual* linguistic *abilities* rather than linguistic *social practices*—but that is a substantive commitment to which we shall return.
- The topic of *semantics* is then the *meaning* of linguistic expressions. Its foundational question is “What is **meaning**?” Of course there are many views about what kind of “thing” meanings could be—or, more prosaically, what kinds of semantic interpretants we theorists should associate with linguistic expressions so as best to codify how they are properly used—the norms or proprieties that govern that use. That formulation clearly involves further substantive commitments, both to the *normative* character of an adequate pragmatics and to the relations between semantics and pragmatics—the way in which, as I will say “semantics answers to pragmatics.”

One cannot understand meanings without understanding how the *use* of linguistic expressions can confer meanings on those expressions.

These commitments, too, will be elaborated and argued for as we delve further into the underlying issues.

- The topic of *logic* is *reasons*. Exactly how and in what sense this is so is importantly and tellingly controversial, as we shall see.

Answering the foundational demarcational question

“What is *logic*?” requires explaining the relations between logic and non- or pre-logical languages.

- Articulating the relations between logic and reasons brings us to what I will claim is the heart of the matter.

The most basic question is “What are *reasons*?”

This *reasons-first* approach to language that I will be elaborating in the next weeks is epitomized in the *mandala of metavocabularies* that is prominently displayed on the website and reproduced on the handout.

What is most distinctive about this picture is that it puts *reasons* at the center of the triangle whose vertices are pragmatics, logic, and semantics.

It expresses a commitment to understanding language in terms of its pragmatics, semantics, and logic, and understanding those disciplines in terms of **a specific constellation of pragmatic, semantic, and logical *metalanguages* each of which makes explicit a distinctive essential aspect of reasons.**

I call this approach “**metalinguistic rationalism**” about the discursive (or sometimes, just “metarationalism.”) What in *Making It Explicit* I called “semantic inferentialism” is an important part of this way of thinking about things, but it is only one part (the semantic part) of it.

I will endorse and argue for a version of **Dummett’s claim that “philosophy of language is first philosophy”**—how, through the notion of **reasons**, the philosophy of language reaches out to inform every other part of philosophy. It does so because understanding *language* and understanding *reasons* are two sides of one coin, two perspectives on one task.

From its earliest days the task of philosophy has been understand the peculiar “force of the better reason,” the distinctive way in which they are *compelling* even though they can be ignored, that so puzzled and fascinated the ancient Greeks.

And we have put ourselves in a position to see that

- **Language is the medium of reasons**, and
- **Reasons are the heart of language.**

Language matters to philosophy because reasons do.

The **metalinguistic rationalist** answer to the demarcational question with which I began, “What is language?” is that

- i. languages—I will say, meaning it to be more general, “vocabularies”—are distinguished by the applicability to them of a distinctive constellation of explicating *metavocabularies*: pragmatic, semantic, and logical.
- ii. Further, *what* those metavocabularies explicate, each in its own characteristic way, is **reason relations of material consequence or implication and material incompatibility or incoherence**.
- iii. The idea is to understand *reasons* functionally, in terms of the positions they occupy or the roles they play in networks of such reason relations.

Insofar as they can both serve as and stand in need of reasons, play the role both of premise and of conclusion in implications, linguistic expressions count as declarative sentences, that can be accepted or rejected, asserted or denied, and so express distinctively *propositional* contents, specifiable in a semantic metavocabulary. (That is the “semantic inferentialist” bit of the metalinguistic rationalist approach to language.)

Thinking about the relations among possible answers to these questions—about discursive practice, conceptual content, and logic as all perspectives on reasons—makes visible a unique combination of them that articulates a strong alternative perspective to traditional ones. This makes possible a binocular view that provides substantial new illumination on all these important topics.

For we can ask: if *articulating* reasons in its own particular theoretical way is the ultimate task common to pragmatics, semantics, and logic, what is the best way to pursue those enterprises? **How might we do things differently in those three theoretical spheres if we adopt a metalinguistic rationalist reasons-first approach?**

For the past decade, that is the broad issue that has animated the efforts of the international logic group “**Research on Logical Expressivism**” (ROLE) that I helped organize. We began with the aspiration to develop a new, distinctively expressivist approach to logically codifying nonmonotonic consequence relations, and spread out from there to what showed up as the neighboring regions of semantics and pragmatics. Although many people contributed (and we will read and discuss some of those contributions), **Ulf Hlobil, Dan Kaplan, and I are preparing the first book-length report on what we have found out and what we have learned how to do**. Ulf and Dan are recent Pitt philosophy Ph.D.s—Dan having defended his dissertation on this topic just this past December, and Ulf, who is now a tenured Professor at Concordia University in Montreal some years before. The book we are writing is called *Reasons for Logic, Logic for Reasons*. My aim in the first 10 weeks or so of this course is to present the material from that book.

With only minor exceptions, **all the technical results that I will report are due to Dan and Ulf**. So it is only right that they are the principal authors of the book. Their logical and semantic results are astonishing and important in their own right. But the way they fit together into a metalinguistic rationalist view of language, discursive practice, reasons, logic, and

meaning deserves, I think, to transform our understanding of those central philosophical topics. This course offers me the opportunity to tell the story the way I would—which is not always the way they would. Ulf and Dan have agreed to make guest appearances and talk about their contributions when we are reading their work.

So at this finest level of grain, new approaches to logic and semantics will be on offer, embedded in a new way of thinking about pragmatics, and all of them together articulating a new way of understanding reason-relations and (so) reasons.

These amount to very specific proposals for each of the principal elements of the mandala:

- a) A specific **pragmatics** (pragmatic MV), developing Restall and Ripley’s normative bilateral interpretation of the logical implication turnstile.
- b) A specific view of the **structure of reason**, that understands it first as having the dual structure of paired relations of asymmetric implication and symmetric incompatibility, which are further understood as contrasting with specifically *logical* conceptions of consequence and incompatibility in being in general **nonmonotonic** and **nontransitive** (substructural or having an open rather than a closed structure).
- c) A specific **logic** that is expressively adequate to those substructural or open-structured reason relations: the system NM-MS of NonMonotonic, MultiSuccedent sequent calculus. Dan Kaplan proves that it is *expressively complete* for arbitrary substructural (open-structured, nonmonotonic and nontransitive) material base vocabularies
- d) And a specific **semantics**, Dan Kaplan’s implication-space semantics, construed as Ulf Hlobil does as what is common to our pragmatics and Kit Fine’s truthmaker semantic framework. Dan shows soundness and completeness of his open-structured NM-MS logic w/res to an implication-space semantics.

There are two overviews of this project available on links on the course webpage.

- One of them is a draft ms. “On the Structure of Reasons: Pragmatics, Semantics, and Logic” listed as supplementary for this week.
- The other is the *Introduction to Reasons for Logic, Logic for Reasons*, linked to because parts of it are to be read for Week 4.

II. Language

I have sketched a topic and a program for a descent from the view from 10,000 feet up to what I have promised will be not only substantial details about each element indicated in the Mandala of Metavocabularies, but marvelous new contributions to each kind of metavocabulary.

1. Let me then say something about **what I will not be talking about**.

These are restrictions on the story I tell, simplifying abstractions needed to make the story tellable.

a) First is *syntax*.

This might well seem strange. After all, Chomsky take the applicability of quite specific kinds of *syntactic* metavocabularies to be what distinguishes (human) languages from other sorts of things.

I am going to ignore this proposed criterion of demarcation.

This is principally because I am concerned to develop in detail an alternative picture.

And for that picture, “Je n’ai pas besoin de cette hypothèse la,” as Laplace said about appeals to God in physics.

If and insofar as the approach I will elaborate successfully picks out language-like things from the rest of the world’s furniture, it would be interesting to see how the sort of demarcation I will pursue—appealing to a distinctive constellation of rational Metavocabularies—lines up extensionally with Chomskyan syntactic demarcational strategies. If and insofar as the two demarcational approaches do more or less pick out the same items, that would be interesting and call for explanation. We would learn something.

But I won’t get that far this term.

b) Relatedly, I will also not talk about *sub*-sentential structure. The whole analysis I will present, pragmatic, semantic, and logical, will stay resolutely at **the level of sentences**. (You might not think there is that much of interest in purely *propositional logic*—or, for that matter, semantics. But you would be wrong.)

In elaborating a propositional logic we will, of course, consider sentential operators that form sentences from sets of other sentences.

But we will consider *only* sentential components that are themselves sentences, and *only* specifically *logical* vocabulary for sentence formation.

c) Finally, I will make only occasional glancing references to the *social*, dialogical character of discursive practice. As important as that is, and as large as it looms in *Making It Explicit*, it is by and large irrelevant to the aspects of discursive practice I’ll be focusing on. This is a substantial omission from the pragmatic metavocabularies

elaborated here. But we can't do everything at once, and this defect is, I think relatively straightforwardly remediable.

2. **Linguistic exceptionalism:**

We begin with a *demarcational* question:

What is it to be a language, a discursive practice, or (as I will say) a *vocabulary*?

It asks whether and in what regards languages differ from other bits of the universe's furniture.

That is a kind of *ontological question*.

But this demarcational question raises an *exceptionalism* question:

The issue of *discursive exceptionalism* is whether, whatever distinguishing features we might endorse as a response to the demarcation question, languages must be *understood*, or *studied* in different ways than other kinds of things.

That is a *methodological question*.

I use the term "exceptionalism" here in recognition of **a current debate in the philosophy of logic**.

It concerns whether logic does and ought to use fundamentally different modes of inquiry and understanding than do empirical sciences. "Exceptionalists" say "yes" and the rebarbatively named "anti-exceptionalists" say "no." (Tim Williamson is a prominent example.)

This exceptionalism issue comes up in a particularly pressing way for the case of demarcating the *discursive*.

Let me say something about how and why, before moving to characterizing some of the considerations that bear on the general demarcational question.

At the dawn of the 19th century, Hegel radicalized Kant's distinction between the realm of necessity and the realm of freedom into **the distinction between discursive Geist (Spirit) and non-discursive Natur**.

For him, this was the distinction between things that had *histories* and things that had (only) *natures*.

When Alexander von Humboldt invented the modern German university, he organized it disciplinarily along Hegelian lines, sharply distinguishing the *Geisteswissenschaften* from the *Naturwissenschaften*, the humane from the natural sciences.

Geisteswissenschaften study us *as* specifically discursive creatures.

We might think here of Alexander Pope's remark (unnecessarily gendered, as they did in the eighteenth century) "The proper study of mankind is man."

American universities inherit a version of this division, distinguishing Humanities and Social Sciences from Natural Sciences. The boundaries of these are perennially fraught and contentious (math, linguistics, history, psychology, cultural vs. physical anthropology...).

The distinction between the methods appropriate to the two sorts of study was then both strengthened and sharpened by a philosophical tradition stretching from Schliermacher, through Dilthey, to Gadamer. This is the tradition of philosophical *hermeneutics*.

(My Doktorvater Rorty used to say that whenever he mentioned hermeneutics to an Anglophone audience he was worried that half of it would think he was referring to a German philosopher whose first name was Hermann, and whose last name they didn't quite catch.)

This tradition thinks that discursive items (concepts, sentences, texts, persons and institutions insofar as they are essentially discursive) require a fundamentally different sort of understanding from the sort that is appropriate and successful for nondiscursive bits of reality.

Dilthey called it *Verstehen* rather than *Erklärung*, understanding rather than explanation.

The thought was something like that revived in Anglophone philosophy of language as the interpretivism Davidson developed from Quine's emphasis on what is distinctive about translation. To understand linguistic utterances and texts one must map them onto one's own discourse, in effect using one's own capacity to speak as the measuring instrument both for detecting and for grasping the content or meaning of what is said or written.

As Quine put the point, **fluency of dialogue** is the criterion of understanding.

One of the Vienna Circle's most fundamental distinguishing characteristics was their commitment to what they called the "Unity of Science" program. Understanding *is* what comes to its highest form in the sort of understanding characteristic of the developed natural sciences. This they explicitly conceived in terms of the denial of a notion of "verstehen" that would contrast with the "erklären" of scientific theories.

They had in mind, and on their side, the danger of repeating the mistake of the 19th century vitalists, downstream from the Romantics, who argued that *living* organic beings were sufficiently ontologically different from nonliving ones that wholly different forms of understanding were required to grasp them as *organisms*. Teleological understanding has no analogue in understanding inorganic things. But Darwinian natural selection provided a mechanism for understanding some of what appeared as requiring teleological explanation, and biology became successful as a natural science down to the molecular level and up to the population-biological level.

There might indeed be something left out by this conception of biology—as Thompson thinks and Rödl concurs. My analogy would be with Manders's diagnosis of the kind of understanding that traditional Euclidean geometers had of their subject that was lost in the Hilbertian axiomatic successor. But vitalism remains a cautionary tale.

I mention all of this because the **metalinguistic rationalism** I will be recommending and expounding **is a form of discursive exceptionalism**. Vocabularies *are* substantially and fundamentally different from other things, and must be understood in different ways—

specifically, I want to say, in terms of different sorts of metavocabularies codifying their reason relations. Exceptionalism by itself is not a bad thing. The horrible example of vitalism shows that it must be handled with care.

In effect, the vitalists promoted the substantial *distinction* between living and nonliving things into an ontological and methodological *dualism*.

As I use the terms, **a *distinction* becomes a *dualism*** when it is drawn in terms that make the *relations* between the distinguished items unintelligible.

This is a concern with Sellars's, Davidson's, and **McDowell's space-of-reasons exceptionalism**, downstream from Kant's normative criterion of demarcation of the discursive—as we shall see.

But so long as the dualistic danger is appreciated, it can be avoided.

Diagnosis: Hermeneutic *verstehen* theorists and a certain kind of interpretivist (Davidson himself is not a pure example) mistake

- i. The proper *criterion* of discursive understanding for
- ii. The unique *method* of discursive understanding.

One can accept that mapping onto our own practices in a way that permits fluent dialogue plays role (i) without taking it to follow that it is the only candidate for playing role (ii).

Like Davidson, we will distinguish and divide these roles.

(He takes recursive truth-theories to play role (ii).)

I will appeal to a distinct constellation of rational metavocabularies.

This strategy would court circularity—defining vocabularies in terms of (other) vocabularies—except for the central role played by *reason relations* of consequence and incompatibility in defining both the constellation of (meta)vocabularies, and the elements of that constellation.

We will avoid the danger of an obscurantist *merely* hermeneutic *verstehen*-style interpretivist discursive exceptionalism by giving formally tractable *exact* characterizations of the pragmatic, semantic, and logical metavocabularies whose applicability is appealed to in distinguishing languages or *vocabularies* generally from other sorts of things. (The special character of these *metavocabularies* will allow us to avoid circularity here.) We will offer a genuine *explanation*, in the case of logic and semantics, in mathematical terms, of discursiveness. This is all the logical empiricists had a right to ask for—even though the *kind* of explanation offered is *sui generis*, applying to nothing other than vocabularies.

Incidentally, it comprises a distinctive kind of exceptionalism about *logic*.

Logical expressivism demarcates specifically logical vocabulary by its unique expressive role.

Before leaving this topic, let me say a quick word about the relations between *ontological* distinctions and *epistemological* or *methodological* distinctions.

The implication of an ontological distinction wherever we find an epistemological one has been called “the Platonic principle,” for instance, by Sellars, based on Plato's thinking that

what is grasped in thought must be different in ontological kind from what is knowable sensuously: the realms of Being and Becoming, the original noumena and phenomena.

Sellars, properly, wants to resist ontologically distinguishing theoretical and observable objects and properties, as instrumentalists do, on the basis of their merely methodological-epistemological difference, namely that theoretical objects can, by definition, only be known about inferentially, while observable ones, by definition, can also be known about noninferentially, by observation. His argument is that the methodological boundary can change—theoretical entities can become observable—without, presumably, changing the ontological kind of thing they are.

3. Still addressing the “What is language?” question:

Two broad traditions of philosophical thought about language in the last century:

a) **Logico-semantic formalist tradition** (Frege-Russell-*Tractatus*-Carnap-Tarski-Lewis-Fine).

Monological apodictic (meaning of or pertaining to proof) formal languages as calculi, both modeled on mathematical vocabulary (the language of mathematics) and originally and most centrally aimed at explicating it. Even today, formal semantic theories (possible worlds, truthmaker semantics, and our inferentialist one) prove themselves by *first* offering semantics for *logical* vocabulary.

Vs.

b) **Anthropological, natural-historical broadly pragmatist tradition** (American pragmatism, early MH, late LW, some of Quine, and Travis). Social practices. (In general, second tradition is better represented in Continental than in analytic circles: besides Heidegger, Merleau-Ponty is surely in it, while perhaps only de Saussure and structuralists belong to the logistical.)

The difference is whether we focus on meaning or on use.

The first leads to the question: **What is meaning?**

The second leads to the question: **What is** (what distinguishes) **discursive practice?**

This dispute is best thought about as a matter of whether formal *semantic metavocabularies* or *pragmatic metavocabularies* matter most.

It seems clear that rather than confronting us with a forced *choice*, these two traditions are inviting us to **synthesize** them.

The difference between *artificial logical calculi* and *natural languages* is in play here.

The traditions differ on which they take to be paradigmatic.

Here we can begin with **Carnap’s two-stage account**: first language, fixing meanings, then theory, determining beliefs, settled by world as represented by those meanings.

This requires fixing the meanings in an expressively more powerful metalanguage.

This is required for his “Principle of Tolerance,” his pragmatism about choice of language, where we are totally free, and the view that once that decision has been made, we are not free at all about what we should believe—or only free to make mistakes. This attempt to reconstruct the actual normative friction of language as the Cartesian product of total freedom and no freedom, is doomed.

Quine rightly observes that natural languages don’t work like this.

For them there is only *one* thing, the practices comprising the actual *use* of the language, that must do *both* jobs.

Quine and Wittgenstein both claim that fixing the meanings of expressions requires implicitly presupposing various general truths.

This line of thought motivates introducing **the “vocabulary” vocabulary**, building on Rorty’s use of “vocabulary” as intermediate between “language” and “theory.” I shall use the term capaciously, to include, for instance, not only logical and semantic vocabularies, but nautical and culinary vocabularies.

Vocabularies are not just sets of linguistic expressions. They are such expressions *in use* and *as used*. (Much) more on this later.

In place of “language” in some of its standard uses I will use the notion of an ***autonomous discursive practice (ADP)***: adapting Wittgensteinian terminology, these are **language games one could play though one could play no other**—discursive practices one could engage in though one engaged in no other, or verbal abilities one could exercise though one exercised no others. Nautical, culinary, and logical and semantic vocabularies are not like this.

But the issue on which these traditions (logistical-semantic and anthropological, meaning vs. use) diverge are not best thought of just in terms of artificial vs. natural languages. For we can be—and will be—concerned about the *formal* (mathematical) semantics of *natural* languages.

4. We will see that in seeking to understand reasons, we can offer:

a) **Semantics-first** order of explanation.

A **semantics-first order of explanation** specifies reason relations (paradigmatically, relations of consequence or implication) in terms of meaning or contents.

Q: What is meaning?

Logistical tradition (3a) says in effect that it is the applicability of certain kind of *semantic metavocabulary* that distinguishes the linguistic or discursive.

Specifically, it looks to a *representational* semantic MV, as codified in Tarskian model theory, Lewisian possible worlds (Etchemendy reminds us not to confuse this with the Tarskian), or—the latest development, and one we will consider in some detail—Kit Fine’s truthmaker semantics.

Main point here is:

Q: What makes something a semantics?

A: It underwrites reason relations.

Example: Tarski’s topological semantics for quantifiers.

It is a semantics because it underwrites notions of consequence and validity.

Contrast: Stone representation theorem, relating powersets and Boolean algebras matters a lot for some semantic projects, but is not itself a semantics.

Another alternative is *inferentialist* semantics.

This can take the form of proof-theoretic semantics (Prawitz, but especially Schröder-Heister.

Jarda Peregrin is very good on this topic in his book *Inferentialism: Why Rules Matter*).

Or the inferentialist semantics of *MIE*.

Or, as we shall see, and look at in detail, the latest in inferential semantic approaches, Dan Kaplan's implication-space semantics.

b) **Pragmatics-first** order of explanation, or

This is using the applicability of a certain kind of *pragmatic metavocabulary* to distinguish specifically *discursive* practices.

Here there is a tradition from Kant through Hegel to the American Pragmatists and the later LW that looks to a *normative* characterization of discursive social practice.

Kant on the normativity of discursiveness (sapience, apperception).

Judgment as the smallest unit of responsibility, commitment, authority.

Concepts as “functions of judgment”: rules that tell us *what* we have committed ourselves to.

Judging is binding ourselves by concepts in the form of rules.

By contrast to the preKantian tradition, the issue is not *our* grip on *concepts*—is it clear, distinct...?—but *concepts* grip on *us*.

The question is the nature of their bindingness, or validity (*Verbindlichkeit, Gültigkeit*).

Hegel: a social cognitive account of discursive normativity.

American pragmatists: a broadly selectional, teleological account of norms, looking to what is in common to processes of individual *learning* and species *evolution*. (Ruth Millikan and teleosemantics as successors.)

LW, back to social account.

Cavell *bon mot*:

Kant depsychologized epistemology.

Frege depsychologized logic.

Wittgenstein depsychologized psychology.

Motivate the transition to reasons:

- a) **Norms** first, then
- b) **assertion**, then
- c) **inference**, then
- d) **reasons**.

- e) we can not only understand reasons as implicit in *pragmatics* (pragmatics-first order of explanation), we can understand *semantics* as determining reason relations.

What is distinctive of discursive practice is that some speech acts have the significance of *assertions* (claims).

Contrary to Wittgenstein, I am claiming that **language does have a “downtown”**—and it is *claiming that* things are thus-and-so.

We can understand assertion in normative terms.

Authority and responsibility are co-ordinate.

And it is essential to being assertions that they can stand in reason relations to other claimables.

Version of asserting/denying that essentially comes with defending/challenging.

It is *justificatory* responsibility one assumes and *justificatory* authority one claims, in making an assertion.

Note that MIE insists we must have *both* a normative pragmatics *and* an inferential semantics.

The role of reasons is what we will use to demarcate the discursive as the linguistic.

Specifically, in the form of **assertion/denial, acceptance/rejection, requiring defending/challenging, i.e. giving reasons for/against.**

Cannot understand either the *authority* of assertions, or their (justificatory) *responsibility* apart from these standing obligations to give reasons if suitably challenged.

The linguistic turn (in both analytic and continental philosophy) comes out of German Idealism (via neoKantianism), which was focused on reasons (apperception, self-consciousness as sapience), and accepted the Hegelian discovery of language as the medium of reasons.

Propositional content (what can be accepted/rejected, asserted/denied) as what can both serve as and stand in need of reasons, which is what can not only be challenged and defended, but which can serve to challenge and defend other claimables (sayables, believable, acceptables/rejectables...). It must be able to play the role of premise or conclusion in an implication, and stand in relations of incompatibility to sets of other acceptables/rejectables.

Iron triangle of discursiveness.

A **pragmatics-first order of explanation** says we must understand reason relations in terms of practices of reasoning.

This thought introduces the idea of pragmatic metalanguages (or as I will say, pragmatic metavocabularies): vocabularies that let us *say* what we are *doing* in talking, thinking—centrally, I claim, *reasoning*. They are the languages in which we specify the *use* of linguistic expressions. Semantic metavocabularies specify the *meanings* or *contents* of linguistic expressions.

Q: What do we have to *do* in order thereby to be *saying* something (not just *vocal*, but *verbal*)?

This much “choosing between”—pragmatics-*first* and semantics-*first*, as opposed to doing *just* pragmatics *or* semantics is OK. But one might more plausibly insist that neither exclusive order of explanation will work, since neither is intelligible (at least fully) antecedently to and independently of, the other. The form of metalinguistic rationalism I will pursue is a mixed strategy. For, in the end, it claims that *all* the metavocabularies must be understood together, in relation to each other, and to the base vocabulary (ADP).

The two traditions should be synthesized, not treated as offering exclusive alternatives to be chosen between.

c) We will suggest a **reason-centered** approach.

5. The question I will argue turns out to be central is: **What are reasons?**

This is *linguistic rationalism*, or rationalism about the discursive as such.

Because:

Language is the medium of reasons.

Reasons are the form (soul) of language.

Reasons are what pragmatic and semantic metavocabularies have in common: both offer explanations of reason relations, paradigmatically, consequence or implication, the relation between premises and conclusions in good arguments, the relation of being a reason for (or, as we will see, against).

Reason relations vs. Reasoning practices:

Here put in **Harman point** (which he made concerning logic, but can be generalized).

(We’ll think about this more in connection with the MacFarlane essay):

Must distinguish *activity* of *inferring* from *relations* of *implication*.

Outrageous claim: “There is no such thing as deductive inference.”

For, if there were, a primary logical rule of inference would correspond to *modus ponens*:

If you believe *p* and you believe *if p then q*, then you should believe *q*.

But that would be a crazy rule or norm.

You might have much better evidence against *q* than you have for either *p* or *if p then q*.

Then you should reject (at least) one of them.

What logic really offers is a *relation*: $p, p \rightarrow q \mid \sim q$.

It *constrains* inference, dictating that you should not accept *p* and $p \rightarrow q$, and reject *q*.

But there are *lots* of ways of following *that* rule.

6. We should ask? **What is logic?**

For most of the twentieth century there was a debate about whether classical logic or intuitionism was the **right logic** (I want to say: the logic of *real* reasons). Dummett revived this in the '70s and '80s.

But before that, Quine and Putnam (in their books, published within a year of each other, both called *Philosophy of Logic*) added a second question:

The question of **demarcating** logic.

In their hands, this was saying how to demarcate *logical vocabulary*, or *logical concepts*.

They were retrospectively recollecting the dispute, which also raged through the twentieth century, over whether the set-theoretic epsilon (or various things *Principia* used to get a similar effect—such as ramified type theory) was a logical expression/concept.

If it was, then logicism about arithmetic was vindicated by set-theoretic reconstructions.

If not, not.

When we begin to talk about logical expressivism in later weeks, I will return to the topic of the paired demarcation and correctness questions.

But I take it that the prior question, of even more importance in determining one's philosophical understanding of logic, is:

What is the relation between *logic* and *reasons*?

(The mandala manifests this commitment.)

And here we see two possible ways to go:

a) **Logic-first**, reasons second. Good reasons just are *logically* good reasons.

Logicism: Good reasons are, at base, *logically* good reasons. Behind (in *some* sense) every good argument is a logically valid argument. Of course, many arguments must be seen as enthymematic. Logic articulates the missing premises that must be added to turn these informal arguments into formally good ones.

b) **Reasons-first**, logic second. Material proprieties of reasoning. Expressivism.

Expressivism: Materially good reasons are good reasons in virtue of the prelogical reason relations that articulate the conceptual contents of OED vocabulary. The job of logic is to make explicit, in an extension of the object language, those antecedent semantogenic reason relations—as well as (as a bonus) the reason relations articulating the use of the logical vocabulary that extends the base language.

7. **The structure of reasons \neq the structure of *logical* reasons.**

a) Structure of *logical* reasons (Tarski):

- i. CO: $X \subseteq c(X)$.
- ii. MO: $X \subseteq Y \Rightarrow c(X) \subseteq c(Y)$.
- iii. Closure: $c(c(X)) = c(X)$.

b) Structure of ordinary reasons:

- i. CO OK.
- ii. MO not OK.
- iii. Closure not OK.

This divergence of the structure of *logical* reasons from the structure of reasons *tout court* speaks for expressivism—though it is not *incompatible* with logicism about reasons.

But from an expressivist point of view, the divergence of the structure of *logical* reasons from the structure of reasons *tout court* sets a task:

What sort of logic can codify substructural (structurally open) reason relations?

Note that this is different from asking for a *nonmonotonic logic*.

Maybe there is a logic that codifies nonmonotonic reason relations but is itself monotonic.

In fact, this is the case.

The logic we will recommend, NM-MS, is fully structural.

But it codifies *substructural* reason relations—indeed, is *expressively complete* with respect to *all* such material reason relations.

8. The course:
- pursues **a reasons-first approach to language and logic,**
 - **which views reasons as providing the defining structure of language, and**
 - **understands logic as a distinctive kind of language of reasons.**
 - It examines the relations among **pragmatic, semantic, rational, and logical metavocabularies** for characterizing semantogenic reason relations of consequence and incompatibility.
 - And demarcates specifically *discursive* practices as those that admit that particular constellation of rational *metavocabularies*.

I call this a “**metarationalist**” approach to language.

This term “metarationalist” is chosen in part to distinguish it from the **inferentialist semantics** that is just one (in a sense optional) part of it.

That is the big picture.

Some details of that *RLLR* project:

One basic idea is that the consequence relations that govern reasoning that has not been formalized are massively substructural from a logical point of view: usually nonmonotonic and often nontransitive.

Our logics and semantics ought to be designed with this in mind, but typically are not.

Dan Kaplan has an astonishingly simple and tractable multisuccedent sequent calculus that can codify arbitrary substructural consequence relations supraclassically. (There is a single-succedent suprainstitutionistic version, too.) He is able to prove a powerful and unprecedented expressive completeness result for it: It is expressively complete for arbitrary substructural (open-structured) material base vocabularies.

Taking his cue from Girard's phase-space semantics for linear logic, Dan then elaborates an implication-space semantics that satisfies every aspiration this semantic inferentialist ever had for such a thing, and proves it sound and complete for his substructural logic.

Ulf Hlobil shows that if we define consequence in just the right way, we can identify a hitherto unsuspected isomorphism between Kit Fine's truthmaker semantic framework and the normative bilateral pragmatics for sequent calculi developed by Greg Restall and Dave Ripley.

Building on Dan's work, he goes on to show how focusing on this isomorphism makes it possible for the first time to extend both those frameworks to accommodate radically substructural (nonmonotonic and nontransitive) consequence relations.

My small technical contribution is then to show that Dan's implication-space semantics is exactly what is needed to characterize the notion of conceptual content that Ulf's isomorphism reveals as the common factor that shows up in one form in bilateral normative pragmatics and in another form in truthmaker semantics.

The punchline is that, as Dan puts it, the key to semantics that can accommodate substructural reason relations is commutative monoids with a partition on the space of the monoid.

9. Then, in the final third or so of the course, we look at a generalization of what we have learned about pragmatic, semantic, and (especially) logical metavocabularies.

The generalization I have in mind is to ***categorical metavocabularies***. This is how I, developing **Sellars, who was inspired by Carnap**, understand Kantian categories: in terms of *metavocabularies*. Sellars saw in Carnap's notion of metalanguage a way of making Kant's talk of categories respectable. That it could do so is, I conjecture, what converted Sellars to "the new way of words."

Kant invented-discovered:

(epistemic invention of a way of distinguishing and thinking about, conceptualizing, a bunch of pre-existing concepts, which he did not make up)

concepts whose distinctive expressive job is not describing or explaining empirical goings-on, but rather making explicit features of the *framework* that made possible (and intelligible to us) activities of describing and explaining such goings-on.

So the strategy of demarcating languages by the specific reason-centered constellation of metavocabularies they admit (that stand to them *as* metavocabularies) can be understood as a version of claiming that to be a conceptually contentful expression (in a ground-level vocabulary) is to have one's use be articulable according to the categories.

This is a distinctive kind of linguistic Kantianism—a way of endorsing a version of his doctrine of categories, not just as a distinctive class of concepts, but as one that in fact can be functionally characterized by how it does what Kant said the categories did.

The issue of picking out descriptive relations to what one is talking about arises (epistemic tracking and normative governance) in connection with the topic of categorial metavocabularies in connection with semantics.

Every kind of *metavocabulary* is a kind of *self-consciousness*.

The result of pursuing the line of thought I will rehearse in the seminar is **the two-dimensional use of the distinction between alethic and deontic metavocabularies.**

- a) They show up once as the two ends of bimodal hylomorphic conceptual realism, as reconstrued now through Ulf's isomorphism of reason relations between what shows up in deontic normative form in pragmatic MVs and in alethic modal form in semantic MVs (Fine's truthmakers).
- b) The second dimension is then the double-barreled character of the relations between the reason relations of *both* kinds of MV (pragmatic and semantic) and features of their base V, which mimic those between the vase V and *its* topic: epistemic tracking, as an alethic modal matter of subjunctive dependence and normative governance, as a deontic normative matter of providing a standard of assessment of correctness.

This should be the punchline of the course, and the return to the question at the start of it: the challenge to synthesize two ways of thinking philosophically about language.