Between Saying and Doing: Towards an Analytic Pragmatism

Lecture One: Extending the Project of Analysis

Section 1: The Classical Project of Analysis

The *classical project of analysis* is to study logically elaborated semantic relations between vocabulary-kinds. What I call 'semantic logicism' is a commitment to the appropriateness of employing *logical* vocabulary in elaborating the semantic relations between base and target vocabularies. Sample relations between vocabularies that have been considered include: analysis, definition, paraphrase, translation, reduction (of various sorts), truth-making, and supervenience. Two core programs (not, of course, endorsed or pursued by all semantic analysts) are *empiricism* and *naturalism*. Various base vocabularies to which empiricists have appealed include phenomenal, secondary-quality, and observational vocabularies. Characteristic target vocabularies include theoretical, modal, and normative vocabularies. Various base vocabularies to which naturalists have appealed include the vocabularies of fundamental physics, of the special sciences, and of ordinary empirical description. Characteristic target vocabularies include normative, semantic, and intentional vocabularies.

Section 2: The Pragmatist Challenge

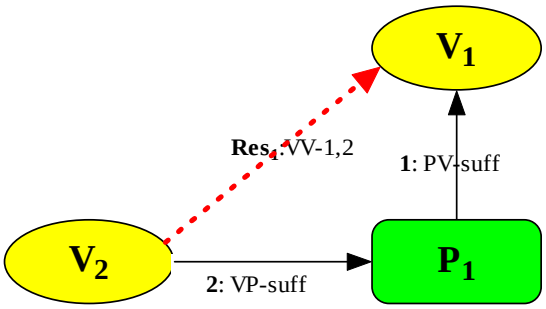
In the middle years of the 20th century, this project is confronted by the *pragmatist challenge* to it, which seeks to replace concern with *meaning* by concern with *use—semantics* by *pragmatics* (in the broad sense in which I shall use the term). Sellars's arguments against the practical autonomy of various empiricist base vocabularies and Quine's arguments against the theoretical utility of the concept of meaning (in the context of commitment to the *methodological pragmatism* that endorses the analogy *meaning* : *use* :: *theory* : *observation*) present elements of this challenge. But its most powerful voice is that of the later Wittgenstein. The considerations he advances have often been thought to counsel descriptive particularism, theoretical quietism, and semantic pessimism.

Section 3: Extending the Project of Analysis: Pragmatically Mediated Semantic Relations

If we extract consequences from the pragmatists' observations somewhat more modestly and construe the analytic project somewhat more broadly, we can understand pragmatics as providing special resources for extending and expanding the analytic project, from exclusive concern with relations among meanings to encompass also relations between meaning and use (what is said and what is done).

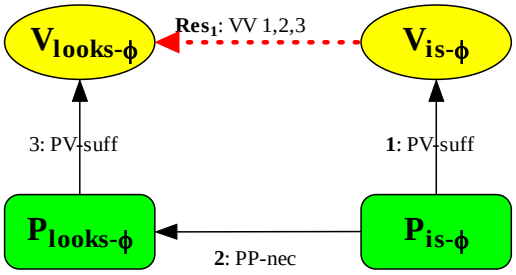
a) *PV-sufficiency* of some set of practices-or-abilities to *deploy* a vocabulary;
b) *VP-sufficiency* of some vocabulary to *specify* a set of practices-or-abilities;
c) The composition of VP-sufficiency and PV-sufficiency is a *pragmatically mediated semantic relation* between vocabularies: being a pragmatic metavocabulary.
d) *Expressive bootstrapping* occurs when an expressively weaker vocabulary is a sufficient pragmatic metavocabulary for an expressively stronger one.

Meaning-Use Diagram #1:
Pragmatic
Metavocabulary

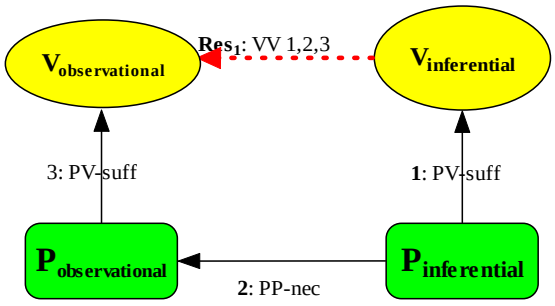


My basic suggestion for extending the classical project of analysis so as to incorporate the insights that animate the pragmatist critique of that project is that alongside the classical semantic relations between vocabularies we consider pragmatically mediated ones, of which the relation of being a pragmatic metavocabulary is a paradigm.

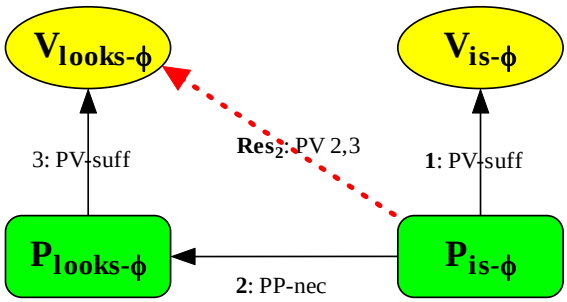
Meaning-Use Diagram #2:
Pragmatically Mediated
Semantic Presupposition



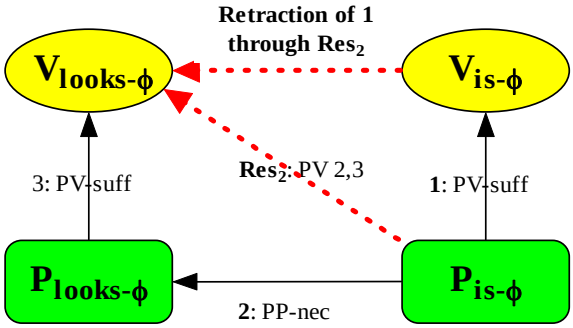
Meaning-Use Diagram #3:
Pragmatically Mediated
Semantic Presupposition



Meaning-Use Diagram #4: Composition

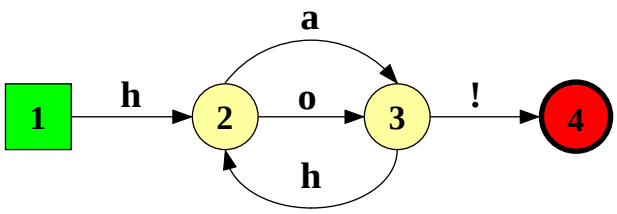


Meaning-Use Diagram #5: Composition and Retraction



Section 4: Automata: Syntactic PV-sufficiency and VP-sufficiency

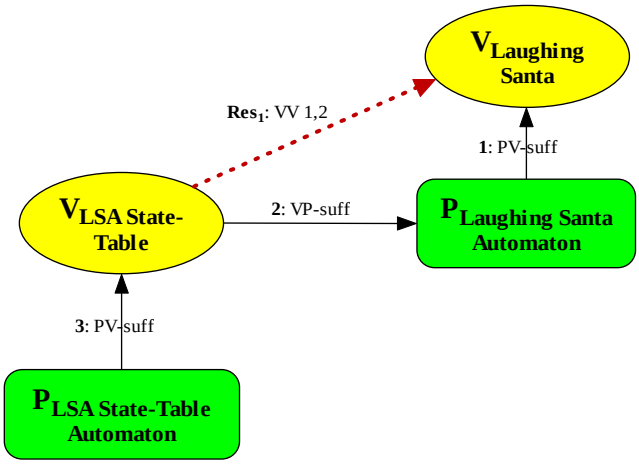
The Laughing Santa Automaton



LSA	State 1	State 2	State 3
a	Halt	3	Halt
h	2	Halt	2
o	Halt	3	Halt
!	Halt	Halt	4

aHalt3Halth2Halt2oHalt3Halt!HaltHalt4

Meaning-Use Diagram #6: Specifying the Automaton that Deploys the Laughing Santa Vocabulary

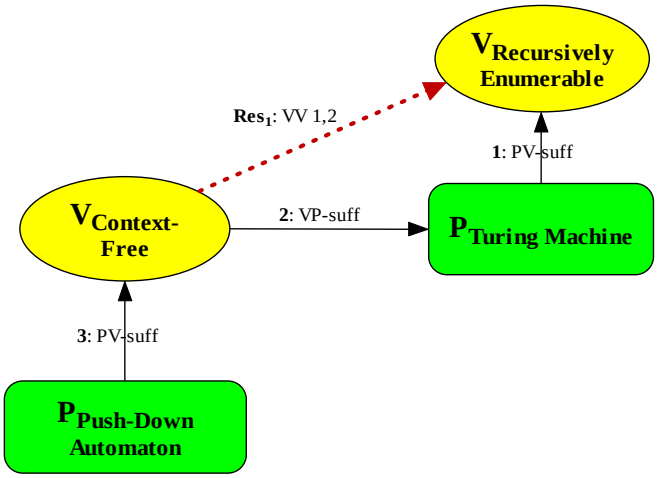


Section 5: The Chomsky Hierarchy and a Syntactic Example of Pragmatic Expressive Bootstrapping

Vocabulary	Grammar	Automaton
Regular	A→aB A→a	Finite State Automaton
Context-Free	A→<anything>	Push-Down Automaton
Context-Sensitive	c_1Ac_2→c1<anything>c_2	Linear Bounded Automaton
Recursively Enumerable	No Restrictions on Rules	Turing Machine (= 2 Stack PDA)

Meaning-Use Diagram #7:

Syntactic Pragmatic Expressive Bootstrapping



Context-free vocabularies are strictly weaker in syntactic expressive resources than recursively enumerable vocabularies. The push-down automata that can read and write only context-free vocabularies cannot read and write recursively enumerable vocabularies in general. But it is possible to *say* in a context-free vocabulary what one needs to *do* in order to deploy recursively enumerable vocabularies in general. It can be proven that the abilities codified in Turing Machines—the abilities to recognize and produce recursively enumerable vocabularies—can be specified in *context-free* vocabularies.

Section 6: Looking Ahead

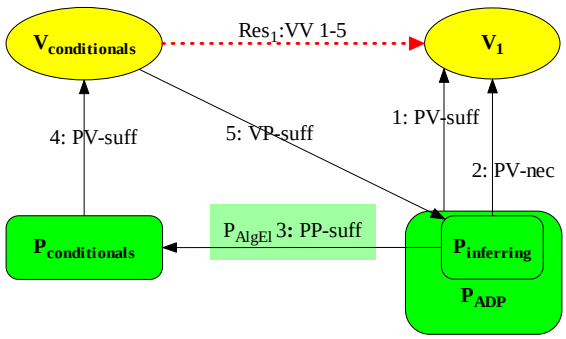
Here are two candidates for *semantic* examples of strict pragmatic expressive bootstrapping. Huw Price argues that that although normative vocabulary is not semantically reducible to naturalistic vocabulary, naturalistic vocabulary may suffice to specify what one must *do*—the practices-or-abilities one must engage in or exercise—in order to deploy normative vocabulary. And I will argue that although (as Anscombe, Perry, and Lewis have shown), what is expressed by *indexical* vocabulary cannot be expressed without remainder by non-indexical vocabulary, non-indexical vocabulary nonetheless is a sufficient pragmatic metavocabulary for indexical vocabulary: it suffices to *say* what one must *do* in order to deploy indexical vocabulary..

In subsequent lectures I will further develop the conceptual apparatus of meaning-use analysis, by introducing both new basic meaning-use relations and new combinations of them and will apply that apparatus to vocabularies of ongoing philosophical interest (logical, modal, normative, intentional). For instance, in my next lecture I consider the (semantic) "logicist's dilemma," which is set by the tension between two requirements:

- Semantic Transparency: The auxiliary vocabulary employed by the philosophical analyst should not add anything distinctive of its own. For any substantive content that it contributes impugns the claim that what can be said in the terms of the target vocabulary is somehow present already in the base vocabulary or at least is intelligible entirely in terms of what that vocabulary expresses.
- Analytic Efficacy: Using the auxiliary vocabulary must *help* in the process of establishing the desired semantic relation between vocabularies—whether that is definability, translatability, reducibility, supervenience, or….

I argue that it is resolved by recognizing that logical vocabulary stands in a distinctive and important complex resultant meaning-use relation to the vocabulary deployed by any autonomous discursive practice (language game one could play though one played no other). Here is the meaning-use diagram for a representative case:

Elaborated-Explicating (LX) Conditionals



In my third lecture, I will argue that the notion of the algorithmic decomposability of some practices-or-abilities into others that implements the PP-sufficiency relation appealed to in this diagram suggests in turn a pragmatic generalization of the classical program of artificial intelligence functionalism. Broadening our concern from automata as purely syntactic engines to the realm of *transducing* automata puts us in a position to see AI functionalism as properly concerned with the algorithmic decomposability of discursive practices-and-abilities. What I will call the 'pragmatic' thesis of artificial intelligence is that the ability to engage in some autonomous discursive practice—a language game one could play though one played no other—can be *algorithmically decomposed* into non-discursive abilities. The arguments for and against this pragmatic version of AI-functionalism look quite different from those arrayed on the opposing sides of the debate about the prospects of symbolic AI.

My last three lectures will address modal vocabulary, normative vocabulary, and the pragmatically mediated semantic relations they stand in to ordinary objective, empirical, and naturalistic vocabularies, and to each other.

I will begin my consideration of modality, in my fourth lecture, with a vindication of the role of modal vocabulary that parallels the one I will already have offered for ordinary logical vocabulary: modal vocabulary, too, can be elaborated from and is explicative of, features integral to every autonomous discursive practice—features intimately related to, but distinct from, those made explicit by ordinary logical vocabulary. I will then enter into an extended treatment of the relation between *alethic* and *deontic* (modal and normative) vocabularies. I argue that deontic normative vocabulary is *also* universally LX (that it is VP-sufficient to specify practices-or-abilities that are both PV-necessary for deploying any autonomous vocabulary, and PP-sufficient for practices-or-abilities PV-sufficient for deploying the deontic normative vocabulary that explicates them). Although in this regard it belongs in a box with alethic modal vocabulary, the features of autonomous vocabulary use that it explicates are quite different from those explicated by modal vocabulary.

In my fifth lecture, I will show how exploiting the relation between them makes possible a new kind of directly modal formal semantics: incompatibility semantics. It in turn gives us a new semantic perspective both on traditional logical vocabulary, and on modal vocabulary.

The final lecture will then weave all these strands into a meaning-use analysis of intentionality itself (what is expressed by intentional vocabulary) as a pragmatically mediated semantic relation essentially involving both what is expressed by modal and what is expressed by normative vocabulary.

"Between saying and doing, many a pair of shoes is worn out." ***Italian Proverb***