# Modal Expressivism and Modal Realism: Together Again

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## I. A Modal Expressivism

1. Kant saw that in addition to concepts whose principal use is to make it possible for us to describe how things are, there are concepts that make explicit features of the metaconceptual *framework* that makes such description possible. An important class of the framework-explicating concepts (arguably the one that motivated this entire line of thought) comprises *alethic modal* concepts, such as <u>necessity</u> and <u>possibility</u>. These express lawful relations between ground-level descriptive concepts, and mark the special status of Newton's laws, their lawfulness, by contrast to the status of merely contingent matters of fact, the role played by statements of initial and boundary conditions for particular applications of those laws. But it is not only in understanding the use of technical scientific concepts that the modal concepts find application. The use of ordinary empirical descriptive concepts such as <u>gold</u>, and <u>cat</u>, and <u>house</u>, no less than the Newtonian concepts of <u>mass</u>, <u>force</u>, and <u>acceleration</u>, is essentially, and not just accidentally, articulated by the modality these modal concepts express.

It is because he believes all this that Kant calls modal concepts (among others) 'pure' concepts: categories. Pure concepts are a species of *a priori* concepts.<sup>1</sup> The sense in which we

That is, concepts available *a priori*. I take it that Kant's standard usage of "a priori" is adverbial, though this is not obvious since the Latin phrase is not grammatically marked as it would be in German. *Exactly* what Kant means by the term 'pure' [rein], as it applies generically to reason, knowledge, understanding, principles, concepts,

can think of them as available *a priori* that I want to focus on comprises three claims. First, what they express are structural features of the framework within which alone it is possible to apply *any* concepts, make *any* judgments, including ordinary empirical descriptive ones. Second, in being able to apply any ground-level empirical concepts, one already knows how to do everything one needs to know how to do in order to apply the categorial concepts. Finally, there are no *particular* empirical descriptive concepts one must be able to apply in order to have implicit mastery of what is expressed by categorial concepts such as the modal ones (though perhaps one must have some descriptive concepts or other).

The alethic modality that has this categorial status is something like physical necessitation. It is the modality involved in the "pure principle" that "every alteration must have a cause." But the use of these modal concepts to formulate particular laws of nature results neither in *a priori* principles nor in analytic judgments. Lawlike claims assert modal relations between noncategorial descriptive concepts. They are synthetic, and must be discovered and justified empirically. The crux of Kant's challenge in the first Critique that culminates in the B Deduction, is to show how it is intelligible that categorial concepts, paradigmatically the modal ones, can both articulate structural relations intrinsic and essential to the use of descriptive *concepts* and express *causal* laws of nature that combine the features of being on the one hand universal and necessary, and on the other hand, empirical.

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and intuition is a complex and challenging question. There seems to be some terminological drift across the species, and some wavering on how to classify particular examples. (The status of the crucial *a priori* principle that every alteration must have a cause, for instance, is apparently variously characterized at [B3] and [B5].) Being available *a priori* is necessary, but not sufficient [B3].

2. A further development of what I want to claim will be retrospectively recognizable as the same line of thought can be found in Frege.<sup>2</sup> His use of Latin letters and his logical sign of generality (used in conjunction with the notation for hypotheticals) express relations between concepts. It has always been an embarrassment for the anachronistic extensional quantificational reading of this notation (due originally to Russell) that Frege says of it, when he first introduces it in the *Begriffsschrift*, that it is the right way to express *causal* relations of necessitation.<sup>3</sup> For it is a commonplace of the later logistical tradition that merely quantificational relations between concepts cannot distinguish between contingent regularities and lawlike, necessary ones. For that, explicit modal operators must be applied to the quantified conditionals.

But Frege deploys his notation so that the relations between concepts expressed by generalized conditionals *already* have modal force. Relations between concepts of the sort logic lets us express have consequences for relations between their extensions, of the sort our quantificational notation expresses, but his generality locutions (the use of Latin letters and the concavity with German ones) codify relations we think of as intensional. Fregean logical concepts are indeed second- and higher-order concepts, but more than that, the universality they express is rulish. They are in the first instance principles in accordance with which to reason, and only derivatively premises from which to reason.<sup>4</sup> In addition to permitting the formulation

The characterization of Frege's Begriffsschrift that follows is one that I had my eyes opened to by Danielle Macbeth's pathbreaking book *Frege's Logic* [Harvard University Press, 2005].

<sup>3 &</sup>quot;This is the way in which causal connections are expressed." [Italics in the original.] Begriffsschrift §12 (p. 27 in Jean van Heijenoort (ed.) From Frege to Gödel: A Source Book in Mathematical Logic, 1879-1931 [Harvard University Press, 1967]), foreshadowed at §5.

<sup>4</sup> Following Mill, this is Sellars's way of putting the point, in "Counterfactuals, Dispositions, and the Causal Modalities" Pp. 225-308 of *Minnesota Studies in the Philosophy of Science*, Vol. II, ed. by H. Feigl, M. Scriven, and G. Maxwell, (University of Minnesota Press; Minneapolis, MN: 1957). Henceforth "CDCM."

of purely logical relations among logical concepts, Frege's logical vocabulary permits us to assert necessary connections among empirical concepts that themselves can only be discovered empirically: physically or causally necessary connections. In the Preface to the *Begriffsschrift*, Frege says:

It seems to me to be easier still to extend the domain of this concept-script [Begriffsschrift] to include geometry. We would only have to add a few signs for the intuitive relations that occur there...The transition to the pure theory of motion and then to mechanics and physics could follow at this point. The latter two fields, in which besides rational necessity [Denknotwendigkeit] natural necessity [Naturnotwendigkeit] asserts itself, are the first for which we can predict a further development of the notation as knowledge progresses.<sup>5</sup>

The additional signs that such an extension requires do *not* include modal operators. The necessity (whether natural or rational) of the connections between empirical concepts is already contained as part of what is expressed by the *logical* vocabulary, even when it is used to make claims that are not logically, but only empirically true.

The capacity to express modal connections of necessitation between concepts is essential to Frege's overall purpose in constructing his Begriffsschrift. Its aim is to make explicit the contents of concepts. Frege understands that content as articulated by the *inferential* relations between concepts, and so crafted his notation to make those inferential connections explicit. Introducing his project in the third section of the *Begriffsschrift*, he says:

<sup>5</sup> P. 7 in van Heijenoort op.cit.. I have emended the translation slightly, where I have noted the original German terms.

The contents of two judgments may differ in two ways: either the consequences derivable from the first, when it is combined with certain other judgments, always follow also form the second, when it is combined with the same judgments, or this is not the case. The two propositions "The Greeks defeated the Persians at Plataea," and "The Persians were defeated by the Greeks at Plataea," differ in the first way...I call that part of the content that is the *same* in both the *conceptual content* [begrifflich Inhalt]...[I]t alone is of significance for my concept-script [Begriffsschrift].

The principal technical innovation that makes it possible for the Begriffsschrift to express the inferential relations that articulate conceptual content, Frege takes it, is his notation for generality, when used in connection with his conditional (used to express hypothetical judgeable contents). An essential element of that expressive power is the capacity of this notation to express rulish, *modally robust*, inferential relations of necessitation, including, importantly, the natural necessity characteristic of inferences underwritten by *causal* connections. Though he doesn't himself think of it this way, Frege is continuing and developing Kant's line of thought concerning the role that modality (including centrally the kind of necessity involved in causation) plays in distinguishing the expressive role of certain concepts that relate ground-level empirical descriptive concepts to one another from the expressive role of those descriptive concepts themselves.

3. Nearer to our own time, this line of thought has been further developed and clarified by Wilfrid Sellars. He lucidly compressed his endorsement of the fundamental Kantian idea that modal concepts make explicit something implicit in the use of ordinary empirical descriptive

concepts into the title of one of his earliest essays: "Concepts as Involving Laws, and Inconceivable without Them." But he also offers the outline of a more articulated argument for the claim. We can reconstruct it as follows:

- 1. "It is only because the expressions in terms of which we describe objects... locate these objects in a space of implications, that they describe at all, rather than merely label." <sup>6</sup>
- 2. It is an essential feature of the inferential relations in which, according to claim (1), descriptive concepts must stand, that they can be appealed to in *explanations* and *justifications* of further descriptions.
- 3. So: "although describing and explaining (predicting, retrodicting, understanding) are *distinguishable*, they are also, in an important sense, *inseparable*... The descriptive and explanatory resources of language advance hand in hand...."
- 4. The expressive role distinctive of modal vocabulary is to make explicit these explanatory and justificatory relations.

This line of thought is a way of filling in ideas that Sellars had had since his student days. In an autobiographical sketch, he tells us that he was to begin with concerned to understand the sort of content expressed by concepts of the "logical, causal, and deontological modalities." (Here only what he calls the "causal" modalities are at issue—a point to which I shall return.) His big idea, he tells us, was that

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<sup>6 &</sup>quot;Counterfactuals, Dispositions, and Causal Modalities" In *Minnesota Studies in the Philosophy of Science*, *Volume II: Concepts, Theories, and the Mind-Body Problem*, ed. Herbert Feigl, Michael Scriven, and Grover Maxwell (Minneapolis: University of Minnesota Press, 1958), p.225-308.] (hereafter CDCM), § 108.

<sup>7</sup> CDCM § 108.

what was needed was a functional theory of concepts which would make their role in reasoning, rather than supposed origin in experience, their primary feature.<sup>8</sup>

The idea he got from Kant was that the "role in reasoning" distinctive of a key class of alethic modal concepts is to articulate the "role in reasoning" of ordinary empirical descriptive concepts.

The two key moves in an argument of this form are, first, an account of the descriptive use of empirical concepts that exhibits as essential their articulation by inferences that can support explanations and justifications, and second, an account of the central function of at least some alethic modal vocabulary as expressing explanatory and justificatory inferential relations among descriptive concepts. The conclusion of the argument is what I call the "Kant-Sellars thesis about modality": in knowing how to use ordinary empirical descriptive vocabulary, one already knows how to do everything one needs to know how to do in order to be able (in principle) to use alethic modal vocabulary. According to this thesis, one cannot be in the semantic predicament that empiricists such as Hume and Quine envisaged: understanding ordinary empirical descriptive vocabulary perfectly well, but having thereby no grip at all on what is expressed by modal vocabulary.

How does Sellars understand the distinction between "merely labeling", on the one hand, and describing, in the sense he then wants to argue "advances hand in hand" with explaining and justifying, on the other hand? Labeling is attaching signs to, or associating them with, items in the nonlinguistic world. The paradigm of this semantic relation is that between an arbitrary

<sup>8</sup> In Action, Knowledge, and Reality, H. N. Castaneda (ed.) [Indianapolis, Bobbs-Merrill, 1975] p 285.

<sup>9</sup> I discuss this claim at greater length in Chapter Four of *Between Saying and Doing: Towards an Analytic Pragmatism* (Oxford: Oxford University Press, 2008).

name and its bearer, or a sign and what it signifies—what Sellars elsewhere calls "the 'Fido'-Fido model." Now it is one of the founding insights of analytic philosophy of language that the results of a Procrustean assimilation all semantic relations to this nominalistic model are disastrous. That is a lesson taught originally by Frege, and again by both the Wittgenstein of the Tractatus and the Wittgenstein of the Investigations, each in his own way. (The mistake lives on in semiotics and in the structuralist heirs of de Saussure. Derrida was sufficiently in the grip of this traditional picture that the only alternative to it he could conceive was that signs should be understood to stand exclusively for...other signs.) What one will not understand on this model, in the first instance, is what is special about *sentences*, and what they express: claimables, judgeable contents, Fregean thoughts as thinkables. In particular, using the 'Fido'-Fido model to think about the relation between declarative sentences and *true* Fregean thinkables, facts, is fraught with difficulties. Indeed, even the more promising strategy that avoids the nominalistic mistake of modeling the semantics of sentences on that of names while crafting a technical notion of representation to be generic across its disparate name-bearer and (true) sentence-fact species requires more subtlety, craft, and guile than is generally appreciated.

Of course, one need not make the nominalistic mistake of assimilating *all* semantic relations to labeling in order to claim that the model applies to *some* uses of linguistic expressions, that is, to claim that there are, after all, labels—even if sentences are not to be counted among them. Sellars is claiming that describing should also not be assimilated to applying a "mere label." Here the relevant grammatical category is not terms or sentences, but predicates. Predicate labels in Sellars's sense can have more content than proper names like 'Fido'. The use of predicates to make observation reports requires the user to exercise a reliable

differential responsive disposition. It is tempting to think that reliably responding in a distinctive way to some things and not others is a way of *classifying* them as being of some kind, or as having something in common. What more besides dividing things into groups could be required to count as *describing* them as being of different kinds? The difference between classifying in the sense of labeling and describing emerges when we ask what the things grouped together by their elicitation of a common response are supposed to be described *as*. If the dog reliably barks at some things, and not others (cats, dogs, and squirrels, but not horses, men but not women, motorcycles but not cars, helicopters but not airplanes, church bells but not the neighbor's stereo, and so on) it is *grouping* things, sorting them into two classes. But there need be nothing it is *describing* them *as*. When the metal strip expands in some environments and contracts in others, it is not yet *describing* them as warm or cold.

Sellars's idea is that what one is describing something *as* is a matter of what *follows* from the classification—what *consequences* falling in one group or another has. It is insofar as being grouped one way rather than another can serve as a *premise* in an *inference* that the grouping is intelligible as a *description* and not merely a label. Even in the primitive, noninferential case of the three vervet cries appropriately elicited (as the young ones are trained by their elders) by snakes, eagles, and leopards, it is insofar as they are appropriately responded to (as the young ones are trained by their elders) by jumping, covering, and climbing respectively that they begin to be intelligible as describing threats-from-below, threats-from-above, and so on. Reliably differentially elicited responses are intelligible as observation reports, as empirical descriptions, just insofar as they are available to *justify* further claims. It is essential, and not just accidental, to descriptive predicates that they can be used to make claims, which would be expressed by

declarative sentences. And it is essential, and not accidental to those claimings that they can serve as *reasons* for further claims. (Of course, this Sellarsian inferentialist way of developing Frege's claims about how we must think of the contents of predicates and sentences as related to one another once we see the inadequacy of nominalistic construals is controversial. I have elaborated and defended it elsewhere, and am merely expounding it here.)

In the same spirit, Michael Dummett argues that the content of a descriptive concept cannot be identified with its circumstances of appropriate application alone. In order to avoid the defects and inadequacies of one-sided theories of meaning, one must consider *both* those circumstances of application *and* the appropriate consequences of such application—which is to say also its role as a premise in inferences (both theoretical and practical). It is possible to construct descriptive concepts that share circumstances or consequences of application, but differ in the other component. In such cases, they differ also in their content or meaning. Thinking of the application of substantive nonlogical descriptive concepts as involving a commitment to the propriety of the material inference from their circumstances to their consequences of application is a way of insisting that descriptive concepts count as locating the objects they are applied to "in a space of implications."

Sellars sees modal locutions as tools used in the enterprise of ...making explicit the rules we have adopted for thought and action...I shall be interpreting our judgments to the effect that A causally necessitates B as the expression of a rule governing our use of the terms 'A' and 'B'. 10

<sup>10</sup> Sellars, "Language, Rules, and Behavior" footnote 2 to p. 136/296 in PPPW.

The rules they express are rules of *inference*. Modal expressions are inference licenses or inference "tickets," in Ryle's terminology. These are what Sellars calls "material," that is, non-logical inferences. In fact, what these modal locutions make explicit, according to Sellars, are just the implications, situation in a space of which is what distinguishes descriptive concepts from mere labels. Inferences such as that from "Pittsburgh is to the West of Princeton, so Princeton is to the East of Pittsburgh," articulate the content of the descriptive concepts <u>West</u> and <u>East</u>.

Further, it is the inferential commitments acknowledging such material implicational relations that are appealed to in explanation and justification.

To make first hand use of these [modal] expressions is to be about the business of explaining a state of affairs, or justifying an assertion.<sup>12</sup>

That is, what one is *doing* in *using* modal expressions ("As are necessarily Bs") is endorsing an inference (from anything's being A to its being B) that can be appealed to in justifying one description on the basis of another, or explaining the applicability of one description by the appealing to the applicability of another: "The raspberries are red *because* they are ripe." This is why the expressive resources of description, on the one hand, and justification and explanation, on the other hand, "advance hand in hand," as Sellars says.

Because he understands the expressive function characteristic of the modal vocabulary he is addressing to be that of making explicit the inferential relations appealed to in justifications

<sup>11</sup> Gilbert Ryle, "'If', 'So', and 'Because'", pp. 302-318 in Black, Max (ed.) *Philosophical Analysis* [Prentice Hall, 1950]. Sellars does not discuss whether "A causally necessitates B" should be understood as expressing a committive, or merely a permissive inference.

<sup>12</sup> CDCM § 80.

and explanations, Sellars takes it that the central use of that vocabulary is in qualifying conditionals, paradigmatically quantified conditionals, rather than their use as operators applying to nonconditional descriptive sentences. What the modal vocabulary expresses is the element of *generality* that Ryle had insisted was present in all endorsements of inferences:

...some kind of openness, variableness, or satisfiability characterizes all hypothetical statements alike, whether they are recognized "variable hypotheticals" like "For all x, if x is a man, x is mortal" or are highly determinate hypotheticals like "If today is Monday, tomorrow is Tuesday.<sup>13</sup>

That element of generality would naturally be made explicit in this last example by applying a necessity operator to the conditional. Another way of putting this same point is that the inferential relations among descriptive concepts in virtue of which they can be used to *describe*, and not just *label*, which are appealed to in *justifications* and *explanations* of the applicability of one description on the basis of the applicability of another, and which are made explicit by the use of modally qualified conditionals are *subjunctive* and *counterfactual* supporting inferences. They make explicit the laws that Sellars says concepts involve and are inconceivable without.

This constellation of claims to which Sellars aspires to entitle himself articulates what he makes of the tradition of thinking about modality that Kant initiates and Frege develops in an inferentialist key. It is a story that construes (at least one kind of) modal vocabulary as distinguished by the role it plays in expressing explicitly essential aspects that it makes visible as implicit already in the use of ordinary empirical descriptive vocabulary. Having a ("first hand") use in explicating the framework within which vocabulary use can have the significance of

<sup>13</sup> Gilbert Ryle "'If', 'So', and 'Because'", pp. 302-318 in Black, Max (ed.) *Philosophical Analysis* [Prentice Hall, 1950], p. 311.

describing—a framework we come to see as necessarily a unified package comprising not only description, but justification and explanation, a framework articulated by subjunctively robust inferential relations among descriptive concepts—sets modal vocabulary off from the descriptive vocabulary, precisely in virtue of the distinctive expressive role it plays with respect to the use of such descriptive vocabulary. This, then, is Sellars's modal expressivism.

4. It is, it should be acknowledged, largely programmatic. Turning the program into a full-blooded account of the use of modal vocabulary would require satisfactory responses to a number of challenges. I remarked above that Sellars's approach focuses on modally qualified conditionals. So, at a minimum, we would need to understand how it might be developed or extended to deal with other uses of modal operators.<sup>14</sup>

A second issue concerns the kind of modality Sellars is telling us about. His topic patently is not *logical* necessity and possibility. Nor is it the sort of *metaphysical* necessity and possibility Kripke introduces us to in "Naming and Necessity." In the principal essay in which he develops his expressivism, Sellars specifies what he is interested in as "causal" modalities. <sup>15</sup> There and elsewhere he talks about them as "physical" modalities. It is clear that he means to be discussing the sort of alethic necessity and possibility that characterizes laws of nature—not only laws of fundamental physics, but also laws promulgated in the special sciences. He seems to

<sup>14</sup> Semantic inferentialists think that the use of *any* concept involves commitment to the propriety of all the inferences from the circumstances of appropriate application to the appropriate consequences of application of that concept. (Cf. Chapter One of *Articulating Reasons* [Cambridge: Harvard University Press, 1997]. So in that context, a strategy for addressing this challenge might not be far to seek.

15 CDCM.

think that this is generically the same modality as that involved in ordinary informal explanations of empirical phenomena: of why the car wouldn't start, why the beans burned, why the squirrel couldn't get to the bird-feeder, and so on. It is clearly some such notion of <a href="mailto:necessity">necessity</a> and <a href="mailto:possibility">possibility</a> that Kant was addressing. It is the kind of necessity that is the target of Hume 's skeptical epistemological doubts about the possibility of establishing on inductive grounds, and of his consequent semantic doubts about its ultimate intelligibility. Frege's few, gnomic remarks about the modal force of his generality locutions (the concavity and the use of latin letters) suggest he was thinking about something like this same notion of <a href="mailto:necessity">necessity</a>.

Sellars also clearly thinks that it is a kind of *conceptual* necessity. The modality he is analyzing characterizes the subjunctively robust inferential connections among empirical concepts in virtue of which (at least in part) they have the descriptive contents that they do. The laws, exhibiting that modality, which such concepts involve (without which, we are told, they are inconceivable) articulate the contents of those concepts, or at least the framework within which they are intelligible as having those contents. This aspect of Sellars's thought is what he makes of Kant's treatment of alethic modality as a *category*, a *pure* concept. For those, Sellars thinks, are the concepts that make explicit what something implicit in the use of any empirical descriptive concepts. This is the *semantic* sense in which they are always available *a priori*: apart from the applicability of any *particular* noncategorial, empirical concepts.

But it is not easy to see how to reconcile these two characterizations of the modality in question: as causal, physical necessity and possibility, and as some sort of conceptual necessity and possibility. In particular, these two conceptions of a kind of alethic modality seem to pull in

different directions epistemologically. For laws of nature, or statements about what causally or physically necessitates what (or makes what else causally or \_uggestion possible or impossible) must in general be established empirically. But questions of what is conceptually necessary or possible, of what other concepts must or can be applied if some concept *were* to be applied, just in virtue of the contents of the concepts involved, seems to be something one can discover *a priori*. One does not need to know how the world is, only what one means—not what descriptive concepts actually apply to a situation, but only what the contents of those concepts are. We are faced with an inconsistent triad of a form that is familiar to readers of "Empiricism and the Philosophy of Mind".16:

- Physical or causal necessity and possibility are a kind of conceptual necessity and possibility.
- 2. Physical or causal necessities and possibilities must be established empirically.
- 3. Conceptual necessities and possibilities can be established *a priori*.

Sellars is fully aware of this difficulty, and has a straightforward, if radical, response. He rejects the third element of the triad. A semantic externalist *avant la letter*, he takes it that we cannot discover the contents of our concepts or the meanings of our words just by introspecting. He follows Kant in understanding concepts as rules (norms) we bind ourselves by, without knowing everything about what we are committing ourselves to by applying those concepts. Finding out what applications of descriptive concepts are correct and finding out what inferences connecting those descriptive concepts are correct are two sides of one coin, two aspects of one

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<sup>16</sup> Edited by Robert Brandom, with an Introduction by Richard Rorty [Cambridge: Harvard University Press [ref.]] §[6 or 7, check]. Notice that insofar as there is any go to Sellars's reading of Kant on this point, a corresponding issue arises for Kant's view. How is it, exactly, that we can know *a priori that* nature is lawful, but can only know empirically what the laws are? I say something about this issue in Section IV.

process of empirical inquiry. Though Quine would not put the point this way, Sellars is at one with him in denying the Carnapian two-phase story (appropriate for formal languages, but not for natural languages) according to which first, by one sort of procedure one has privileged, nonempirical access to, one fixes meanings (concepts, the language) and then subsequently, by another sort of procedure, which is empirical, determines the facts (what to believe, one's theory) as expressed in those meanings (concepts, language). To find out what the contents of the concepts we apply in describing the world really are, we have to find out what the laws of nature are. And that is an empirical matter.

Another challenge to working out Sellars's version of modal expressivism concerns the extent to which, and the sense in which, it should be understood as taking the expressive role characteristic of modal vocabulary to be a *metalinguistic* one. On the one hand, when Sellars says he wants to understand a paradigmatic kind of modal judgment as "the expression of a rule governing our use of the terms 'A' and 'B'," this sounds straightforwardly metalinguistic in a classical sense. (This formulation is from an early paper, and is *not* appealed to in the later 1959 paper that contains his official account.) On the other hand, it cannot be right to say that modal claims should be understood as covertly made in a metalanguage whose mastery requires mastery of terms that *refer to* terms (here, descriptive ones) in an object language—which is the classical Tarski-Carnap sense. For someone (perhaps a monolingual German) could claim, believe, or judge that A causally necessitates B without ever having heard of the English *expressions* that 'A' and 'B' stand for in the example. Further, the claim could be true even if there had never been such expressions, because there had never been any language users. (There would still have been laws of nature, even if there had never been language.) So is the view he is

after a metalinguistic expressivism, or not? In light of the considerations just mentioned, Sellars's characteristically nuanced-but-unhelpful assessment is this:

Shall we say that modal expressions are metalinguistic? Neither a simple 'yes' nor a simple 'no' will do.<sup>17</sup>

He wants to say that while modal statements are not metalinguistic in a narrow sense, there is a wider sense in which they are.

It is sometimes thought that modal statements do not describe states of affairs in the world, because they are *really* metalinguistic. This won't do at all if it is meant that instead of describing states of affairs in the world, they describe linguistic habits. It is more plausible if it is meant that statements involving modal terms have the force of *prescriptive* statements about the use of certain expressions in the object language. Yet there is more than one way of to 'have the force of' a statement, and failure to distinguish between them may snowball into a serious confusion as wider implications are drawn.<sup>18</sup>

What distinction does he have in mind?

We must here, as elsewhere, draw a distinction between what we are committed to concerning the world by virtue of the fact that we have reason to make a certain assertion, and the force, in a narrower sense, of the assertion itself.<sup>19</sup>

Sellars acknowledges that modal statements do not *say that* some entailment holds, but distinguishes between what is *said* by using a bit of vocabulary and what is '*contextually*'

<sup>17</sup> CDCM §82.

<sup>18</sup> CDCM §81.

<sup>19</sup> CDCM §101.

*implied*' by doing so. Sellars says very little about this latter notion, even though it bears the full weight of his proposed emendation of the rationalist account. This is really all he says about the matter in the only essay he devotes to the exposition of his views about the "causal modalities."

Elsewhere he had put what I think is recognizably the same point in terms of a distinction between what one *says* by making a statement and what (else) one *conveys* by doing so.<sup>20</sup> There his example is that in asserting "The weather is fine today," I *say* that the weather is fine today, but *convey* that I *believe* that it is fine. This is suggestive, but won't help us out in detail in the modal case. For, first, he doesn't give us any idea what, if anything, *is said* by making a modal claim. Second, assertions are in general expressions of belief, regardless of what their content is. But the case we care about depends on the application of specifically modal concepts in what is said *doing* something specific that one is *not* doing in making assertions generally.

I think Sellars never really figures out how to work out the line of thought he suggests here. After 1959 he never repudiates the views he sketched in "Counterfactuals, Dispositions, and the Causal Modalities," and seems to continue to endorse them. But he never revisits the topic substantially—never says how he thinks one might go on to fill in the expressivist idea he had gestured at there. Doing that is, in effect, left as an exercise to the reader. I conjecture that one reason for this failure is that he labored under the restriction of a further systematic constraint consequent upon other views near and dear to his heart. For he *also* thought that discourse about properties, universals, and even facts was metalinguistic in a broad, nonclassical

<sup>20 &</sup>quot;Inference and Meaning", p. 280/332 in in J. Sicha (ed.) *Pure Pragmatics and Possible Worlds: The Early Essays of Wilfrid Sellars* [Ridgeview Publishing Company, Reseda CA, 1980]. This is also an earlier piece (1953), and he does not in CDCM advert to this way of making the distinction.

sense. The problem for him, I think, is that he thought he not only needed to find a specific sense in which modal vocabulary could be understood to be 'metalinguistic', but also a sense of that term that was *generic* between that case and the case of ontological-categorial vocabulary such as 'property' and 'universal'. He *did* work hard, and make significant progress, on delineating the sense in which he thought of that latter sort of vocabulary as metalinguistic, avoiding the pitfalls (mentioned above) involved in understanding it as metalinguistic in the orthodox sense that requires reference to the expressions of an object language. His response turns on the discursive functional roles that dot-quoted expressions refer to, the notion of distributive singular terms, and of the formation of a kind of such terms by instantiating-categorizing quotation to refer to those roles.<sup>21</sup> This is a very sophisticated response to the corresponding difficulties that arise for calling ontological-categorial expressions 'metalinguistic'. But *that* solution does not *immediately* apply to modal expressions. (Whether some variant of it would work is another question.) And he could not figure out how to specify either the genus that comprises both, or the modal species.

5. Sellars is working with Kant's idea that the expressive role distinctive of alethic modal vocabulary is to make explicit something that is implicit already in the use of ordinary empirical descriptive vocabulary. He picks up Frege's hint that what matters is the specifically *inferential* articulation essential to the conceptual contentfulness of descriptive vocabulary. He develops

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<sup>21</sup> His views are developed in three seminal essays: "Naming and Saying," "Grammar and Existence: A Preface to Ontology," and "Abstract Entities." They are reprinted as Chapters Five, Six, and Seven of K. Scharp and R. Brandom (ed.s) *In the Space of Reasons: Selected Essays of Wilfrid Sellars* [Cambridge: Harvard University Press, 2007].

those thoughts by adding the ideas that that expressive role is in some broad but noncanonical sense metalinguistic—a matter of the role such vocabulary plays in endorsing rules of inference governing descriptive vocabulary. And equally importantly, he focuses our attention on the *pragmatic* dimension of that expressive role. That is, he counsels us to look to what we are *doing* when we endorse a modal claim. (Compare: expressivism about normative vocabulary—paradigmatically deontic vocabulary.)

I want to make a couple of suggestions for how one might move forward with what Sellars made of Kant's thought about how the expressive role characteristic of alethic modal vocabulary is related to that of ordinary empirical descriptive vocabulary. One lesson I think we can learn from Sellars's difficulties is that the notion of being 'metalinguistic' or ("about language") is too crude an expressive tool, too undifferentiated a concept, to be helpful in this context. There are, as Sellars intimates, many ways in which the use of one vocabulary can depend on that of another, besides any terms of the one vocabulary referring to those of the other. Putting together Sellars's metalinguistic idea with his pragmatic idea, we could consider the possibility that the place to begin thinking about the expressive role of modal vocabulary is with what in Between Saying and Doing I call a "pragmatic metavocabulary." This concept takes its place alongside that of a syntactic metavocabulary, which enables one to talk about linguistic expressions themselves (both what Sellars calls "sign designs" and grammatical categories), and a semantic metavocabulary, which enables one to talk about what linguistic expressions refer to or what descriptive concepts let one say. A pragmatic metavocabulary enables one to talk about what one is *doing* in using linguistic expressions, the speech acts one is performing, the pragmatic force one is investing them with or exercising, the commitments one

is undertaking by making claims, the norms that govern linguistic performances, and so on.

(This list is something of a motley, meant to correspond to the capaciousness of 'do' and 'use', a reminder that the concept is picked out is still generic.) Sellars's model is that modal vocabulary says something that would be said more explicitly in a *semantic* metavocabulary. But by the time his commentary has taken back everything that it turns out needs to be taken back, not much is left of that model. What seems right about the commentary, however, is Sellars's observations about what one is *doing* in "making first-hand use" of modal vocabulary: endorsing inferences. Insofar as there is anything to that idea, the more natural strategy would seem to be to take one's model from *pragmatic* metavocabularies. After all, Sellars ends up saying nothing at all about what one *says* in making first-hand use of modal vocabulary. Properly understood, I think, his is not a *semantic* expressivism about alethic modal vocabulary, but a kind of *pragmatic* expressivism about it.

As a first try at expressing the thought that would result from transposition from a semantic into a pragmatic key, we might try this: In making first-hand use of (the relevant kind of) alethic modal vocabulary one is *doing* something distinctive that could be specified explicitly in the right kind of pragmatic metavocabulary, namely endorsing a class of inferences. The pragmatic metavocabulary enables one to *say* what modal vocabulary enables one to *do*. Such a claim does not in itself involve any commitment concerning the relations between the *content* of talk about endorsing inferences and talk about necessity and possibility, never mind commitment to their equivalence. Notice, further, that counterfactuals that suppose the absence of concept users are irrelevant to the assessment of *this* claim. For in that case there would be neither endorsers of inferences nor users of modal vocabulary.

The claim that is on the table so far is evidently too weak to be interesting, though. It does not carve out an expressive role that is distinctive of modal vocabulary. For in making an ordinary descriptive claim one is *also* doing something that could be specified in a pragmatic metavocabulary, namely applying descriptive concepts, making a claim, undertaking a doxastic or assertional commitment. And those, the Frege-Sellars inferentialist line goes, essentially involve commitments to the proprieties of inferences. My second suggestion for developing Sellars's modal expressivism is that what is special about (a certain kind of) modal vocabulary is that it stands in a special relation to descriptive vocabulary—a relation that invited its characterization as 'metalinguistic' (with respect to that descriptive vocabulary) in the first place. This relation is that anyone who knows how to use ordinary empirical descriptive vocabulary (e.g. 'red', 'square', 'moving', 'alive', 'electron') already knows how to do everything she needs to know how to do to deploy modal vocabulary. A variant formulation (closely related, but not equivalent) would be that the norms govering the use of ordinary empirical descriptive vocabulary determine the norms governing the use of modal vocabulary. In this sense, modal vocabulary makes explicit (in the form of a new kind of claimable content) something that is implicit already in the use of descriptive vocabulary. This claim about the expressive role characteristic of modal vocabulary is vocabulary-specific. For not all vocabularies stand in this relation to some other kind of vocabulary. In particular, there is in general nothing that ordinary empirical descriptive (OED) vocabulary stands to in this expressive relation.

An instructive parallel is with a particular bit of logical vocabulary: the conditional. If Sellars is right that an essential element distinguishing *describing* from mere *labeling* keyed to

differential responsiveness is the inferential involvements of the locutions applied (their "situation in a space of implications") then anyone who knows how to use descriptive vocabulary already knows how to do everything he needs to know how to do to use conditionals whose antecedents are formed from those descriptive claimables. For to be able to use the descriptive vocabulary, one must make some distinction (however partial and fallible) between materially good and materially bad inferences involving that vocabulary. And that is sufficient to introduce conditionals as having the circumstances of appropriate application that if one is committed to the propriety of the inference from p to q, then one is committed to the conditional claim "if p then q," and the consequences of application that if one is committed to the conditional claim "if p then q," then one is committed to the material propriety of the inference from p to q. The capacity to use the underlying descriptive vocabulary can be straightforwardly (indeed, algorithmically) transformed into the capacity to use conditionals involving that vocabulary.

What aspect of inference is it that modal vocabulary is supposed to express? My third suggestion for developing the Kant-Sellars approach to modality is an answer to this question. The key fact to appreciate, I think, is that outside of logic and mathematics (and possibly fundamental physics, though I doubt it<sup>22</sup>), in ordinary language and the special sciences, material inference is massively *nonmonotonic*. That is, the fact that the inference from p to q is a materially good one in some situation does not mean that the inference from p and r to q must also be a good one, in the same situation. If I strike this dry, well-made match, it will light—but not if in addition all the oxygen is removed from the room, or a sufficiently strong magnetic field is applied, or.... If I let loose of the leash, the dog will chase the cat—but not if either one is

<sup>22</sup> For reasons Mark Wilson elaborates in his original and important book *Wandering Significance* [Oxford: Oxford University Press, 2006]

struck by lightning, a bear suddenly blocks the way, or.... This phenomenon is ubiquitous and unavoidable, even in less informal contexts: differential medical diagnosis, the application of common or case law, or philosophical argumentation. One cannot secure material inferences from all possible defeasors by explicitly building their denial into the premises, for the class of defeasors is in general open-ended and not antecedently surveyable. Nor can one achieve the same effect wholesale by the use of *ceteris paribus* clauses. As I have argued elsewhere, the expressive role of such clauses is explicitly to acknowledge the non-monotonicity, hence defeasibility of the qualified inference, not magically to remove it. <sup>23</sup> (The technical term for a Latin phrase whose application can do *that* is 'spell').

The defeasibility or nonmonotonicity of the material inferences essential to the conceptual contentfulness of descriptive vocabulary means that the use of such vocabulary requires not only making a distinction (however fallibly) between those inferences one endorses and those one does not, but also (as part of that capacity, and also fallibly) between the collateral premises or auxiliary hypotheses whose additions one takes it would, and those that would not, infirm the inference, in the sense that the conclusion would no longer follow. That is, in order to use OED vocabulary, one must associate *some* range of subjunctive and counterfactual robustness with the material inferences that (at least partially) articulate the contents of the descriptive concepts. So, for instance, I might endorse the inference that would be made explicit in a conditional by "If I release my grip on the book, then it will fall to the floor." But for the attribution of such an inferential commitment to me to be sustainable, I must make some distinction between collateral circumstances that would defeat the inference (a table is moved

<sup>23</sup> In Chapter Two of *Articulating Reasons: An Introduction to Inferentialism* [Cambridge: Harvard University Press, 2000].

under it, someone else catches it, it dissolves in a puff of smoke, it is snatched up by a passing hawk...) and those that would not (it is Tuesday, it is slightly cooler today than it was yesterday, my car has been moved slightly further away...). Of course I might be wrong about whether any of these particular auxiliary hypotheses actually would or would not defeat the inference to the conclusion. But if I make no distinction of this sort at all I should be convicted of not understanding the concepts (book, falling) that I am attempting to apply.

The principal vocabulary we use to make these distinctions explicit is *subjunctive* and *counterfactual* conditionals: "If the lioness *were* to be struck by a spear...," "If the book *had been* attached to a large helium-filled balloon...." Subjunctives let us express, explore, and communicate the ranges of counterfactual robustness of the inferences we endorse, our commitments concerning what would and would not defeat or infirm those inferences. The subjunctive mood is a principal alethic modal construction. Talk of what is and isn't possible or necessary if... also lets us mark out regions of monotonicity within the field of material inferences relating applications of descriptive concepts. "If the patient has a positive muscle-contracture test, it does not necessarly follow that he has malignant hyperthermia. It is possible that he has Duchesne's dystrophy. If he has [genetic variant], then it is necessary that he has malignant hyperthermia." "If the wood had been pressure-treated, it would not have split over the winter, but it is possible that its color would have faded."

On this account, subjunctive robustness is the generality or "openness" Ryle found in the inferences made explicit by conditionals, and which is made explicit by modal vocabulary, including the subjunctive mood. It involves a kind of quantification over auxiliary hypotheses

that would not, according to the modal claim, infirm the inference or its conclusion.<sup>24</sup> (Frege's account of the significance of his Latin letters indicates that he agrees with Ryle.) The kind of generalization implicit in the use of subjunctive or modal vocabulary is what is invoked in explanation, which exhibits some conclusion as the resulting from an inference that is good as an instance of a kind, or in virtue of a pattern of good inferences. This is what was intuitively right about the deductive-nomological understanding of explanation. What was wrong about it is that subjunctive robustness need not be underwritten by *laws*: modally qualified conditionals whose quantifiers are wide open. That is, there need not be inferences guaranteed to be *globally* monotonic no matter what collateral premises are thrown in, standing behind every *local* region of monotonicity—every set of collateral premises with respect to which the inference is subjunctively robust. Thus singular explanations, for instance, singular causal explanations, need not fall under covering laws to be good explanations. But they do need to involve some range of subjunctive (including counterfactual) robustness in order to count as *explanations*, rather than just descriptions of some event. It is because the use of descriptive vocabulary requires commitment to inferences with some range of subjunctive robustness that, as I earlier quoted Sellars as saying:

Although describing and explaining (predicting, retrodicting, understanding) are *distinguishable*, they are also, in an important sense, *inseparable*... The descriptive and explanatory resources of language advance hand in hand...."<sup>25</sup>

The expressive job characteristic of modal vocabulary is to make explicit this implicit dimension of the use of ordinary empirical descriptive vocabulary.

<sup>24</sup> Many everyday uses of modal vocabulary to qualify claims suppress the premises from which the claim implicitly is taken to follow, and so court the danger of countenancing the modal fallacy that would infer from p and  $\Box(p \rightarrow q)$  to  $\Box q$ . Thereon hangs a tale.

<sup>25</sup> CDCM § 108.

## II. A Modal Realism

- 6. This sketch of a program for extending the Kant-Sellars tradition of modal expressivism raises a myriad of questions, some of detail, others more substantial. Rather than beginning to fill in that sketch by addressing some of those questions, I want to confront the ideas that motivate it with a different set of intuitions: those that motivate a robust modal realism. By "modal realism" I mean the conjunction of the claims that:
- MR1) Some modally qualified claims are true.
- MR2) Those that are state *facts*.
- MR3) Some of those facts are *objective*, in the sense that they are independent of the activities of concept-users: they would be facts even if there never were or never had been concept-users.<sup>26</sup>

There are strong reasons to endorse all three of these claims. As to the first, physics tells us things such as: "Two bodies acted upon only by gravitational forces necessarily attract one another in direct proportion to the product of their masses and in inverse proportion to the square of the distance between their centers of mass." I take it this claim, for instance, is true. Even if it is not, I take it that *some* claims of this form, purporting to state laws of nature, do, in fact, state laws of nature. Denying this brings one into direct contradiction with the empirical sciences themselves. Supporting such a position would require a strong argument indeed. For the

<sup>26</sup> Of course, this is itself a modal claim, expressed counterfactually in the subjunctive mood. That fact is not problematic in the current context. One upshot of the previous discussion is that *any* description of how things objectively are implicitly involves modal commitments.

empirical sciences are in the business of making subjunctive and counterfactual-supporting claims. That is, they offer not only *descriptions*, but *explanations*. Indeed, the descriptions they offer are essentially, and not just accidentally, available to figure in explanations of other descriptions.

The second claim is, I think, true in virtue of the definition of 'fact'. A fact, Frege says, is a thought that is true.<sup>27</sup> He means 'thought' in the sense of something thinkable, not in the sense of a thinking, of course. For there can be unthought facts. On this usage, it is alright to say that facts make thoughts or claims true only in the sense that facts make acts of thinking and claiming true. For the facts just *are* the true thinkables and claimables. Wittgenstein is appealing to this way of using 'fact' when he says: "When we say, and mean, that such-and-such is the case, we—and our meaning—do not stop anywhere short of the fact; but we mean: this—is—so."<sup>28</sup> On this usage, if there are true modal claims—in the sense of true modal claimables, or modal claimings that are true in that they are claimings of true claimables—then there are modal facts. Modal facts are just facts statable using modal vocabulary, as physical facts are facts statable using physical vocabulary, nautical facts are facts statable using nautical vocabulary, and so on.

The third claim is perhaps the most controversial of these three platitudes. But I think the same principle I implicitly invoked in talking about the first claim underwrites it. Physics tells us that the current laws of nature were already laws of nature before there were human conceptusers. And, although it does not specifically address the issue, it is clearly committed to the

<sup>27</sup> In "The Thought" [ref.].

<sup>28</sup> Philosophical Investigations [ref.] §95.

claim that the laws would have been the same even if there never had been concept-users.

Indeed, many of the laws of nature (including all the Newtonian ones) exhibit a temporal symmetry: they hold indifferently at all times. So they are independent of the advent, at some particular time, of concept-users. And one of the mainstays of physics over the last century—substantially contributing to its distinctive conceptual shape—is the result of the Noether theorem that tells us (entails) that that this fundamental temporal symmetry is mathematically equivalent to the physical principle of conservation of energy. Denying MR3 is denying the temporal symmetry of laws of nature. And the theorem tells us that that means denying the conservation of energy. While there are reasons from the bleeding edge of physics to worry about the universal truth of the principle of conservation of energy, those considerations are irrelevant in the current context: they do not stem from the presence or absence of concept-users in our world). I conclude that one cannot deny MR3 without taking issue with substantial, indeed fundamental, empirical issues in physics.<sup>30</sup>

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<sup>29</sup> Cf. for instance Nina Byers (1998) "E. Noether's Discovery of the Deep Connection Between Symmetries and Conservation Laws." in *Proceedings of a Symposium on the Heritage of Emmy Noether*, held on 2–4 December, 1996, at the Bar-Ilan University, Israel.

<sup>30</sup> I offer a different argument for this same conclusion (not specifically for the modal case, but for a more generic one that comprises it) in Section V of Chapter Five of *Perspectives on Pragmatism*.

There were no true claimings before there were vocabularies, because there were no claimings at all. But it does not follow that there were no true claimables. In fact, we can show that we ought not to say that. Here is an argument that turns on the grammatical transformations that "It is true that…" takes.

Physics tells us that there were photons before there were humans (I read a lot about them in Stephen Weinberg's account of the early history of the universe, *The First Three Minutes* [New York: Basic Books, 1988], for instance). So if before time V there were no humans, so no vocabularies, we do not want to deny that

<sup>1.</sup> There were (at time pre-V) photons.

We can move the tense operator out front, and paraphrase this as:

<sup>2.</sup> It was the case (at time pre-V) that [there are photons].

By the basic redundancy property of 'true', we can preface this with "It is true that...":

<sup>3.</sup> It is true that [It was the case (at time pre-V) that [there are photons]].

Now we can move the tense operator out to modify the verb in "It is true that...":

<sup>4.</sup> Was[ It is true (at time pre-V) that [there are photons]]

This is the key move. It is justified by the observation that *all* sentential operators can be treated this way, as a result of deep features of the redundancy of 'true'. Thus one can transform "It is true that Not[p]," into Not[It is true that p], "It is true that Possibly[p]," into "Possibly[It is true that p]," and "It is true that Will-be[p]," into "Will-be[It is true that p]." But now, given how the tense operators work, it is straightforward to derive:

<sup>5.</sup> It was true (at time pre-V) that [there are photons].

I am claiming that one ought to endorse MR1 and MR3 unless one takes issue with the principle that philosophers thinking metalinguistically about semantics and concept-use ought not, in general, to be in the business of denying claims made by physicists, when the latter are speaker *ex cathedra* on matters that fall within their professional purview. There are some philosophers (Huw Price is one) who are both competent and willing to do so—indeed, in his case, specifically on the matter of the physicists' uncritical use of modal vocabulary. But I am not one of them.

#### I take it that:

1) If some crucible were heated to a temperature high enough to melt copper, then it would be hot enough to melt aluminum.

Is a chemical necessity: a chemical law of nature. It is a modal fact. It is modally, subjunctively, counterfactually independent of the existence of concept-users. If that is right, then descriptions of how things objectively are stand in modally robust material (non-logical) consequential relations to one another. Another such is:

2) If the sample were (had been) pure copper, then it would be (would have been) denser than water.

Besides relations of material consequence, descriptive facts we can state can also stand in relations of material incompatibility.

And again invoking the features that make 'true' redundant, we get:

<sup>6.</sup> It was the case (at time pre-V) that [It is true that [there are photons]].

These uniformities involving the interaction of 'true' with other sentential operators tell us we are committed by our use of those expressions to either deny that there were photons before there were people—which is to deny well-entrenched deliverances of physics—or to admit that there were truths about photons before there were people to formulate them.

3) A sample's being pure copper is incompatible with its being an electrical insulator. (It is not possible that a sample be both pure copper and an electrical insulator.)

Ways the world can be empirically described as being stand to one another in objective, modally robust relations of material consequence and incompatibility.

7. The modalities this sort of realism addresses are those invoked by the natural sciences, and their analogs in less systematic ordinary language. What the kind of modal vocabulary in question expresses is not *logical* possibility and necessity, for the truth of claims such as (1), (2) and (3) depends essentially on their use of the *non*-logical empirical descriptive concepts <u>copper</u>, <u>aluminum</u>, <u>temperature</u>, <u>water</u>, <u>density</u>, and so on. Nor is it metaphysical necessity, which abstracts from actual laws of nature and other subjunctive- and counterfactual-supporting dependencies that turn on particular properties things can be described as having.

The modal revolution in late twentieth-century Anglophone philosophy had three principal phases. First was Kripke's revolution in the semantics of modal logical vocabulary. Second was the generalization, by Lewis, Stalnaker, Montague, and Kaplan, among others, of his algebraic possible-worlds apparatus to an intensional semantics for non-logical expressions. Third was the introduction of the conceptual apparatus that led to the recognition of the possibility of necessities knowable only *a posteriori*, and contingencies knowable *a priori*, in Kripke's *Naming and Necessity*. It was this third phase that gave rise to contemporary analytic metaphysics. The kind of modality to which both the modal expressivism of the previous section and the modal realism of this one are addressed is relevant at most to the second phase: the one

in which modal notions such as <u>possibility</u> are used to explicate the contents of nonlogical concepts.

There is another line of argument to the conclusion that commitment to modal realism is implicit in commitment to a corresponding realism about claims expressed using ordinary empirical descriptive vocabulary. It will make clearer the relation between one kind of alethic modality and conceptual content. We can begin with a platitude: there is some way the world objectively is. How it objectively is must be discovered by empirical inquiry, and sets a semantic and epistemic standard for assessment of the correctness of our descriptive claimings as potential expressions of knowledge. The question is how to understand the relation of modal facts (if any) to how the world objectively is as describable (at least sometimes) in non-modal empirical descriptive vocabulary. One might ask a supervenience question here, but the line of thought I am concerned with goes a different way. It asks what modal commitments are implicit already in the idea of an empirically describable world. It focuses on the *determinateness* of the way things objectively are.

To talk about how things objectively are as determinate is to invoke a contrast with how they are not. This idea is summed up in the Spinozist (and scholastic) principle *omnis* determinatio est negatio. This thought is incorporated in the twentieth-century concept of information (due to Shannon<sup>31</sup>), which understands it in terms of the partition each bit establishes between how things are (according to the information) and how they are not. But there are different ways we might follow out this idea, depending on how we think about the sort

<sup>31</sup> Claude E. Shannon and Warren Weaver: *The Mathematical Theory of Communication*. The University of Illinois Press, Urbana, Illinois, 1949. ISBN 0-252-72548-4

of negation involved. What I'll call the "Hegelian" model of determinateness insists that it must be understood as what he calls "exclusive" [ausschließend] difference, and not mere or "indifferent" [gleichgültig] difference.<sup>32</sup> Square and circular are exclusively different properties, since possession by a plane figure of the one excludes, rules out, or is materially incompatible with possession of the other. Square and green are merely or indifferently different, in that though they are distinct properties, possession of the one does not preclude possession of the other. An essential part of the determinate content of a property—what makes it the property it is, and not some other one—is the relations of material (non-logical) incompatibility it stands in to other determinate properties (for instance, shapes to other shapes, and colors to other colors). In fact, Hegel's view is that determinateness is a matter of standing in relations of material incompatibility (his "determinate negation") and material consequence (his "mediation") to other determinates. We might think of these as related by the principle that one property, say metallic is a consequence of another, copper, in case everything incompatible with being metallic (say, being a mammal) is incompatible with being copper. A property possession of which rules out possession of no other properties, and has as a consequence possession of no others, is in so far such indeterminate.

One observation we can make about this distinction between exclusive difference and mere difference is that one can define mere difference solely in terms of exclusive difference, but not *vice versa*. For one can say that two properties are *merely* different just in case they are not incompatible with each other, but are materially incompatible with different properties. Square

<sup>32</sup> The rubric 'Hegelian' here is tendentious, and liable to be alarming. More seriously, it is liable to be unhelpful. For now, treat it as a mere label. I will say what I mean by it—give it some content—as we go along.

and green are different because they are incompatible with different properties: square is incompatible with circular, and green is not.<sup>33</sup>

One reason to endorse this Hegelian conception of <u>determinateness</u> is that it is required to underwrite what might be taken to be an essential aspect of the structural difference between the fundamental ontological categories of *object* and *property*. Aristotle had already pointed out a fundamental asymmetry between these categories. It makes sense to think of each property as coming with a *converse*, in the sense of a property that is exhibited by all and only the objects that do *not* exhibit the index property. Has a mass greater than 5 grams is a property that has a converse in this sense. But it does *not* make sense to think of *objects* as coming with converses, in the analogous sense of an object that exhibits all and only the properties that are *not* exhibited by the index object. This is precisely because some of those properties will be incompatible with one another. Thus my left leg has the properties of not being identical to Bach's second Brandenberg concerto and not being identical to Gottlob Frege. Its converse, if it had one, would have to have the properties of being identical to both.

Now one might deny that this categorial asymmetry is essential to the concepts of <u>object</u> and <u>property</u>. A *Tractarian* conception of (elementary) objects and properties makes do with mere difference. Elementary properties and relations do not stand in relations of material incompatibility or consequence. They are independent, in that the fact that an object exhibits one property or stands in one relation has no consequences for any others it might exhibit or stand

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<sup>33</sup> This definition sounds circular, because of its invocation of the notion of <u>sameness</u> of the properties incompatible with a property. But we can avoid this. Suppose we have labeled properties (say, by real numbers). If an oracle then tells us for each label the set of all labels of incompatible properties, we can sort the labels into equivalence classes, accordingly as the set of incompatible labels they are associated with is the same. These will all be labels of the same property. Two labels that are not in the same incompatibility-equivalence class, are then labels of different properties. Some pairs of properties that are different in this sense will then also be exclusively different, if one is a member of the incompatibility set of (a label of) the other.

in.<sup>34</sup> (*All* the relations of incompatibility and consequence holding between states of affairs in the *Tractatus* hold between non-elementary states of affairs, and are due solely to the *logical* complexity of those states of affairs. There are no material, that is, nonlogical, relations of consequence and incompatibility in that picture.) In this context it is coherent to associate with each elementary object a converse, which exhibits all and only the properties (stands in all and only the relations) that the index object does not. I am not concerned here to argue that the Tractarian conception of <u>object</u> is incoherent or otherwise inadequate just because it has no room for the Aristotelian categorial asymmetry. For my purposes it is sufficient to point out that the Hegelian notion of <u>determinateness</u>, which requires acknowledging the distinction between mere difference and exclusive difference, *does* underwrite (is necessary and sufficient for) the Aristotelian point about the difference between objects and properties (or relations).

A Tractarian conception of <u>determinateness</u> is one according to which it is sufficient for properties to be determinate that they are *merely* different from one another, and sufficient for objects to be determinate that they exhibit some merely different properties. Tractarian properties do not stand to one another in relations of determinable properties (e.g. polygonal, colored) and more determinate properties falling under them (circular, green). For the more determinate properties would stand in relations of material consequence to their determinables, and in relations of material incompatibility to other determinates falling under the same determinable. So nothing like the structure—characteristic of shapes and colors, and of biological taxonomies—of properties as falling into determinable families of exclusively

<sup>34</sup> There are both textual and conceptual difficulties concerning the status of monadic elementary properties in the *Tractatus*. But the points I am concerned to make go through just as well if we restrict ourselves to relations, so I will ignore both these kinds of difficulty.

different determinates which are merely different from determinates falling under other determinables is available in a Tractarian world.

The Hegelian conception of determinateness as a matter of standing in relations of exclusive difference (material incompatibility, and—so—material consequence) to other determinates, then, has at least these three consequences in its favor:

- The mere difference that articulates the Tractarian world can be defined in terms of exclusive difference, but there is no backwards route;
- Objects and properties that are determinate in this sense exhibit the Aristotelian categorial asymmetry;
- Properties will exhibit the standard structure of compatible determinable families of incompatible determinate properties.

It should be clear that to take the objective world to be determinate in the Hegelian sense—so, to consist of objects and their properties and relations in the Aristotelian sense, and for those properties and relations to exhibit the structure of determinable families of determinates—is to be committed to modal realism. For Hegelian determinateness requires that there be facts about what properties and states of affairs are materially incompatible with which others, and about what material consequential relations they stand in to which others. The determinateness of the fact that this coin is copper consists in part in its being incompatible with the coin being silver and its having as a consequence that it conducts electricity—that is, with its being *necessary* that it is not silver, *possible* that it is green, and *necessary* that it conducts electricity. Metallurgists

<sup>35</sup> Of course there are various provisos that would have to be added to make these claims strictly true, since copper can be alloyed with silver, and so on. I ignore these complications, as beside the point I am after.

discover these modal facts as part of the same kind of empirical inquiry through which they discover that this coin is in fact copper. A world without modal facts would be an indeterminate world: a world without objects in the Aristotelian sense, and without properties in the sense that admits a determinate-determinable structure.

The kind of modality in question is that expressed in ordinary conversational language, and in a more systematic and controlled way in the special sciences, both empirical and exact. It is the modality involved in claims such as "No monochromatic patch can be both red and green," "It is impossible for a square plane figure to be circular," "Pure copper at sea-level pressure necessarily melts at 1083.4 \( \text{C.,"} \) and "A mammal placed in an evacuated bell-jar would die of oxygen deprivation." These are not either *logical* modalities, except in an extremely extended sense—though one not without precedent in Anglophone philosophy of the '40s and '50s), nor are they oomphier metaphysical modalities in a Kripkean sense.

In laying out Sellars's views I registered that he thinks of what he called the "causal modalities" as characterizing the inferential relations that articulate the contents of empirical descriptive concepts. If we go back to what Hegel made of Kant's views of modality and conceptual content, we find a notion of conceptual content that can help us better understand how this kind of modality can be understood as a *conceptual* modality. On this conception, to be *conceptually* contentful just is to stand in modally robust relations of material consequence and incompatibility (what Hegel calls relations of "mediation" and "determinate negation"). This is a resolutely non-psychological sense of 'conceptual'. For it makes no reference to concept
use—to the application of concepts by anyone at all. So if there are laws of nature according to which some properties are incompatible with others (cannot be exemplified by the same object at

the same time) or have others as their consequences (if one is exhibited by an object, the other *must* be) then the world as it is objectively, independently of the activity of any knowing and acting subjects, is conceptually articulated. Empirical inquiry is at once the job of determining what judgments are true and what concepts are correct—that is, what really follows from what and what really precludes what. Linguistic terms can *express* concepts, by being used so as to undertake commitments as to what follows from what and what precludes what. But the concepts they express are in no sense *products* of that concept-applying activity.

As we saw, Sellars insists that it is standing in such relations that makes empirical descriptive vocabulary genuinely *descriptive*, that is, expressive of descriptive *concepts*, rather than merely functioning as reliably differentially responsively elicited *labels*. And we have seen that the sort of modal realism I have been sketching has as one of its consequences that empirical descriptive properties and states of affairs stand to one another in relations of material consequence and incompatibility. So Hegel offers us definitions of what it is to be *determinate* and to be *conceptually articulated*, according to which to take the objective world to be determinate is to take it to be *modally* articulated and to be *conceptually* articulated. That is, it commits one both to modal realism and to conceptual realism: the view that the objective world is modally, and *so* conceptually structured, quite apart from its relations to us.

## III. Together

8. The core of the modal realism I have just sketched consists of some claims that express philosophical common sense: there are laws of nature, events sometimes causally necessitate

others, there is a determinate way the world objectively is, and its being that way rules out (excludes the possibility) of its being some other ways. These are commitments to which any philosopher ought to want to be entitled. They should be contested only under theoretical duress by exceptionally weighty and compelling arguments. I have elaborated those core claims in the context of others that are *not* commonsensical, most notably that modal realism in this sense entails *conceptual* realism about the objective world. The link between the two classes of claim is forged by the Hegelian non-psychological definition of the <u>conceptual</u>, as what is articulated by relations of material (that is, in general nonlogical) consequence or necessitation and incompatibility. I think this is a good thing to mean by "conceptual," not the least because of the space it opens up to understand how the sort of causal modalities investigated by the sciences can be thought of as articulating the contents of concepts. That is a deservedly controversial claim. Whatever stance one takes on it, the sense in which I am using the term "conceptual" is, I trust, at least reasonably clear.

But what is the relation between this kind of modal *realism* and the modal *expressivism* I talked about in the first part of this essay? There the expressive role characteristic of modal vocabulary was identified as making explicit the material inferential and incompatibility relations in virtue of which ordinary empirical descriptive (OED) vocabulary expresses the content that it does. This expressive role was distinguished from that of the ground-level empirical descriptive vocabulary, whose principal job it is to say how things objectively are. There is no further vocabulary to which OED vocabulary stands in the same semantically explicative relation as alethic modal vocabulary stands to it.<sup>36</sup> The core of this version of modal expressivism lies

<sup>36</sup> This is the expressive role of being *elaborated from* and *explicative of* the use of OED vocabulary. It is what in *Between Saying and Doing* I call "being LX" for that vocabulary.

precisely in the distinction it insists on between the expressive role distinctive of modal vocabulary and that of vocabulary whose job is describing the world, at least in the narrow, paradigmatic sense in which OED vocabulary describes the world. Modal realism says that modal vocabulary *does* describe the world, does say how things are. So are these two lines of thought simply incompatible? Are we obliged to choose between them?

I think that the modal expressivism of Part I and the modal realism of Part II are not only compatible, but that that account of the *expressive* role distinctive of modal vocabulary is just what is needed to understand the central claims of modal realism. The expressivism complements, rather than conflicting with, the realism about the use of modal concepts. How is such a reconciliation to be understood? The first step is to see that modal expressivism (ME) makes claims about what one is *doing* in using modal concepts, while modal realism (MR) makes claims about what one is saying by using modal concepts. ME says that what one is doing when one makes a modal claim is endorsing an inference relating descriptive concepts as subjunctively (including counterfactually) robust, or treating two descriptive concepts as incompatible. MR says that when one does that, onethat saying (claiming) that possession or exhibition of one empirical property is a consequence of, or is incompatible with, possession or exhibition of another. The claim that ME and MR are *compatible* is the claim that one can both be doing what ME says one is doing in applying modal vocabulary and be saying what MR says one is saying by doing that. The claim that they are *complementary* is the claim that an important way to understand what one is saying by making modal claims is precisely to think about what one is *doing* by making them.

According to this way of understanding the relations between ME and MR, the claims of modal expressivism are made in a *pragmatic* metavocabulary for modal vocabulary: that is, a vocabulary suitable for specifying the practices, abilities, and performances that make up the use of modal vocabulary. And the claims of modal realism are made in a *semantic* metavocabulary for modal vocabulary: that is, a vocabulary suitable for specifying the *meanings* or conceptual contents expressed by modal vocabulary. What we have here is an instance of the general question of how to understand the relations between these two complementary aspects of concept application in claims: the use of the concepts and their meaning or content, what one is doing by applying them and what one is saying by applying them. I don't think we have a good general theory of how these dimensions of discourse are related to one another. (I've made a first try at an analytic framework in which such a theory might be embedded, in *Between Saying and* Doing.) Looking more closely at the special case of modal vocabulary—a vocabulary-kind of particular philosophical interest and importance—provides a potentially valuable case study and test bench for approaching the more general question of how to understand the relations between what is said in pragmatic metavocabularies and what is said in semantic metavocabularies addressing the same base vocabulary. Of special interest in this case is the relation between the use and meaning of modal vocabulary in relation to that of ordinary empirical descriptive vocabulary.

Modal expressivism says that what one is doing in making modal claims is not the same thing one is doing in making claims using ordinary empirical descriptive vocabulary. For in the former case, but not the latter, one is (perhaps *inter alia*) committing oneself to subjunctively robust inferential-and-incompatibility relations among descriptive concepts one is not in general

thereby applying. Modal realism says that in making modal claims one is saying how things objectively are, describing the objective world. Reconciling these claims requires specifying a sense of "describing" or "empirical fact-stating" that is broader than that applicable to the primary use of OED vocabulary, but still sufficiently akin to it that the broader sense applicable to modal claims and the narrower sense applicable show up as species of a recognizably descriptive genus.

One broader sense that is available is that provided by *declarativism* about decription, which makes it equivalent to "fact-stating" in a very capacious sense. This is the view that identifies facts with whatever is stated by declarative sentences that can be used both free-standing, to make assertions, and in embedded contexts, paradigmatically as the antecedent of conditionals and in the context of propositional attitude ascribing locutions. I think this is a perfectly good way to use "fact" and "fact-stating." But in this context, it buys modal realism too cheaply, and hence buys too cheap a version of modal realism. For in this sense "One ought not to be cruel," "Raspberries are preferable to strawberries," and "The value of Picasso's Guernica does not lie in its beauty," are all straightforwardly fact-stating (if they were true, they would state facts), and hence descriptive in the declarativists *very* broad sense. So this usage loses the contrast between description and evaluation (which perhaps is no bad thing, but should be a position reached for more specific reasons than the broad charter of declarativism offers) and between objective description and subjective expression of preference or other attitude. A modal realism worthy of the name should be held to a more demanding standard for what counts as empirical fact-stating or description. I conclude that a proper reconciliation of ME and MR requires crafting a sense of "empirical description" or "empirical fact-stating" that is wider than the narrow senses applicable only to OED vocabulary such as "cat", "red", and "mass of five grams", but not as broad as the declarativist's.<sup>37</sup>

9. Before indicating how that might be done, I want to consider one way in which the modal expressivist line of thought can be seen to be essential to understanding the modal realist line of thought. Modal realism claims that there are objective modal facts. One important species of modal facts is *laws* of nature. Modal realism makes essential use of the concepts of fact and law, but does not by itself explain those concepts. Modal expressivism does. As I indicated at the beginning of Part II, facts are (at least) true claimables. (The problem with declarativism is not its acknowledgement of this as a necessary condition on facts, but with its insouciant commitment to this being also a sufficient condition. We'll see in (10) what more might be demanded, at least for objective empirical facts.) Does this mean that there are no facts that cannot be stated, that is, expressed in some language or vocabulary? I think we adequately acknowledge the intuitive language-transcendence of fact by affirming that for any vocabulary, there are facts that cannot be stated in that vocabulary. I think of this claim as a commitment, should you specify a vocabulary, to being able to find some facts not statable in it. (I don't think, for instance, that one can express in the language of physics facts such as that the stock market dropped yesterday, or that the Republicans' unwillingness to allow a vote on the judicial nominee was a strategic political blunder.) But I don't know how to understand a claim that reverses the quantifiers and asserts that there are facts such that no vocabulary can state them. It

<sup>37</sup> Here I've run back and forth indiscriminately between <u>description</u> (or <u>fact-stating</u>) and <u>empirical description</u> as the concept being considered. I think it is the combination that matters for modal realism. These issues will be taken up separately in sections (9) and (10).

might well be possible to give some sense to this sort of wide open quantification over all possible vocabularies, but it does not already come with one.

More deeply, though, the claim is that key concepts of the *semantic* metavocabulary in which modal realism is stated are *sense-dependent* on concepts drawn from the *pragmatic* metavocabulary for modality offered by modal expressivism. One cannot understand the concepts <u>fact</u> and <u>law</u> except in a context that includes the concepts <u>asserting</u> and <u>inferring</u>. For facts are essentially, and not just accidentally, something that can be asserted. If one does not know that it is at least sometimes true to that facts can be stated, one does not know what facts are. And laws are essentially, and not just accidentally, something that support subjunctively and counterfactually robust inferences. If one does not understand that Newton's second law of motion implies that if a force *were* (had been) applied to this moving body, it would accelerate (have accelerated), one does not grasp "F=ma" as having the force of a law.<sup>38</sup>

One concept is sense-dependent on another if one cannot grasp or understand the first without grasping or understanding the second. This sense-dependence relation must not be confused with that of reference-dependence of one concept on another, which holds when the first cannot be true of something unless the second is true of something. The concepts <u>parent</u> and <u>child</u> are both reciprocally sense-dependent and reciprocally reference-dependent. One cannot understand one in isolation from an understanding of the other, and nothing can be a parent

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<sup>38</sup> In articles such as "Abstract Entities" and "Grammar and Existence: A Preface to Ontology" (reprinted as Chapters 7 and 6 of Kevin Scharp and Robert Brandom (eds.) *In the Space of Reasons: Selected Papers of Wilfrid Sellars*, [Harvard University Press 2008] Sellars develops what he calls a "metalinguistic" approach to ontological-categorial concepts such as <u>fact</u> and <u>property</u>, which is much better worked-out than his corresponding views on modality. Here, too, I think his basically Carnapian concept of the <u>metalinguistic</u> is far too undifferentiated to do the work he needs it to do in order to express the insights by which he is motivated. I discuss his pragmatic expressive nominalism in Chapter Seven.

unless something is a child (indeed, it's child), and *vice versa*. But there can be sense-dependence relations without corresponding reference-dependence relations. This is true of response-dependent properties. Suppose we define something as *hedonically beautiful for humans* just in case a human observer would respond to its perceptible presence with a feeling of pleasure. One cannot understand this dispositional property without also understanding the concept of <u>pleasure</u> (and, indeed, of <u>human</u>). But the exhibition of this property by an object does not require that there actually be feelings of pleasure. We can make perfect sense of the claim that there were sunsets that were hedonically beautiful for humans before there were humans. For to say that is just to say that *if* there *had been* humans to perceive them, those sunsets *would have* produced feelings of pleasure. And that can be true in a world without humans or pleasure. Similarly, if we define a planet as *supraterrestrial* just in case it has a mass larger than that of the Earth, that concept is sense-dependent on that of the Earth, but we can use it to describe a possible world in which *all* planets are supraterrestrial, and the Earth does not exist.

To claim that the concepts <u>fact</u> and <u>law</u> were reference-dependent on the concepts of <u>asserting</u> and <u>inferring</u> would be to assert an objectionable and obviously false sort of language-or mind-dependence of crucial categoreal features of the objective world. But to claim the corresponding sense-dependence claim is not in the same way objectionable. For it is compatible with the truth of the counterfactual that there would have been facts and laws even if there had never been asserters and inferrers—indeed that in our world there were facts and laws before there were asserters and inferrers. The claim is just that one cannot understand what one is saying when one talks about an objective world characterized by facts and laws (which is to

say just a determinate world) unless one understands facts as the kind of thing that can be stated and laws as the kind of thing that can support subjunctively and counterfactually robust reasoning. Modal expressivism helps explain what the claims of modal realism mean.

10. Modal realism asserts that modal vocabulary is used to form empirical descriptions of objective facts. Modal expressivism asserts that modal vocabulary plays a content-explicating expressive role that distinguishes it sharply from that of ordinary empirical descriptive vocabulary. Saying something about the broader sense in which modal vocabulary can nonetheless be understood as descriptive will further illuminate the complex complementary relations between what MR says about modal vocabulary in a semantic metavocabulary and what ME says about it in a pragmatic one. Here is a suggestion: A broader sense of "fact-stating" and "description" that is not yet so promiscuous as the declarativist candidate is defined by the dual requirements of *semantic government* of claimings by facts and *epistemic tracking* of facts by claimings.

By "semantic government" I mean that descriptive claims are subject to a distinctive kind of ought-to-be (related only in complicated ways to the ought-to-dos that Sellars contrasted them with). It ought to be the case that the content of a descriptive claiming stands in a special relation, which we might as well call "correspondence," to a modal fact, which it accordingly purports to state (and in case there is such a fact, succeeds in stating). In virtue of that semantic norm, claimings are answerable for their correctness (accord with that norm) to facts. The underlying thought here is that what one is talking *about* is what exercises a certain kind of *authority* over what one says; what one says is *responsible to* what one is talking about, in a way

that is characteristic of this relation as *semantic*. What one is talking about provides a standard for the assessment of what one says.

What is the nature of the correspondence that the norm enjoins? The contents of possible claimings are articulated by relations of material consequence and incompatibility to the contents of other potential claimings. These notions are themselves specifiable in a deontic normative pragmatic metavocabulary: committing (or entitling) oneself to one claim can commit (or entitle) one to others, and can preclude entitlement to still others. The contents of facts and possible facts are also articulated by relations of material consequence and incompatibility to the contents of other possible facts. In this case, these notions are specifiable in an *alethic modal* semantic metavocabulary: the obtaining of one fact has the obtaining of others as a necessary (that is, subjunctively, including counterfactually, robust) consequence, makes others possible, and rules out still others as not possible. Normative semantic government of claimings by facts says that it ought to be the case that there is a fact whose content is articulated by objective modal relations of material consequence and incompatibility that line up with the subjective (in the sense of pertaining to knowing and acting discursive subjects) normative relations of material consequence and incompatibility that articulate the content of a claiming. If that norm is not satisfied, the claiming does not live up to the standard provided by the fact it purports to state.<sup>39</sup>

Where semantic government of claiming by facts is a (deontic) *normative* matter, epistemic tracking of facts by claimings is a(n) (alethic) *modal* one. It is a matter of the subjunctive and

<sup>39</sup> The concept of propositional content as what is articulated by relations of material consequence and incompatibility is a development of the Fregean metaconceptual semantic dimension of *Sinn*, while the normative relation of aboutness between objective facts and subjective commitments is a development of his metaconceptual semantic dimension of <u>Bedeutung</u>.

counterfactual robustness of the conceptual content correspondence between facts and claims. The tracking condition holds just insofar as the subjunctive conditional "If the fact were (or had been) different, the claiming would be (or would have been) correspondingly different," is true. Insofar as this condition holds, there is a *reliable* correspondence between the contents of facts and the contents of claimings. That is to say that the inference from a claim about the content of a claiming to the content of the corresponding fact is in general a good one. [I have written elsewhere about the sense in which deontic normative and alethic modal vocabularies are two sides of one (intentional) coin. I cannot here pursue this significance of this particular application (to the complementary conditions of semantic govrnance and epistemically tracking) of that general (meta-)conceptual complementarity.<sup>40</sup>]

11. I think it is a fundamental mistake to try to do all the work of done by the concept of semantic government with that of epistemic tracking, as for instance Fodor and Dretske do.

What goes missing is the fine structure of the crucial interaction between activities on the part of the claiming subject, expressed in a deontic normative pragmatic metavocabulary, and how it is with the objects and facts those claims are about, expressed in an alethic modal semantic metavocabulary, and how the two sides stand in both normative relations of semantic government and modal relations of epistemic tracking. It is precisely in these intricate relations that the complementary character of modal expressivism and modal realism becomes visible.

When the two requirements of semantic government and epistemic tracking are satisfied, it makes good sense to think of the claimings in question as fact-stating and descriptive. They

<sup>&</sup>lt;sup>40</sup> For instance, in Chapter Six of *Between Saying and Doing*.

purport to say how things are with what they in the normative sense of semantic government *about*. The actual applications of the vocabulary in question, no less than their normative status as correct or not, are epistemically *responsive* to and *controlled* by the corresponding facts. The notions of <u>correspondence</u>, <u>semantic government</u>, and <u>epistemic tracking</u> do not invoke causal connection—only subjunctively robust reliable covariation. For this reason, they define a notion of <u>description</u> or <u>fact-stating</u> that applies equally well to mathematical vocabulary as to empirical.

This is also evidently true also of modal vocabulary, supposing we grant the dual claims of modal realism and modal expressivism. For modal *expressivism* tells us that modal vocabulary makes explicit normatively significant relations of subjunctively robust material consequence and incompatibility among claimable (hence propositional) contents in virtue of which ordinary empirical descriptive vocabulary *describes* and does not merely *label*, *discriminate*, or *classify*. And modal *realism* tells us that there are modal facts, concerning the subjunctively robust relations of material consequence and incompatibility in virtue of which ordinary empirical descriptive properties and facts are determinate. Together, these two claims give a definite sense to the possibility of the correspondence of modal claimings with modal facts. If we can then say what it is for a norm of semantic governance to be instituted and the modal fact of epistemic tracking to be achieved, the descriptive, the fact-stating character of modal vocabulary according to ME and MR will have been made intelligible.

It is a consequence of the version of Kant-Sellars modal expressivism that I outlined in Part I that instituting normative semantic government of modal claims by modal facts, and of

achieving modal epistemic tracking of modal facts by modal claims must be an aspect of the process of instituting semantic government of ordinary empirical descriptive claims by the facts they state, and of achieving epistemic tracking of those facts by ordinary empirical descriptive claims. For the essence of that view is that what is expressed explicitly (that is, put in claimable, propositional form) by the use of modal vocabulary is already implicit in the norms governing the use of OED vocabulary.

Empiricism, in both its traditional and its twentieth century logical forms, offered a threestage layercake picture of empirical inquiry that is particularly clear in Carnap's version. The task of the first stage is semantic: to determine the empirical concepts to be used, to fix the meanings to be expressed by OED vocabulary. The task of the second stage is epistemic: to settle, on the basis of the meanings fixed at the first stage, the claims expressed using that vocabulary that are taken to be true. The task of the third stage is explanatory: to identify, on the basis of regularities exhibited by the claims made at the second stage, laws governing the facts stated at the second stage. The first stage is a matter of convenient conventions, the last two of the assessment of empirical evidence—fraught at the second stage by the potentially problematic transition from applying observational descriptive vocabulary to applying theoretical descriptive vocabulary, and at the second stage by the potentially problematic transition from observed regularity to conjectured law. Quine sees that separating the first two stages, which makes good sense when one's model is artificial languages, is not possible when one addresses natural languages. There is just one thing discursive practitioners do: use vocabulary to make claims. Doing that must be understood as at once fixing meanings and beliefs, language and theory. Like Hume, Quine doesn't think the third stage can be rationally warranted—though this

empiricist conclusion sits ill with his avowed scientific naturalism. But modal expressivism is motivated by the same pragmatic considerations about the use of vocabularies that motivate Quine's recognition of the semantic and epistemic enterprises as aspects of one process of empirical inquiry. As Sellars puts the point (in a passage I quote at the end of section 3): "although describing and explaining...are *distinguishable*, they are also, in an important sense, *inseparable*... the descriptive and explanatory resources of the language advance hand in hand."

Determining and applying descriptive concepts inevitably involves committing oneself as to the subjunctively robust inferential and incompatibility relations they stand in to one another. Rectifying concepts, determining facts, and establishing laws are all projects that must be pursued together. Empirical evidence bears on all of the semantic, epistemic, and explanatory tasks at once, or it bears on none of them. Of course, there is a lot more that needs to be said about how this actually works and should work. The multifarious ways in which commitments of one sort—semantic, doxastic, subjunctive—bear on and can be traded off for commitments of other sorts needs to be investigated and explicated in detail. (I've sketched a story about the next level of gross structure in the first three chapters of *Reason in Philosophy*.) And I certainly would not claim that seeing how modal expressivism and modal realism complement and illuminate one another clears up at a stroke all the vexing problems in the epistemology of modality—even when pursued outside the confines of the straitjacket of empiricism. But all I need here is the general conclusion—which gives us confidence that there must be solutions to those problems.

If that is right, then modal claims (and the concepts that articulate them) exhibit semantic government by and epistemic tracking of facts no less than ordinary empirical descriptive ones do. Far from being incompatible with this fundamental modally realistic claim, modal expressivism is just what is needed to make it intelligible. By showing how the use of modal concepts and the use of ordinary empirical descriptive concepts are inextricably bound up with one another, modal expressivism also shows itself and modal realism as two sides of one coin.

## IV. Again

12. I have argued that modal realism and the right kind of modal expressivism belong together. The tendency to understand views of this kind as incompatible alternatives—to take the sense in which modal vocabulary plays, as Scllars put it a "metalinguistic" expressive role relative to ordinary empirical descriptive vocabulary to rule out the possibility of its being also fact-stating and descriptive of something other than language use—is the result of failing to attend to the distinction beween *pragmatic* and *semantic* metavocabularies. I think we don't know very much about the various ways in which what is said in these two sorts of metavocabulary are related for various vocabularies they might address. In *Between Saying and Doing*, I explore the expressive roles of various kinds of pragmatically mediated semantic relations between vocabularies, a genus that includes pragmatic metavocabularies, without saying much at all about the relations between what they make explicit and what is made explicit by traditional semantic metavocabularies of the Tarski-Carnap variety. (This was the only model Sellars had available, Procrustean though it made his efforts to formulate what I take to be his pragmatic expressivist insights.) One of my aspirations in the present piece has been to begin the

process of investigating those crucial relations by looking as a test-case at a vocabulary of particular philosophical interest and importance: alethic modal vocabulary. I hope the results will be of interest to those moved by expressivist intuitions concerning other vocabularies: some kinds of normative vocabulary, moral or aesthetic, for instance, or even (were we to follow Sellars in his metalinguistic nominalism about universals) ontological-categorial or metaphysical vocabularies.

I have finished my argument. But I want to close with a lagniappe, indicated in the final word of my title. Why claim, as that title does, that the result of this story is to put modal expressivism and modal realism together *again?* Why should the story be thought of as recounting a *re*union? The answer I want to leave you with is this: It is because we've seen something very like this constellation of metaconceptual commitments before. I started my story with Kant, and that is where I want to end it. Claiming that one should be a *pragmatic* modal expressivist (an expressivist about what one is *doing* in applying modal vocabulary) but a *semantic* modal realist (a realist about what one is *saying* in applying modal vocabulary) is, I think, recognizably a development and a descendant, for this special but central case, of Kant's claim that one should be a *transcendental idealist*, but an *empirical realist*. That is what I mean by saying that the view I have been presenting puts modal expressivism and modal realism together *again*. Here, I think, is a way of developing Kant's ideas in the vicinity that is much more promising than the one Sellars pursues as a rereading of the phenomenal/noumenal distinction that I deplore in the second half of Chapter One.