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A Tune Beyond Us, Yet Ourselves:
Reasons and Conceptual Realism

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William James: “The trail of the human serpent is over all.”
G. W. F. Hegel: “On he who looks on the world rationally, the world looks rationally back.”

Ulf Hlobil and I have a book coming out in the Spring: *Reasons for Logic, Logic for Reasons*.[1] The story I tell here is basically an advertisement for one of Ulf’s central technical results that is reported in that book. In spite of the book’s title, the result I am concerned with here is only tangentially related to logic. It is, I am convinced, of central importance for contemporary philosophy of language and semantics. To understand its significance, it will be useful to get a running historical start.

I. From Resemblance to Representation

The scientific revolution of the seventeenth and eighteenth centuries radically transformed our conception of the relation between appearance and reality. The new physics, pioneered by Galileo and Descartes and raised to a powerful systematic pinnacle by Newton, achieved its unprecedented explanatory successes by redescribing the natural world in a variety

[1] Hlobil, Ulf. and Brandom, Robert. *Reasons for Logic, Logic for Reasons: Pragmatics, Semantics, and Conceptual Roles*, [Routledge, 2024].

of mathematical vocabularies. This decisive advance in the scientific conception of reality was accompanied by a radical metamorphosis in the philosophical understanding of the relation between that reality and its appearance to the human subjects who had come to understand physical reality so much better by deploying those new vocabularies. A key element of early modern philosophers' response to the rise of the new science was to move from thinking of appearance in terms of its *resemblance to* reality to thinking of it in terms of its *representation of* reality.[2]

The home of the appearance/reality distinction lies in specifically *perceptual* appearances. Veridical perceptual experience, in which things appear as they really are, is not only a necessary condition of empirical knowledge, but also its principal source. However, perceptual appearances also sometimes mislead, by diverging from reality: the circular coin looks elliptical, the distant tower is larger than it appears, the color of the cloth turns out not to be what in bad lighting it was taken to be. Since the Greeks, the idea had been that, at least when things go well, the way things appear to us *resembles* the way they really are, on the model of pictures. Resemblance here can be understood as the sharing of some properties, as a realistic portrait might reproduce the shapes of facial features or the color of clothing. Where the picturing shapes and colors replicate the shapes and colors of what is pictured, reality appears as it is. Where they diverge, appearances can be misleading.

The rise of the new science exposes the inadequacy of the resemblance model of appearance. On **Copernicus**'s account, the reality behind the appearance of a stationary Earth and a revolving Sun is a rotating Earth and stationary Sun. Being at rest and being in motion are opposites, incompatible properties that don't have anything in common. Rotating and revolving (spinning and orbiting) are both circular kinds of motion, but quite different ones. The general lesson was that astronomical reality was nothing like its appearance to us. **Galileo**'s reading of what he calls the "book of nature, written in the language of mathematics" finds the best way of getting a grip on the reality of motion to be by manipulating geometrical appearances. For him a period of time shows up as the length of a line, and acceleration as the area of triangle. One

[2] These terms come from John Haugeland, *Artificial Intelligence: The Very Idea* [Bradford, M.I.T. Press, 1985], Chapter One.

could force the assimilation of temporal to spatial extension into the form of resemblance-as-shared-properties, but no such Procrustean maneuver will make the resemblance model sufficient, or even helpful in understanding the relations between the real acceleration of a falling body and its geometrical appearance as a triangle.

Descartes sees that making sense of mathematical appearances of physical phenomena requires a model more abstract than the traditional perception-inspired notion of resemblance. He crafts a concept of representation for this purpose. The paradigm of representational relations are to be found in his algebraic geometry. He thinks of material reality as the realm of extension and takes it to *consist* of geometric properties—thus radicalizing Galileo by giving an ontological twist to his use of geometrical vocabulary. For Descartes, the real geometrical world of shapes and motions can best be represented by discursive sequences of symbols in the form of algebraic equations. The equations $x^2+y^2=1$ and $x=y$ do not at all resemble—are in no sense replicas of—the circle and line that they represent. But they make it possible to reason about those figures, for instance by computing the two points of intersection of that circle and that line.

But how is the looser, more abstract representational relation to be understood? Giving up the bonds of resemblance by allowing representings to be so radically dissimilar to what they represent opens up a new skeptical possibility: that reality is radically different from how it appears in representations of it. If representings and representeds don't need to share properties, what *does* connect them? Descartes didn't offer much of an account. Mental states and episodes, he thought, are *intrinsically* representational. It is their nature to be "*tanquam rem*", as if of things—as it is the nature of physical things to be extended, in the sense of geometrically describable as having a shape, and size, and state of motion or rest.

It was **Spinoza** (whose first book was on Descartes) who figured out the concept of representation that was implicit in the motivating paradigm of analytic geometry. The key is that, as he puts it, "the order and connection of ideas is the same as the order and connection of things."[3] Equations can represent geometrical figures because the whole *system* of equations is isomorphic to the whole *system* of figures—with, for instance, simultaneous solutions of

[3] *Ethics* II, Prop 7.

equations corresponding to intersections of lines. That is why algebraically manipulating equations is intelligible as reasoning about geometrical figures. Given the global isomorphism—the "order and connection" of linear strings of symbols that is the same as the "order and connection" of extended plane figures—the equation '$x^2+y^2=1$' can play the same functional role in the world of equations that the circle it thereby counts as representing plays in the world of geometrical figures.

According to this story, the resemblance model was not wrong to take the sharing of properties to be essential to the *of*-ness invoked by talk of appearances *of* material reality. Its mistake, the source of its expressive limitations, was to restrict attention to *local* properties, conceived *atomistically*: properties elements of picturings and of what is pictured could have regardless of what properties *other*, systematically related elements had. The wider scope of the new representational model is due to the *holistic* character of its appeal to *global* isomorphisms, which make visible *functional* correlations between items in the two systems that might have quite different atomistic material properties. The new, more abstract and expressively powerful representational model of the intentional nexus between appearance and reality develops the older, more concrete resemblance model by shifting attention to the larger relational structures whose individual elements can be understood to play the functional roles of representing and represented in virtue of the global isomorphism of those structures. Representings and representeds are still understood to share properties—but properties of a new, functional kind, intelligible only globally, in terms of relations to other representings or representeds. This shift from atomistic to holistic conceptions of contentfulness was enthusiastically seconded by **Leibniz**, who required each monad to represent its whole universe in order to represent any of it, and whose monadological vision added the even more holistic idea that *any* difference *any*where in the representationally related relational structures requires *some* difference *every*where.

II. Phenomenalism about Conceptual Appearances

This metaconceptual sea-change from understanding the appearance/reality distinction in terms of the atomistic model of *resemblance* to using the more holistic model of *representation* introduced by Descartes is the first big episode that I need to have on the table in order to introduce my topic. The second is **Kant**'s further step away from the original perceptual paradigm to focus on specifically *conceptual* appearances. Descartes's new notion of representation was sufficiently capacious to encompass both concepts and percepts, thoughts and sensations. His successors, rationalists and empiricists alike, had tried out the strategy of treating these two kinds of representation as extremes of a spectrum. Though they developed different understandings of the common dimension along which different sorts of representings are arrayed—rationalists as a matter of clarity and distinctness at the conceptual end and confusion at the perceptual end, empiricists as a matter of concreteness and vivacity at the perceptual end and abstractness at the conceptual end—both schools saw thoughts and sensations as tied together by a variety of intermediate cases that make up the unifying spectrum of which they are extremes.

For Kant, this quantitative scaling approach is an unsatisfactory framework in which to analyze the qualitatively different sorts of contribution to empirical knowledge made by representations of the two kinds. Those differences in function are sufficiently stark, he thinks, to justify treating them as the products of wholly distinct cognitive faculties. Kant's bold strategy is to understand the functional division of labor between those faculties hylomorphically, with sensibility contributing empirical *content* and the understanding contributing the intelligible conceptual *form* of empirical cognitions. He accordingly faces a new question: What does it mean to say that in the representings that are the appearance of represented reality, empirical content shows up in specifically *conceptual* form?

To address this question adequately, Kant needed to rethink the wider realm of discursive activities in general, within which concepts play their distinctive functional role. It includes both

the application of concepts in judgments, and the use of judgments in reasoning. Here he could help himself to the logical tradition. The Scholastics, seconded by the Port Royale logicians, envisaged a methodological hierarchy relating these components. Its most basic level is a doctrine of concepts, particular and general. On top of that is built a doctrine of judgments, classified according to the kind of concepts they deploy. And on top of that is constructed a doctrine of inferences, codified in the form of syllogisms, classified according to the kinds of judgments that serve as their premises and conclusions.

In order to adapt and extend this structure to address not only traditional *general* logic, but also what he called "*transcendental*" logic, which is tasked with understanding the specifically *representational* dimension of concept-use, in the light of the holistic lessons Spinoza and Leibniz taught about the importance of the systematic "order and connection of ideas" to understanding representation, Kant needed to turn that logical tradition on its head. Wilfrid Sellars said about this crucial move:

> Kant was on the right track when he insisted that just as concepts are essentially (and not accidentally) items which can occur in judgments, so judgments (and, therefore, indirectly concepts) are essentially (and not accidentally) items which can occur in reasonings or arguments.[4]

In fact, Kant recruits the structural elements of the traditional, atomistic, bottom-up account in the service of a holistic, functional, top-down account of discursiveness. Concepts, he says, are 'functions of judgment.' They must be understood in terms of the role they play in activities of judging. Judgments, not concepts, are the minimal unit of discursive awareness: what, following Leibniz, he calls 'apperception'. Judgments are indeed, as the tradition had it, applications of concepts. But we are to understand applying concepts in terms of an antecedent understanding of what judging is, not the other way around.

[4] "Inference and Meaning" [I-4], in Kevin Scharp and Robert Brandom (eds.) *In the Space of Reasons*: *Selected Essays of Wilfrid Sellars* [Harvard University Press, 2007]. Sellars is thinking in part of his favorite passage, at A79/B105: "The same understanding, through the same operations by which in concepts, by means of analytical unity, it produced the logical form of a judgment, also introduces a transcendental content into its representations, by means of the synthetic unity of the manifold in intuition in general."

At the center of Kant's revolutionary reconceptualization of the discursive is his new account of the activity of judging. He understands judging as taking up a distinctive kind of normative stance: undertaking a responsibility, committing oneself. He further understands the normative status taken on in judging as a *task* responsibility: a commitment to *do* something, to engage in specific kinds of activities. Concepts are then to be made intelligible as rules for determining *what* one is taking responsibility for or committing oneself to by making the judgments that are the application of those concepts. What one becomes responsible for doing in making a judgment is integrating it into a constellation of doxastic commitments that has a distinctive kind of unity: a rational systematic unity. One obligation undertaken in endorsing a new claim is securing the coherence of one's commitments by extruding rationally incompatible ones from the ensemble. Another is to expand the system by acknowledging the consequences of one's judgments, and by identifying other judgments that justify one's commitments by providing reasons for them. Constellations of commitments governed by the critical, ampliative, and justificatory rational task responsibilities have the unity Kant sees as distinctive of **apperception**, that is, discursive, specifically *conceptual*, awareness (*sapience*, not merely sentience).

His generic term for the rational, norm-governed discursive activities that confer conceptual form is 'synthesis.' In the first instance, what is synthesized is a constellation of commitments having the kind of rational unity characteristic of apperception. The conceptual contents of judgments, the most basic kind of conceptual representation, are their potentials for being integrated into wholes having that sort of synthetic unity. Rational synthetic activity results, Kant tells us, in the *transcendental* unity of apperception. It is a transcendental unity in the sense studied by transcendental logic: a unity that makes intelligible the *representational* dimension of judgment and discursive understanding generally. The challenge is to derive an account of the relations between representing appearances and represented realities from such a top-down, holistic functional account of the activities and processes that structure the rational, norm-governed, conceptual "order and connection of ideas."

By elaborating in this way the underlying idea of conceptual form as conferred by role in reasoning, Kant crafted a powerful new conception of the conceptual. It includes an original

account of what any subject (looking ahead, we could think of computers) must be able to *do* to count as thinking, that is to count as aware in a way that essentially involves discursive understanding. This is apperception, being appeared to, in a distinctively *conceptual* sense of appearance. These ideas were of the utmost significance for subsequent German Idealism, and later, American Pragmatism, starting with Peirce. And my main topic for the rest of this talk is how they can be developed and deployed to address issues we still wrestle with today. But already in the form to which Kant brought them, a disadvantage becomes visible of tying conceptual form so closely to the reasoning activities of apperceiving subjects.

For however successful or promising a construal of conceptual form in terms of role in reasoning might be as an account of the conceptual form of *appearances*, it seems in principle restricted to accounting for conceptual *representings*. It is not clear, on this account, what it could even *mean* for the reality that appearance represents *also* to have or to be in conceptual form. How could conceptual form in this sense be the "order and connection" that is shared by the systems of represent*ings* and the system of represent*eds* on the Descartes-inspired Spinozist holistic construal of representation? On the face of it, things in the objective world do not play functional roles in rational practices of acknowledging how some judgments provide reasons for and against others. Understanding the conceptual form of judgments or judgeable contents to consist in the role they play in such norm-governed rational activities restricts conceptual form to the appearance side of the appearance/reality distinction. We can characterize any view that restricts conceptual articulation to the realm of appearance 'conceptual phenomenalism.' By contrast, we can use 'conceptual realism' to describe accounts of conceptual structure that discern it on both ends of the relations between discursive representings and what they represent. In these terms, Kant is a conceptual phenomenalist.

Of course, Kant fully understands and enthusiastically embraces this conclusion. It is the core of his transcendental idealism. Since conceptual form is for him exclusively the product of the rational activities of the faculty of the Understanding, it follows that it is restricted to our representings. It can characterize the reality the representings that constitute discursive appearance represent only *as* represented, that is, only as it exists *in* and *according to* those representings, not, as a matter of deep principle, how what is represented is in *itself*, that is, apart

from its relation to representings of it. As I put the point a bit earlier, on the Kantian conception of the conceptual we do not even understand what it would mean for reality as it is apart from our representing activities to be in conceptual shape. That is why the world as we conceptually represent it in our judgments and beliefs cannot be understood to be transcendentally real. It must be thought of as only ideal transcendentally and real only empirically—that is, as being what we take it to be only *in* our representings of it. Conceptual phenomenalism in the form of transcendental idealism is entailed by the conjunction of Spinoza's holistic functional account of the form shared by veridical systems of representings and what they represent with Kant's account of the conceptual form of discursive representings in terms of the role they play in the reasoning of representers.

With this claim I have at last arrived at the principal question that is the subject of the rest of my remarks here. That is how we may understand conceptually realistic views, which reject the restriction of conceptual form to the realm of appearance, in the sense of the products of our rational, representational activity. Since I introduced the issue by offering a pedigree for Kant's conceptual phenomenalism that begins with large-scale features of the appearance/reality distinction, it is worth noting that in the broadest terms, along this dimension Kant turns Plato on his head. For Plato contrasted a reality that is *intelligible* just in virtue of its conceptual form, to its *sensible*, nonconceptual appearance, whose resemblance to that intelligible reality is hard enough to grasp that it requires heavy-duty philosophizing to make visible. Both Kant's picture of conceptual appearance and nonconceptual reality and Plato's complementary picture of conceptual reality and nonconceptual appearance stand in opposition to views I am calling 'conceptually realist', which attribute conceptual articulation both to reality and to its appearance to concept users—both to what discursive activity represents and to conceptual representings of it.[5]

Kant's picture of cognitive faculties as conceptualizing the nonconceptual world, rendering it intelligible to or graspable by concept-using subjects builds a strong kind of

[5] This comparison is suggested by some remarks in Ryan Simonelli's "Sellars's Two Worlds" in *Reading Kant with Sellars*, ed. M. Ranee and L. C. Seiberth. Routledge. Forthcoming.

skepticism into the ground floor of his semantics. In the opening paragraph of the Introduction to his *Phenomenology*, Hegel complains about this

> strict line of demarcation separating knowledge and the absolute. For if knowledge is the instrument to take hold of the absolute essence, one is immediately reminded that the application of an instrument to a thing does not leave the thing as it is, but brings about a shaping and alteration of it. Or, if knowledge is not an instrument for our activity, but a more or less passive medium through which the light of truth reaches us, then again we do not receive this truth as it is in itself, but as it is in and through this medium. In both cases we employ a means which immediately brings about the opposite of its own end….

The original perceptual version of the appearance/reality distinction made sense both of veridical appearances, where things appear as they really are, and mistaken appearances, where how things appear is not how they really are. Does understanding appearances as conceptual representings really preclude us from taking some of them to be veridical?

John McDowell's masterwork *Mind and World* can be understood as botanizing various pathologies that result from rejecting conceptual realism: for taking it that, as he puts it, the realm of the conceptual has an "outer boundary" marking the cleavage of mind from world. In order to be entitled to take the reality we think and talk about as *rationally* and not merely *causally* constraining our representings of it, he argues, we must understand that world, and not just our minds, as already in conceptual form. The challenge is to say how one must understand the conceptual in order to make good on this aspiration.

Kant explicitly recoils from one strategy for reconciling conceptual realism with a restriction of the conceptual to representings. That is the view that represented reality consists entirely of representings—that the world is thinkable because it consists of thinkings. He rejects both what he calls the "subjective idealism" of Berkeley, with its single divine world-thinker as the source of representable representings and Leibniz's monadological plenum of represented representers. If we agree with Kant in spurning these extravagant approaches, must we also renounce conceptual realism and agree with him in settling for conceptual phenomenalism in the form of some sort of transcendental idealism?

The conceptual phenomenalist threat and the corresponding conceptual realist aspiration is perhaps best expressed by the chorus in Wallace Stevens' poem "The Blue Guitar":

They said	"You have a blue guitar,
	You do not play things as they are."
The man replied:	"Things as they are
	Are changed upon the blue guitar."
And they said then:	"But play you must, a tune beyond us, yet ourselves,
	A tune upon the blue guitar, of things *exactly* as they are."

In what follows, I want to explore a way of playing that tune, by sketching one form that conceptual realism could take. I will do so in the context of the conviction that the two ideas that lead to Kant's conceptual phenomenalism are good ideas, worth pursuing. That is the Spinozist holist account of how thinking in terms of representation improves upon thinking in terms of resemblance in understanding the relations between appearance and reality and Kant's functionalist construal of conceptual form as conferred by role in reasoning.

III. A Bilateral Normative Pragmatic Model

I am going to consider how this last idea might be developed in the context of a third large movement of philosophical thought. That is the focus on *linguistic* expressions as the most basic kind of conceptual representation. After the linguistic turn, functionalism of the sort Kant pioneers takes the form of interest in how the *use* of linguistic expressions can be understood to confer *meaning* on them. I use the term 'pragmatics' in a very broad sense, to refer to the study of the use of linguistic expressions in discursive social practices. In this sense, I will be pursuing a pragmatics-first order of explanation, seeking to understand the representational dimension of conceptual content in terms of such practices. This is the strategy that led Kant to his phenomenalist restriction of the conceptual to the appearance side of the appearance/reality distinction. But my aim is to evade that conclusion, and its repugnant consequence that it is in the end not so much as intelligible that we should ever know things as they are in themselves, that is, as they are independently of our representational activity.

A first step is to heed the wise Scholastic advice: "When faced with a contradiction, make a distinction." The distinction I want is between reasoning *practices* and what I'll call reasoning *relations*. It is one that Gil Harman taught us, in the course of arguing for what seemed like an outrageous conclusion: that there is no such thing as deductive reasoning—or, slightly more carefully put, that deductive logic does not provide rules for reasoning. If it did, he observes, surely a central one would be something like "If you accept both *p* and 'if *p* then *q*', then you should accept *q*." But that would be a terrible rule. You might have much better evidence *against q* than you have *for* either *p* or 'if *p* then *q*.' If so, then you ought to reject one of them, rather than accept *q*. The lesson is that we should understand deductive logic as characterizing relations of implication (expressed in logical vocabulary using conditionals) and incompatibility (expressed in logical vocabulary using negation). The relations logic articulates normatively constrain reasoning practices, but they do not dictate what we should do.[6]

[6] Harman, G. (1984). Logic and reasoning. Synthese, 60(1):107–127.

I think this distinction between reason *relations* and reasoning *practices* can be exploited to yield a version of Kant's ideas that leads to an attractive and illuminating sort of conceptual realism, rather than to a conceptual phenomenalism that is objectionable in semantically precluding representational knowledge of how a nonconceptual represented world really is, apart from its appearance in the form of conceptual representings of it. To do that it will be helpful to look more closely at how reason relations of implication and incompatibility show up in a simple model of discursive practice. For Kant, the fundamental conceptual form of representation is judgments: representings that are judgings. A good thing to mean by specifically *discursive* practice is accordingly social practices in which some performances are treated as having the practical significance of claimings: sayings *that* things are thus-and-so. Declarative sentences are linguistic expressions whose free-standing utterance has that default significance of asserting or denying.

What is that practical significance? Following Kant's clue connecting conceptual form to role in reasoning, we can understand making a claim as taking up a position in what Sellars called the "space of reasons": "of justifying and being able to justify what one says."[7] Claiming is undertaking a distinctive kind of commitment: a commitment to accept or reject. It is a commitment the speaker's rational *entitlement* to which is always open to question, potentially up for grabs. Discursive practice is essentially, and not just accidentally, a critical, rational practice. When someone makes a claim, it is liable to rational challenge. A challenge is a further claim, whose effect, if successful, is to suspend entitlement to that commitment. That entitlement can be redeemed by producing further claims that justify the challenged commitment. (The basic epistemological structure of the minimal practice is what I have elsewhere called a "default-and-challenge structure of entitlement.") Discursive practice in this minimal model consists of undertaking commitments and challenging and defending entitlement to them, with participants' understanding of what is going on consisting in their practically keeping track of who is committed and entitled to what, as the conversation continues. I call this a 'minimal' model of discursive practice because I think that it describes the minimal structure of practices within which some performances are pragmatically intelligible as claimings and that is

[7] "Empiricism and the Philosophy of Mind" §36.

capable of conferring on the acts, attitudes, and linguistic expressions playing suitable roles in such practices semantically recognizable as possessing specifically *conceptual* contents. Practices that do not accord some performances the pragmatic significance of claimings are not discursive in the sense I am delineating. (According to this way of demarcating genuinely discursive practices, many of Wittgenstein's '*Sprachspiele*' are not in the strict sense *language* games. They are vocal, but really verbal games, since, like the 'calls' (his word is '*Ruf*') in the 'slab' game early on, no performances in them have the significance of *claimings*.)

Simple as it is, this stripped-down model of discursive practice shows how we can understand reason relations, in terms of the role they play in reasoning practices. Defending a claim is making other claims that collectively offer reasons *for* it (in the basic case, reasons to *accept* it). Challenging a claim is making other claims that collectively offer reasons *against* it (in the basic case, reasons to *reject* it). And implicit in these practices are two kinds of reason relations: those that determine what is a reason for what and those that detgermine what is a reason against what. These are relations of *implication* and *incompatibility*. What stand in those relations are claimables: what can be asserted or denied, doxastically accepted or rejected. We may think of those claimables as conceptually contentful just insofar as they stand to one another in relations of implication or consequence and incompatibility. Those relations articulate the norms governing assessments of what claimables are reasons for and against which others, by determining which claim*ings* provide reasons to accept and which provide reasons to reject other claimings.

Now the reason relations we are talking about are not relations of *logical* consequence and inconsistency. They are what Sellars calls "material", rather than formal-logical, in the sense that they articulate the contents of *non*logical concepts, as the goodness of the implication from 'Pittsburgh is to the West of New York' to 'New York is to the East of Pittsburgh' is part of the meaning of the concepts East and West. Indeed, the order of explanation I am pursuing introduces logical vocabulary later in the game, in order to make explicit in the form of claimable sentences those reason relations. The conditional has the job of making explicit in claimable form implication relations, and negation has the job of making incompatibilities explicit in claimable form. Nonetheless, the way forward I want to pursue in further specifying

the relations between the dyads accept/reject, defend/challenge, and implication/incompatibility builds on a particular view in the philosophy of logic: bilateralist normative pragmatic accounts of implication. It will give us a clearer view of how reason relations may be understood as precipitating out of inferential practices of rationally challenging and defending claimings.

Greg Restall introduced, and David Ripley further developed, the bilateral normative pragmatic metavocabulary I will be building on, in order to explain multi-conclusion implications in sequent calculi. It extends easily to an account of incompatibility, and the points I want to make don't require us to look beyond single conclusions. On this account, what you are doing when you say that a premise set of sentences Γ implies a sentence A is to rule normatively out of bounds the constellation of claimings in which one *accepts* all of Γ and *rejects* A. Dually, we can say that Γ is incompatible with A just in case commitment to accept all of Γ normatively rules out commitment to *accept* A. In keeping with the Harman point, this normative assessment does not say what someone who is in that position should *do*. It says only that one cannot be jointly *entitled* to all of those commitments. Reason relations of consequence and incompatibility are understood in terms of *states* of being out of bounds. It distinguishes *sets* of doxastic commitments to accept and reject to which one cannot simultaneously be entitled. That only *constrains*, and does not *settle*, how one should alter one's commitments so as to come back into bounds, to repair one's attitudes so that one's commitments to accept and reject rationally cohere—that is, cohere according to those reason relations of implication and incompatibility. This is recognizably a version of Kant's specification of the sort of rational unity he took to be characteristic of conceptual, discursive apperception.

If we combine this bilateralist thought with the minimal model of discursive practice, we get a picture of how reason relations of implication and incompatibility are normatively related to practices of asserting and denying declarative sentences, expressing practical attitudes of acceptance and rejection, and rationally defending and challenging entitlement to the commitments undertaken by those acts and attitudes. The reason relations among claimables articulate global constraints on the coherence of constellations of commitments to accept and reject claimables, by determining which such constellations one can be jointly entitled to. That in turn settles which claimings count as providing reasons for, and hence potential defenses of,

which others, and which claimings count as providing reasons against, and hence potential challenges to, which others. These relations can be exploited *synthetically*, by using a given set of reason relations to determine which moves in the language game are licit (for instance, which challenges and defenses should count as successful), or *analytically*, by determining the reason relations from the practical normative assessments of moves in a given discursive practice.

Sellars argues that the important difference between *describing*, by applying concepts, and mere *labeling*, as nonconceptual classification, consists in the situation of descriptions in a space of implications. The suggestion I am pursuing is that we understand the conceptual contents of claimables in terms of their situation in, the role they play with respect to, a space of reason relations: of implications, and incompatibilities. Doing so promises progress on the way to a version of conceptual realism insofar as it contributes to a *non-psychological conception of the conceptual*: one that does not restrict it to the products of discursive practices. To fulfill that promise, we will have to show how the conception of relations of consequence and incompatibility that are introduced and understood to begin with in terms of their role in normatively governing discursive practices of asserting and denying, and challenging and defending the rational credentials of those acts and the doxastic attitudes and commitments they express, can be found on the side of the objective reality represented by those subjective activities of manipulating representings.

It is not yet clear that following Harman in distinguishing relations of implication (and incompatibility) from practices of inferring (giving reasons for or against, so defending or challenging claimings) does make such progress. It might be admitted that it usefully fills in Spinoza's notion of the "order and connection of ideas" in a way that respects Kant's insights both into the normative character of that "order and connection" and into the specifically conceptual character of the "ideas" so related. For I have not yet said anything about the transcendental, that is, representational dimension of those practices—and so, not about the "order and connection" of represented things. Kant thought that rational synthesis of a normatively 'in bounds' constellation of doxastic commitments produced the *transcendental* unity characteristic of apperception—that is, conceptual appearance, representings in conceptual form. What is it about the critical rational processes of challenging and defending, normatively

governed by reason relations determining what constellations of commitments one can become jointly entitled to, that establishes *representational* relations? Another manifestation of the same issue is that I have also said nothing about *truth*. Among the various dyads that structure the minimal model of discursive practice I have outlined we find acceptance and rejection, assertion and denial, reasons for and against, implication and incompatibility, but not truth and falsity. The practical attitude of accepting a claimable can be paraphrased as *taking-true*, and that of rejecting as *taking-false*, but nothing put in place so far gives any representational substance to those otherwise empty paraphrases.

So let us turn our attention from *pragmatics* to *semantics*, from concern with the *use* of linguistic expressions by discursive subjects to looking at the representational dimension of their conceptual content, which relates them to the objective world as conceptual representings (appearances) of a represented reality.

IV. Truthmaker Semantics

The most sophisticated and expressively powerful contemporary representational formal semantic framework is Kit Fine's truthmaker semantics. It begins with a metaphysical picture of what there is to be represented semantically. That universe consists of a structured collection of what he calls 'states.' The formal apparatus is as noncommittal as possible about what these consist in, but states are meant to include such ways things could be as Pittsburgh's being to the West of New York City and snow being white. The universe of states is thought of as having two sorts of structure: mereological and modal. On the *mereological* side, some states are to be understood as being *parts* of others. More formally, there is a *fusion* operation that maps any set of states into a whole comprising them. This defines the part-whole relation: state A is part of state B just in case B is the result of fusing A with some other states. On the *modal* side, the universe of states is partitioned into *possible* and *impossible* states.

Mereologically and modally structured state spaces generalize the metaphysics of possible worlds in a number of important ways. Possible worlds show up in this framework as maximal possible states: possible states such that every other state is either a part of that state or incompatible with it, in the sense that fusing it with the world-state yields an *im*possible state. (Situation semantics had already shown the expressive advantages of building such wholes out of smaller parts, rather than getting the partial ones by analyzing whole worlds.) On the modal side, state spaces in general include multiple *im*possible states, where the possible worlds setting in effect has only one. On the mereological side, various structural conditions can be put on the fusion operation, for instance, requiring that all the states that contain any impossible state are themselves impossible—that is, that the result of fusing any state with an impossible state is always an impossible state. Like the existence of multiple impossible states, the capacity to consider different kinds of mereological structures is a major degree of freedom in the apparatus, enhancing the expressive power of the truth-maker framework.

This *metaphysical* specification of what is there to be represented is then married to a flexible and powerful representational *semantics*. An interpretation function assigns each declarative sentence to a pair of sets of states, thought of as the (exact) *truth*-makers and *falsity*-makers of that sentence. Rather than simply defining one of these sets in terms of the other, one can put various explicit structural constraints on the sets of verifiers and falsifiers that are assigned to declarative sentences as their semantic interpretants. One might be tempted to require that they be disjoint: no state is both a truth-maker and a falsity-maker of any sentence. Fine requires rather that the fusion of any truth-maker with any false-maker of the same sentence must be an impossible state. He calls this condition *Exclusivity*. It entails the cognate, but usefully different, requirement that any states that are both truth-makers and false-makers of the same sentence be impossible states. Some statements, say "All cows are made of glass," and "This neutrino has a mass of 500 kilograms," might have only impossible truth-makers—but they are not required to have the *same* impossible states as truth-makers. The combination of the mereological and modal fineness of grain of the underlying metaphysics and keeping separate books on the truth-makers and falsity-makers that semantically interpret sentences results in a hyperintensional theory of meaning, which makes many more distinctions than its possible-worlds predecessor.

To count as a semantics in the sense of an account of the *conceptual* contents sentences express, the truth-maker framework must permit the definition of reason relations of implication and incompatibility. Fine offers two principal ways one might define consequence (among other possibilities) and counts it a virtue of the system that there are such alternatives. He says that a set of sentences Γ *entails* a conclusion A in case every verifier of all the premises in Γ is also a verifier of A. He says that A is a consequence of Γ in the sense of *containment* if every verifier of A includes as a part a verifier of all of Γ and every verifier of all of Γ is a part of a verifier of A. Corresponding definitions of incompatibility are not far to seek. My principal concern here, as might be expected from the preamble, is with how best to understand reason relations in the truth-maker framework. I shall return to that topic shortly, to criticize Fine's candidates, and to offer a suggestion as to how these definitions might be improved upon. First, let me revert briefly to the metaphysics, to make an observation about how it looks once we have used it to supply semantic interpretants for sentences.

For, as Fine observes, the overall picture underwrites a striking realism about the propositional contents expressed by declarative sentences. Such contents are just pairs of sets of states that meet whatever structural conditions we impose on such pairs to make them eligible to serve as truth-makers and false-makers of sentences—paradigmatically, Exclusivity, which requires that all fusions of elements of the first set with elements of the second set be impossible states. He proposes to call any pair of sets of states meeting that condition a 'proposition', since it is eligible to serve as the interpretant of a sentence. But even in the metaphysically implausible case where there is only a countably infinite number of states, there will be uncountably many pairs of sets of them meeting the minimal structural condition for propositionality—so, far more than any natural or formal language in the ordinary sense can have sentences to express. And those worldly propositions stand to one another in relations consequence (for instance, entailment and containment in Fine's sense) and incompatibility, since those notions are defined in terms of the metaphysical mereological and modal properties of the paired sets of states.

As a result, Fine's semantic and metaphysical picture is a *conceptually realist* one. The world that is there to be represented by our linguistic representings of it, however incompletely and imperfectly, is always already conceptually structured. Antecedently to and independently of our discursive practices, reality is already in conceptual shape, in the sense of exhibiting structures that stand to one another in reason relations of consequence and incompatibility. I have drawn from the tradition the suggestion that a good way to demarcate specifically conceptual contentfulness is precisely standing in such relations—that conceptual form consists in being locatable in a constellation of items so related to one another. On Fine's account of linguistic representation, what Spinoza called the "order and connection of things"—one side of the isomorphism with the "order and connection of ideas" that he saw as necessary and sufficient for representation—itself exhibits the specifically *conceptual* structure that consists in being articulated by reason relations of material (nonlogical) consequence and incompatibility. And of course, this conceptual realism is achieved without recourse to the Berkeley-Leibniz heroic, but metaphysically extravagant, stratagem of understanding the reality that is there to be represented as in conceptual shape because it itself consists entirely of representings.

V. An Isomorphism between Pragmatic and Semantic Definitions of Reason Relations

Contemporary philosophers should be accustomed to conceptual realism in the sense in which it is on offer in Fine's framework, because it is already present in the possible-worlds framework that is its predecessor. In neither case does the account of worldly propositions standing in objective relations of consequence and incompatibility depend on or owe anything to an account of the *use* of linguistic expressions or concepts. That is the feature of Kant's view that led to his contrasting conceptual phenomenalism in the form of transcendental idealism. Indeed, the truth-maker semantics *could* not be conceptually phenomenalist in this sense, because Fine's story does not include *any* account of the *use* of expressions. He does not say anything about what linguistic practitioners must *do* in order thereby to count as using declarative sentences so as to associate them with sets of truth-makers and falsity-makers. There is no native pragmatics that goes with Fine's semantics and metaphysics. (Compare the different pragmatic approaches to understanding the association of sentences with sets of possible worlds told by David Lewis and Robert Stalnaker.) There is accordingly no analogue in Fine's setting of the connection between the two phenomena Harman taught us to distinguish—reason relations and norms governing practices of reason*ing*—of the sort we saw that Restall-Ripley bilateralism underwrites.

This failing can easily and usefully be remedied, however, and showing how this lacuna can be filled in is my principal purpose here. As a first step, we might notice that Fine's definitions of consequence relations do not make anything like full use of the mereological and modal innovations that principally distinguish his framework from the possible worlds semantics it improves upon. Taking it that premise-set Γ entails conclusion A just in case all the verifiers of all of Γ are verifiers of A just translates the set-theoretic inclusion criterion of consequence in the possible-worlds setting, without adding anything of substance to it. His notion of containment exploits the mereological structure of his metaphysics, but not its modal structure. My

collaborator and coauthor, Ulf Hlobil shows us how to do better.[8] We can take our cue from Fine's Exclusivity condition relating verifiers and falsifiers of the same sentence (so of the same proposition). It requires that every fusion of any verifiers and any falsifiers be an impossible state. Hlobil suggests that we take Γ to *imply* A just in case every fusion of any verifiers of all of Γ with any falsifier of A is an impossible state. Exclusivity then just becomes Reflexivity of consequence. Like Exclusivity, this definition of a notion of consequence appeals both to the mereological and to the modal structure of the universe of states from which the semantic interpretants of sentences are drawn. (The corresponding notion of incompatibility requires that the fusion of any verifiers of all of Γ with any *verifier* of A be an impossible state.)

The key point is that this semantic definition of implication lines up perfectly with the bilateral *pragmatic* definition of implication.

Ulf Hlobil's version of consequence (implication) in truth-maker semantics is:

1. Γ implies A iff any fusion of a state that verifies all the members of Γ with a state that falsifies A is an impossible state.

The Restall-Ripley normative pragmatic reading of implication is:

2. Γ implies A iff any position that includes accepting all of Γ and rejecting A is normatively incoherent or "out of bounds"—as we have read it: one cannot be entitled to such a constellation of commitments.

And similarly for incompatibility:

3. Γ is incompatible with A ⇔ the state resulting from *fusion* of any *verifiers* of all the members of Γ with any *verifier* of A is an *impossible* state,
4. Γ is incompatible with A ⇔ the position resulting from concomitant commitment to *accept* all of Γ and to *accept* A is normatively *incoherent* ("out of bounds")—a constellation of commitments to which one *cannot* be entitled (entitlement to which is precluded).

Indeed, Hlobil proves that with these definitions, the reason relations defined semantically in Fine's truth-maker setting are *isomorphic* with those defined pragmatically in the bilateral

[8] Hlobil, U. (2022a). The laws of thought and the laws of truth as two sides of one coin. *Journal of Philosophical Logic*, 52:313–343.

normative setting. Further, the isomorphism permits the intertranslation of logical vocabulary introduced into the pragmatic setting by sequent-calculus rules with those introduced semantically in the truth-maker setting by the sorts of rules Fine uses, so that the isomorphism is preserved for logical extensions of prelogical languages (in a wide variety of logics).

The Hlobil isomorphism between (suitably tweaked versions of) Fine's truth-maker representational semantics and Restall and Ripley's bilateral normative pragmatics supplies an answer to a question Fine's framework by itself does not. For it tells us what practitioners must *do*, how they must *use* expressions, in order to confer on them the conceptual contents Fine assigns them in terms of truth-makers and falsity-makers, up to isomorphism of reason relations. In order to associate verifiers and falsifiers with expressions as their semantic interpretatants, practitioners must use those expressions according to the bilateral pragmatics, distinguishing in practice between constellations of commitments to accept and reject claimables that are normatively "in bounds" and those that are normatively "out of bounds." That includes expecting anyone who is precluded from being jointly entitled to the doxastic commitments they have undertaken practically to acknowledge the obligation to alter those commitments so as to repair the situation and find their way back in bounds.

By forging this tight structural connection between the norm-governed use of declarative sentences and their representational meaning, the isomorphism that Hlobil demonstrates specifies the structure of reason relations that is the *same* for the "order and connection of ideas" (or representings) on the pragmatic side, and the "order and connection of things" (or representeds) on the metaphysical side. That is the holistic structural condition that, given his foregrounding of the analytic-algebraic geometry model, Spinoza's Descartes takes *representation* relations of the sort Fine specifies to consist in. Truth-maker semantics by itself only addresses the worldly side. The structural isomorphism of bilateral pragmatics with that semantics at the level of reason relations completes the Spinozist picture. It shows the structure of reason relations common to *takings*-true of sentences by discursive subjects that is the subject of bilateral pragmatics and the *makings*-true of sentences by worldly objects that is the subject of Fine's semantics.

It is important that the isomorphism, and so the correspondence between representings and representeds, is specified to begin with not at the level of sentences and facts, but at the higher level of reason relations. That is, on the linguistic side it is at the level of *meaning*, not of *truth*. The common structure we have discerned does not depend on what anyone is actually doxastically committed to, on the pragmatic side of representings, nor on what states are actual or factual, on the semantic side of represented reality. It is not a correspondence theory of truth. Rather, the sort of conceptual realism it underwrites is a transcendental presupposition of the possibility of correspondence theories of truth. The idea of "coherence theories of truth" was always the result of misunderstandings of *holistic* theories of *meaning*. Truth of sentences as correspondence to reality is a local property, appropriate to atomistic categories of resemblance rather than the holistic categories of representation presupposed at the level of meaning, on which it turns out to depend.

The key is understanding the specifically *conceptual* form of the content of sentential representings in terms of their situation in a network of reason relations of consequence and incompatibility. We saw how the Restall-Ripley bilateral normative pragmatics can be used to put some social linguistic practical flesh on the bare bones of Kant's account of how norm-governed rational synthetic activities confer conceptual form on the doxastic commitments that show up for him as judgings. Because that story defines conceptual form in terms of the synthetic activities of concept-applying subjects, Kant saw no way to avoid a conceptual *phenomenalism* that restricts the conceptual to the representing side of the intentional nexus. The Hlobil isomorphism between the variants we have considered of the Restall-Ripley bilateral normative pragmatics and Fine's truth-maker representational semantics, though, shows how Kant's idea can be made compatible with a conceptual *realism* that discerns conceptual form on the side of what is represented, as well as what can be understood as representings of it, precisely in virtue of the conceptual structure they share. That shared conceptual structure is holistically defined in terms of reason relations. It is the Harmanian distinction between reason *relations* and reason*ing practices* that makes possible this extension of the idea of conceptual structure from representings to representeds, as required by conceptual realism.

I have here adopted a pragmatics-first order of explanation, which explains what reason relations *are* by appeal to their role in articulating norms governing practices of rationally challenging and defending doxastic commitments. It is appropriate to *understand* reason relations as such first in their relation to what doxastic practitioners *do*—just as Kant thought. But he was wrong to think that such a dependence at the level of *sense* of our conception of the conceptual on our understanding of activities of reasoning entails that at the level of *reference* items cannot be in conceptual form unless that form is imposed by rational activities. In Fine's mereological modal metaphysics, propositions as pairs of sets of states that are eligible to serve as verifiers and falsifiers of declarative sentences would stand to one another in relations of consequence and incompatibility even if there never had been and never would be concept *users* deploying sentential representings with those truth- and falsity-conditions.

The roles with respect to reason relations that are shareable between items caught up in discursive practices of claiming and defending and challenging claims, on the one hand, and constellations of worldly states can be thought of as *rational forms*, in a recognizably neo-Aristotelian sense. They are *rational* forms precisely in being roles things play in structures of reason relations.[9] They are essentially *modal* forms. For both essentially appeal to a notion of preclusion: the *impropriety* ("out of boundness") of a collection of concomitant commitments, or the *impossibility* of a state resulting from the fusion of other states. In both cases, consequence is a matter of a kind of necessitation, and incompatibility of a kind of exclusion. The isomorphism shows that the modal relations can correspond exactly. But the kinds of modality involved in the pragmatics of representing and in the metaphysics of the representeds in the semantics are systematically different.

The modality that articulates the reason relations implicit in the use of declarative sentences is a *deontic* modality, while that articulating the reason relations implicit in the modalized mereological universe of states is an *alethic* modality. On the pragmatic side of claimings, the claim that the coin is made of copper is materially incompatible with the claim that the coin is an electrical insulator. The modal ruling-out involved in this kind of incompatibility is *normative*:

[9] In *Reasons for Logic, Logic for Reasons* we present a novel implication-space formal semantics for codifying and manipulating sentential conceptual contents as rational forms in this sense.

one cannot be *entitled* to commitments to accept both these claimables. It is *possible* to do so, but not *appropriate*. The state consisting of the coin's being made of copper and the state consisting of the coin's being an electrical insulator are incompatible in the different, alethic modal sense that the combination of them that is their metaphysical fusion is *impossible*. Both the order and connection of ideas and the order and connection of things consist of *modally robust* reason relations: in the one case deontic normative, and in the other case alethic modal. The view I am recommending is accordingly a *bimodal* conceptual realism. Thereon hangs a tale, but my purpose here has been only to bring us to the gates of that promised land.

VI. Conclusion

I began my story with the large-scale shift in the structure of conceptions of the appearance/reality distinction that was motivated by the rise of the new, mathematized sciences: the shift from understanding it in terms of *resemblance* to understanding it in terms of *representation*. Descartes was the hero here, and I particularly emphasized the holistic structural lessons about global isomorphism as the essence of representation that Spinoza drew from Descartes. Kant then focuses attention on the fact that reality shows up for sapient creatures in *conceptual* form, in specifically *discursive* representations. I suggested that Spinoza's insight gives us reason to want to avoid the dual mistakes of Plato and Kant, each of whom lined up the appearance/reality distinction with the distinction between what is and what is not in specifically *conceptual* shape—disagreeing about whether it was reality or appearance that was on the conceptual side of the gulf they excavated between them. The way forward I recommended appeals to a notion of rational forms shareable between the intellect appeared to and the reality that appears to it. This was Aristotle's response to Plato on this point, and it is an interesting exercise to read what Hegel calls "idealism" in his *Phenomenology* as a conceptual realism in this sense, one that shows up in a post-Kantian shape, downstream from Descartes' and Spinoza's holistic lessons. (My response to this challenge is laid out in *A Spirit of Trust*.[10])

The particular contemporary version of this conceptually realist strategy that I sketched here began by using Gil Harman's distinction between activities or practices of reason*ing* and reason *relations* to adapt Kant's insight into the nature of conceptual form, so as to avoid the conceptual phenomenalism that he properly saw was entailed by his version, which did not make that distinction. I called on Greg Restall's and David Ripley's bilateral normative pragmatics for sequent calculi to clarify the relations between norms of reasoning and reason relations of consequence and incompatibility in discursive practices of making claims and defending and challenging them by offering reasons for and against those claims. Kit Fine's truth-maker semantics and its associated mereological modal metaphysics then provided a model of the reality represented by the sentences whose verifiers and falsifiers it provides. A powerful formal

[10] Harvard University Press, 2019.

result of Ulf Hlobil's subsequently shows how to line up alethic modal relations of consequence and incompatibility in Fine's semantic structure with the deontic normative reason relations construed by the bilateral pragmatics. The resulting bimodal conceptual realism with rational forms defined functionally, so holistically, as roles with respect to reason relations, which we can understand as amphibious between representing appearance and represented reality, shows how it is possible to play a tune beyond us, yet ourselves, a tune upon a conceptual blue guitar, of things *exactly* as they are.

End