§ 1 Since Descartes begat the modern philosophical tradition, a persistent problem has remained in the connection, if any, between the mind and the world. The 'pineal gland' has become philosophical comedy, perhaps mostly because the solution to such an unfathomable problem cannot be so easily explained away. In a strong sense, such answers are so difficult partially because the mind is perceived through modern 'spectacles' as one of the most basic, fundamental ideas upon which all else is built: the mind is unquestionable; to then establish the body takes some work. Descartes' ontology can, in this sense, be seen as necessary for subverting the Aristotelean doctrine of matter and form in its Scholastic instantiation. Indeed, this was no easy task; but if philosophy was to become a science—the goal common to Aristotle and Descartes—then that would require the separation from the physical and the mental. The physical seems to operate according to rule-governed behavior, the mind not. The mind has 'spooky' implications, corresponding to the 'ghost' resident in 'machine.' Indeed, the behaviorist and materialist goals of uniting, or of reducing, the mental to the physical end up in a desperate absurdity, doing damage to both our idea of what the mental and the physical constitute.
Scientifically minded philosophers today are still grappling with the same problematic. The terms have changed, but the problems remain the same, viz., how can one naturalize value? Are there discrete laws by which the mind works? By which basic elements of which the mind is constructed? What is the structure of these elements?

The modern period prior to Kant has given us a variety of solutions to the problem, most of which ended up too far on one side of passivity, and too far on the other side of activity. Empiricism dictates that the mental allows the physical to cause mental, and rationalism tells us that the mental causes the physical to then cause mental. The one side is sheer receptivity, the other pure spontaneity. Kant, of course “united” them in function, but kept sharp separation for each faculty qua faculty

§2 As I have previously argued elsewhere, the history of early twentieth century philosophy can be properly understood as having remained strongly under a Kantian spirit. Perhaps the height of this scientific-modeled philosophy is the philosophy of Rudolf Carnap. Carnap took the Frege-Russell logic to its dialectical limits in the *Aufbau*, by “order[ing] the objects of all sciences into a system according to their reducibility to one another.” The “construction theory” sought to replace the need for any metaphysics; Carnap’s goal was to reduce all that is, or could be, to a firm quasi-Cartesian foundation: that of first-order quantified logic. Once there was no need for metaphysics, all one needed to do is to remove all excess, in a sense ‘trimming the fat’ from philosophy. But Carnap’s own project left an empty shell of the human, as scientific object, by *de facto* removing the cultural, the valuable, the political, and all discourse

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1 Carnap (1967)
2 Ibid., §47
which cannot be translated into the arbitrary language of sense-impressions and the logical structure that inheres between them. What Carnap proposes, then, is a metaphysics of non-metaphysics.

§3 Spinoza is in direct lineage with this problem. In Book II of the Ethics, he analyzes the question of the human mind and its relation to the world. The mind and the body for Spinoza are, contra Descartes, not two 'clearly distinct' substances, but rather two aspects of the same substance. This is the perplexing and complex thesis which is commonly identified as Spinoza's doctrine of parallelism, that “the order and the connection of ideas is the same as the order and connection of things.”¹  One might be tempted to read this as advocating an isomorphic relation between the world of objects and that of thought. Or rather, like Hobbes, to read the mental as properly reducible to the physical. But clearly Spinoza means to deny that the explanation of the mental can be given through physical causes, or that the physical can be described in terms of adequate ideas. Thus, mind and body do not interact:

Hence, so long as things are considered as modes of thinking, we must explain the whole of nature, or the connection of causes through the attribute of thought alone. And insofar as they are considered as modes of extension, the order of the whole of nature must be explained through the attribute of extension alone.²

Or again: “The body cannot determine the mind to thinking, and the Mind cannot determine the body to motion, to rest, to anything else (if there is anything else).”³

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¹ Spinoza Ethics 2p7. All Spinoza quotes are from the Curley translation in *The Collected Works of Spinoza*. (Princeton, NJ: Princeton University Press, 1985). All citations from the Ethics will be according to the text, not to page.

² Ibid., IIp7s. See also IIp21s and IIIp2s

³ Ibid., IIIp2
way, the parallelism that many attribute to Spinoza is not a simple identity of predicates, but rather is the possibility of two incompatible yet complete descriptions of the same thing. The reading I wish to present of this thesis is that the thought-thought and object-object connections are both modally robust, but the former is of normative necessity, the latter of physical, or causal, necessity. It should be relatively uncontroversial to contemporary readers that there is a different type of connection between thoughts than exists between objects.

Objects determine the motion of other objects, and indeed thoughts 'cause' other thoughts. But it should be clear that thoughts do not interact causally in the same way that objects do. This similarity is merely a product of the modal character of the two cases. When a student adds incorrectly or when an inference is inappropriately made, we would like to say that it violates the causal nature of thought, the normative connections between premises and conclusions. It is by necessity that thoughts have connections, but not by physical, causal necessity, but rather by normative necessity; standards of correctness occupy these normative connections between thoughts. Thus, although the temporal and modal character of thought and objects (the order and the connection) is indeed the same, it is taking great liberty to then presuppose that they are parallel. To do so invites the temptation to reduction, or to interaction, neither of which is palatable for a rigorous reading of Spinoza.

Further, I intend to criticize a predominant reading of Spinoza given to us by Edwin M. Curley, who reads Spinoza in continuity with the logical atomists, viz., Russell and the early Wittgenstein. I believe this does damage to Spinoza insofar as it advocates strict parallelism, that under the attribute of thought 'mirrors' or 'represents' the physical
world of cause. In light of contemporary discussion of the normative dimension of thought and the tendency towards naturalistic reductionism, the thesis of parallelism is often considered misleading, or just plainly false. I intend, in what follows, to explicate Spinoza's doctrine of the physical and the mental in terms of this debate. I will rely heavily upon contemporary work in epistemology and semantic theory, principally the inferential semantics of Wilfrid Sellars and Robert Brandom.

§4 According to Spinozan metaphysics, substance is one and its attributes and modes are many. Substance is infinite, and unfolds in an infinite number of ways, through an infinite number of attributes. However, there are two main attributes relevant to humanity, namely thought and extension. Descartes' untenable dualism of mind and body is recast by Spinoza as two aspects of the same thing. In terms of first cause (causa prima), the immanent cause of substance (although not the transitive cause) is God. Spinoza adopts the Cartesian thesis ex nihilo nihil fit; God is the only possible self-causing thing, characterized as that “whose nature cannot be conceived except as existing.” All things, both extended and thought, are given by the same determinate causa prima of substance. Thus corporeal objects and thoughts, two attributes of one and the same substance, must have the same cause, the infinite self-caused substance (God). In short, God is not merely the cause of all things, but rather God is all things (“Deus sive Natura”).

But Spinoza tells us that “things that have nothing in common with one another

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6 The naturalists' target is not Spinoza proper, but rather any normative or value-laden world cast over and against the natural world.
7 Ethics I, p. 18
8 Ibid., I, d. 1
also cannot be understood through one another, or the concept of the one does not involve
the concept of the other.”

Due to Spinoza's denial of interaction between mind and body, one can identify thoughts and objects as differing essentially, that it is in the essence of thoughts that they cannot interact with objects, and vice versa. This must also mean that it is of the essential nature of thoughts that they can influence other thoughts, and the same for objects. Thus, although thought and extension are both disparate, thoughts and objects do interact each among their own kind; each must work according to certain determinate modal relations (both causal and normative) for which must be accounted; that is, there is a causally necessary relation between objects and other objects, and a normatively necessary relation between thoughts in their interaction with other thoughts.

§5  As a strict correspondence theory of truth would have it, the world of ideas is in a one-to-one relation of satisfaction with that of objects. A true idea must have an existing object that stands in its reference. On this view, the intensive relation of concepts is given by the extensive relations between the objects to which they refer. Spinoza's thought, however, does not allow for such strict referential relations, as the world of ideas does not permit the objectual to affect it. On the common reading of Spinoza, the world of causality, however, must be 'mirrored' or represented through the world of ideas. Thus, the temptation exists to bring the causal and the normative connections together through the use of conditional statements. To state that there exists a causal relation between two objects often is considered ceteris paribus sufficient to express the relation in terms of an

\[ \text{Ibid., Ia5} \]
'if-then' truth-functional conditional. Indeed, the truth functional conditional is modeled on the causal relation, since the conditional statement is false only when antecedent conditions hold, and consequent conditions do not follow. On this view, physical causal relation between objects is juxtaposed against a normative relation between ideas, but occurs in the same form. The temptation towards a one-to-one relation in mind-world explanation by the atomists, and positivist reduction of mind to world are two examples of this error. It is a tempting error, but it is false.

§6 E. M. Curley's brilliant and influential reading of Spinoza's metaphysics has done a great deal for allowing Spinoza to be understood by contemporary analytic philosophers. Curley's “preference for translating Spinoza's language into the language of logical atomism”\(^\text{10}\) allows us to understand Spinoza in the familiar terms of Russell and the early Wittgenstein. However, this in some ways does a disservice to Spinoza for several reasons, to which I will turn. But, first, an account of Curley's interpretation is in order.

Curley takes seriously the doctrine of parallelism, that “the order and connection of ideas is the same as the order and connection of things.”\(^\text{11}\) The difference is given by a commonly conflated pair of ideas, namely causal inferences in the physical world that connect facts and conditional statements that connect propositions:

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\ldots\text{ whenever you have two facts standing in a causal relation you also have two propositions standing in a logical relation, the proposition describing the cause entailing the one describing the effect. The set of true propositions is the world conceived under}
\]


\(^{11}\) Ethics IIP7
the attribute of thought; the set of facts, the world conceived under
the attribute of extension. But the two worlds are not two, they are
one.12

On this way of understanding Spinoza, there are two central things that describe the
universe: particular facts about states-of-affairs, and nomological principles, laws, that
determine the understanding of facts about particulars. It seems that, from the passage
above, facts fall under the mode of extension and laws under the mode of thought. There
are no laws 'in' nature, rather nature complies with laws. But, it seems that Curley wants
there to be facts 'in' the world, and indeed this is a central premise in Russell's atomist
metaphysics.

The central error is this picture is that of philosophical hubris. Aristotle, for
instance, warns us of the error of conflating the picture of assertion given by the
Categories and the picture of substance, of being, as it actually is. The second doctrine is
in the central books of the Metaphysics. The error is given in one of two ways a) by
anthropomorphizing the world in order to make it correspond with the structure of
language (Russell) or b) by re-defining language so that it happens to correspond with the
structure of the world (Carnap). Thought, however, is a much more creative, dynamic
force than most will give it credit. Indeed, it must be, in order to give new and dynamic,
albeit always incomplete, descriptions of the world.

To preface these comments, I do not believe that Curley's interpretation is bad, but
merely misleading. To satisfy 2p7, all that is needed is that the “order” and the
“connection” of the two attributes are the same. Of course, for any type of causal order,
whether it be implication (either in a rich material sense or in the formal sense) there

12 Curley (1969) p. 124
must be a causal order, and that is satisfied by time. Time is the ordering principle. What
would satisfy the “connection” qualification? Well, if I am right, the connection is
nothing more than different aspects of the same thing: modality.

§7 A main critic of Carnap, Wilfrid Sellars, is often credited with the post-positivist
shift, in bringing the ideas of normativity and inference as primordial concepts, back into
the study of semantic theory and epistemology. Sellars major work in the normativity of
thought and its connection with inference is his classic “Inference and Meaning.”13 In
sharp juxtaposition to the truth-functional “formal” inference of the Principia, Sellars
advocates a stronger sense of inference he refers to as “material inference.”14 A material
inference is different than a logical inference insofar as material inferences rely upon
semantic content in terms of judging inference. According to a truth-functional model of
inference, there are certain discrete “paradoxes” (so-called by C. I. Lewis initially), viz.,
that a contradiction implies any statement, and a tautological statement is implied by any
other statement whatsoever.

As is the case in most of Sellars logical writings, his direct target is Carnap.15 In
his Logical Syntax of Language, Carnap argues that there are two different yet related
senses of inference, logical and physical. The former are referred to as “L-rules,” the
latter “P-rules.” P-rules are more complex than L-rules, in the sense that P-rules are
extra-logical, and that any system with a mix of P-rules and L-rules can, in principle, be

14 I urge the reader’s caution on this matter since Russell referred to his truth-functional inference as
“material implication.” For the purposes of clarity in this paper, I shall refer to the Principia implication
viz., (P → Q) ↔ (¬P ∨ Q), as Sellars does.
15 Sellars cited 47 different books and articles of Carnap throughout his published writings.
reduced down to a system merely containing L-rules.\textsuperscript{16}

Sellars goes on to argue that the expressive power of subjunctive conditionals requires viewing implication as material, and not formal. Sellars shows “beyond a reasonable doubt not only that there are such things not only that there are such things as material rules of inference, but, which is far more important, \textit{that they are essential to any conceptual frame which permits the formulation of such subjunctive conditionals as do not give expression to logical principles of inference.}”\textsuperscript{17} In the case of subjunctive conditionals, its meaning cannot be divorced from its logical assessment. Thus, Sellars argues that although the material implication is not reducible to the formal, but rather the formal is a special case of material inference, and also since the sophistication of our language requires the material mode of inference in terms of subjunctive conditionals, that we should ultimately view the material as basic, and the formal derivative.

Sellars' influence is still vital to understanding recent work in semantic theory, most notably through Robert Brandom's brilliant and provocative recent classic, \textit{Making it Explicit}. Brandom notoriously traces a historical lineage against the representational Cartesian frame, under which we still operate\textsuperscript{18}, and towards a rich sense of inference as the primary motivation for semantics. Historical antecedents of Brandom's 'inferentialist' philosophy are a motley group, including Spinoza and Leibniz, Hegel, Frege and Sellars. Brandom, for instance, states, in a direct genuflection to Spinoza, that “[p]re-Kantian empiricists and rationalists alike were notoriously disposed to run together causal and

\textsuperscript{16} Sellars (1953) p. 320.
\textsuperscript{17} Sellars (1953) p. 323. Emphasis in original.
\textsuperscript{18} Perhaps the best work diagnosing and refuting the representational concepts in epistemology and philosophy of language is Richard Rorty's \textit{Philosophy and the Mirror of Nature}. Rorty's work was a great influence on Brandom, as Brandom was a student of Rorty's at Princeton.
conceptual issues, largely thought insufficient appreciation of the 'order and connection of ideas' that matters for the latter.”

Brandom's goal is a semantics which has no need for such troublesome notions as objectivity, especially in relation to truth and representation. Thus, one of the primary focii of *Making it Explicit* is the inferential character of expressions, the ability of statements to stand in roles as premises and conclusions. This requires much more than a simple isomorphic, “parallel” relation of statements to the world, for grasping statements in their inferential roles requires a great deal of interrelated concepts:

The kind of inference whose correctness essentially involve the conceptual contents of its premises and conclusions may be called, following Sellars, “material inference.” As examples, consider the inference from “Pittsburgh is to the West of Philadelphia” to “Philadelphia is to the East of Pittsburgh,” the inference from “Today is Wednesday” to Tomorrow is Thursday,” and that from “Lightning is seen now” to “Thunder will be heard soon.” . . . Endorsing these inferences is part of grasping or mastering those concepts, [“east” and “west,” or “Thursday” and “Friday,” or “lightning” and “thunder”] quite apart from any specifically logical competence . . . Since neither the premises nor the conclusions of such inferences employ logical concepts, it seems appropriate to distinguish them from inferences whose correctness depends on logical form. Often, however, inferential articulation is identified with logical articulation. Material inferences are then treated as a derivative category.

One of the important features of material inference is their *non-monotonic* nature.

It is not always easy, thus, to capture the processes of the world in terms of the formal idea of logic. For instance, it is clear that often physical processes are not strictly truth-functional when extraneous factors come into play. Such a case is given to us Robert

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20 Ibid., p. 97-8
Robert Brandom, arguing against the monotonic view of causes in terms of conditionals.

Consider his example:

1. If I strike this dry, well made match, the it will light \((p \rightarrow q)\)
2. If \(p\) and the match is in a strong electromagnetic field, the it will not light \((p & r \rightarrow \sim q)\)
3. If \(p\) and \(r\) and the match is in a Faraday cage, then it will light \((p & r & s \rightarrow q)\)
4. If \(p\) and \(r\) and \(s\) and the room is evacuated of oxygen, the it will not light \((p & r & s & t \rightarrow \sim q)\)\(^{21}\)

What is important in this picture is not the one-to-one relation of truth-functional implication statements to causal processes in the world, in an attempt to “mirror” the physical in terms of the mental, but rather a deeper understanding that the inferential relations which constitute the mental are sui generis, unable to be reduced or explained away in terms of laws that connect the two worlds. The reading of Spinoza as endorsing Curley's parallelism would, in this sense, turn him into an advocate of this type of explanatory reductive strategy.

§8

This can be made clear through an understanding of Spinoza's epistemology. Spinoza characterizes three types of knowledge: knowledge of singular things garnered through the senses and through signs (words, for instance) is knowledge of the first kind, which Spinoza calls “opinion or imagination.” I shall refer to this first kind as received knowledge. Knowledge of “common notions and adequate ideas of the properties of things” belong under the heading rational knowledge and constitute the second type of knowledge. Finally, intuitive knowledge which is derived from an adequate idea of the formal essence of God. The last two are secure, a priori, and necessarily true. The

former involves contingency, and thus is liable to error.

The normative structure of thought is given by the interactions between the different types of knowledge. The latter two types of knowledge, reason and intuition, Spinoza claims as adequate, which “insofar as it is considered in itself, without relation to an object, has all the properties, or intrinsic denominations of a true idea.” It seems in this passage Spinoza is defining adequacy in terms of the inferential consequences of the idea, taken in terms of its own essence. The essence of an idea gives it determinate content, and it is in this content that the idea is interconnected to the other ideas which it implies. Adequate ideas are like “conclusions without premises,” but this does not imply that such conclusions cannot be used as premises for other conclusions. In fact, for such an 'ideal' holism of mind, it would seem to require that this must be so.

In order to track the path of knowledge, one must trace it back to its initial cause, its antecedent content, as the theses which unify knowledge and causes would suggest. Although received knowledge seems the most basic, it is the most confused as misleading. Contemporary instantiations of epistemic thought agree with this basic insight. The mind is given by discrete inferential connections between the three types of knowledge, that intuitive knowledge must inform and shape rational knowledge, which in turn must lead to specific determine the connections amongst different sensations given through received knowledge.

§9 It seems that Curley anticipates such a criticism. Since God unfolds in an infinite

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22 Ethics, IId4
23 Ibid., IIp28
24 I shall not deal here with intuitive knowledge. Frankly, I don't know what to do with it.
number of attributes, and we know only two of these, it follows that there are a great many attributes that exist and remain unknown. These “unknown attributes,” Curley argues that thought cannot be “on par” with the other attributes:

. . . the attribute of thought has a peculiar status. Each alternative description of the world will generate, not one, but a pair of attributes. For every time we reconstruct the facts which make up the totality of facts, we get a new set of propositions corresponding to those facts. The result is that we shall have to say either 1) that the attribute of thought is coextensive with all the other attributes combined, or 2) that just as there is an attribute of thought corresponding to the attribute of extension, so there are infinitely many other attributes of thought corresponding to some one of the other unknown attributes.25

Curley endorses the second of these two pictures as a proper reading of Spinoza. Two replies are in order. First, although thought may correspond to each of an infinity of modes of substance, it is only two to which humans have access, thought and extension. Thus, although there may be an infinite number of thought-systems to which each corresponds a mode of substance, they are still in principle unknowable. Thus, although Curley's fix does allow God to know every mode, it is unclear how this allows for human knowledge of the world and its contents.

Secondly, it is unclear to me how thought can possibly encompass every mode and not preserve the distinction between the modes. It should be clear that although the modes, known or unknown, are the same in terms of order and connection, they are in principle non-translatable. What Curley does in this move is to create a 'master' mode, which can serve as a translation schema for modes amongst one another. If this is not the case, and each sub-mode of thought is autonomous and non-intertranslatable, then it

seems Curley has fallen into Davidson's “third dogma of empiricism,” the dichotomy of scheme and content. Thus, Spinoza becomes a proto-Kantian, for whom differing conceptual schemes (sub-modes of thought) allow for differing content in the world. This may be what Curley meant, but it is unpalatable to the ears of those for whom wish to uphold the attractive consequences of the post-positivist philosophical tradition, from Quine to Brandom.

The richness of language, as has become apparent in the post-positivist Analytic philosophy, must be accounted for. I believe that Spinoza does indeed account for it, or perhaps more securely, I do not believe there is any evidence that Spinoza would not have thought so. If the two worlds, that of thought and language are to be independent, complete and non-translatable, then the character of thought must indeed remain autonomous from that of cause. To presuppose otherwise is not only philosophical hubris, but moreso does damage to the power and magnesty of Spinoza. Or, perhaps put less accurately but more tellingly, I think Spinoza fits better with the later Wittgenstein, and those whom he has influenced, rather than the Russelian early Wittgenstein.

§10  The turn in the middle twentieth century philosophy away from the reductionism of Carnap and Russell, and towards the normative holism of Brandom and Sellars agrees with this basic Spinozan model of knowledge. The normative character of thought and language, and sensation in general, does not provide a justificatory basis of knowledge, but moreover is constitutive of thought itself. The basic rationality of the conceptual serves as a normative framework on which thought is at all possible. Thus, the inferential relations between sensations is modeled by rationality. Rational knowledge provides
form for received knowledge. This is Spinoza's insight, which translates well into the contemporary discourse of normative inferentialism.


Davidson, Donald. “Spinoza's Causal Theory of the Affects” in


