What Life Has Mind in a Physical Universe?

Dennis Bielfeldt

Imagine that you are held responsible for something that you could *not* have done. Somebody killed Mary, and the police think it is you. However, you have a solid excuse because you were out of town on the fateful night. Unfortunately, the police don't seem to grasp the significance of your exculpatory evidence. They believe that Mary died because someone killed her, and that you are the one who committed the crime—even though they know that you were not in the vicinity of the murder. But what kind of reasoning is this? Would it not be grossly unjust to be accused and charged with such a crime?

Now imagine that you are on trial, and the prosecuting attorney is detailing your guilt to the jury. He points to you: "Bob is the one who killed Mary, and the person sitting here is Bob!" The attorney continues, "I admit that that the defense will likely argue that Bob's being out of town on that night is somehow relevant to the question of his guilt, but do not be confused by this underhanded maneuver. You can see clearly that the man before you is the person who killed poor Mary. You have eyes, after all!"

You now await the verdict. Finally, the jury foreman reads, "On the issue of first-degree murder, the jury finds the defendant guilty as charged." At sentencing, the judge asks if you have any final words before incarceration. You spin around and see Mary's family in attendance. You begin, "I am so sorry that somebody killed Mary, but know that since I was not in town on the night of the murder, I could not have killed her. I would apologize to you were I guilty, but it is not possible for me to be guilty because I was not present at the crime. I cannot apologize for an action for which I cannot be responsible." You wait hopefully to discern the effect of your words. But Mary's family shake their heads sadly, and then the judge interrupts, "Since you still exhibit no remorse in this matter, I must hand out the harshest sentence available. You are hereby sentenced to death by lethal injection. Guards, take the prisoner away!"

What a crazy story! This could never happen, right? Clearly, you could not have done the dastardly deed because you are not causally connected to the act that was

done. It does not matter that it might *appear* to some that you did it, for you are causally disconnected from the crime and thus simply could not be guilty. Appearances do not always track with reality. *In reality*, you did not and could not kill Mary.[1]

Reflect upon the story and consider that in our everyday experience and decision-making we think that we can do other than what we did. (Clearly, the jury thought Bob could have chosen not to kill Mary.) We have *freedom*, and this ability to do other than what we did carries with it *responsibility*. There is something that we ought to do, and since we have the *freedom* either to do it or not, we are praiseworthy if we do so and blameworthy if we do not.[2] It is indeed part of the *manifest image* of our world that we are *agents* who could do other than what we did, and accordingly we deserve praise and gratitude if we do what is good and/or right. This manifest image of the world is how things *seem* to us.

But unfortunately, it is part of the *scientific image* of the world that my body and brain are complicated physical systems whose processes are realized by more basic physical entities whose behavior obeys inexorable laws of nature. The agent who seemingly acts freely is, we are told, actually a complex system of neurophysiological entities, properties and events whose occurrences are caused by other neurophysiological entities, properties and events.[3]

Thus, while I might admit that my body is part of that fateful causal chain issuing in the death of Mary, I clearly could not have caused it. Why? Even though witnesses say that I was there, my mind, my actual "I," which is classically conceived not to be in space at all, was nowhere near this event. Thoughts and intentions are mental events, not physical events, and since it makes no sense to say *where* they precisely are, they must be deemed not to be denizens of the spatial. It is not that the real "I" was thousands of miles away from the event, it is rather that it is absurd to suggest it could ever be spatially proximate to it.

So, Bob's position seems *prima facie* justified. Mary died, but Bob is not an agent with contra-causal agency and thus could not have *caused* the dying event. Accordingly, he has no *responsibility* for the event. In truth, *agent* Bob does not exist at all, at least not in the way often assumed. What is it that could be Bob apart from the complex physical processes comprising him? Clearly, agent Bob can have no *causal agency*. Bob has no *I* that *as an I*, can perform act X or ~X.

While Bob is confident that he could hot have killed Mary, the jury finds otherwise: He did it! Bob is judged culpable, though surely it cannot be. Analogously, we widely conceive ourselves to be free moral agents, deserving praise or blame. But neuroscience seemingly finds otherwise. It assumes that each and every brain state is caused by other brain states and relevant environmental inputs. Accordingly, we have neither agency nor freedom and thus could not have done it!

A Sketch of the Problem

THE CANONICAL MIND/BODY PROBLEM ARISES in part because we are prone to offer mental explanations for our behavior. Consider the best explanation of why Sally went to the airport today. Arguably, she went because she *believes* that her friend Monica is on a plane landing today, and she *desires* to see her. Such belief-desire explanations are common in our everyday life—so common, in fact, that many philosophers who deny their explanatory value term them "folk psychological ascriptions." Just as the common folk once attributed evil befalling them to demons—though there never were demons—so do commoners today attribute their actions to *mental causation* —though neuroscientists generally deny the existence of such causation.[4]

Sometimes theologians are unaware of the philosophical consensus on the contour and scope of the mind-body problem, and they try to solve or evade some of its difficult problems without fully understanding the issues motivating them. The mind-body problem arose in the seventeenth and eighteenth centuries as natural philosophers began to conceive the possibility that nature is *causally closed*. Consider the following ordered pair: $<\{x_1, x_2, x_3, \ldots x_n\}, C_{xy}>$. The first member of the duple lists all the entities, events or property instantiations in the universe, while the second claims that the members of this set are related causally.[5]

Denied by the formula is that there are entities, events or property instantiations outside the sum of natural entities, events or property instantiations, that cause natural entities, events or property instantiations. Also denied is that there are natural entities, events or property instantiations that can cause non-natural entities, events or property instantiations. The *causal closure of the physical* assures that putative non-natural or supernatural entities, events or properties are causally disconnected from natural entities, events or properties. The proscription against causal relations defined over the domains of the natural and non-natural is the problem with which Descartes, Spinoza, Leibniz, Hume, and Kant had to deal. How is human freedom possible when *only* natural entities, events and properties causally connect? *A fortiori*, and recalling our question in the first section of this paper, how is moral reality conceivable without human freedom?

One response to this problem is to deny that the physical is causally closed. Descartes advanced such a position, sometimes called *dualistic causal interactionism*. Accordingly, there are material things in space and time (*res extensa*) and mental things in time (*res cogitans*), and they somehow causally interact. Accordingly, the explanation why I raised my right arm might be that I desired to raise it, and I believed by moving my arm in certain ways it would raise. My desiring and believing (or perhaps willing) to move my body in a particular way thus explains the moving of it in a particular way.

Descartes further adhered to *substance dualism*, the view that everything that is can ultimately be sorted into one of two domains: There are mental substances (thoughts, desires, knowings, experiencings, believings, etc.) and material substances (entities, mass, velocity, shape, position, etc.). Causal relations are drawn only between members of these two disjoint sets.

Descartes, however, admitted to not knowing the mechanism by which causal connection between disparate ontological domains was possible and finally resorted to the perhaps tongue-in-cheek idea that the pineal gland, itself a physical substance, was somehow a "shuttlecock" between the mental and the physical.[6] Descartes' idea is simple enough: the soul *qua* soul is free as much as God is, but the soul is connected to the body in various ways limiting both its epistemic powers and its powers of movement. Being free is, for Descartes, what it is to be made in the image of God. The soul, like God, is immaterial and wholly free.

The problems of substance dualism and dualistic causal interactionism are legion and were mostly already appreciated in Descartes' time and immediately afterward. How is a causal connection definable between disparate ontological domains? How does a mental event cause a physical event without somehow introducing more energy or momentum into the physical system? How can we regard nature and brain as causally closed physically if there is yet an immaterial substance that brings about different events or properties in the natural order that would not have otherwise been brought about?

Because of the problems with dualistic causal interactionism, Spinoza embraced a "dual aspect theory." He espoused a neutral monism in which God is the single substance having two known attributes, the mental and the physical. God's being can be discerned in the mental order in His various nodes having epistemic agency and in the physical order in His world that knowers come to know. With this move, dualism is rejected along with much that is consonant with dualism, e.g., freedom and personal immortality.[7]

There were other early views much more compatible with dualism, notably the options of *occasionalism* and *pre-established* harmony. However, both avoided dualistic causal interactionism. Malebranche argued that our mental lives and physical lives run in parallel to each other because God "occasions" the bringing about of physical events and properties that are appropriate to the mental events and properties agent's experience. Leibniz's views are more complex, holding that God has coordinated a universe of panpsychic entities (monads) such that there appear to be causal connections between the mental and physical when, in fact, they are causally isolated. Every monad is "windowless," as it turns out. No genuine relations can exist among entities and events because all relations are actually monadic properties of substances. Instead of causal relations among substances (monads), there is a pre-established harmony coordinating them.

It was left to Kant, however, to bequeath to posterity a mind-body view that influenced the nineteenth century and the very early part of the twentieth century. Kant argued that while each and every event within the universe is caused by other events in the universe—and thus the causal closure of the physical is retained and personal freedom denied—our experience of ourselves is such that we can legitimately assert freedom, for we are immediately confronted with duty, and since "thou ought presupposes thou can," with freedom as well. From the standpoint of pure reason, we are without freedom, but from the standpoint of practical reason, we are entitled to regard ourselves as free. Simply put, we are phenomenally determined, but noumenally free.[8]

The solution that Kant, along with later thinkers such as Fichte, Schelling, and Hegel, adopts is that while the pure concepts of understanding must apply to the empirical ego—to the self as it is acted upon and acts within its environment—these concepts cannot apply to the transcendental field or ego, to the thinker whose pure concepts of understanding grasp the causal relations of the self in its context. The reason is simple: Both these pure categories of the understanding and the thinker thinking them are systematically illusive to being thought because they themselves are presupposed in any such thinking.[9]

The nineteenth century was an age of idealism, and it proved relatively easy to hold idealist-inspired monisms or dualisms by pointing to the obvious fact that the phenomenal world could not include within it the synthesizing ego from which it itself resulted. While the relationships among natural entities, events and properties resulted from that synthesis, the synthesis itself did not *cause* those relationships, for the category of cause was reserved for inter-worldly connections. Natural science was thus made consonant with the transcendental idealistic standpoint, as idea was regarded more fundamental than matter. Accordingly, neo-Kantianism could hold sway in philosophy departments in Germany with fundamental investigations of nature taking place down the hallway in German physics departments.

Beginning in Britain, however, the early twentieth century rejected much of the idealism of the nineteenth century and embraced *realist* and *materialist* assumptions. The effect in the mind/body discussion was immediate and recalled the Cartesian problematic: If ultimate reality is material, then how is the mental possible? How could it be that the physical processes of neurons and synapses in our brains can eventuate in thoughts about human equality, global warming, and the judging of a legal matter? How is it that the extensional and descriptive can give rise to the intensional and normative?[10] Physical reality is comprised of objects behaving in certain ways according to particular laws. How can such an unconscious collection of physical processes account for judging one logical proof superior to another? As Donald Davidson famously remarked, normativity and rationality "find no echo in

physical reality."[11] So how is critical judgment possible in a world that is ultimately constituted by physical entities, events, properties and processes?

The Contemporary Landscape

THERE ARE A NUMBER OF APPROACHES TO the mind/body problem in the twentieth century, many of which flesh out more deeply what the tradition had previously suggested. Notice that none of the positions I distinguish below retain overt appreciation for the Kantian "solution" regnant through much of the nineteenth century.

- *Dualism*. Some continue to point out that the mental and the physical are *different*, and thus there can be no reducibility of one to the other. To gain insight into contemporary dualism, it is important to distinguish between *substance dualism* and *property dualism*. While few today subscribe to the former view (*Cartesian dualism*), many nonetheless want to claim that mental properties do exist and that these properties cannot be reduced to the physical. For instance, my thinking of a golden mountain in France really is a mental event and not the firing of a batch of neurons. However, property dualists deny that there is an immaterial substance that accounts for, or causes, the thought. Rather, the thought, while mental, is somehow *physically realized*. Accordingly, the mental can neither be semantically nor metaphysically reducible to the physical, but it is nonetheless realized within a physical system. The precise nature of this realization is, of course, the question.
- *Logical Behaviorism*. This once popular view simply understands mental ascriptions as complex sets of stimulus-response conditionals. John is smart – has the mental property of being bright – if and only if when John is stimulated in appropriate ways, he responds in appropriate ways. He is hungry if and only if when presented with particular stimuli such as roast beef, he will eat the roast beef *ceteris paribus* ("all things remaining the same").[12] The salient point—what makes this behaviorism *logical*—is that mental terms are thought to *just mean* their appropriate stimulus-response realizers. What is the meaning of 'smart' when applied to a student? It is nothing more than 'if the student S is stimulated X-ly, student S responds Y-ly,' and 'if stimulated Z-ly, S will respond W-ly,' etc.
- *Identity Theory*. This view claims that there is one thing that manifests itself in both mental and physical ways, or more popularly, that the mental *just is* the physical. One type of identity theory espouses *type-type identity (or reduction)*, claiming that each and every *type* of mental event can be reduced to an appropriate type of physical event. While

it might seem that mental events are different than physical events, if whenever a particular mental state arises a particular physical state is present, one can go further and in principle do away with the mental, claiming it to be another way of talking about, or referring to, the physical. The *eliminativist* claiming that mental events and properties do not exist stands close to the reductive identity theorist. For both, there is only the physical. But whereas the type-type *reductionist* nonetheless thinks that one can still employ mental talk, the eliminativist rejects such talk altogether.

- *Non-Reductive Physicalism*. Because of its popularity, I present it as a separate view, but really it is a species of *identity theory*. It asserts, in fact, a *token-token identity*, claiming that while each mental event is coextensive with some physical event or other, there is no possibility of reducing the mental to the physical because of the *multiple realization* of the mental in the physical. Such multiple realization seems to be empirically verifiable, in fact. There are many occasions when a brain-damaged person seems to have the same thoughts, experiences or attitudes with different parts of the brain active than those areas that had been damaged.[13] *Token-token identities* guarantee that only the physical ultimately exists, but the *multiple realization* of the mental scuttles any reductionist agendas.
- *Functionalism*. This view, which can be combined with various others, claims that the identity conditions of mental states are found in the complex relationship such states have with inputs, outputs and other mental states. While Logical Behaviorism could only individuate mental states in terms of input/output conditionals, functionalism realizes that oftentimes there are mental processes occurring even when there are not specific inputs and outputs. Functionalism captures the fact that mental states of people can change without changes to the external environment. In most versions it is consistent with non-reductive physicalism. The idea is simple enough: The human mind, and its mental events, properties and states, is realized by the neuro-machinery of the brain just as the Word program I am using right now is realized by the Mac Pro hardware on which this program is running. A Word program is multiply realizable, of course, because it can be run on many different machines and many different platforms. Any system that can emulate "~, v, &, →, ↔" can run the program, though it might be ungainly to do so with levers and pulleys.

This general overview should give the reader a sense of the scope of the contemporary mind/body discussion. The questions remain, however. How is it that what

seems closest to us—our thoughts, fears, aspirations, dreams and judgments—is all physically realized? How is the normative possible in a physical universe without normativity? How does *ought* emerge from *is*? The pre-Kantian problematic reasserts itself with a vengeance. To better understand the magnitude of the problem, it is helpful to unpack two crucially important notions that occur throughout the contemporary discussion: supervenience and downward causation.

Supervenience

Those espousing non-reductive physicalism oftentimes employ *supervenience*, a metaphysical (though sometimes semantic) notion supposedly asserting an asymmetrical dependency relationship between groups of entities, events or properties. The idea is simple enough. Property group *A* supervenes on *B* if and only if a complete specification of *B*-properties determines the distribution of *A*-properties. This means that whenever the B-properties are set, so are the A-properties, or alternately, if any two domains are A-discernible, they must be B-discernible as well.[14] Thus, if the mental supervenes upon the neuro-physiological, then molecule-by-molecule brain replicas *must* be in the same mental state. Supervenience offers a kind of constraint upon the mental, keeping it non-reducibly tied to the physical.

At this point it is useful to review the standard supervenience formulations with an eye to understanding the supervenience of the mental upon the physical. Below are Jaegwon Kim's classic formulations of *weak* and *strong supervenience*:

- A *weakly supervenes* on B if and only if, necessarily, for any object *x* and any property F in A, if *x* has F, then there exists a property G in B such that *x* has G, and if any *y* has G, it has F.[15]
- A *strongly supervenes* on B if and only if, necessarily, for any object *x* and any property F in A, if *x* has F, then there exists a property G in B such that *x* has G, and *necessarily*, if any *y* has G, it has F.[16]

Weak supervenience disallows placing in the same world B-duplicates that are not A-duplicates, while yet permitting B-duplicates that are not A-duplicates in other possible worlds. Accordingly, it asserts an *intra-world*, but not *cross-world* constraint. *Strong supervenience*, on the other hand, claims a cross-world or inter-world constraint by asserting a *rigid covariance* of lower-level and upper-level properties. Accordingly, strong supervenience supports counterfactuals of this form: *were y* to possess G in B, it *would* possess F in A. Without this inter-worldly constraint, the higher-level A properties could seemingly vary widely with a slight modification of the lower-level B properties. While weak supervenience disallows two indiscernible individuals occupying the same world to be discernible with respect to their super-

vening properties, strong supervenience disallows any two possible individuals to be subveniently indiscernible, yet superveniently discernible.

Another way of understanding the difference is to conceive of weak supervenience as claiming an accidental regularity between the subvenient and supervenient, while understanding strong supervenience to express a nomological connection between the two. This can be easily seen in these two supervenience formulations where '□' means 'necessarily,' and 'P' and 'M' range over physical and mental properties respectively.

- [Weak Supervenience] $\Box (\forall x)(\forall M)\{Mx \rightarrow [(\exists P)Px \,\&\, (\forall y)(Py \rightarrow My)]\}$
- [Strong Supervenience] $\Box (\forall x)(\forall M)\{Mx \rightarrow [(\exists P)Px \,\&\, (\forall y)\,\Box\,(Py \rightarrow My)]\}$

Weak supervenience states that *as a matter of fact*, the tokening of mental properties correlates with the tokening of physical properties, not that they *must* so correlate. Thus, while it is true that John displays certain mental properties when certain physical properties are instantiated, it need not be the case. Strong supervenience declares that for any x, and any mental property M, if x has M, then there is some natural property P that x also has, such that any x having P necessarily has M. This claims that M and P *must* be coninstantiated. Strong supervenience seems to offer constraints on the assignment of mental properties given what is physically realized. Accordingly, we *cannot conceive* that John tokens a set of mental properties when displaying some set of neuro-behavioral properties, and not say he is tokening these mental properties on each and every possible tokening of those neuro-behavioral properties. Because of this, strong supervenience is often regarded as the better candidate for mental supervenience than its weaker counterpart. It must be noted, however, that for both the tokening of mental properties in the agent is somehow determined by the tokening of some set of physical properties in that agent.[17]

Unfortunately, neither formulation can likely account for the instantiation of supervening mental properties on the physical base of the agent. The problem is that "meaning is not in the head." Hilary Putnam famously pointed out that two thinkers indiscernible with respect to their physical properties can still differ with respect to their mental properties. The reason for this is that being in mental state M_1 regarding object O, is to bear certain representational properties toward O—one might say the "look" of O—*and* to possess *nonrepresentational* properties towards O—normally considered to be causal. Accordingly, to *mean* water is not simply abstractly to mean something that is wet, colorless, odorless and tasteless, but also to *mean* that which *causes* those particular representations in the utterer.[18]

Say that earth John has a concept of water. He has proper representations of it and stands in the appropriate causal relations to it. Now John* on twin earth, a molecule-by-molecule replica of John on earth, also has representations of a colorless,

odorless and tasteless liquid comprising twin earth lakes and rivers. However, when John* utters 'water,' he does not refer to water as John does on earth because there is no H_2O on twin earth, only XYZ. Since XYZ causes John*'s representations on twin earth, John* means XYZ and not H_2O. While John and John* are in the same neurophysiological state, John refers to H_2O with 'water' while John* refers to XYZ. Moreover, since the individuation of mental states is via the *content* of those states, John saying 'water is wet' is not the same thing as John* saying it, for John asserts 'H_2O is wet' while John* declares 'XYZ is wet.' Since by stipulation John and John* are in identical neurophysiological states, semantic supervenience fails; there is a supervenient semantic difference without a subvenient physical difference.[19]

The upshot of this is that semantics cannot be merely internal, but rather it must be understood externally (content externalism).[20] Accordingly, weak or strong supervenience seemingly must give way to *global supervenience* in semantics. While the first two apply indiscernibility conditions *locally*, global supervenience expresses *global* indiscernibility. Kim formulates the latter notion as follows:

- A *globally supervenes* on B if and only if, any two worlds indiscernible with respect to B-properties are indiscernibility with respect to A-properties.[21]

This more holistic sense of supervenience simply asserts that no two possible worlds are physically but not mentally indiscernible. While there are philosophical problems with global supervenience, it can take into account both what is going on inside and outside John's head.[22] Clearly, the total physical states do differ for John and John*, for John is causally related to H_2O and John* to XYZ.

What is important is to realize that supervenience provides the physicalist with what he or she needs to make progress in the direction of a "unity of science" approach holding that the special sciences are somehow *dependent* upon physics even if they cannot be *reduced* to physics. The idea is that the ultimate constituents of reality are those things (points? particles?) quantified over by our most fundamental physical theory. It is here that one finds the most profound *causal map* of reality, here that one encounters the deepest laws of nature. Accordingly, psychology is supervenient upon neurophysiology, which supervenes upon biochemistry, which supervenes upon chemistry, which supervenes upon physics. (I could add more rungs to this ladder.) Simply put, mental events are what they are because of the distribution of neuro-properties, which are what they are due to biochemical properties, etc. Supervenience seemingly precludes the possibility of downward causality, a bringing about of a particular distribution of neuro-properties because of the tokening of certain mental properties.[23] What supervenience seemingly precludes is the notion of downward causality, the idea that the mental, in so far as it is mental, can causally affect the physical.

Downward Causation

Imagine any mental event M_1. If one is not a substance dualist, one must assert that M_1 is realized by some physical event P_1. Now let us say that the particular mental event M_1 causes another mental event M_2. (My thought of Wanda reminded me of a fish.) But if one is not a substance dualist then M_2 must be realized by some physical event P_2. Notice how odd it is to say that 'M_1 causes M_2' when we know that P_1 is sufficient for M_1, and P_2 is sufficient for M_2. It seems, in fact, that if we were to use the word "cause" at all, we might want to say that the physical realizers cause the mental events. But now consider P_1 and P_2. Clearly, the fact that M_1 can be said to cause M_2 is that M_1 is realized by P_1 that itself causes P_2 which is itself sufficient for M_2. There does not, in fact, seem to be any *downward causation* at all in this system. M_1 does not downwardly cause P_2 but is realized by P_1 that simply causes P_2.[24]

This problem is generalizable into the problem of human agency. If my willing of raising my arm (M_1) is to cause my arm's movement (P_2), then it cannot be due to some physical realizer P_1 causing P_2, for then the mental has not been causally efficacious in the movement of my arm. What is important is that mental *qua* mental does *not* causally bring about P_2. While one might say that M_1 is causally *relevant* for P_2–P_1 would perhaps not have been present without M_1—causal *efficacy* does not follow. For an event to be causally efficacious for another event, it must be the case that if the former had not happened, the latter would not have happened either. Clearly, P_2 would not have happened without P_1, although it could have happened without M_1.[25]

Taking Stock and Theological Misunderstanding

So, where has this rather technical discussion led us? For Bob to be responsible for his actions, he must have agency, that is, he must be an entity that causally connects to his external environment and can freely have done other than what he did in fact do. Since much of the contemporary work in the philosophy of mind has sought to explain or account for our mental life without violating the causal closure of the physical, the discussion has assumed as wrongheaded or hopelessly misguided the intuition that many non-philosophers have that morality demands *contra-causal freedom*, the idea that one can choose to do X rather than ~X, and that one's choosing and doing is not necessitated by antecedent natural conditions or causes. Just as we no longer believe in phlogiston, so can we no longer indulge the fantasy that there are incorporeal agents (souls) that freely choose to move the physical world in different ways.

It is important to point out that no matter how technical the discussions become in the contemporary philosophy of mind, they take place upon the same ground

marked out by Descartes almost four centuries ago. Moreover, the same problems long ago recognized continue to mount serious challenges to moral life today, at least in so far as people still reflect upon them.

Unfortunately, theologians have consistently avoided entering the technical discussions in the philosophy of mind and have, accordingly, oftentimes not understood fully what is at stake. For instance, a recent article by theologian Sybille Rolf shows initial promise in dealing with the intractable issue of how to think personhood when human freedom, mental causation and moral responsibility must be realized within a physical universe where neuroscience seemingly offers the deepest "causal map" of human experiencing, thinking and behaving. In "Die Kommunikativität des Menschlichen: Überlegungen zum Verhältnis von Leib und Seele im Anschluss Martin Luthers,"[26] Rolf sketches a possible way to overcome the current impasse in the mind/body discussion by appropriating a specifically *theological* resource, the *communicatio idiomatum*. Moreover, she suggests that Luther had something very interesting to say about all of this. Could Luther somehow be a resource in the face of this most difficult of problems?

Below I sum up Rolf's argument for a "communicative model," showing how her model fails to address the profound issues confronting the mind/body theorist. I conclude with a reflection on her use of the Joest/Ebeling relational model of personhood, and her commitment to a linguistic ontology, suggesting that this way of proceeding does not take seriously enough the problem with which men and women have been dealing since the Enlightenment: How is mind (mental causation) possible in a physicalistic universe?

Communicative Relationality and Evaluation

Instead of conceiving the problem as how to square the immateriality of mental causation with a physical brain—the classic body/soul approach—Rolf asks us to take the two natures of Christ as a starting point into the problem: "Christ is the true image of God, [so] it is theologically legitimate to look to the reality of Jesus Christ in examining the reality of human being."[27] Rolf suggests that human personhood is similar enough to Christ's personhood to grant *prima facie* legitimation for employing the *communicatio idiomatum* in understanding the mind/body problem. Rolf points out that the unity of the two natures of Christ prohibits an interpretation of those natures *dualistically* and suggests that the unity of Christ's person in His divine and human natures can be a hermeneutical key to unpack the unity of the mind/body in each person. Accordingly, "the communication between God and human being [in Christ] is interpretable as a test case for the question of the possibility of mental and physical processes in general."[28]

Rolf quotes Luther at length in the first passage from his sermon on John 6:51, where Luther addresses the well-known image of the unity of fire and iron.[29] Just as fire penetrates the iron, so too does the divine nature penetrate the human (*durchgöttert*). There is neither a dualism of natures in Christ nor a reducibility of one nature to the other (monism). Rolf points out that Luther carries over the structural characteristics of the iron interpenetrated by fire into a discussion of soul (*Seele*), body (*Leib*), and spirit (*Geist*) in his 1521 Magnificat.[30]

For Luther, the soul and spirit concern reason. While the spirit has insight into the eternal and invisible, the soul is the living principle of the person concerned with natural reason. While Luther explicitly says that the soul can exist without the body, but not the body without the soul,[31] Rolf believes that this does not commit Luther to substance dualism and all of its attendant problems: "Had the Reformer employed the image of heated (*glühenden*) iron explicitly not only for the reality of the person of Jesus Christ, but also for the relation of body and soul, he would have avoided an obvious dualism."[32]

Rolf wants to understand the soul as the living principle (*Lebensprinzip*) of the body, and to hold that there exists a reciprocal dynamic exchange between soul and body characterized by a *communicatio idiomatum*.[33] Moreover, there is a reciprocal dynamic exchange between the soul and Christ making them "one body" (*ein Leib*). All of this means, thinks Rolf, that we can affirm *Kommunikativität als Strukturmerkmal des Menschlichen bei Luther*.[34]

But what does this putative communication of natures amount to? Is there a divine reality perichoretically interpenetrating human reality in Christ grounding some kind of interpenetration by mind of the body? Is any of this relevant to saving mental causation?

Clearly, Rolf wants to escape the intractability of the mind/body problem by moving the discussion into a new key, one taking a cue from Joest and Ebeling. She claims that the soul is human being in its relationality (*Bezogenheit*), its "being for" (*Für-Sein*) the other and itself, a relationality constituted as well by the soul's relation to the ground of its own possibility as "being for."[35] Predictably, Rolf connects this relationality to Luther's proclamation of the Gospel, for the *performative* power of Gospel proclamation emphasizes the communication between human being and God accomplished in the soul through the medium of the Word. Having established a connection back to Luther, she declares: "Body and soul are to be sure distinguishable, but neither separate from each other nor bound into a third thing, a new unity, nor graspable as a substantial entity distinguished from them. They form distinctive aspects of human *Dasein*, that on their own have different effects upon the other."[36] Modeling body and soul as distinctive aspects of *Dasein* can be aided

by developing a linguistic ontology where communication becomes an *existentielle Wesensmitteilung* inside a matrix of relations.

Rolf has more to say about her model, pointing out repeatedly that it overcomes the dichotomy between dualism and monism in a way that can be made consonant with the analogy of heated iron and the reality of the two natures of Christ. She assumes that Luther held to a view of personhood and substance that separated him from the Catholic theologians of his day, a view that asserts that relations and their relata are equally primordial.[37]

Unfortunately, there is nothing she can say about her model that improves its chances of either being true to Luther or aiding in the mind/body problem. I spent a great deal of time in this paper talking about the mind/body problem in order that any position putatively addressing it could be fairly evaluated in light of the actual problem and not some caricature of it. The general situation is this: *There seems no way short of substance dualism (or perhaps panphysicism) to allow for the mental (or perhaps consciousness) to have causal characteristics*.[38] But if mental causation is not possible, it is difficult to see how the will could be contra-causally free. So how does Rolf's communicative model help in granting mind causal powers?

The short answer, lamentably, is that what she writes is basically irrelevant to the problem at hand. The question is not that of the psychosomatic unity of soul and body, but rather how the mental is possible in a causally closed physical universe. More to the point, the question is a *causal* one. For there to be a true communication of idioms entailing mental properties affecting the distribution of neuro-properties, as well as vice-versa, there must be specifiable a *mechanism* by which this is possible. But she suggests none. Rolf's model does not help us in conceiving downward causation, the *sine qua non* of physicalist mental causation. To say that soul and body are distinctive aspects of existence (*Dasein*) does not really engage the metaphysical presuppositions of much of neuroscience holding that the ultimate causal map of "mind" is neural.

The move to find in the back-and-forth of language a key to the mind/body problem begs the question as well because, presumably, language itself is physically realized. Simply put, the entire mind/body problem is logically prior to language. To say x rather than to say y is itself metaphysically dependent on some neuro-actualizations, themselves caused by other neuro-actualizations and environmental inputs. Language might be necessary to articulate and express the problem of mind, but it does not *create* it. One must distinguish the phenomenology of human existence from the subvenient neuro-actualizations metaphysically sufficient for that phenomenology. Human phenomenology in all of its complexity is precisely a supervening higher-level property group metaphysically dependent upon a subvening

lower-level physical region. Given the importance of the Other in phenomenology, one's subvenient property group would likely need to be wide enough to include both neuro-events and the external environment causally connected to those neuro-events. Accordingly, one might say that phenomenology, including language, globally supervenes upon brains and other particulars causally connected to them.

The other basic problem with Rolf's analysis is her commitment to the Joest/Ebeling model of the ontology of personhood. In my opinion, it is not likely that Luther held a relational personalist ontology asserting that the being of a person is determined by the relationships that person has to a congeries of significant other entities. Luther was trained at Erfurt and studied logic from *via moderna* teachers who held that what ultimately exists are particular substances having particular qualities. I have found no evidence to suggest that Luther in his semantics ever departed from this understanding.[39] The notion of a relation without relata would have been, for Luther, simply incoherent. Relationships are defined by what they relate. Relationships do not *create* relata, because without relata, there cannot be a relationship in the first place.[40]

It is important to recall that Luther was familiar with the category of *relatio* because he was trained in Aristotle. Because of this, it would have been natural for him to conceive a relation as monadic relational property, not a dyadic property relating discrete substances.[41] The idea of an *internal relation*, where the being of the relation determines the being of the relata, is unknown to him. Moreover, Luther's Ockhamist training would likely have taught him an *anti-realism* with respect to relations, for as a term of second intention, a relation always signifies a being of reason and not a thing.

For Luther and thinkers before him, the person Paul is a particular substance having particular accidents. Secondary substances like 'man' can be said of Paul, and any number of accidents can be present in him. While Luther did not invent a new ontology to understand personhood, he did, however, grasp that human beings also have a theological dimension, a way of being in God that cannot facilely be expressed in Aristotelian categories. It is here that sense can be made of Joest's claims in *Ontologie der Person bei Luther*[42] that the person *coram Deo* is not constituted by the righteousness he or she might have as an accidental property, but rather the person has that righteousness only by the activity of God in him or her. This activity of God in the believer is the latter's ex-centric existence, an existence not merely efficiently caused by the external agency of God, but one in which the agency of God is intimately involved in, with, and under the agency of the believer.

Modeling body and soul as "distinct aspects of *Dasein*" that "have their effects on each other" may make some sense in Joest's analysis of Luther, where *spiritus*

concerns the basic decision before God for belief or unbelief and *corpus* the person's relationship to the world, but it has very little to do with the classic mind/body problem which has been my concern. Pointing to the psycho-somatic unity of mind/body and finding a theological image to bespeak such unity does not touch the question of how the psyche can ultimately escape either being *eliminated* in the face of contemporary physicalism or being *reduced* to or *identified* with physical processes. If mental causation is not possible, then putative "communicative activity" will surely not help us at all.

What Kind of Life is Available?

It is now time to treat the question at hand. What does the mind/body problem have to do with personhood and issues of life generally? Why have we spent so much time on non-reductive physicalism and its variants?

We have done so because if substance dualism is a nonstarter and we deny that consciousness itself is basic to the universe, we are left with property dualism and various compatibilist strategies in conceiving the relationship of the mental to the physical. In the face of this, I wish to explore a slightly different option, one that does not begin confidently with the truth of the scientific image of the world – while trying to make our manifest image somehow compatible with it -- but rather commences in the immediacy of the manifest image itself, daring to claim that the particularity of human experience itself has implications for both truth and ontology.

I wish to suggest that it is our first-person perspective on experience that grants life its preciousness. After all, to be a child of God is finally to *enjoy* creation.[43] This means that our particular seeings, conceivings, and knowings are precious. When thinking about ending the life of another (or our own lives), or when considering death generally, what is lost is not for us the realities of our brain and their functioning, but rather our *experiences* of thinking, loving, fearing, discovering, and feeling. Death is an end to the physical and mental, to be sure, but it is primarily significant in ending the mental, the *what-it-is-to-be-meness* that we cannot put into words. What is ultimately lost are not those regions of being to which our experience can be *reduced*, or which otherwise physically account for our experience, but that which is *irreducible*. Moreover, what is lost are not irreducible things in general, but *my* irreducible experiences, *my* continuity of consciousness, *my* ability to think X rather than ~X. In other words, what is lost is my very *freedom*, my sense of being able to be other than what I am. What is lost is finally *the irreducible features of me*.

There are billions of human brains in the world, and billions of human brains have existed before mine. There are tens of billions of animal and reptile brains that

have lived, all hardwired for outputting efficiently beneficial behaviors as functions of relevant inputs. While there have been many more human synapses formed than there are elementary particles in the universe, there has been only one *me*, only one person with this precise set of proclivities, experiences, memories, feelings, actions, affections, hopes, and passions. Only one person exists and will ever exist that has precisely *this* set of *experiences*.

Nonreductive physicalist strategies purport to allow for personhood while yet claiming that everything that exists is physical. Such attempts are motivated by a deep commitment to the scientific image of the world, a commitment to materialist or physicalist metaphysics. While such strategies can, in various degrees, provide insight into what it is to be a person, they tend ultimately to downplay the preciousness of that person, *his* or *her* life, and *his* or *her* right to live. While Bob might have the only brain that ever existed with this exact arrangement of physical entities, properties, processes, events, etc., the *constituents* of his particular arrangement are nonetheless extraordinarily common.

Commitment to nonreductive physicalist assumptions privileges certain questions and suggests certain trajectories of adjudication. For instance, the question of mental particularity becomes a question of how constituent parts should be ordered. While one might grant that a particular physical system can realize the particularly mental, can one facilely develop a set of defeaters for the perpetuation of a particular arrangement of the physical? For example, what if the physical system is *deficient* or *degraded*? What if its actualization will cause a real experience of suffering either in the mental life realized by the physical system or in the mental lives realized by other physical systems? If the reality of the physical is primary, and we must graft the mental somehow onto or into this physical reality, then our view of what is precious will have to run through the physical. Lamentably, this perspective can obviate what stands right before us.

This is not likely the way forward, however, if what we have said about the problems of nonreductive physicalism have been grasped. What is important is precisely the *mental qua mental*, and it is the perpetuation of this reality that is at issue with any defeaters. It is true that sometimes the *subjective experience* of a person is degraded to the point that they themselves opt to end their own experiences. This is the situation where one might try to give good arguments against suicide. However, for most people, this is not the case. We oftentimes seek to end, or counsel to end, the subjective experience of others or seek to prevent, or counsel to prevent, the subjective experience of others. If the *mental qua mental* is *prima facie* precious, then on what basis can we do this? What arguments from the experience of the mother can weigh against the very possibility of subjective experience for her would-be offspring?

A Concluding Less-than-Scientific Epilogue

HUMAN BEINGS LIVE IN THE WORLD OF the phenomenological, in the region of that which is given to consciousness. We live in the phenomenological knowing that causal connections are mostly not drawn at the level, but at the level(s) below that level. It's a feature of our time that the subvenient is thought to present a more accurate causal map than the supervenient. As we have seen, the problem with nonreductive physicalist views is that it becomes difficult to see how irreducible causal connections can be drawn between mental events, causal connections consonant with our first-person mental experience. Since we live in a time in which to be is to have causal powers, non-reductive physicalism with its denial of downward causation, downplays the very reality of the mental, and accordingly, suppresses those issues of life dependent upon the mental.

In ages past, the reality of God reinforced the reality of the mental. If human beings were made in the image of God and God is not material, then the being of man and woman was not considered to be ultimately material either. The basic dualism between God and world, creator and creature, is replayed in the life of the creature who can either love the immaterial from which he or she ultimately came or become enmeshed in the material from which he or she was proximately built. A human being's *psychosomatic unity*, seemingly gives priority to the latter, and that human being grows and dies like other material beings.

But the *imago Dei* calls humans back into a dualism not so easily resolved, a dualism as irreducible as the two natures of Christ Himself. I believe that the only way to make real progress on the issue of the "life of the mind" in our time is to be as scientific as Kant was while remaining as open as he was to the reality of human experience itself. Non-reductive physicalism attempts to make harmonious what is clearly dissonant. I believe it better to address the dissonance forthrightly.

From the standpoint of the best science of our day, the best *neuroscience*, Bob should not be held wholly responsible for what he has done. After all, he is a complex of physical actualizations whose causes are physical. There is no possibility of freedom outside the empirical order and, thus, no moral responsibility. Yet, from the standpoint of his immediate experience, he is an agent with contra-causal freedom whose mental life connects with the world around him. He is a child of God guilty before divine judgment yet liberated by grace. These two perspectives cannot be synthesized by unity of science proposals (e.g, non-reductionisms, functionalisms) seeking to account for the *particularity* of experience by appealing to *general* or *universal* features of the brain. But what exactly motivates the search for compatibility?

Famously, Kant argued in the third antinomy in his *Critique of Pure Reason* that moral experience and its attendant freedom can be thought as consistent with

empirical determinism, but that consistency is not found in the *content* of what is thought but depends upon a recognition of the *standpoint* we occupy in doing the thinking. We are clearly denizens of the empirical with its universal determinism, and we simultaneously inhabit another world, one that cannot be accessed scientifically but is in some way *deeper* than the scientific because it plays at the level of the transcendental conditions of science.

Neuroscience can indeed give us the causal map of human behavior, but reflection upon this causal map shows that it cannot be simply identified with *how things are*. While it is the nature of human beings to *understand* the world in this way, human beings have another nature, one that *experiences* the world in all its particularity, in its tones, its moral successes and failures, its beauty and ugliness, and this experience is prior to human cognition, especially the cognition of the universal law of causation. Children clearly encounter the particularity of experience and do not doubt their own freedom—until they come to appreciate the principle of universal causality. So why do we so quickly abandon the ontology of the phenomenological to that which supposedly realizes it?

What if we could recover the Kantian perspective in the philosophy of mind, a perspective that recognizes the *incompatibility* of the physical and mental while at the same time not downplaying one of those perspectives in favor of the other? What if, like Kant, we searched for the conditions for the simultaneous incompatibility of the physical and the mental: what Kant called the *sensible* and the *intelligible*? What if we took seriously that there really is an *ought*, an *ought* that is not accounted for on the basis of the *is* of nature, an *ought* that nevertheless truly exists?[44] What I am suggesting is to run the Kantian solution without adopting its associated idealistic ontology.

Consider the two natures of Christ. They seemingly form incompatible property groups coninstantiated by the hypostasis of the second person of the Trinity. Notice that their disparate natures are not taken up conceptually by the person of Christ, but merely coninstantiated in Him.[45] Heresy results in trying to account for one nature on the basis of the other. The way to Chalcedon is paved by recognizing that the dualism of the creative and created is held together in the particularity of the Christ who unites these natures in and through their difference. There is no *compatibility* of natures, but simply the recognition that the *incompatible* can be united.

The point is that we must avoid the temptation too quickly to claim a *compatibility* or a *unity* of the natures, a compatibility towards which the contemporary mind/body discussion aims. Maybe it is time to remind ourselves simply of the *disunity* of these perspectives. Maybe all we can do is confess that we are "wholly determined," yet "wholly free," and that our identity as human beings is found in the simultaneity of these perspectives. If so, perhaps we might discover that the very nature of human life in a physical universe is found in the disparity of these perspectives and the

incompatibility of the natures that each suggest. Ultimately, just as we cannot understand the Christ without grasping His disparate natures, so we cannot understand our own life without understanding this unity of the disunity of perspectives in which it is lived. Starting here means that everything remains precious, and clearly decisions about life depend upon what we regard ultimately to be precious.

Bob is thus always guilty and paradoxically not guilty. What judgment we proffer depends upon context, the identification of which demands wisdom. The point is that Bob, like all of us, cannot escape the moral perspective with its freedom and agent causality, for ultimately that perspective is ingredient in who we profoundly are.

***Verba Vitae*'s General Editor Dennis Bielfeldt** *is Founding President of the Institute of Lutheran Theology, and Chancellor and Professor of Philosophical Theology at its Christ School of Theology. Having taught previously at Bethany College, Grand View University, and Iowa State University, Rev. Bielfeldt is currently Emeritus Professor of Philosophy at South Dakota State University, holding an M.A. and Ph.D. from the University of Iowa. He has published books and many articles in academic journals and encyclopedias.*

Notes

1. Arguably, the distinction between appearance and reality is fundamental in Plato, and did not Whitehead say that Western philosophy is merely a "footnote" on Plato? See Alfred North Whitehead, *Process and Reality* (New York: Free Press, 1979), 39: "The safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato."

2. The freedom to which I refer here is what Kant meant when characterizing freedom "in the cosmological sense" as "the power to begin a state *on one's own*" (A533/B561). See *The Critique of Pure Reason*, trans. Werner Pluhar (Indianapolis, IN; Cambridge, UK: Hackett Publishing, 1996), 535ff. Hereafter, CPR. Kant continues, "*Freedom in the practical meaning* of the term is the independence of our power of choice from coercion by impulses of sensibility.... The human power of choice, is an arbitrium not brutum but liberum; for its action is not made necessary by sensibility, but the human being has a power to determine himself on his own, independently of coercion by sensible impulses." CPR, 536 (A534/B562).

3. The distinction between the manifest and scientific image of the world was made very clear by Wilfrid Sellars. See "Philosophy and the Scientific Image of Man," 1-40, in Wilfrid Sellars & Richard Rorty, *Empiricism and the Philosophy of Mind* (London: Routledge and Kegan Paul, Ltd., 1963). The manifest image is "the framework in terms of which man came to be aware of himself as man-in-the-world. It is the framework in terms of which, to use an existentialist turn of phrase, man first encountered himself—which is,

of course, when he came to be man" (6). Sellars continues, "the scientific image presents itself as a rival image. From its point of view the manifest image on which it rests is an 'inadequate' but pragmatically useful likeness of a reality" (20).

4. While eliminativism of the mental had been suggested by Sellars, Quine, Feyerabend and Rorty, the contemporary discussion builds particularly upon the work of Paul and Patricia Churchland and Stephen Stich. See William Ramsey, "Eliminative Materialism," The *Stanford Encyclopedia of Philosophy* (Summer 2013 Edition), Edward N. Zalta (ed.), http://plato.stanford.edu/archives/sum2013/entries/materialism-eliminative/. Accessed November 2024.

5. My example is overly simple, showing that *one* entity, event or property is causally related to another entity, event or property. In reality, 'x' and 'y' in 'Cxy' likely refer to conjunctions of other entities, events or properties.

6. Gilbert Ryle once likened Descartes' pineal gland to a "shuttlecock." Some have suggested that a philosopher of the stature of Descartes could not have truly believed that a physical entity, the pineal gland, could somehow account for the connection between the mental and the physical. The problem with any dualism is how to connect the disparate regions. So, is that which connects them a member of one of them? If so, how is it connected to the other? If not, then dualism itself is sacrificed. Analogously, consider Plato's Demiurge in the *Timaeus*. Is the Demiurge a member of the world of becoming or the world of being? How can it fashion being into becoming without in some sense standing outside both being and becoming?

7. Spinoza understood that we are free when we come to understand the necessity of all things. Clearly, he rejects *contra-causal freedom*, the notion that a person (or a node) could really be other than what he is or could have done other than what he did. In fact, for Spinoza, freedom is found in grasping the necessity of all things

8. Kant argues that universal determinism characterizes the "world of appearances," that is, empirical reality actualized through sensibility in time and space. We have, however, no warrant to claim that such determinism holds of things in themselves. Hence, we are allowed to claim a freedom in reason that, while consistent with empirical determinism, is of a different order, an *intelligible* one rather than a *sensible* one. Kant writes: "But such an intelligible cause is not, as regards its causality, determined by appearances, although its effects appear and thus can be determined by other appearances. Hence this cause, along with its causality, is outside the series of empirical conditions, whereas its effects are encountered with the series. Hence the effect can be considered as free with regard to its intelligible cause, and yet with regard to appearances be considered simultaneously as resulting from these according to the necessity of nature." CPR, 538 (A537/B565).

9. The question of the ontological status of transcendental conditions quickly surfaces. Transcendental conditions are not part of empirical reality because they putatively ground such reality by constituting necessary conditions for its possibility. Yet, they are also clearly not a transcendent supersensible metaphysical reality about which metaphysics aims to make claims but can never rightly assert.

10. One might think of the intensional as that by virtue of which the extensional is picked out. The intensional accordingly specifies properties, and the extensional is comprised of entities possessing those properties.

11. Donald Davidson, "Psychology as Philosophy," in *Essays on Actions and Events* (Oxford: Oxford University Press, 1980), 231.

12. It turned out to be extremely difficult to articulate precise *ceteris paribus* clauses, one of the reasons that Logical Behaviorism is no longer popular.

13. There is much to be concerned about in my use of "the same" in this expression. Perhaps it is better to say that tokens of a particular type normally associated with one region of the brain are now associated with another region.

14. At its simplest, the supervenience relation defines a function from subvenient group B to supervenient group A, such that every x in B maps to a unique y in A. What is precluded is some x in B mapping to two different y in A. Broadly conceived, one can think of supervenience as asserting either a semantic relationship between meaning groups, between meaning and physical marks, or as asserting a metaphysical relationship among groups of properties.

15. Jaegwon Kim, *Supervenience and Mind* (Cambridge: Cambridge University Press, 1993), 80.

16. Ibid.

17. Early on it was assumed that the supervenience relation entailed an asymmetrical dependency relation of the supervenient upon the subvenient. However, Kim has shown that supervenience is indifferent to which way metaphysical dependency relationships are drawn or even if they are drawn. Supervenience merely expresses a covariance of property groups, not the dependence of one upon the other. For instance, just because metric weights supervene on English weights does not entail that English weights do not supervene on metric weights. They, in fact, do. Clearly, supervenience becomes less interesting to those wanting it to impose physical constraints on the mental when the two property groups are covariant. For an excellent introduction to the current supervenience discussion see Brian McLaughlin and Karen Bennett, "Supervenience," *The Stanford Encyclopedia of Philosophy* (Winter 2023 Edition), Edward N. Zalta & Uri Nodelman (eds.), https://plato.stanford.edu/archives/win2023/entries/supervenience/.

18. See Hilary Putnam, "The Meaning of Meaning," *Philosophical Papers, Vol. II: Mind, Language, and Reality* (Cambridge: Cambridge University Press, 1975).

19. For a summary of the standard attacks upon, and defenses of, Putnam's externalism, see Lance Hickey, *Hilary Putnam* (London: Continuum International Publishing, 2009).

20. The situation is not nearly so clear as I suggest. The philosophical literature distinguishes many species of externalism and solid arguments against on both sides of the issue. For an overview see Mark Rowlands, Joe Lau, and Max Deutsch, "Externalism About the Mind," *The Stanford Encyclopedia of Philosophy* (Winter 2020 Edition), Edward N. Zalta (ed.), https://plato.stanford.edu/archives/win2020/entries/content-externalism/. Accessed December 6, 2024.

21. Kim, *Supervenience and Mind*, 82.

22. It has been pointed out that global supervenience seems to allow that a minor difference in the subvenient base set between W_1 and W_2 can result in a major difference in the su-

pervenient set between the two. For example, a difference in the ionization of one atom in a ring of Saturn in W_1 with respect to W_2 is consistent with there being no consciousness (or moral properties) at all in W_1. But it seems that the same problem arises for strong or weak supervenience as well. Imagine two brains that are molecule-by-molecule replicas except for one the presence of an extra atom in the first. It is consistent with local supervenience that the first brain has consciousness and the second does not.

23. Notice how this view precludes the truth of such commonsense statements as "studying Sanskrit in one's sixties and seventies can help protect against the ravishes of Alzheimer's Disease."

24. Jaegwon Kim has presented this argument in many of his publications. For an overview on the problems associated with mental causation, see David Robb, John Heil, and Sophie Gibb, "Mental Causation," *The Stanford Encyclopedia of Philosophy* (Spring 2023 Edition), Edward N. Zalta & Uri Nodelman (eds.), https://plato.stanford.edu/archives/spr2023/entries/mental-causation/.

25. For another critique of downward causality see Dennis Bielfeldt, "Downward Causality: How Does the Mental Matter?" *Center for Theology and Natural Science Bulletin* 19:4 (Fall 1999): 11-21.

26. Sybille Rolf, "Die Kommunikativität des Menschlichen: Überlegungen zum Verhältnis von Leib und Seele im Anschluss Martin Luthers," *Neue Zeitschrift für Systematische Theologie und Religionsphilosophie* 53:2 (2011): 119-136.

27. Rolf, "Die Kommunikativität des Menschlichen," 123 (my translation).

28. Ibid., 124 (my translation).

29. Martin Luther, *Luthers Werke: Kritische Gesamtausgabe* [*Schriften*], 73 vols. (Weimar: H. Böhlau, 1883–2009) 33, 191:3-32. Hereafter, WA.

30. WA 7, 550:21 ff.

31. WA 7, 551:1-3.

32. Rolf, "Die Kommunikativität des Menschlichen," 127 (my translation).

33. Rolf believes that Luther distanced himself from the traditional Catholic assertions that the soul is the form of the body and that the soul is immortal.

34. Rolf, "Die Kommunikativität des Menschlichen,"129.

35. Ibid., 132.

36. Ibid., 133 (my translation).

37. Ibid., 131.

38. It should be noted here that some like David Chalmers have simply admitted that consciousness really does not fit at all within the regnant scientific image of the world and have moved to regard consciousness as a basic ontic category irreducible to, or explicable by, some more fundamental ontological domain. See David J. Chalmers, "Panpsychism and Panprotopyschism," at https://consc.net/papers/panpsychism.pdf.

39. For a classic treatment of the influence of *via moderna* presuppositions on Luther's ontology and semantics, see Graham White, *Luther as Nominalist: A Study of the Logical Methods used in Martin Luther's Disputations in the Light of their Medieval Background* (Helsinki: Luther-Agricola-Society, 1994).

40. Simply put, relations and their relata cannot mutually presuppose each other. Relata are always logically prior to relations.

41. Cf. Aristotle's discussion on "the relative" in the *Categories*.

42. Wilfried Joest, *Ontologie der Person bei Luther* (Göttingen: Vandenhoeck & Ruprecht, 1967).

43. Emmanuel Levinas develops this theme in *Totality and Infinity: An Essay on Exteriority*, trans. Alphonso Lingis (Pittsburgh: Duquesne University Press, 1969).

44. See Kant, CPR, 545-546 (A548/B576).

45. Kant would say that the natures cannot be synthesized.