BOOK REVIEW



Uwe Meixner

The Two Sides of Being: A Reassessment of Psycho-Physical Dualism

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Review (Part II) by Ulrich Mohrhoff

Psycho-physical dualism may not be the last word in ontology, but if there is a last word, the surest route to it is likely to pass through a dualistic theory of consciousness. One needs to discover both the ultimate subject and the ultimate object — the former by deep introspection and/or mystical experience, the latter by following the physical evidence — before one is in a position to recognize their original identity and arrive at a genuine (i.e., non-reductive) monism.

In my estimation, Uwe Meixner's theory of consciousness is not only the most convincing dualistic theory of consciousness to date. *The Two Sides of Being* is also one of the most important works coming out of academic philosophy for quite some time. In fact, offhand I can't think of a worthy competitor, while I could rattle off a list of candidates for the silliest recent publication in philosophy. That list would be headed by some title by D.C. Dennett, to whose inanities Meixner pays far more attention than they deserve — but then he is writing for an audience that pays them far more attention than they deserve.

The first seven chapters of *The Two Sides* were reviewed in the previous issues of *AntiMatters* \clubsuit . In what follows I discuss the remaining three chapters.

The basic concept in Meixner's theory is that of a *conscious event*. To be as clear as possible about what it means, Meixner introduces the useful (rather than handsome) verb "to conscious." "X consciouses Y" is not the same as "X is conscious of Y," for the latter strongly suggests intentionality, which consciousness itself does not necessarily imply.

A conscious event is not the same as a mental event, for a mental event need not be conscious. Meixner offers the following suggestive imagery:

Imagine the mind is like a deep river flowing in a riverbed of neural events. The sunlit surface of the river is formed by *conscious mental events*, the events in the ever-darker waters below, right down to the bottom, are *unconscious mental events*. They *connect* the conscious mental events at the river surface to the neural events that form the riverbed — a functional image that dualists will find helpful when confronted with the familiar complaint that once consciousness is differentiated from its neural basis, it is hard to see how it could be linked (though it must be linked) to that basis. (p. 291, Meixner's italics)

I have myself argued for the existence of a continuum stretching from neural events to events in consciousness and filling the gap between the two kinds of events — a fourth dimension of the brain that goes unperceived because it is transparent to the self looking *through* the brain (from a non-spatial vantage point), and because it is hidden "behind" the brain's three-dimensional "surface" from anyone looking *at* the brain (Mohrhoff, in review). Meixner is the only contemporary philosopher known to me who also countenances such a continuum.

The core principles of Meixner's psycho-physical dualism are as follows:

(C1) every conscious event is a mental event,

(C2) there are conscious events, and no conscious event is a physical event,

(C3) every conscious event is an actual event,

(C4) for every conscious event y there is a physical event x such that x is a causal representative of y.

Definition: "x is a *causal representative* of Y" is the same as saying: x and y are actual events, and every cause of x (i.e., everything that causes x) is a cause of y, and vice versa, and y is a cause of everything (i.e., causes everything) that x is a cause of, and vice versa.

Thus, actual events x and y are causal representatives of each other if, and only if, they have the same causes and the same effects.

Suppose x and y are causal representatives of (but not identical with) each other, and suppose x has an effect z. It immediately follows that y has the same effect. x (sufficiently) causes z, and y (sufficiently) causes z, and this constitutes a case of what is usually called causal *overdetermination*. This somewhat infelicitous term suggests that there is at least one *superfluous* cause. Yet in the *double-causation* of a physical event z by a nonphysical conscious event y and a physical causal representative x of y, there is no superfluous cause, for the two causes, x and y, are firmly correlated: if one of them had not happened, the other would not have happened either. Hence, in this case, a term like "multiple (sufficient) causation" would be more appropriate than the term "causal overdetermination."

To obtain a *one-to-one correlation* between conscious events and the physical events that are their causal representatives, two further principles are needed:

(C8) For every x, y and z: if z is a conscious event, and x and y are physical events that both are causal representatives of z, then x is identical with y.

(C9) For every x, y and z: if z is a physical event, and x and y are conscious events that both are causal representatives of z, then x is identical with y.

It should now be clear why Meixner characterizes his theory of consciousness in slightly paradoxical terms, as the theory of *interactionist parallelism*. Conscious events and their physical causal representatives are *parallel* to each other in the sense one associates with the traditional doctrine of psycho-physical parallelism, for

there are no causal relationships directed along the *verticals* between the parallels; but directed *sideways* from the verticals, in both directions (*to* the conscious events and *from* the conscious events), there are lots of causal relationships between conscious events and physical events. The theory, therefore, combines parallelism with interactionism. (p. 313)

According to Meixner, evolution has (so far) brought forth three basic kinds of organisms: simple reactors, hierarchical reactors, and genuine decision makers. A piano (considered without its pedals) exemplifies a (non-biological) simple reactor.

As this example forcefully suggests, a very complex music of life can be played even on a simple reactor. But that music became incomparably more complex once evolution produced *hierarchical reactors*. Hierarchical reactors are, essentially, embodied, non-empty but finite sets of non-empty but finite sets of parallel triggers, hierarchically ordered from top to bottom in such a manner that pressing anyone of the triggers on a level higher up in the hierarchy (or pressing it in a certain manner) will determine a certain (transient or permanent) *modulation* ... of the result produced by pressing (or pressing in a certain manner) a trigger in the trigger-set immediately below that level. (p. 315)

A piano considered with its pedals exemplifies a two-tiered hierarchical reactor, the top level of its trigger-hierarchy being the piano's pedals, the bottom level being its keys. A reactor, whether simple or complex, is controlled exclusively by *determinative information*: "given the triggers of it that are pressed at anyone time and the manners in which they are pressed, the total reaction outcome is *determined*, in whatever simple or complex way" (p. 316). A genuine decision maker, on the other hand, acts on the basis of both determinative and *nondeterminative* information.

[Nondeterminative] information does not by itself contribute to determining its reactions; rather, it merely constitutes a basis for *deliberation* (which can be the matter of an instant) if, and when, the time for making decisions comes to the decision maker. Nondeterminative information is, in the first instance, physical, like determinative information. But a genuine decision maker ... can only take in nondeterminative information if it is transformed *into something for him*¹ ... (which "transformation" ... actually leaves what is transformed *unchanged* and only provides *a matching something else* for it). (p. 316)

That matching something else has a certain *experiential quality* to it, something one could very well call - as Meixner does - its "savor." The savor of a conscious

¹ The previous ellipsis featured the President of America as an example; hence the gender.

experience, moreover, "invariably displays the structural element of *being a savor for someone*" (p. 306). The savors of conscious events are thus, in a sense, *relational qualities*.

I have myself argued that consciousness is sufficiently characterized as existence *for* (someone). In the context of a nonreductive monistic framework such as that provided by Indian Vedanta — which describes ultimate reality in terms of its fundamental *relations* to the world — one must distinguish between two kinds of existence: existence *for* and existence *by*. Ultimate reality is that *by* which the world exists, the substance (*sat*) to which the world owes its existence, and at the same time it is that *for* which the world exists, the self that contains the world in its consciousness (*chit*). (In the Vedantic scheme of things, the remaining fundamental relations are *tapas*, the force that shapes the world, and *ānanda*, the infinite quality/delight that expresses and experiences itself in the world.)

From the beginning, Meixner goes on to say, decision makers needed (to some extent) to have *themselves* in their consciousnesses, and this for two reasons. First, information presented in *consciousness* "has invariably the aspect of being presented *to someone*, namely, to the decision maker; it has, as it were, an address written on it. This aspect of it might be called its *forness*" (p. 317). Second, the information presented to decision makers is to a great extent directly about *themselves*.

In human beings, the *outer self*, the organismic body, is matched by an *inner self* to such an extent that the inner self takes on a life of its own, a life which can even be contrary in its interests to the homely natural "interests" of the outer self: self-preservation and reproduction. In human beings, the inner self can dedicate itself, and therefore, willynilly, the outer self, to a *cause* that has nothing whatever to do with biological reasons, it can even *sacrifice* itself to such a cause. (p. 318)

Can a decision maker nevertheless be physical?

A physical decision maker would have to be either a chance generator \dots or \dots a deterministic device determining a specific reaction when activated ("pressed") in a specific manner, or a system of such triggers. This exhausts the candidates for decision makers that the physical world can offer. (p. 321)

Yet a decision maker is not a chance generator. "Far too often for chance generators, the decision makers of organisms make (what turn out be) the *right decisions*" (*ibid.*). Nor is it a (simple or hierarchical) reactor.

And therefore ... they have to be *nonphysical entities*, which somehow are connected to the physical organisms they — on the whole successfully — *serve*. Thus it is indeed the case that *Nature herself put the ghosts in the machines*, those marvelous caretakers and guardians who actually *love* the thing they are put in charge of and who will see it through many dangers, toils, and snares, relinquishing it only with the utmost reluctance. (*ibid.*)

Two remarkable features of conscious events, which set them apart from all physical events, are *qualia* and *forness*. In addition to these, very many conscious events — but not in all — possess "a salient structural feature: *intentionality*, also distinguishing them from all physical events" (p. 327). If E and E* are, respectively, a physical brain event and a nonphysical conscious event, and if the two are causal representatives of each

other, then E^* is the *meaning* of E for a decision maker S connected to the organism in whose brain E takes place. The *forness* of E^* is complemented by what may be termed, as Meixner does, its *towardness*. In other words, E^* has an intentional content to it. Whereas all the content of its consciousness is conscioused by S, S is conscious *of* only the *intentional* content of its consciousness.

Intentionality, as Meixner understands the term and as it was traditionally understood, before it was re-defined by John Searle — is *content* intentionality. It is a feature of consciousness that is entirely *immanent* to it. By contrast, Searle's *referential* intentionality, referring as it does to things in the world (the existence of which is not nearly as certain as the existence of the content of consciousness) *transcends* consciousness.

Now that we have intentional content, nondeterminative information, and genuine decision makers, it stands to reason that we also have true agents. A true agent, for Meixner, is "an enduring individual, x, such that at a certain moment in time the further course of the world is not already determined by the laws of nature and what has happened before, and x *contributes to determining* the further course of the world" (p. 365). (An enduring individual is "a persistent individual that is wholly present at each moment of its existence" (*ibid.*).) But: "Given the existence of agency and consciousness there must also exist subjects of agency and subjects of consciousness, for agency and consciousness logically require subjects" (p. 390). "Selves," therefore, "are best defined as being exactly those entities which are subjects both of consciousness ness and of agency" (p. 391).

These entities are substances: "Since selves are by definition subjects of consciousness and agency, and have the additional characteristic of being enduring individuals, they are *substances*" (p. 393–394). And they are nonphysical:

Take any self; being a self, it is a subject of consciousness, and it could be a subject of consciousness in the absence of all physical entities (even subject of that very same consciousness it is actually the subject of); but if this can be, then the self is not a physical entity. (p. 393)

This argument, while not much in use any longer, remains perfectly cogent. For

consciousness — while there is probably something other than consciousness, its subjects, and its contents — is indeed all we have got *epistemically*: it is where all our *epistemic* ladders *start* (to echo Yeats), and it is also where they all *end*. (What remains is a natural — or perhaps not so natural — *leap of faith*.) As Hume once expressed it: "Let us fix our attention out of ourselves as much as possible; let us chase our imagination to the heavens, or to the utmost limits of the universe; we never really advance a step beyond ourselves." (*ibid*.)

If it is logically possible for a subject of consciousness to exist in the absence of physical entities, as Berkeley and others have shown, then the self is not a physical entity — if it were, and if all physical entities were to disappear, it would necessarily disappear as well. We may therefore turn the tables:

Suppose *the world of physics* is an abstraction, while the self is not. Edmund Husserl has rather plausibly indicated how this could be, and how it could have come about that what is really an abstraction — the world of physics — is finally taken, as the result of a

historical process undergone and forgotten, *as the ultimate and only reality.* Suppose we, materialists and dualists alike, are inheritors of an abstraction: the world of physics, but have forgotten its genesis as an abstraction, taking it for a *real thing*, and materialists indeed for the *totality of reality*. Suppose this. Then the world of physics, on the whole, is neither a false abstraction nor a useless one (far from it), but it is an abstraction nevertheless. And it should not come as a surprise that we, not realizing that it is an abstraction, experience difficulties of fitting back into the abstraction things we have abstracted from when creating it. (p. 365)

Alfred North Whitehead spoke of the fallacy of misplaced concreteness.

Meixner refers to the substantial, nonphysical self that belongs to an organism as the organism's *soul*.

The true connection of the organism and its self — its soul — is achieved via consciousness and agency: in agency, the organism is constituted its self's *first* circle of causation; in consciousness, the organism is constituted its self's *first* circle of intentionality, sense impression, and emotion. This connection is a strong one, a *necessary* one (though *not* a *logically* necessary one), and it is ultimately effected ... by natural laws (which then, of course, cannot simply be the laws of physics as we know it: there must be additional laws). (p. 398)

Once again Meixner's views resonate with the Vedantic scheme of things, in particular with its modern (that is, 20^{th} Century) amplification by Sri Aurobindo. Here the fundamental principles are, besides the four mentioned above (*sat, chit, tapas,* and *ānanda*): mind, life, and matter. These can be seen as stages of the creative process — the process by which ultimate reality creates or manifests the world (out of its substance, *sat,* for its conscious self, *chit*). This in turn can be seen as a development of infinite quality/delight (*ānanda*) via the formation of *expressive ideas* and the action of an *executive force* into *revealing forms*. In this scheme, *mind* is responsible for the formation of expressive ideas, *life* is the executive force, and *matter* is a generic term for the revealing forms. As it stands, this scheme applies to every (Vedantically) possible world. Our world (Vedantically conceived) is special in that it is evolutionary, and evolution (Vedantically conceived) implies *involution*.

The "mechanism" of involution has been described by Sri Aurobindo as a *multiple exclusive concentration* of the consciousness that contains the world. Primarily, the self of this consciousness is coextensive with its content. But it can, and does, localize itself manifoldly within its content, so as to view and act upon the same from a multitude of locations. It can also make this multiple concentration exclusive, and it can do this by degrees.

The first degree of exclusiveness produces what in Indian philosophy is known as *avidya* ("ignorance"): the individual (localized) self loses sight of its identity with the other selves. The second degree results in the involution of mind in life; the third and final degree results in the involution of life in matter, thereby setting the stage for the drama of evolution. This begins with the emergence of life (the essence of which is not replication but *agency* — "the organism is constituted its self's *first* circle of causation") and mind ("the organism is constituted its self's *first* circle of intentionality, sense impression, and emotion"). From a Vedantic point of view, Meixner is therefore right

in saying that "the organism it [the soul] belongs to has *evolved*, and in evolving, its soul has evolved along with it" (p. 398).

He is also right in that the additional laws mentioned by him "will need to be *genuine* – nonreductive – *emergentic* laws: the lawfully emerging phenomena (in the case at hand *selves*, in contrast to *brains*) cannot be understood as being simply highly complex amassments of simple physical phenomena" (p. 399).

According to the orthodox way of integrating selves (howsoever conceived) into the evolutionary picture, selves, and therefore consciousness and agency (howsoever conceived), are here to *serve*, to help the organism (and thereby help the species) to survive. A self is seen as belonging to an organism *instrumentally*, just like, say, the organism's claws. It would be better, Meixner suggests, to reverse the relationships of belonging and service, and still better, to consider these relationships to be *symmetrical*:

The organism belongs to a substance — to a self if the substance is a subject of consciousness and agency — as much as that substance belongs to the organism. An organism is there for a substance and in its service as much as that substance is there for the organism and serving it. (p. 405)

Yet the symmetry is not perfect, for while the substance is capable of having interests in the literal sense (for example, an interest in survival, whether its own or the organism's), the organism (qua physical entity) is *not* able to have interests in the literal sense. Hence "[i]t is more accurate to say that the organism is *the* tool of survival for the substance than that the substance is a tool of survival for the organism" (p. 406). "It is more accurate to speak that way," Meixner goes on to say, "but not quite accurate. For the organism is not just an instrument for the substance; it is, so to speak, its home" (*ibid.*).

If organisms are *designed to be* anything, even if this just means that they have *naturally developed to be especially efficient in* (or *as*) something or other, then what they are designed to be is this: they are designed to be the homes of substances, to be the *vehicles* of substances.... Biological evolution is the long historical process, subject to laws of nature, in which varied forms of organisms as vehicles and homes of substances come into being, modifications of previous forms.... (p. 408)

This, too, strongly resonates with Vedantic theory. For according to this theory (as amplified by Sri Aurobindo) evolution starts out not with one but with *two* multitudes: a multitude of fundamental particles — in the context of the well-tested standard model of particle physics, that would be the quarks and the leptons — and a multitude of *souls*. We may think of the former as (resulting from) a multiple individuation of *sat*, and of the latter as a multiple individuation of *ānanda*.

Between these multitudes there initially yawns a gulf. The soul lacks the means to form expressive ideas, while the particles lack the capacity to constitute revealing forms. Evolution proceeds from both sides and may be likened to the building of a bridge. On the side of nature there emerges, first life, the capacity to create revealing forms, then mind, the capacity to form expressive ideas. On the side of the soul there grows up a soul personality, a *psychic being* increasingly capable of infusing its essence of quality/delight into the mind's expressive ideas and life's revealing forms.

One of the consequences of Meixner's view of the relationship between substances and organisms is that "the sap is restored to evolutionary theory" (*ibid.*). Even though evolutionary theory is widely regarded as having dealt the deathblow to teleological ontologies, "teleological language flavors evolutionary talk, on all levels, to such an extent that leaving it out is like putting no salt into the soup — if not worse" (p. 404):

leaving the interests of life out of the picture takes *the sap* out of evolution theory, and it takes the sap out of biological theory as a whole — which is the reason why the interests of life are all the time put back into the picture, usually quite non-self-consciously by blithely ignoring what the officially accepted doctrine really requires one to believe, but sometimes in a self-conscious, utterly twisted way. (p. 411)

Here are a few samples of these utterly twisted ways, taken from - where else? - Richard Dawkins's *The Selfish Gene*:

I shall argue that the fundamental unit of selection, and therefore of self-interest, is not the species, nor the group, nor even, strictly, the individual. It is the gene, the unit of heredity. [p. 12] ... At some point a particularly remarkable molecule was formed by accident. We will call it the Replicator. [p. 16] ... There was a struggle for existence among replicator varieties. They did not know they were struggling, or worry about it; the struggle was conducted without any hard feelings, indeed without feelings of any kind. But they were struggling, in the sense that any miscopying which resulted in a new higher level of stability, or a new way of reducing the stability of rivals, was automatically preserved and multiplied. [p. 20] ... What weird engines of self-preservation would the millennia bring forth? Four thousand million years on, what was to be the fate of the ancient replicators? ... Now they swarm in huge colonies, safe inside gigantic lumbering robots, sealed off from the outside world, communicating with it by tortuous indirect routes, manipulating it by remote control. They are in you and me; the[y] created us, body and mind; and their preservation is the ultimate rationale for our existence. They have come a long way, those replicators. Now they go by the name of genes, and we are their survival machines. [p. 21] (quoted on p. 412)

Meixner's comment:

One might as well say that books are the survival machines of those selfish replicators called "words" (the word "is," for example, being very successful in getting itself perpetuated); that seems to be the exact analogy - revealing the basic absurdity of the view. The reader will perhaps have noticed how in the cited passages "the fundamental unit[s] of selection" mutate from being "the gene[s], the unit[s] of heredity" to being certain molecules, "replicators," to being "replicator varieties," to being replicators that "swarm in huge colonies" (all replicators in a single colony are, I take it, at a certain level of consideration copies of each other: the complete DNA-strings deposited in each cell of an organism are, if read in a certain uniform order, replicas of each other), to being genes again. This volatility of meaning and reference, though irritating (to some), is perhaps unobjectionable in a popular work. But neither genes (abstract entities which, like centers of gravity, are usefully postulated by theory) nor molecules (microscopic geometrically structured constellations of atoms) nor types of molecules (certain universals) nor (concentrated or distributed) collections of (type-)identical molecules are capable of being fundamental units of self-interest in a literal sense, as Dawkins should very well know - and of course he does know: "If we allow ourselves the licence of talking about genes as if they had conscious aims, always reassuring ourselves that we could translate our sloppy language back into respectable terms if we wanted to, we can ask the question, what is a single selfish gene trying to do? It is trying to get more numerous in the gene pool" (*The Selfish Gene*, p. 95). (p. 412)

In the endnotes added to the second edition of *The Selfish Gene*, Dawkins makes the same point more arrogantly: "This strategic way of talking about an animal or plant, or a gene, as if it were consciously working out how best to increase its success ... has become commonplace among working biologists. It is a language of convenience which is harmless unless it happens to fall into me hands of those ill-equipped to understand it" (*The Selfish Gene*, p. 278).

Nevertheless Dawkins keeps recklessly feeding his readers the metaphor of the selfinterested gene, or molecule, or type of molecule, or collection of identical molecules. Why? Because it is precisely this metaphor — not taken as a metaphor but so to speak as the literal truth (if the reader of Dawkins is as sophisticated as the author: in a complicated act of allowing oneself to do something that one knows one cannot, in reason, do, while always reassuring oneself that one is not really doing it) — that makes his theory *interesting*, in fact, *sensational*. Leave out the metaphor (and hence also the ever-present implicit invitation to take it literally) and *the sap* is gone out of *The Selfish Gene*. What remains is, at best, a dry stalk of empirical facts, open to various interpretations. (p. 413)

What is worth asking is whether *substances* that are not capable of being conscious could nevertheless have interests in the literal sense.

The idea of unconscious will, which yet is *will* literally enough, and of unconscious interests, which yet are *interests* literally enough, has become a familiar idea since the time Schopenhauer, and later Freud, proposed it. Therefore, one should not balk at substances that, incapable of consciousness, yet have interests in the literal sense. (p. 407)

Here's a related question: what should we make of the drive of organisms to reproduce? "This drive certainly points beyond the interests (that is, self-interests) of the reproducing organisms" (pp. 409–410).

If we follow the *Principle of Selfishness* (which lies at the heart of much theorizing in biology, sociology, and psychology), according to which *every interest is a self-interest of the entity which has it, or serves* (*is instrumental for fulfilling*), *possibly covertly, a self-interest of something else*,² then we see that the interest of living organisms to reproduce must serve the self-interest of something else (since the interest to reproduce is not a self-interest of them), which self-interest, however, cannot be an interest of a species or a gene (since these entities *have no interests* properly speaking).... (pp. 410–411)

So whose interest is it?

The view of living beings (the subjects of evolution) as ensouled organisms or embodied substances (or Aristotelian *composita*) *capable of true life-interests* is the *natural view* in the — from the etymological point of view — fairly literal but unusual sense of being the view of *natural man*. This view most thinkers, nowadays, quickly dismiss as belonging to the intellectual childhood days of mankind. I have tried to show that the dismissal is not

² Meixner's footnote: Unfortunately, the Principle of Selfishness is prone to generate spurious bearers of (self-)interest: the Id and Super-Ego of psychoanalysis, the Classes of Marxist theory, and, recently, Dawkins' Selfish Gene.

reasonable, neither philosophically nor scientifically; rather, what is less than reasonable are the alternatives, the The Big Disinterested Soulless Machine, or The Great Selfish Gene Conspiracy.

As recently as the 19th century, and at the dawn of evolution theory, *the natural view* was expounded philosophically by Arthur Schopenhauer. According to him, each organism, whether endowed with consciousness or not, is an individualized *expression* (in space, time, and matter, and subject to natural (event-)causation) of "the Will." Schopenhauer's view can be made to coincide essentially with the view here propounded if the *substances belonging to organisms*, the *substances embodied in organisms* are regarded as atomic parts (elements) of the Will.... (p. 414)

Schopenhauer had a deeply pessimistic view of the Will and its organismic individualizations. To his eyes, the emergence of the Will in its individual expressions was a metaphysical error, and a *bloody* one at that: it was the cause of the tremendous amount of suffering and futility in the world.

Consider the vast amount of thoughtlessness, callousness, indifference, selfcenteredness that is a necessary condition of each and every carefree enjoyment of life: Consider the slight — at *least* slight — totally fatuous Nietzschean nausea with which, commonly, *those who are well* uncomprehendingly regard from a distance *those who suffer*. The thought may enter their heads, *what if it were me who was going through this*? But, under ordinary circumstances, this remains a very theoretical idea indeed, which is soon forgotten....

But is [that emergence] *indeed* a metaphysical error, something that had better not been, something where the world has gone *utterly wrong*? Is there no metaphysical gain hidden in the manifestation of the Will, or behind it? Is there not, at least, a full compensation for the evils that necessarily accompany that manifestation? And if it is indeed an error (with or without *someone* who committed it), is there no *remedy* for it? (p. 417)

Several remedies — some subjective and some metaphysical — are examined and found wanting. On the Buddha's remedy — inward extinction of the self and the senses culminating in a state of illumination beyond both suffering and existence, which are inseparable — Meixner has this to say: "Not much of metaphysics seems to be necessary for this to be true (which is precisely the fact that makes Buddhism attractive to Western intellectuals), although there must certainly obtain some objective metaphysical states of affairs" (p. 421) if such a state of illumination is to be possible.

To Meixner, the emergence of the Will does indeed appear to be a metaphysical error – "in one sense *a tragic error*, since it is a consequence of absolute goodness,³ but in another sense *not a tragic error*, since there is reparation for it" (p. 419).

But is there a remedy proposed for the Error that is objective and universal, not merely enabling us, if we make the right efforts, to by-pass it, so to speak, to keep ourselves out of it, but, in a sense, *nullifying it post factum* for *everyone* (*human or nonhuman*) *involved* (though indeed nothing that has happened can ever be made to have not happened)?

³ Meixner's footnote: On this theme, on which I cannot elaborate here, see my book *Ereignis und Substanz.*

There is such a remedy proposed, and it has been proposed for thousands of years, although never much emphasized even in the philosophico-religious context to which it belongs. Metaphysically, it is the most costly proposal, costlier than that of the old dualists by far, requiring the highest number in unprotected assumptions, and everyone that has been captivated by it and has attempted *to spell it out in full*⁴ knows the tremendous difficulties of making it coherent, and plausible at least to the open-minded. *Others*, merely glancing at it, will say that it is an impossible idea, a ridiculously impossible one, an absurdity. Yet, it moves hearts. It has moved mine.

After the prophet Isaiah (or whatever was his name) has foretold the coming of a new king from the royal line of David to whom the spirit of the Lord will give wisdom and who will know and obey the Lord's will, a king who "will rule his people with justice and integrity," the vision of the prophet, all of a sudden, broadens into an image of the redemption of all life: (p. 421)

"Wolves and sheep will live together in peace, and leopards will lie down with young goats. Calves and lion cubs will feed together, and little children will take care of them. Cows and bears will eat together, and their calves and cubs will lie down in peace. Lions will eat straw as cattle do. Even a baby will not be harmed if it plays near a poisonous snake. On Zion, God's holy hill, there will be nothing harmful or evil. The land will be as full of knowledge of the Lord as the seas are full of water." (*Isaiah* 11, 6–9)

Here is a simple test: if your heart, gentle reader, is *not* moved by this, then you are, like Dennett and people of his physicalist ilk, a *zombie*.

Let's have it in Sri Aurobindo's words:

The fully evolved soul will be one with all beings in the status and dynamic effects of experience of a bliss-consciousness intense and illimitable. And since love is the effective power and soul-symbol of bliss-oneness he will approach and enter into this oneness by the gate of universal love, a sublimation of human love at first, a divine love afterwards, at its summits a thing of beauty, sweetness and splendour now to us inconceivable. He will be one in bliss-consciousness with all the world-play and its powers and happenings and there will be banished for ever the sorrow and fear, the hunger and pain of our poor and darkened mental and vital and physical existence. He will get that power of the bliss-freedom in which all the conflicting principles of our being shall be unified in their absolute values. All evil shall perforce change itself into good; the universal beauty of the All-beautiful will take possession of its fallen kingdoms; every darkness will be converted into a pregnant glory of light and the discords which the mind creates between Truth and Good and Beauty, Power and Love and Knowledge will disappear on the eternal summit, in the infinite extensions where they are always one. (*The Synthesis of Yoga*, 1999, pp. 509–510)

The Spirit self-luminous, infinitely aware of itself behind all workings of force and their master, seems here to have disappeared and not to be at all; somewhere He is perhaps, but here He seems to have left only a brute and inconscient material Force which creates and destroys eternally without knowing itself or what it creates or why it creates at all or why it destroys what once it has created: it does not know, for it has no mind; it does not care, for it has no heart. And if that is not the real truth even of the material universe, if behind all this false phenomenon there is a Mind, a Will and something

⁴ Meixner's footnote: I have tried my hand at this in my book *Ereignis und Substanz*.

greater than Mind or mental Will, yet it is this dark semblance that the material universe itself presents as a truth to the consciousness which emerges in it out of its night; and if it be no truth but a lie, yet is it a most effective lie, for it determines the conditions of our phenomenal existence and besieges all our aspiration and effort.

For this is the monstrous thing, the terrible and pitiless miracle of the material universe that out of this no-Mind a mind or, at least, minds emerge and find themselves struggling feebly for light, helpless individually, only less helpless when in self-defence they associate their individual feeblenesses in the midst of the giant Ignorance which is the law of the universe. Out of this heartless Inconscience and within its rigorous jurisdiction hearts have been born and aspire and are tortured and bleed under the weight of the blind and insentient cruelty of this iron existence, a cruelty which lays its law upon them and becomes sentient in their sentience, brutal, ferocious, horrible. But what after all, behind appearances, is this seeming mystery? We can see that it is the Consciousness which had lost itself returning again to itself, emerging out of its giant self-forgetfulness, slowly, painfully, as a Life that is would-be sentient, half-sentient, dimly sentient, wholly sentient and finally struggles to be more than sentient, to be again divinely self-conscious, free, infinite, immortal. (*The Life Divine*, 2005, pp. 257–258)

Let us now take a brief look at Meixner's responses to some of the predictable (and predictably hollow) objections to his proposals. Topping the list is the notion that (true) agent causation would, if it occurred, violate some of the physical conservation laws. I won't repeat the responses — Meixner's as well as my own — given in the first part of this review. In the final chapters of *The Two Sides of Being* Meixner argues convincingly that

all the standard ways of explicating causation are entirely neutral with respect to these laws: they neither imply that the causation of physical events by nonphysical events will violate these laws, nor that it will not violate these laws. *Whence*, then, the idea that such a violation would be unavoidable if physical events were caused by nonphysical events? The origin of the idea is likely to be the (apparent) fact that the causation of physical events by *physical events* is always accompanied by the transfer of (physical) energy/momentum. From this it is *— illegitimately —* concluded that the causation of physical events by nonphysical events would also be always accompanied by the transfer of energy/momentum. From this it is *— again illegitimately —* concluded that the causation of physical events by nonphysical events would *introduce* additional energy/momentum into a system (*the physical world*) that according to the physical events by nonphysical events by nonphysical events would introduce additional energy/momentum into a system (*the physical world*) that according to the physical events by nonphysical events by nonphysical events of physical events by nonphysical events would introduce additional energy/momentum into a system (*the physical world*) that according to the physical events by nonphysical events would introduce additional energy/momentum into a system (*the physical world*) that according to the physical events by nonphysical events by nonphysical events would violate physical conservation laws comes down to being the mere effect of repeatedly jumping to entirely unwarranted conclusions. (pp. 301–302)

It has even been claimed that (genuine) agent causation is incompatible with *science*. Meixner calls the general scheme in which such claims are couched "an inference to the better-liked explanation" (p. 351). It goes like this:

(1) Phenomenon p could also be explained by assuming D instead of the rival hypothesis G. (2) Assuming D habitually agrees with me (and therefore ought to habitually agree with you) better than assuming G. Therefore, (3) D is true, and G false.

Dennett might protest that, in the case at hand, the second premise is not of the form "Assuming D habitually agrees with me better than assuming G," but of the form "Assuming D agrees with science better than assuming G." (*ibid.*)

In actual fact,

What the assumption of nonphysical agent-causation is likely to violate is *not* science; it is something else, which physicalists do not care to distinguish from science. It is, for example, the Principle of Causal Closure of the Physical World, whether in its strong version ("All (sufficient) causes of actual physical events are physical") or in its weak version ("All actual physical events which have a (sufficient) cause also have a (sufficient) physical cause").... But the demand that *only* physical events cause physical events ... already breathes the spirit of philosophical imperialism that is typical for monistic metaphysical doctrines; it is a spirit that is foreign to physics. (pp. 378, 304)

As I have explained in my article "The physics of interactionism" (*Journal of Consciousness Studies* 6, 1999, pp. 165–184), the validity of conservation laws is contingent on the causal closure of the physical world. If the latter is a metaphysical prejudice ("which physicalists do not care to distinguish from science") then so is the former. This metaphysical prejudice is often couched in such disingenuous and misleading words as "Our best science teaches us...."

This doesn't sound like prejudice at all. But, on reflection, we really should say that our best science does not teach us metaphysics at all; otherwise it would not be our best science. (p. 342)

Case in point: "The best evidence of contemporary science tells us that the physical world is more or less causally closed: for every physical event, there is a physical sufficient cause" (David Chalmers as quoted on p. 303). In actual fact,

the best evidence of contemporary science tells us, or rather: most contemporary physicists tell us, that the Physical Principle of Causation is *false*; most contemporary physicists are ready to countenance actual physical events that have no physical sufficient cause. (*ibid.*)

A stronger affirmation is warranted: the general theoretical framework of physics — quantum mechanics — is a calculus whose only use consists in assigning probabilities to possible measurement outcomes on the basis of actual measurement outcomes. In other words, the fundamental laws of physics quantify correlations between events that indicate the possession of a particular property (by a physical system) or a particular value (by a physical variable). *None* of these events has a sufficient cause (see my paper "Making sense of a world of clicks," *Foundations of Physics* 32, 2002, pp. 1295–1311). Meixner's conclusion thus stands on firm ground: "the Principle of Causal Closure, weak or strong, is *not* a principle of science, is *not*, in particular, a principle of physics. It is a principle of *physicalistic metaphysics*, and a *false* one at that" (p. 379). What "is quite obviously violated by the assumption of nonphysical agent-causation is the belief that science — meaning: natural science, and in particular, *physics* as presently conceived — can, in principle, render a complete description of reality" (*ibid.*).

But that belief is not a *scientific belief* (its content is not a subject matter of physics or of any other natural science, *but of philosophy*), and it is not a part of the *scientific attitude* either (otherwise, nobody without that belief could be a true scientist, which is of course *wrong* to the point of insult). It's a belief of *physicalistic metaphysicians*, and a *false* one at that. (pp. 379–380)

Again, most of us have a strong tendency to accord causal basicness to the physical micro world.⁵ Nonphysical agent causation originating in a nonphysical decision-making substance guided by conscious reasons is an obvious affront to this tendency. Yet

[i]t is just as correct (or incorrect) to say that the movement of my arm causes the movement of the atoms in my arm as it is correct (or incorrect) to say that the movement of the atoms in my arm causes the movement of my arm. For none of physical reality's layers of size — the ultra-big, the very big, the big, the middle-sized, the small, the very small, the ultra-small — has a causal prerogative (or, indeed, any other ontological prerogative) over any other such layer.... *Why* should it have such a prerogative? Just because it is the layer of the ultra-small things? How can *ultra-smallness* constitute a causal prerogative? Come to think of it, it is a rather indefensible idea. (pp. 380–381)

In point of fact, "physical micro-causation" is a contradiction in terms. Causal concepts become applicable in the so-called "classical limit" — the theoretical limit in which the laws of quantum physics degenerate into the laws of classical physics and the probabilistic correlations between measurement outcomes become deterministic (which is what makes it possible to apply causal relations to the properties whose possession is indicated by measurement outcomes).

Meixner, who holds that a story featuring genuine decision makers "implies that there is widespread indeterminism in the macro world" (p. 319), seems to be under the impression that (quantum-mechanical) micro indeterminism is insufficient to account for the required macro indeterminism — an impression that the previous paragraph may seem to support. Yet there could be no evidence of micro indeterminism if this did not evince itself through the indeterministic behavior of macroscopic instruments performing measurements. Meixner is aware of this: "There are well-known artificial magnifying devices (for example, the Geiger-counter); it is to be expected that there also are natural ones" (p. 320). Moreover, since the "nervous system is, among other things, a device that essentially magnifies effects" (p. 369), nervous systems must be perfectly capable of magnifying microscopic effects caused by (genuine) decision makers — whether by "loading the quantum dice" or by exerting weak influences on brains qua chaotic systems. (There is sufficient evidence of deterministic chaos in the brain. As the "butterfly effect" famously illustrates, a chaotic system is extraordinarily sensitive to extremely weak external influences.)

Meixner's arguments for a macro indeterminism *not* rooted in quantum mechanics therefore appear to me to be superfluous. They are also less than convincing. They cannot, however, be used to poke holes in his theory of psycho-physical dualism, inasmuch as the theory's validity does not in any way depend on these particular arguments.

⁵ In his book *The Limits of Influence: Psychokinesis and the Philosophy of Science*, a chapter of which appears in this issue of *AntiMatters* ♠, Stephen Braude voices strong objections to this tendency, calling it the *Small Is Beautiful Assumption*.

As the reader may have gleaned from the first part of this review (in the previous issue of *AntiMatters* \clubsuit), the first seven chapters of *The Two Sides* contain some stern criticism of physicalist apologetics. So do the last three chapters.

Dennett would have us doubt that there are any real seemings. A truly radical skepticism! In fact, it's so radical, it's not skepticism at all. It's simply dogmatic materialism. Dennett does not stop with *doubting*, as a true skeptic would: Dennett would have us *believe* that there are no real seemings — contrary to what, regarding real seemings, *seems* to be the case to us. (p. 329)

According to Dennett, illusions (e.g., qualia) are had by illusions (e.g., selves). Meixner invites his readers to consider "this slogan of Anti-Ockham: *Illusiones non sunt multiplicanda praeter necessitatem*" (p. 356) and then to "ask themselves: How many things did Dennett, for example, declare to be illusions? – Too many" (*ibid.*).

[I]t is philosophically suspicious to fill the world of theoretical thought with so-called *"illusions"* or "myths" (very likely contrary to the maxim, so often disregarded by those who like to think of themselves as tough thinkers, *non-entia non sunt multiplicanda praeter necessitatem*, which, on reflection, is just as true as its more well-known and well-heeded Ockhamist counterpart). (p. 322)

The denial of qualia ... is what one might term a *brutish* physicalist reaction to them. That reaction is not brutish because it is brutal to qualia. Fortunately, qualia are quite incapable of being brutalized. And if we ever cease speaking of them, as the eliminativists⁶ are confident we shall after we (all of us) have finally grasped what they believe they already know for a fact: that there are no such things at all, *we and our humanity* will be the worse for it, not the qualia. ...we will be lacking a language of experience, a language of the soul, and therefore not have expressive and hermeneutic access to a large part of what *we* are (and our ancestors were). But the physicalist denial of qualia deserves to be called "brutish" not only on account of its brutality to a vital part of our common humanity, but also because it certainly appears to be a mere instance of brute dogmatic stupidity, which is no less appalling for the staggering amount of intelligence that is expended on behalf of its defense. (p. 308–309)

Another thing Dennett fails to be aware of is that *rationality* — like any other type of normativity — becomes *meaningless* under determinism. On pp. 103–104 of *Elbow Room* he discusses, in effect, the question, "What attitude *ought* we *rationally* to adopt if determinism were discovered to be true by us?" The question is meaningless (since its explicitly stated condition contradicts its implicit presupposition), in contrast to the question, "What attitude would we adopt if determinism were discovered to be true by us?" (And the answer is: the attitude that we would be determined to adopt.) (p. 368)

Dennett in *Elbow Room*: "One of my tactics has been to respond to traditional philosophical claims about what is unimaginable by urging: try harder."

If, gentle reader, you still cannot imagine a married bachelor, try harder! Try re-interpreting the concepts. By this method you will be helped to imagining what

⁶ "Actually, '*nihilism* regarding qualia' would be the better phrase [than eliminativism regarding qualia]. Because, if there are no qualia, you cannot eliminate them, and if there are qualia, you cannot eliminate or eradicate them either (since *qualia* are not like, say, *germs* at all)" (p. 307).

Dennett says *you can* imagine (if you try hard enough): "a rational *and deterministic* being who is not deluded when it views its future as open and 'up to' it" (*Elbow Room*, p.170; emphasis Dennett's), and of course you will also be helped by this method to imagining a married bachelor. (p. 400)

Dennett again: "those who claim to know that they have performed acts such that they could have done otherwise in exactly those circumstances must admit that they proclaim this presumably empirical fact without benefit of the slightest shred of evidence, and without the faintest hope of ever obtaining any such evidence" (*Elbow Room*, p. 136). So what? There are many things a physicalist claims to know "without benefit of the slightest shred of evidence, and without the faintest hope of ever obtaining any such evidence."

The physicalist believes in laws of nature and causation (and the existence of the physical world, and the nonexistence of the mental world insofar as it is supposed to be different from the physical world, etc.), *but surely not on the basis of scientific evidence.* (p. 387)

Truly,

[i]f as much effort had been put into the advancement of a position that is essentially dualistic in nature as physicalists have put into finding a satisfactory *but physicalistic* solution for those problems [the problem of conscious intentionality and the problem of qualia], physicalists would not rule the roost in the philosophy of mind today (I venture to say). (384)

Wouldn't that be wonderful?