**Book Review and Commentary**

**Gordon Globus**

*The Transparent Becoming of the World: A crossing between process philosophy and quantum neurophilosophy* (2009). Amsterdam/Philadelphia: John Benjamins, 169 pp., ISBN 978 90 272 5213 5 (hb)

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***Between-Two*: On the Borderline of Being & Time**

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**Abstract:** The purpose of this review article is to attempt to come to grips with the elusive vision of Gordon Globus, especially as revealed in this, his latest book. However, one can only grip that which is tangible and solid and Globus’s marriage of Heideggerian anti-concepts and “quantum neurophilosophy” seems purposefully to evade solidity or grasp. This slippery anti-metaphysics is sometimes a curse for the reader seeking imagistic or conceptual clarity, but, on the other hand, it is also the blessing that allows Globus to go far beyond (or deep within) the usual narrative explanations at the frontiers of physics, even that of the quantum variety.

“For the sorcerer it is always dawn” (Durand, 1976, p. 102)

Gordon Globus MD is a practicing psychiatrist and a Professor Emeritus of Psychology and Philosophy from the University of California Irvine. His work with human minds drew him into consciousness studies before the discipline became recognized as a discipline. As early as 1976 with *Consciousness and the Brain: A scientific and philosophical inquiry*, Globus attempted to bestride the seemingly incompatible worlds of philosophy and science. His early acquaintance with the famed (and sometimes maligned) Carlos Castañeda indicates he already had an interest in transformative experience and the mingling of dream reality with daytime reality. Dreaming, with the central perspective of the dreamer amidst a continually shifting ground of place and time and dramatis personae, may have led Globus to his notion that our life-narratives or lived realities in linear time disguise the fact that reality is similar to dreaming; our situation in an objective, unchanging world is a transparent illusion over the basic fact of being situated at all. This is to say, we always find ourselves, in both dreams and reality, situated in a particular place and time and with various dramatis personae and, as we act in this situation, particular pasts and futures emerge (see Globus, 1986). It seems likely his understanding of visions, dreams, and the aberrant situations of some of his patients led to him to feel a unique kinship with Heidegger’s concept of *thrownness*, of finding ourselves *thrown into being* and subsequently developing a consciousness of direction in time and space as we dealt with it. So when he declares in *Transparent Becoming* (2009), “To our surprise, quantum neurophysics has turned out Heideggerian” (p. 149), that surprise must have long duration since Globus attempted to merge neuroscience, quantum mechanics, and Heidegger as early as 1995 when he wrote *The Postmodern Brain* (to the perplexity of many).

*The Transparent Becoming of the World* is a short book at 154 pages of text, but it is long read. At first reading, I confess I found it numbingly frustrating because the use of Heidegger’s invented terminology shaken and stirred in with the already ambiguous terminology of quantum neurophilosophy (itself an intermingling of quantum physics, neuroscience and free speculation) simply did not compute. Trying to grasp what Globus is getting at often seemed like the proverbial attempt to hold a rushing stream in one’s hand. I confess I had to put the book aside for a time. However, when I realized that Globus seemed to be relying on spatial metaphors when what he was really referencing was time, the second reading bore more fruit (even it was a strange fruit indeed).

By now, the meaning of the title should be, well, transparent. We cannot perceive how the world “becomes” because the actual process of becoming is invisible – we see right through it. We generally just accept the world as given, at least as it is given to us in our sane, daylight hours. The world seems real; therefore, it must be real. Of course, we have learned that our senses interpret this reality in particular ways and our culturally-given concepts frame those sensory interpretations, so what we perceive is a re-presentation of reality, apparently existing in our brains. This is indirect realism, the commonly accepted paradigm of science. It is still within the umbrella monism of materialism or physicalism (as opposed to, say, the previous favourite dualism, as evident in Cartesianism, or the other monism of idealism, in which only the mind is real, or the now popular twist dual-aspect monism). How does the world really come into being? According to Globus, the best answer is found in the unlikely crossroads of quantum field thermodynamics (what he calls quantum neurophilosophy, a mysterious subject in its own right), process cosmology (in which dynamic becoming is ultimate, not physical stuff), and, unmentioned in the title, Martin Heidegger’s abstruse anti-ontology.

Globus has always been a maverick voice in consciousness studies, taking a perspective that is uniquely his own by embracing positions that one would assume are contrary (such as quantum physics and so-called postmodern philosophy). These positions are often non-positions that can only be (somewhat) understood in their trajectories. In the same way Heisenberg’s uncertainty principle allows us to know only position or momentum but never both at once, Globus employs abstract conceptions that often seem to resist imagery, so uncertainty is as central to his writing as it is to quantum physics. He resists choosing between logical alternatives in the “either/or” sense, even while he complexifies “both/and” approaches that would blandly unify such alternatives. Instead of differentiation or unification he insists on a *between-two* dynamic in which neither of the “two” pre-exist the dynamic of their betweenness yet the betweenness is not an entity or monad that can exist without the two it is between. If this seems obscure, and it should, my summary of his book below will attempt further elucidation, but, be warned, some of Globus’s concepts – especially those whose source is in Heidegger’s invented terminology – simply resist elucidation.

Globus begins with an introduction that outlines up his perspective so well it almost makes the rest of the book superfluous. The reader immediately feels himself thrown into rapidly flowing stream of ideas with neither a solid image to grasp nor a conceptual ground to stand on anywhere in sight: “There is no palpable ground of world-thrownness, only an ever-withdrawing and so concealed dynamics that transparently gifts it” (p. 1). Needs considerable unpacking, yes? However, like an abstract painter revealing his skill in photographic realism, in subsequent chapters he builds a case for his own undoing of metaphysics with bracingly clear summaries of other views that reveal his erudition, firm comprehension, and reader-friendly writing skills. Globus then proceeds to not only use these summaries as dynamic building blocks, but also to demonstrate their limitations and, in the process, the need for his deconstructive – one might say *surreal* in its original sense – insights.

Globus is better understood if one takes the time to delve deeply into almost any part of this little opus rather than attempting to get a swift overall impression. A short summary of the book’s contents just would not do it justice. This should not be surprising, for Globus understands the visual universe, at least, as made manifest by the holographic principle, which means that a close study of any one of its parts will reveal the nature of the whole, and this is true of Globus’s text, too. For example, by bringing “revolutionary quantum theory to the brain,” Globus reveals that the brain is only computational, and, by implication, that consciousness cannot be a product of such computation: “In place of computation on order, a plenum of implicate symmetry is proposed, with symmetry-breaking as trace (memory), and differentiation of the plenum into explicate concretions” (p. 3). Already we have Globus doing some symmetry-breaking of his own in this passage, bringing in diverse concepts, each from a field with its own symmetry or integrity and somewhat transforming each to make them fit into his boundary-breaking asymmetric complex system.

The *plenum*, philosophically speaking, is a concept probably originating in alchemy for the *pregnant emptiness of nonbeing* and used by mystics, visionaries and artists since. For a scientist, this pregnant emptiness most nearly infers to the quantum vacuum, as close to absolute nothingness as can be found in this universe, yet a nothingness “pregnant” with the unthinkable potential energy of virtual particles. The plenum is suggested with slight variations by the implicate order of eccentric quantum physicist David Bohm (out of which enfolds the explicate order) or A.N. Whitehead’s parallel ultimates of creativity and God in his primordial nature (out of which the occasions of experience, i.e., concretions, that are the world process emerge). Needless to say, Globus’s “explicate concretions” that differentiate the plenum into being combine Bohm and Whitehead, as well.

The key here, however, is the mention of *memory trace*, which I take to be a reference to be Derrida’s (unconscious) trace of memory, which he later renamed *the gift* (probably to dissociate it from memory of the past).[[2]](#footnote-2) Globus anoints the power of first action to this notion of trace, for it is the blowtorch that breaks apart the quiescent symmetry of the plenum of nonbeing to throw each of us (individually but in parallel) into multifoliate being. This does not explain exactly *how* something emerges from nothing, but, at first sight, it seems to indicate that a cause-and-effect past lay behind the emergence of asymmetry, so it appears to fall into the logical error of eternal regression, for one must wonder what caused the asymmetry if a trace of that past cause is still present. However, anyone who is acquainted with Derrida knows the Derridean trace is *of a past that has never been present*; it is in fact much the same idea as the famous Derridean neologism *différance*, which implies a difference in space as well as an indefinite deferment of meaning in time.[[3]](#footnote-3)

This operation of difference that shadows presence is *trace*. All ideas and all objects of thought and perception bear the trace of other things, other moments, other *presences*. To bear the trace of other things is to be shadowed by *alterity*, which literally means "otherness." This notion of trace (or *différance*) further suggests the unexpected emergence of time and space awareness out of something absolutely other that may not, in itself, lack awareness in some unimaginable plenum-potential sense (say, awareness without content). The trace is not of the past, then, but of a undifferentiated origin that must remain unspeakable and unthinkable — very much like the unexpected appearance of an asymmetry or singularity that leads to both space and time but is constituted within neither. At the same time (so to speak), a trace of the absolutely other of the plenum remains entangled within being, within spacetime (likely related to quantum superposition). Language is built in time; even using the word “remains” indicates a holdover from the past, but this is not accurate. Instead, one might say in the postmodern sense, the trace is *always already* implicated in the here and now. What does this mean in everyday terms? It means being/asymmetry emerged or emerges spontaneously from the nonbeing/symmetry of the plenum – and, moreover, is still doing so. The ongoing emergence of each existent requires that a place and a present (a space and a time, including a past and a future) come into being as well, creating a context for each existent. As I understand it, it is in this way that we find ourselves thrown into the particular contexts of being (*dasein*), which renew themselves during each moment of existence providing a sense of continuity to what is in actuality ongoing creation – creation renewing itself each instant.

[Pardon me, Dr. Globus, if my interpretations are unrecognizable to you, but that’s the nature of *meaning* in this universe of parallel independent minds: each reader creates the meaning of a text as much as or more than the author!]

This early mention of plenum is rarely repeated as Globus goes on, probably so the reader does not confuse this “pregnant emptiness” with a metaphysical or transcendent background to the between-two out of which being arises. Instead any ultimate ground or background, Globus refers to the “abground,” which literally means “*away from* ground,” a term he has loosely taken from Heidegger. This does help the reader to sense this ground is not anything; it is in fact emptiness (as indicated), but it is pregnant with tension – with the vast potential energy that is constantly produced at the dynamic point of creation *between-two*, but which is held in the state of potency by being reabsorbed into this *abground* (formerly known as the plenum).

Now any reader of the journals *NeuroQuantology* or *PreSpaceTime* or who is acquainted with the frontiers of physics will recognize this non-existent *abground* as suggestive of the quantum vacuum (known by a variety of terminology as it is differently conceived). This is difficult territory to speak of, for it is no territory at all. Concepts call up a sense of something that becomes present to mind, but the quantum vacuum is as close to nothing as we can get and it can never be present. The use of a neologism like *abground*, if properly received, can help us to intuit that there is no ground of being, no transcendental background, and that the quantum vacuum is best understood as the absent presence or the present absence of so-called postmodern thought. It neither exists here nor there (and certainly is not an origin found in the past), yet it is the active principle of being-in-the-world:

The ultimate ‘ground’ is an ‘abground’ … the quantum vacuum state which is ‘between-two’. The abground is pre-space, pre-time, pre-objectual. The flow of belonging-together lights up the dual mode match as world-thrownness. … There is no transcendent world in addition. … Instead reality is an abground dynamically erupting in creative advance. (p. 6)

This creative advance is always happening and is made manifest individually. Globus does not let realism sneak into his ever-erupting dynamic process by having us all thrown into the same world, for “[w]orld-thrownnesses are parallel affairs” (p. 6) – each of us, apparently, appears as the creative core of our own *dasein*, our own lived reality, but we are still able to relate to each other since we have been thrown into existence under parallel conditions. This vision of ultimate reality stretches daily credibility to the maximum, since there is little observable evidence of such a state of affairs, but this should not be surprising since observation can only be of an already existing physical world that, according to Globus, is really a creative process.

Globus sees through such physicalism and boldly attempts to make clear his between-two principle, yet he bases much of his theory on the quantum thermofield dynamics within the material object we call the brain. No doubt without brains none of us would be conscious (or conscious in any way we can comprehend from here), but the fact remains that brains are physical entities and Globus goes to some lengths to show us that physical objects are the result of being thrown into being, not the cause. So how can he place so much emphasis on the quantum thermofield dynamics of these particular objects when thermofield dynamics underlay all that is? It seems that the object that manifests to our senses as the brain is to Globus a particularly dense and complex thermofield that he refers to as the *cryptic brain* that has “striking *ontological* capabilities” so that the brain “‘explicates’ Being from a plenum of interpenetrated possibilities, produces presencing, ‘unfolds’ the very appearances that are the world from an implicate order” (p. 6). This passage that, as usual, freely mixes terminology from very different sources, connects the brain to the unfolding of Being from the quantum vacuum/plenum still leaves it unclear why it should be that which we identify as the brain and nothing else that is so privileged as a creative matrix. Apparently, the observable brain is the external manifestation of the most complex quantum thermofield system of which we know.

Lost? Without the firmament of scientific terms that allow us to imagine that reality is ultimately physical, material, and objective, it is all too easy to lose our bearings. But if we are ever to think beyond the limitations that science has set itself, to get an inkling of the truly complex nature of reality, we must be bold or crazy enough to reach, as Globus, with his unique life trajectory, certainly does.

The key here, to repeat, is the notion of *between-two*, which offends our comfortable hope for a monistic ultimate; an ultimate *one* that is the source of everything will always imply, for many, the transcendent deity we have been taught *must* be out there, somewhere, watching over us. Instead the between-two suggests an ultimate dualism, and Globus does not deny that it s*eems* this way, but he is attempting a description of dynamic existence *between-two* that brings into being *the two the between-two is between*, if any sense can be made of these words at all. How is this possible? Anything is possible in the aliteral, unworldly quantum realm, and Globus draws this idea of between-two from “Umezawa’s (1993) formulation of thermofield dynamics in which quantum physical reality has dual quantum modes that are entangled in the least energy quantum vacuum state. The quantum vacuum state is accordingly *between two modes*” (p. 6).

Can any sense be made of this dynamic principle that yet only exists between-two? What are the two that the between-two is between?[[4]](#footnote-4) One side seems to be the non-physical realms of activity we variously refer to as “‘consciousness’, ‘mind’ and ‘spirit’,” which includes other attributes like “subjectivity, intentionality, qualia, perception of world” (p. 5), and the other side is the physical realm, especially the brain, with which so much of our subjectivity correlates. It helped me not at all that Globus denotes the former experiential realm collectively with the symbol “ψ,” and the latter physical realm as “ø” since I had to keep checking back to see which was what. In any case, these are the two the *between-two* (aka the dynamic process of the quantum vacuum) is between. This is Globus’s explanation for the famous, seemingly inexplicable *explanatory gap* in consciousness studies between the mind and the brain with which it is implicated: Between them is the pregnant emptiness of the quantum vacuum from which both of them arise, yet this quantum vacuum/plenum/abground cannot be said to exist without the aspects of subjective experience or objective manifestation.

Amongst philosophers, many have recently been drawn toward a worldview that does not deny monism. Double-aspect monism is one ultimate ground that has the dual aspects of physical manifestation (rather than the monism of materialism or realism) and subjective experience (rather than the monism of idealism, transcendent mind that creates the physical world). However, it has never been made clear just what is the nature of the single essence out of which the double aspects arise. The quantum vacuum as the originary essence has been proposed before (including by me: see Nixon, 2010a; 2010b). Since it does not in itself partake of the attributes of existence including change (time) or position (space), it is a good candidate for the source of the double aspects of timely experience and solid, changing substance. However, Globus turns double-aspect monism on its ear and makes the *aspects* appear as the result of the dynamism of the between-two, which in turn cannot exist as a dynamic boundary zone until it brings into existence the two aspects. This is a conundrum indeed, or at least it seems from our position as *always already thrown into being*, to use terminology Globus seems to like. We find ourselves within the contextual realm of linear time and solid substance moving toward the inevitable heat death of maximum entropy. However, it must not be forgotten that the so-called quantum vacuum (aka between-two, plenum, pregnant emptiness) is eternal, that is, it is timeless, not *in time*, so we cannot assume that isolated subjective experience and material reality (the double aspects) pre-exist our appearance within them. Time-reversal has been scientifically shown to be a quantum reality, as well, but, as we shall see in the last section of this piece, science seems to consistently ignore its own findings lest it put in jeopardy the entire scientific project based in an objective materialist worldview.

This seems to me the core of Globus’s argument for a non-metaphysical process of dynamic creativity arising from quantum interactions, i.e., world-thrownness; it is repeated throughout and summarized again at the end. To strengthen his case he reviews other perspectives and philosophies, interpreting them rather freely to support his unique position or to pick out the points where they fall short. The writing in these middle chapters is less encumbered by Heideggerian obscurity and in its clarity a pleasure to read.

Briefly, in chapter two, “Faith in the World,” Globus throws his reader into doubting that we know nearly as much as we think we do, both in philosophy and in science. Using perceptual illusions and an enlightening discussion of qualia, he makes short work of direct realism (including Ted Honderich’s *radical externalism*). Indirect realism – or indirect perception of reality – means the world we perceive consists of representations “in our heads” but does not doubt there is a real, solid world out there. This is by far the most common position in perceptual physics and in consciousness studies, for that matter, yet Globus takes it to task for clinging to assumptions it cannot support. He notes that many agree that it “is *logically* possible that there is no external world” but find it too bizarre to actually consider the possibility. After all this, he also refutes the likelihood of absolute idealism, noting that it, too, must assume some sort of realism (even in God’s mind) to which it can compare the mind’s reality. He does seem drawn to the idealism of the surreal fiction writer, Jorge Luis Borges: “The purist idealist is Borges, for whom world is no more substantial than a dream-world, and subjectivity is the ultimate ever-receding ground” (p. 47). This sounds like Globus himself, even if he complains that Borges leaves us with a solipsistic regress, for the parallel but distinct thrownness-into-being of individual lives in Globus also seems to unable to account for our experience of a shared reality or of intimate communications of meaning.

The richest chapter of straight-ahead prose is chapter three, “Process Philosophies,” in which Globus nicely elucidates the ideas of physicist David Bohm, making a strong case for equating his holonomic dynamics with process philosophy. Globus adeptly used Bohmian terminology to bring him to the brink of Globus’s own project, but he then shows that Bohm stalls in double-aspect monism. For Globus, the holonomic dynamics of the implicate order is pure potential and should not be seen as any sort of transcendent ground for the explicate order. For Globus, Bohm’s holomovement “lacks any connotation of Being, presence, perceivability, worldliness, indeed any distinction. The holomovement is pre-difference, pre-world, pre-spacetime” (p. 50), which makes the implicate order equate with the quantum vacuum. Remember that, for Globus, the quantum vacuum does not really exist but is instead the pregnant emptiness of pure potential that comes into being through the eruptive dynamics of the between-two. The implication is that Bohm should have seen this too and not held onto to dual-aspect monism since there is no “one” that pre-exists being.

Whitehead is similarly dealt with. Globus picks out facets of process philosophy that elide nicely into his between-two vision of world-thrownness. For example, “*Being is not automatically there: it is a continual achievement*” (p. 61, Globus’s italics). With this Globus agrees, but he also notes that Whitehead’s particulate occasions of experience in “creative advance” are dependent on the objective occasions that went before, so the creative advance into novelty is still largely dependent on the past. However, for Whitehead, creativity is the ultimate reality engine, and Globus notes that “Creativity is holonomic,” so finds a way to tie Bohm to Whitehead and both of them to his own views. I do not entirely recognize Globus’s Whitehead, but Globus does a nice job of interpreting the Whiteheadian God in three natures and the difficult idea of Whitehead’s eternal objects. In the end, however, Whitehead must accept an actual world, according to Globus, even if it is in creative process. I’m not sure of this, but it works as introduction to Globus’s turn to Heidegger.

It is a sudden transition and the language changes accordingly from familiar if complex to shadowy and ephemeral as Globus attempts to summarize a Heidegger I hardly recognize despite the use of Heidegger’s own terminology. Most readers of Heidegger, including his admirers, recognize that Heidegger creates a reality vision that is ultimately self-referential since he invents so many of his metaphysical/anti-metaphysical terms. In a similar way that Jungians can mainly speak only to Jungians since no one else is familiar with the logical or terminological territory, most Heideggerians are usually left to themselves or drawn in disarray amongst the poststructuralists/deconstructionists like Derrida. Globus, however, insists on seeing Heidegger as the apex of process philosophy and works hard to make the Heideggerian vision go beyond that of Bohm or Whitehead. He succeeds to his own satisfaction, but I have to confess that I often found this part of the chapter elusive to the point of frustration (something almost everyone experiences while reading Heidegger himself for the first time), and I found myself wondering, *Does Globus even need Heidegger when he’s outlined his point so well already*?

When I read his *The Postmodern Brain* (1995), I mostly wrote Globus off as a dabbler in things postmodern since he applied Heidegger and other such writers to neuroscience and quantum physics (as he does here), things Heidegger would disdain; the postmodern vision eschews any association with the worldview of science. In general, one might say it is more interested in undoing our objective materialist assumptions than fulfilling them by taking them to the next level. I enjoyed that reading but mostly for the wrong reasons. Heidegger with his painful abstractions and idiosyncratic postulates simply did not fit well paired with Globus’s attempt to come to grips with the workings of the brain, even at the quantum level.

Even today in *Transparent Becoming*, Globus admits, “I of course force a marriage here between Heidegger and Bohm which neither would enjoy” (p. 70). But after working with this most recent text, I have to give Globus more credit, for no philosopher but Heidegger, including Bergson, has gone further or delved deeper into the arcane mysteries of time — and the denial of objective linear time may well be the sticking post on which scientific courage gets hung: Theorize as they may, scientists in their writing appear unable to imagine anything but a physically real world beyond our senses and a time that flows one way from its big bang beginning to its inevitable end.[[5]](#footnote-5) Does Heidegger manage to suggest anything else? Maybe so, maybe not: To gain any understanding of Heidegger it is necessary to accept his vision on its own terms, often with its own self-referential meanings or intentions, and this makes understanding rather like dedicating oneself to a path, spiritual or otherwise, that one may find it hard to leave once one has begun.

Sometimes it seems Globus uses Heidegger simply to add more terms for his between-two non-concept of the timeless plenum/holomovement/0D/pregnant emptiness/pre-spacetime/quantum vacuum: “*Zeit* [time] is an opening that is pre-spatial, pre-temporal, pre-measurement, an opening indeed that is transcendental to dimensionalization [yet not a background]” (p. 71). Sound familiar? But Globus is also pointing out that Heidegger is using the German word for time, *Zeit*, in a unique way. For Globus, “Heidegger’s ‘time’ … has a ‘timeless quality’” (p. 71) Heidegger, like Globus, intuits an in-between: “The ‘temporal ekstases’ are Heidegger’s attempted solution to the duality of the Scholastics’ immanence and transcendence. *Ekstasis* straddles the divide” (pp. 71-72).

Ekstasis, then, is another way of expressing the between-two, but the term, as ecstasy, has entered our vocabulary as a name for peak experiences in which we breakthrough the barriers of self into what has been described as transcendent bliss or oceanic unity, but that’s the best we can do, for without the presence of the self as a note-taking observer, self-transcendence can only be directly experienced but never accurately remembered or described. This suggests that both *ecstasy* and *ekstasis* refer to a breakthrough out of it time, itself. Such a breakthrough cannot happen before or after time, since such prepositions as “before” and “after” still imply time. It can only be in an actual present, *the eternal Now*, from which both past and future spring to create the illusion of a one-way flow of time.

It is well-known that the "now" we experience on a daily basis is a constructed now – a product, in fact, of consciousness. Sometimes Globus himself seems to confuse the experienced now with the actual now, at least when he sees the “now” as *in time*, but later he projects that mistake onto Vitiello.[[6]](#footnote-6) There must be real "Now", of course, for how else could things be time-delayed, *behind* the timelessness of chaotic dynamism? Like the between-two, the ultimate Now may be all there really “is”, though the verb “to be” may be inappropriate for a field without the scientific properties of existence.[[7]](#footnote-7) By definition, such a "Now" can only be identified with eternity, the "now" of the eternal return. Our lived "now", however, is somewhat in a time-delay from that eternal (actual) present of sheer energy reactions – and I would suggest that this is so because we live mainly through memory. The constructed self of language restricts us from the immediacy of experience in the penultimate[[8]](#footnote-8) present. Our "lived reality" (Husserl) or our "*dasein*" (Heidegger) or our "duration" (Bergson) or our habitus (alchemy) is a continuum of remembered past and anticipated future. We may well live in this continuum, forever held back from the actual present, which *remains* anticipated but always deferred.

As Heidegger as written, "for the most part we *are* our own having-been" (1927 lecture "*ein eigener positiv ekstatischer Modus der Zeitlichkeit*"). This present-pastness is the time of our personhood-in-the-world. To enter the actual present in selfless (one might almost say “unconscious”) awareness is an experience both of anamnesis and forgetting, as Heidegger puts it: "The ekstasis of forgetting something has the character of disengagement vis-à-vis one's ownmost having-been, indeed in such a way that this disengagement-in-the-face-of closes off what it faces. Because forgetting closes off having-been – such is the peculiar nature of that ekstasis – it closes off itself to itself." "Ekstasis" implies more than rapture, of course, suggesting as it does out of place (*histanai*) or out of time (*stasis*).

Globus concludes his section on the process philosophy sometimes straining to unite the ideas of Bohm, Whitehead, and Heidegger:

There happens to be a transcendent world, which Heidegger does not doubt in his thinking inceptually of the other beginning. This stance with respect to the transcendent world is coherent with the reality of Whitehead’s concretions and Bohm’s explicate order, while *in-der-Welt-sein* constrains, fulfilling the same role as Whitehead’s primordial God and Bohm’s law of overall necessity. (p. 75)

The deconstructive eye (so often mentioned by Globus) raises an eyebrow at this rather cavalier merging of what are very different concepts. Globus is much more fair when he concludes that “Whitehead, Heidegger and Bohm are equally committed to world [though one underlain with process, “*Seyn*” or explication) and equally opposed to any taint of idealism” (p. 83). This seems to be Globus’s central point and his introduction to his next chapter four on “Quantum brain theory and its neurophilosophical interpretation.” This chapter seems to be central to his theorizing but it will receive short shrift here since most of its discussion, though fascinating, seemed somewhat tangential to his core focus on the between-two. The more abstract notions of quantum neurophilosophy simply escaped me. He does a nice review – again with the clarity of a realist painter – of major players in quantum field theory but concludes, “Neither Penrose and Hameroff nor Stapp question the external world” (p. 97). This is indeed key, if, as I understand it, the so-called external world is actually an ever-recurring creation out of a timeless Now, rather than a creation that happened once, long ago, and is currently in the process of unfolding from that determined past into a largely predictable future.

The thermofield brain dynamics of Jibu and Yasue and, earlier, Umezawa, however, offers Globus more for an explanation of consciousness that does not emerge from an already given world: “It is remarkable that the entire past is continually carried forward into the immediate present, recreated as a relevant whole. So the current vacuum state reflects the entire past into which the present is continually enfolded” (p. 102). This seems to indicate that there is an “entire past”, which seems to me to deny the creatively open state of world-thrownness. Does the quantum vacuum state then change? As a nothingness of dynamic chaos, this seems inconceivable.

But Globus here draws on other sources to reveal that the first step of world-thrownness is incorporate a trace memory of previous existence – even if there has been no previous existence in the plane of being. For Globus, this memory trace, as indicated, is in the quantum thermofield dynamics of the brain: “Memory traces are symmetron traces” (p. 103), but seem too realist, too already-into-being, to make sense. The trace is more likely a construct of irretrievable associations, which becomes associated with memory. We attach ourselves to memories because we arrive with traces of other worlds. In this way, memory precedes or coincides with not only consciousness (for many memory and consciousness are identical) but Being. As Globus puts it, “Trace is prior to consciousness” (p. 125), and, “*Memory is prior to Being. Trace is pre-world*. The state of the between-two depends on its recognizing abilities. Re-traces offer the possibility of belonging-together with input replications” (p. 127). Somewhat beyond perfect grasp, as always, the suggestion of an infinitely creative, dynamically active, inconceivable Now that Globus prefers to see as the between-two is clear. How can world and time emerge from such a timeless singularity? He adds, enigmatically, “The simplest way is to have system and environment *matching in energy*. Then the environment is simply represented as the *time-reversed* copy of the system the system’s ‘Double’” (p. 107).

This time-reversal suggestion I consider one the core breakthroughs of this little book. This goes against both hard science and daily common sense. In fact, it is not really a reversal of time but instead *the creation of time and place* – of Being itself – as one finds oneself thrown into a contextualized reality with only the gift of traces of actual origin trailing along. This thrownness from a between-two seem to also do away with favourite stories of pre-existent transcendent reality since pre-existence (like post-existence) is also indicative of linear time.

Globus concludes his book with a reiteration of what is said in the introduction but adds several hints of what could be considered at least more mysterious but perhaps even more mystical side to all this. Before I close with this, however, I would like to ask why any of this highly abstracted and sometime messy dwelling-together of perspectives so varying they are probably shocked to find each other sharing the same room *matters*? Is this even philosophy? Yes is my answer. It certainly does not seem to be science, however, and may be precisely why it matters a great deal. It goes where science cannot.

One method to illustrate this is to do a quick comparison with another recent book of short length but one requiring only a very short read. I refer to Steven Hawking’s *The Grand Design* (2010), which was assisted in reaching a popular audience by Leonard Mlodinow who no doubt was responsible for the irritatingly lame humour throughout. Hawking himself, however, must have been responsible for the stance of scientific arrogance that mocks all philosophy as he has spoken this way on several other occasions. The two major problems with the book are stated early on: “What is the nature of reality? Where did all this come from? … Traditionally these are questions for philosophy, but philosophy is dead. Philosophy has not kept up with modern developments in science, particularly physics. Scientists have become the bearers of the torch of discovery in our quest for knowledge” (p. 5)

Hawking and Mlodinow then proceed to use a core of well-founded scientific theories (even they admit there are no absolute scientific facts) to expand theories freely and sometimes wildly in support of their *model-dependent realism*, yet they do not see this as philosophy. This also leads to blindness as to their unquestioned philosophic assumptions, for if Hawking and Mlodinow are promoting a conceptually modeled universe they must accept that reality is as much subjective as objective. Yet, throughout the book, they simply accept linear time and indirect realism as self-evident. As Globus might say, the deconstructive eye widens at such blind acceptance of *self-evidence*.

Though *Transparent Becoming* was written before that of *The Grand Design*, Globus had already written his response:

To the contrary, when philosophy is excluded from the discussion, then tacit philosophical assumptions – in all likelihood metaphysical assumptions! – go unquestioned. … To look at consciousness and the world in the way of physicists happily practicing their trade is of course to assume metaphysics. … The physicist’s unexamined commitment to world precludes discovering the crossing of stalks in the sheaf of discourse. (p. 110)

On the one hand they state, “According to model-dependent realism, it is pointless to ask whether a model is real, only whether it agrees with observation” (p. 46), and they later point out that “observing a system must alter its course” (p. 80). This admits to a major subjective influence on real reality, very close to Schrödinger’s famous statement, “The only mode of being is to be observed.” However, as stubborn physicists, they ask, “How do I know that table still exists if I go out of the room and can’t see it? … The model in which the table stays put is much simpler and agrees with observation. That is all one can ask” (p. 47). Aside from wondering how an unseen table can agree with observation, other questions follow. The authors wish to make the move into observer-dependence, as revealed as necessary in quantum physics, but are unwilling to question the assumptions of realism, thus their phrase, *model-dependent realism*, which the deconstructive eye sees as a halfway measure if there ever was one. Amidst their talk of observer model-dependence, they outline the history of the universe and its destiny, even while suggesting there may well be other universes with different natural laws.

But in their most intriguing chapter on quantum physics they open a door to a quandary they cannot simply shut again for the sake of convenience, and this is the second problem of the book and of the scientific viewpoint itself:

Quantum physics tells us that no matter how thorough our observation of the present, the (unobserved) past, like the future, is indefinite and exists only as a spectrum of possibilities. The universe, according to quantum physics, has no single past, or history. The fact that the past takes no definite form means that observations you make on a system in the present affect its past**.** (p. 82)

With this admission, Hawking’s clinging to the unquestioned acceptance of linear time (at least in this universe) is seen to be approaching desperation or at least obstinacy. Simply put, if the past is determined by observations in the present, then we can never be certain that the past is any more certain than the future. If this is true, one must accept the consequences and this will require a bold new philosophy that is not afraid to cross boundaries and speculate with concepts from a mixed package of sources.

Of course, this is exactly what Gordon Globus has been doing for years. He has refused to identify himself with realism or idealism or dualism or even dual-aspect monism. Globus, a true trickster of text (like his postmodern mentor, Derrida), disdains all of these ontological ultimates equally (though it seems to me he veers perilously close to idealism on a number of occasions). Like the trickster god, Hermes, Globus positions himself on the boundaries where, as Macbeth put it, “Nothing is but what is not” (I:3). (Globus would likely deny even this since the one thing the trickster abhors is being stuck in place with any sort of label.) Globus would prefer to begin (and even the verb “begin” is thrown into question here) between-two (or between *at least two*, since his complex intermingling seems to be between any number of penultimate processes). As mentioned, he turns dual-aspect monism inside out. Instead of the monism with two aspects – two sides of one ultimate ontological background – Globus implies that Being (as memory if not conscious experience) begins between the two – though how a *between-two* can exist before there are a *two* escapes all logic, at least logic based in linear time. And this is the crux of his seemingly illogical anti-metaphysics that yet compels attention: it is inconceivable in linear time or even in progressive time cycles for a between-two to arise before the two aspects it is between, but, note, we refer here to linear time; in fact, a *two* arising from their common boundary condition seems to indicate both past and future arising from an impossible instant between them (which is not the actual past of the experienced present) in which being is the only reality.

This means that absolute Now of dynamic chaos, the between-two, the quantum vacuum, the pregnant emptiness, the void from which all else arises is the only ultimate reality, but we are stuck with contradiction that our ultimate reality has none of the qualities of existence! Without such boundaries, we must assume this between-two plenum was absent-present before there was a big bang, because time arises from it. The only conclusion possible is that time arises each instant and the universe is in a continual state of creation. We find ourselves thrown into a reality that appears to have the qualities of time and space with the same disorientation we find ourselves thrown into when dreaming. First, we transform our memory traces into the given memories of our new context then we slowly come to assume a conscious identity within that context, fully embracing the seeming reality of linear time and extension in space.

The truth, according to Globus, turns out to be far stranger than fiction, but it does have a resemblance to certain esoteric and ancient philosophies of India. Globus himself likens the between-two the famous *Tao* symbol, in which each side of the opposite shades of the image also contain a smaller image of that opposite, indicating a belonging-together, an *identity-in-difference*.

Globus exceeds science. The question is, has Globus also exceeded philosophy? He seems willing to admit that his “*ability* to unfold an alternate reality – a separate world – according to the sorceric description rather than the socialized quotidian one” (p. 143) does place him in a category all his own. As a trickster of text who dwells nowhere but on the boundaries of things – on the traces of the between-two – including the boundary between the seemingly existent and potent non-existence, I would label Globus as that rare philosopher whose vision has aspects of the sorcerer. As such, not many will follow him on his strange journey, since its very strangeness indicates a truth that is hard is live with.

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2. Globus later develops his own more specific version: “Memory traces are symmetron traces. When the same or a similar input recurs, corticons and photons are excited, which recovers a conscious memory from the symmetron trace” (p. 103). This is still not a memory of past *being*. [↑](#footnote-ref-2)
3. This phrase has been said to originate from both Emmanuel Levinas and Maurice Merleau-Ponty. Derrida (1978) states, “With the alterity of ‘unconscious’, we have to deal not only with the horizons of modified presents – past or future – but with a ‘past’ that has never been nor will ever be present, whose ‘future’ will never be produced or reproduced in the form of presence. The concept of trace is therefore incommensurate with that of retention, that of becoming-past what had been present. The trace cannot be conceived – nor therefore can difference – on the basis of either the present or the presence of the present. A past that has never been present: with this formula Emmanuel Levinas designates … the trace and the enigma of absolute alterity.” [↑](#footnote-ref-3)
4. The reverse of the usual question of dual-aspect monism: What is the one that the two (experience & substance) are aspects of? [↑](#footnote-ref-4)
5. Note I say “in their writing,” which conventionally unfolds in linear time, narrative or exposition style, for there are a number of famous names in science, beginning with Einstein, who no longer accept time’s reality, e.g., Julian Barbour. [↑](#footnote-ref-5)
6. “Vitiello does not mean to imply that Now is a singularity in time. Now is considered in time, part of its flow, participating witness” (p. 111). [↑](#footnote-ref-6)
7. This seems to go against Einstein’s showing that there a different nows for different observers, but an observer is an experiencer so of course its particular context of consciousness will determine its experienced now. But this is not the actual Now or what I prefer to call the eternal Now of chaotic dynamism that is “void and without form” (not to mention time). Einstein himself is said to have told his friend, the logician Rudolf Carnap, that “there is something essential about the Now which is just outside the realm of science” (in Falk, 2008, p. 295). [↑](#footnote-ref-7)
8. “penultimate” because Being or mind cannot exist into the absolute Now of the between-two. [↑](#footnote-ref-8)