Book Reviews

Panpsychism, Linguistic Consciousness, Transcendent Mind: Book Reviews

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Abstract

Following are seventeen book reviews I have written over the years that have been selected by themes suitable to this journal. The thematic sections are panpsychism, language & human consciousness, and transcendent mind. Some have been previously published in journals while others have only been posted online (*e.g.*, Facebook discussion groups or Amazon.com), but this is the first light of day for none of them. I have made minor adjustments to suit the format, but most remain the same as when they first appeared. The majority are highly positive of the books reviewed, but some few are more critical. This should be no surprise since most of us choose to read books we expect will please us. I presume I'm not the only one to like book reviews for their summaries and capsule insights. Book reviews can be insightful, but the perspective of the reviewer must always be borne in mind. My philosophical perspective is easily discernible in what follows, though I am an explorer not a believer, *i.e.*, not committed to it. Metaphysically, I lean toward the panpsychist subcategory of Whiteheadian *panexperientialism*, now preferring the more dynamic term *pancreativism*. However, I admit to an inclination toward non-deity *cosmopsychism*, a universal field of awareness that experiences through individual experiencers. Further, in philosophy of language, I recognize the *symbolic threshold* that separates our human conscious experience from that of our animal confreres, though we often share a similar emotional foundation. Human symbolic consciousness allows for abstract thought and technological powers of environmental manipulation – with the result that we humans have run amok on this planet and are the greatest danger to it. I believe that our hope is the breakthrough into greater insight and understanding, that is, an awakened consciousness – perhaps an as yet barely foreseen more mutual, transpersonal but not physically transcendent form of awareness. Ontologically, pancreativsm is related to neutral (multiple-aspect) monism, but, more anti-metaphysically, to Merleau-Ponty's intra-ontology (*cf.*, Nixon, 2021).

Keywords: Panpsychism, symbolic threshold, panexperientialism, pancreativism, transcendence.

References

Nixon, G. M. (2021), 'Experiential metaphysics and Merleau-Ponty's intra-ontology'. *Constructivist Foundations* 16(2): 153-155: https://constructivist.info/16/2/153.nixon.pdf

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Books Reviewed

Section I: **Panpsychism**

Section II: **Linguistic Consciousness – Human Origins**

Section III: **Transcendent Mind**

Section I: **Panpsychism**

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1. Christian de Quincey, *Radical Nature: Rediscovering the Soul of Matter*

Invisible Cities Press, 2002, 337 pages
ISBN 1-931229-15-5 (pbk)

Christian de Quincey, Managing Editor of the IONS (Institute of Noetic Sciences) Review and advocate for a unified view of consciousness, cosmology, and spirituality should be well-known to the *out there* readers of consciousness studies. He has placed his endorsement of panexperientialism — the view that physical nature experiences — in opposition to the perspectives of Colin McGinn, Nick Humphrey, and Ken Wilber in three *Journal of Consciousness Studies* (JCS) articles (1994, 2000a, 2000b) — much of which is repeated here. Panexperientialism is a bracing notion, one in which human consciousness arises from the natural life of the universe without the explanatory gap of traditional materialism, the need for any sort of supernatural miracle, or the belief that cells, electrons, quanta, etc. have conscious minds.

For me, it is 'a consummation devoutly to be wished'. Scientists, too, should feel a great sense of relief that they no longer have to suffer the frustration of seeking the cause of subjective experience amidst objective reality because subjective experience has been here all the time! De Quincey states forthrightly that his purpose is less to argue than 'to tell a new cosmology story aimed at healing the split between mind and body, between consciousness and the physical world' (p. xii). So what we are dealing with here is not traditional philosophy at all, but therapy. Since the case for panexperientialism cannot be revealed experimentally or logically, de Quincey's therapy will proceed by going beyond such and appealing directly to the 'paradox of experience' itself.

This all sounds agreeable to me so I gird my loins for this adventure into raw experience (even though de Quincey has proven himself so excellent at unbiased intellection that his restatement of materialist Humphrey's noted *A History of the Mind* was recommended by Humphrey himself (2000) as the best summary available). But here all de Quincey tells me is that when intellect faces paradox, 'we must bow in silence before the mystery — and participate with it on its own ineffable terms' (p. 22).

Unfortunately, de Quincey postpones such 'bowing' and does the usual thing with relativity, quantum physics, and chaos theory, the three twentieth century sciences that have undermined mechanism. We next get a summary of the philosophical mind-body problem (even though we know he's already solved it) and the history of panpsychist thinking. I was still awaiting my direct revelation when I found there were two meanings to 'consciousness': one 'psychological' that distinguishes between conscious and unconscious (or preconscious) experience, the other 'philosophical' that equates consciousness with

experience 'all the way down'. Ignoring the fact that many psychologists and philosophers would disagree with this prescription, it seemed to me de Quincey might be folding his tents and preparing to leave the panexperientialist encampment.

The important point about panexperientialism is that it recognizes that conscious experience is a particular quality or mode of universal experiencing in which the mindful apprehension of both world *and* of physical experience is present. To fall back on the standard term *panpsychism* is to open the door to the Mind of — or *beyond* — Nature, which is top-down, shamelessly *religious faith*, not the sort of pantheistic panexperientialism I had come to expect from de Quincey. In this way, de Quincey differentiates his views from the panexperientialism of his colleague David Ray Griffin who apparently coined the term (Griffin, 1977).

This panpsychist-panexperientialist question left me in a panic. Who am I to believe now? Will my direct experience of 'radical nature' be conscious or unconscious? It is a good thing that *Radical Nature* is only the first volume in a proposed trilogy that will be followed by *Radical Knowing* and *Radical Science*. I eagerly anticipate the next two as surely they will cure my pandemic confusion.

References

Griffin, David Ray (1977), 'Whitehead's philosophy and some general notions of physics and biology'. In J. Cobb & D.R. Griffin, eds., *Mind in Nature: Essays on the Interface of Science and Philosophy.* University Press of America.

de Quincey, Christian (1994), 'Consciousness all the way down? — An analysis of McGinn's critique of panexperientialism', *Journal of Consciousness Studies* 1 (2): 217-229.

de Quincey, Christian (2000a), 'Conceiving the inconceivable: Fishing for consciousness with a net of miracles', *Journal of Consciousness Studies* 7 (4): 67-81.

de Quincey, Christian (2000b), 'The promise of integralism: A Critical appreciation of Ken Wilber's *Integral Psychology*', *Journal of Consciousness Studies* 7 (11-12): 177-208.

Humphrey, Nicholas (2000), 'In reply,' *Journal of Consciousness Studies* 7 (4): 98-112.

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2. David Skrbina, editor, *Mind that Abides: Panpsychism in the New Millennium*

John Benjamins, 2009, 401 pages
ISBN 978 90 272 5211 1 (HB)

Is the great god Pan reborn? For a while there, it seemed every intellectual movement began with the prefix 'post', implying non-totality, but now there are indications that 'pan' (all) is returning to provide another answer to one of the most basic of ontological questions: What is the relationship of mind to matter? In this important book with 17 different authors, panpsychism is given its due.

From a previous widely-accepted dualism we have now mostly settled into the monistic worldview of what Skrbina calls *mechanistic physicalism* (p. 364), in which mind, if it exists at all, is somehow a derivative of the non-mental, deterministic physical universe of matter and energy. This book sets out to convince the reader that probably the most ancient of worldviews has been right all along: mind is ubiquitous in the physical universe, and psyche is everywhere in everything. Just like that, the hard problem is solved and no one need wonder how awareness could arise in a non-aware world. The exact form and nature of this *pan-psyche*, however, remain in question.

In the introductory chapter, Skrbina summarizes his earlier book on panpsychism in western philosophical thought, as well as mentioning more contemporary thinkers with panpsychist perspectives. He includes such recent luminaries as Teilhard de Chardin, Bateson, Nagel, Bohm, and, more controversially, Chalmers. He also mentions two books that stand out, each in its own way, as more coherent and stirring panpsychist statements than the current collection — Abram's (1996) wonderful paean to the earth, and Griffin's (1998) process panexperientialism. On the other hand, he overlooks Velmans (2000, reviewed in *JCS* 7/10), who has significantly similar views to Strawson.

Strawson's *realistic monism* or *real physicalism* is becoming the panpsychist standard position to judge by the number of citations it gets and the references to it in the other essays. Strawson's contribution is the first essay in **Part I: Analysis and Science**, though there is little science in it. His position is basically that consciousness can neither be accounted for by any known physical theory, nor can it sensibly be said to supervene or emerge from non-conscious matter. By default, it therefore appears that physical entities must each have been intrinsically conscious all along: 'the existence of every real concrete thing involves experiential being even if it also involves non-experiential being' (p. 37). The mistake that has been made, he avers (citing Eddington), is that our measuring devices tell us about things externally but not what state they are in themselves. He avoids any suggestion that his monism is itself holistically aware, as a pantheist might, but focuses instead on the intrinsic experience of each entity to itself. This may be the reason he insists that (quoting Frege) '"experience is impossible without an experiencer," a subject of experience' (p. 53). This intrinsic internalizing may oppose the panrelationism (similar to what Skrbina proposes in the last chapter) and the panexperientialism of the process

philosophers, each of which see experience created through interactions and thus more participatory than privately subjective. For Strawson, *all* objects, not just quantum particles, are also *subjects* of experience, i.e., conscious. Panexperientialists understand experience qua experience to be taking place at all levels of being but experience that has become conscious of itself, i.e., conscious experience, as being much more rare. Both Skrbina and Strawson basically ignore unconscious experience, which surely is experience without an experiencer.

His tone-setting chapter brings up most of the questions with which theoretic panpsychism will continue to contend: the relational vs the internal, raw experience vs conscious experience, and experience with or without a subject of experience. The priority of space or time is a final question broached by process thinkers such as Solhdju: Do experiential processes in time create spatial objects or are already existing objects intrinsically possessed of inner subjectivity?

Goff is the only panpsychist skeptic represented in the collection. He argues that current panpsychism cannot get around the combination problem: How do little experiencers combine into big (or complex) experiencers? This seems to refer to the aforementioned *subjects of experience* and may be less of a problem if experience is conceived as participatory and pre-subjective. Goff further states that the emergence of mind is no more mysterious than the explainable emergence of life from non-life. The latter is scientific dogma, but most panpsychists would agree that lifelike qualities must pre-exist living manifestations just as experience pre-exists kingdom *animalia*; thus, neither life nor experience is a 'brute' emergence from its opposite. To make his point that in the future the emergence of consciousness will be no more remarkable than that of life, Goff states that, though currently we may conceive of an unconscious zombie, we cannot conceive of a non-living human duplicate. Is this so?

Globus is a near-panpsychist who posits that panpsychism cannot go *all the way down*: 'The decisive point is that there is a size threshold in quantum field theory below which collective dynamics cannot emerge and so there can be no qualia there' (p. 79). We're talking Planck scale here, but these assumptions mean qualia would still be an emergent from matter-energy. Coleman, like Strawson, is a panpsychist internalist who argues that entities must experience in themselves independent of their relations to other entities. Without 'reality's intrinsic building blocks … [w]e face nothingness' (pp. 92-93). Interesting that some mystical traditions take *dynamic nothingness* as the ultimate source, similar to our conception of dynamic process when it is pushed into the insubstantial, as in quantum field theory or the postulated zero-point field. Perhaps the nothingness abhorred by Coleman is as rich in potency as the long-sought quantum vacuum.

In a refreshing chapter because of its clarity and depth, Deiss looks to systems changing in time as the source of sensations, also an effective approach to the combination problem. Consciousness he sees as the *interpretation* of sensations (qualia), which requires memory and reason. Sensible, so to speak, but what then are sensations in themselves – perhaps unconscious experience? With his nod to a systems approach, sensations themselves could

arise within entities *as the result of* external entanglements (i.e., relations), implying that experiencers emerge from experience, contra Strawson. Strawson claims there can be no experience without a subject of experience. However unconscious sensations that have their basis in external relations would seem to be an example of how experiences can occur without a subject of experience. Strawson fails to see this because he fails to distinguish conscious from unconscious experience.

Spät closes Part I with the appeal that panpsychism has moral corollaries such as vegetarianism and kindness to all objects, but I do not see this at all. It's always tough to get from an *is* to an *ought*, and for panpsychists vegetables feel too. Further, if the experience of tribal peoples within an animistic worldview (the precursor of panpsychism) is any indication, there is as much threat as communion from a natural world alive with minds, so we may find ourselves fighting as much as protecting such *others*.

Part II: Process Philosophy could have used a basic statement of this position from, say, Griffin, so an uninitiated reader could grasp its outlines. Whitehead's process cosmology still remains the most completely rendered form of panpsychism (aka pantheism or panentheism), and the chapters here assume an understanding of process philosophy on the part of the reader that some may not have. Basile takes up the process mantle and speaks in favour of unconscious experience, defends relationality in time as ultimate (dynamic process over static physicalism) and notes how close to Whitehead's occasions of experience are to Strawson's concept of *sesmets* (subject-of-experience-that-is-a-single-mental-thing'). Each is an 'ultimate' or 'portion of energy-stuff' (Strawson, p. 60), though Strawson defends extended *isness* over process dynamism for which each 'single mental thing' exists only for a flash within a larger cosmic process. In this vein, Manzotti makes a strong statement for panrelationality as preceding internal 'subjective' experience: 'Qualities and relations are not a product of the internal activity of neural systems; they are processes taking place in the world' (p. 220).

The last chapters of this second part and the first several of those in **Part III: Metaphysics and Mind** read to me like academic philosophy by and for academic philosophers. I slogged through them, understood the contents, but felt little reward at the end. For a topic as truly world-altering as awakening to panpsychism would be, these seemed to me inconsequential (though Harman's massive chapter is certainly witty). Solhdju's chapter, however, is another favourite. Learning from Fechner and James, she makes the important point that experience cannot necessarily be judged or understood by a rationalism or subjective position that exists external to it. Conceptual understanding requires the split of object from subject and Solhdju traces a meaning for experience that precedes the schism (precedes conscious experience). Furthermore, though each thing receives experience relationally, it affects the whole in dynamic reciprocity: 'Each novel thing that comes to be known thus takes part in the creative transformation of reality, which then serves as a plane for future experience *ad infinitum*' (p. 312). Needless to say, she identifies her position, with James, as panexperientialism. This is the one essay that seems to find a way to accept external panrelationism with inner (not 'subjective') experience by noting how they both interactively create the process of ongoing reality. Solhdju is also able to capture

that animistic sense of 're-enchanted nature' (Griffin, 1998) or 'the spell of the sensuous' (Abram) that is missing in the analytic panpsychism-by-default approach. We access the unconscious aesthetically and intuitionally, after all.

It is in the last chapter that Skrbina returns and attempts to answer the questions I've mentioned – in my view with limited success. His dependence on analytical philosophy may reveal its limitations here. Confusingly, Skrbina suggests new terms — *particeptikon* for reality, and *hylonoism* for panpsychism. To his credit, he emphasizes the magnitude of what is being proposed, but he also fails to see that becoming conscious of our own natural experience could be the source of the dualism he identifies as appearing along with mortal knowledge. He comes out for dual-aspect monism (a unified oneness in two aspects) within 'a holistic and interconnected cosmos' (p. 363). In this he appears to stand against Strawson's view of internally isolated experience. He deals quickly and impressively with the so-called combination problem by calling upon dynamical systems theory, which elegantly explains how subsystems can combine into more complex single systems and so on without depending on category shifts as in 'brute' emergence. A phase shift in systems theory is emergent and not deterministically predictable, but it does not involve the emergence of something totally unlike its source, as brute emergence apparently does. The shifts, transformations, and *combinations* involved have their own probability mathematics within a single category.

He first avoids then finesses the important issue of conscious vs unconscious experience by declaring that 'we might more profitably speak of a continuum of mental states', including 'least aware states all the way up to the loftiest introspective or meditative states' (p. 367). In this way, he reduces the problem to one of mentality and avoids the seeming contradiction of unconscious experiencing. He lists six characteristics of mind, but it doesn't take much insight to see he is referring to the conscious mind, which he has already admitted is only a very minor percentage of the full spectrum of awareness. He admits that there must be dynamical systems below each moment of qualitative consciousness that are not conscious: 'On this view, conscious and unconscious mental activities are going on simultaneously, in parallel, at all times' (p. 373).

But then, rather than this leading him to admit that our conscious experience arises from unconscious experience lower-down the complexity scale, he suggests instead that *all* experiencing entities or relationships are composed of the same parallel mental system: 'For each object there exists a top-level structure that serves as the conscious peak of subjectivity' (p. 379). I found this proposal for a humanlike mind *all the way down* as nothing short of incredible and, just as detractors have cried, unnecessarily anthropomorphic. Experience *simpliciter*, preceding the subject-object split, as outlined by Solhdju and indicated by Hameroff, does not have this limitation.

However, Skrbina's overall image of panrelational holism and interconnectedness is somehow profoundly satisfying: 'In a strange way, each of us is a world-soul' (p. 378). If he gave more credit to *creative experience* in realms that we can only recognize from our perspective as unconscious, he would be close to the cutting edge of awareness – opening

our culturally isolated minds to the subtle flux of their source in the *out there*. Overall a stimulating read, possibly profound, and highly recommended.

References

Abram, David (1996), *The Spell of the Sensuous: Perception and Language in a More-than-Human World.* Pantheon.

Griffin, David Ray (1998), *Unsnarling the World-Knot*. University of California Press.

Velmans, Max (2000), *Understanding Consciousness*. Taylor & Francis.

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3. Godehard Brüntrup & Ludwig Jaskolla, editors, *Panpsychism: Contemporary Perspectives*

Oxford University Press, 2017, 414 pages
ISBN: 9780199359943 (HB)

"Panpsychism is stupid because rocks can't be conscious," is commonly heard. In this volume of collected essays, philosophers of mind do a fine job of demonstrating that panpsychism is a significant and worthwhile question, at least for analytic philosophy. It is both a challenging introduction to the topic and a further development of the issues involved for specialists. Brüntrup and Jaskolla clarify this common misconception: "Most forms of panpsychism … distinguish between mere conglomerates like a rock formation and genuine individuals like animals and possibly elementary particles. Mental properties can only be attributed directly to genuine individuals" (p. 2). *Individuals* refer to primary experiencers.

To begin, the editors cite their approved very general definition of their central term: "Panpsychism is the doctrine that mind is a fundamental feature of the world which exists throughout the universe" (p. 1). However, this generic definition says nothing about the size, shape, or nature of the original or primal "minds" or "mind" from which all other minds derive. This question of the fundamental nature of experiencing entities or fields seems to be the major one being addressed in these pages.

This is an important collection in that it fleshes out the vague postulate of panpsychism with a detailed analysis of how it might be understood (if not exactly what it might mean). For the many skeptics who simply dismiss the very idea as ridiculous, there is much here to demonstrate that a good deal of serious thought has gone into this ancient proposal. There are many ways to interpret panpsychism, and they are well represented in this group of philosophers, each speaking for a unique take on the subject or one of its variations – from cosmopsychism to panprotopsychism to panexperientialism to neutral monism, etc. The combination problem is fully interrogated, as is panpsychism associated with dualism, idealism, physicalism, theism, etc. Anyone reading this book is bound to gain some respect for the complexity of such subject matter and the compelling logic for approaching it.

However, it is the entire logical edifice that leaves this writer somewhat dissatisfied. Despite widely different conclusions, each essay clearly seems to be written from within the analytic tradition, often centrally relying on logical syllogisms to strengthen its arguments. This is fine as far as it goes if one can accept sometimes monotonous reading, but the problem with this is that such arguments most often are limited to negatively revealing what *cannot* be the case, not what positively comes forth as intuition or revelation. Panpsychism itself is revealed to be a default position that must be accepted as a metaphysical necessity since experience cannot logically be understood to have somehow evolved within a non-experiencing reality without calling upon radical emergence or magic, which are much the same thing.

Famed philosopher of consciousness, David Chalmers, figures prominently here. He wrote two keystone chapters for the book, one introducing a logical breakdown of the possible ways to interpret and understand panpsychism and the other to do much the same for panpsychism's combination problem. Chalmers is a deeply incisive thinker who is able to bring out unexpected hidden angles in any topic; however, his ability to clarify by complexity is not matched by an ability to clarify by simplifying.

In Section I, "The Logical Place of Panpsychism", Chalmers first sets up the parameters of the discussion to follow with some important clarifications, emphasizing that experience likely begins with the very small or very brief, as does the physical world. Chalmers astutely outlines all possible interpretations of this reductive stand, outlining the similarities and differences among panpsychism, panexperientialism (all things experience but not necessarily consciously), and panprotopsychism (fundamental entities are proto-conscious but must combine to produce consciousness): "Panprotopsychism is then the view that some fundamental physical entities have protophenomenal properties" (p. 31). However, Brüntrup notes that panprotopsychism implies a radical emergence from non-experiencing protophenomena to experiencing phenomena, so it does not seem to have solved the hard problem. Just what a protophenomenal property might be or how it could emerge into phenomenality is never explained. Brüntrup sees that wholes that are greater than their parts may emerge: "There is an opening for macrolevel agents to make a causal difference. This is a genuine difference from constitutive panpsychism" (p. 69). This is a good point though the nature of the pre-phenomenal remains a mystery. But then none of these essays ever really attempts to deal with just what a microsubjective experience might be like.

Section II includes wide ranging essays on possible panpsychist ontologies. Strawson offers his ironic view of a self-conscious panpsychism that yet leaves physical science fully intact. Nagasawa and Wager give priority to the cosmos as a whole over its parts: "…priority cosmopsychism says that exactly one basic consciousness, the cosmic consciousness, exists" (p. 116). So in this case the cosmos *decomposes* into smaller units of experience or consciousness, like our own, rather than *combining* from the very small and rudimentary into larger units. Brogaard's chapter searches for *mentons*, mental experience equivalents of gravitons, which I found perplexing.

But if Brogaard left me perplexed, Rosenberg's much anticipated chapter sometimes left me feeling all at sea – even though it was entitled "Land Ho"! I have long intended to read Rosenberg's version of panexperientialism, for Whiteheadian panexperientialism is where my sympathies lie. However, Rosenberg looks to his alternative to classical cause-and-effect – the *Theory of Causal Significance* (TCS) – to extoll the necessity for pan-experience in the world, though TCS remains unclear.

Section III deals with panpsychism's *combination problem*: how could the micro-subjects or micro-experiences combine into becoming full-fledged macro-subjects of consciousness like ourselves? Chalmers and other notables offer their attempts to deal with this problem but physicalist Barbara Gail Montero simply asks, "What Combination Problem?" by noting

that experiences combine more readily than do objects. She may be correct, but since panpsychism is experiences and objects *as a unity*, perhaps "as readily" is even better.

The last section, "Panpsychism and Its Alternatives", dares to be more speculative while not really dealing with panpsychism, as such. McLaughlin comes up with the contorted notion of *panprotoexperientialism*, which I defy anyone to clearly differentiate from panprotopsychism, but he ends by declaring himself ultimately in favour of *neurobiologicalism*. The other pieces in this section seem unwilling to grasp the uniqueness of panpsychism, so they offer instead alternative ontologies. The jumble of charts used by Stephan cannot hide the fact that strong emergence cannot be panpsychism, which posits actual experience from the universal get-go. Stubenberg has more luck with a very strong essay suggesting neutral monism as the necessary ontological background for panpsychism, which is indeed compatible. The last two chapters by Taliaferro bringing in dualism and Meixner supporting idealism do not seem to see that their perspectives leave panpsychism behind. Both end up calling upon theism (implying *God*) as ultimate. However, panpsychism if associated with theism would likely be polytheistic or pantheistic.

Can panpsychism ever be shown to be a phenomenological reality? None of these essays give any indication panpsychism is anything more than a default position, arrived at by a process of logical elimination. If panpsychism in any form were ever revealed as likely, it would lead to a major upheaval in the world of physics and in our relation to nature. We would find ourselves subjectively connected with all other aspects of reality, as poets have experienced. Surely such an awesome possibility cries out for a philosophical phenomenology or even a literary treatment beyond the grim objective tedium offered by analytical deduction.

Phenomenological philosopher Merleau-Ponty (1968) hinted that only the undoing of memory could lead us to the hollows of being where our experiential origins lie: "If being is to unveil itself, it will be in the face of a transcendence and not an intentionality; it will be brute being caught in the shifting sands, a being that reverts to itself: it will be the sensible hollowing itself out" (p. 210).

The other suggestion to discovering awareness in all things is via poetic reverie. Allow me to close this review with the words of William Wordsworth (1798) when he was inspired to express his own vision of panpsychism, perhaps even pantheism, with the wonder intact:

> —And I have felt
> A presence that disturbs me with the joy
> Of elevated thoughts; a sense sublime
> Of something far more deeply interfused,
> Whose dwelling is the light of setting suns,
> And the round ocean and the living air,
> And the blue sky, and in the mind of man.

Then again, this sort of obfuscation or romantic allusion may be just the sort of thing to leave materialist skeptics in apoplectic horror.

References

Merleau-Ponty, M. (1968). *The Visible and the Invisible, followed by working notes* (A. Lingis, trans.). Northwestern University Press. Original in French: C. Lefort, ed., Paris: Gallimard, 1964.

Wordsworth, W. (1798). "Lines Composed a Few Miles above Tintern Abbey, On Revisiting the Banks of the Wye during a Tour. July 13, 1798." In W. Wordsworth & S.T. Coleridge, *Lyrical Ballads* (1st ed). London: J. & A. Arch. Retrieved 29 June 2017, via archive.org

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4. David Skrbina, *Panpsychism in the West* (rev. ed.)

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Introduction

If I were to make a single reading recommendation to those uninitiated in panpsychist philosophy who wish to learn more, it would be this excellent book, an overview of the important role played by panpsychism in Western philosophy and, later, scientific speculation. It is not a philosophic fleshing out of all possible ways panpsychism might be conceived, interpreted, or elaborated but is instead a vast yet compact survey of the embrace of the idea in the history of thought limited to the sphere of Western Culture. (Panpsychism, though called by a variety of other names, is so pervasive in the Eastern philosophies and theologies of Asia that its presence goes without saying.)

Skrbina's writing style is fluid and articulate. It makes for a pleasurable read, though the price of this style might be found in a relative lack of depth and detail. This however is only to be expected in such a thorough survey. After offering a succinct definition of panpsychism — "[W]e may say panpsychism holds that all things have a mind or a mind-like quality" (p. 2) — he fleshes out comparable but differing terminology like *animism*, *hylozoism*, *panbiotism*, *vitalism*, *pansensism*, *pantheism*, *panentheism*, and *panexperiential–ism*.

He makes clear the status of panpsychism as an ontological metaphysics. It both refers to the ultimate nature of mind and of reality. "In this sense it is a higher-order theory, a meta-theory, of mind. It is a theory about theories. It simply holds that, however one conceives of mind, such mind applies to all things. Because of this, there are panpsychist extensions of most conventional theories." (p. 3)

He deftly notes how different panpsychism is from "mechanistic materialism", but accepts that there are physicalist formulations of panpsychism. The other major contrast is with *emergentism*, which he claims is assumed to be true by nearly every contemporary philosopher of mind (not even to mention the scientists). "They believe that, in the distant past, mind did not exist. Today it does. Ergo, it must have emerged, in an absolute sense, from an organic milieu that was devoid of mind" (p. 17). Panpsychists see such a brute emergentist claim as equivalent to an inexplicable miracle. Mind could not emerge from no-mind, so it could only have been here all along.

> Every structured being in the universe – animals, plants, rocks, planets, stars – all, at some point, did not exist; now they do; therefore they did emerge. But not everything can plausibly do so. Time, for instance, seems inconceivable to have ever emerged from a timeless cosmos. So too with space; we simply cannot conceive how spatiality could have come into being in a universe that was not spatial. Time and space must have always existed, everywhere. They are "pan" qualities of reality. … Panpsychists add one more item to the list: mind. Experientially, subjectivity, qualia

> … the emergence of such things is inconceivable, from a universe utterly without them. … Panpsychists prefer a rational, naturalistic, and non-miraculous universe. And in such a universe, mind must have always been present. (p. 19)

I am not certain that space and time might not in some sense be seen as emergent in terms of Big Bang theories of origin, but I take his point that they are essential to the existence of this universe. Skrbina sums up, "The bottom line seems quite clear: One is either an emergentist, or one is a panpsychist. There seems to be no middle ground." (p. 20)

Survey

At this point, he begins his detailed survey, which is the bulk of the book. He makes it clear that panpsychism — though often severely repressed by the Church in Mediaeval and early Renaissance times and later, after Galileo, by the scientific worldview — has also been astonishingly pervasive in all Western philosophy, right from its apparent first conceptions beginning with Pythagorus and Heraclitus in ancient Greece.

He finds panpsychism present as potential or actuality in quite a number of ancient approaches, surprisingly perhaps including Plato. In an extended section he makes his argument that Plato was a panpsychist, even though he is generally identified in the history of philosophy as the paradigmatic idealist. Skrbina finds strong evidence in Plato's writings, but I can only concede that sometimes Plato sounds like a panpsychist. As long as Platonic reality is based in the invisible *forms* or *ideas*, Plato will continue to be an idealist, at least as I see it.

He does not see much panpsychism in the Epicureans, who are materialists, but he convincingly portrays the metaphysics behind Stoicism as panpsychist. He sees panpsychist influences among the Neoplatonists, more in Porphyry than in Plotinus, but otherwise ignores any approaches that might be called mystical. The rise of Christendom muzzled all panpsychist thought for a great many years, but Skrbina notably identifies St. Francis of Assisi as somehow evading the inquisition and preaching panpsychism: "Francis' view of nature and of man rested on a unique sort of panpsychism of all things animate and inanimate" (p. 74) Other Christian thinkers who leaned toward panpsychism readily recanted when pressured to do so.

It is in the Renaissance that panpsychism seemed to have a rebirth of his own as so many thinkers avidly embraced the concept even though some of them were monks. I must note that in his survey, Skrbina does not note that these rebellious thinkers were often inspired by the esoteric wisdom of the legendary figure of Hermes Trismegistus, who was very influential during this time. "In the sixteenth and seventeenth centuries, several major philosophers advocated or were strongly sympathetic to panpsychism, including Paracelsus, Cardano, Telesio, Patrizi, Bruno, Campanella, Henry More, Margaret Cavendish, Spinoza, and Leibniz" (p. 78). Some of the most outspoken panpsychists like Giordano Bruno and Thomas Campanella refused to recant to the RC Inquisition with tragic results, Campanella being imprisoned for most of his later life, and Bruno burned at the stake.

The rise of the empiricists (including Bacon, Hobbes, and Kepler) de-emphasized both religion and the inner life of the world but often allowed a kind of *pansensism* in material objects. Still, counting and objectivity mattered more. "This, then, was the beginning of the mechanistic worldview—the mathematization of natural phenomena. Galileo took this up in earnest, and greatly advanced scientific philosophy. … Materialist and mechanistic philosophy began to dominate Western thinking." (p. 98)

> The other person of note … is Margaret Cavendish, Duchess of Newcastle (1623-1673). A poet and playwright, Cavendish also produced three major works on natural philosophy. … She advocated a form of materialism in which the cosmos was an organic whole composed of organic and animate parts. (p. 104)

There are major sections on the famous spiritual panpsychists, Leibniz and Spinoza, both remarkable visionaries, but there are also surprising panpsychist tendencies found among the deniers of deity.

Among the most notorious of these [atheist or near-atheist] philosophers was Julien LaMettrie (1709-1751). Author of the provocative and scandalous *L'Homme Machine* [*The Human Machine*], LaMettrie was the first thinker to unabashedly—though anonymously—claim that man was purely a natural automaton and did not require an immortal soul to account for his behavior. … In openly denying the immaterial soul, he carried scientific philosophy to its logical limit. …

> It is quite common, even today, to equate materialism with mechanism. But, as has been noted, the two are logically independent. … Though he obviously adopted the term "machine" in his *L'Homme Machine*, it was in a specifically vitalistic sense. LaMettrie's writing demonstrated that he had quasi-panpsychist and hylozoist inclinations, which necessarily have no role in a mechanistic materialism. Vitalistic materialism sees some degree of life and mind in all things; it seeks a natural rather than a supernatural explanation. (pp. 122-123)

From this point on, Galilean science tends to divorce itself from philosophy, becoming both mechanically and reductively materialist, at least until the quantum revolution opened the gates to consciousness once again. There are exceptions among scientists, of course, such as Lotze (1817-1881), Haeckel (1834-1919), and Mach (1838-1916). In 19th century philosophy, panpsychism came into its own under the likes of Schiller, Schopenhauer, and, more controversially, Nietzsche. In America, panpsychism achieved a new depth and philosophical subtlety in the works of Peirce, Royce, James, and others. (C. S. Peirce, if his writings can be penetrated, is unique in this field.) This continued into the twentieth century with Bergson, Dewey, Whitehead, and Russell, not to mention others like Teilhard de Chardin and Hartshorne. (Such listings are deceptive. The text itself is much richer with compact discussions and colourful anecdotes, so it's best the book be read in its entirety.)

It seems the parallel yet divergent approaches of Alfred North Whitehead and Bertrand Russell present a situation to contemporary panpsychism not unlike that of the Plato-

Aristotle schism of ancient times, Whitehead standing in for Plato, the more inclined to inner speculation, and Russell for Aristotle, the more outer world oriented.

> The best-known and most controversial panpsychist of the twentieth century was Alfred North Whitehead (1861-1947). The nominal founder of process philosophy, Whitehead took the insights of Heraclitus, Bergson, James, and Russell and combined them with the revelations of the so-called new physics of the day to create an intricate and complex philosophical system. Process philosophy saw time as a fundamental ontological entity, something deeply implicated in the nature of being. … On this view, the event is the fundamental reality of the world. (p. 213)

Whitehead's approach indicated that each event in ongoing time – the occasion of experience – lasted about a micro-second. It both emerged from the objective world, providing continuity and was influenced toward novelty by the creativity of the formless, teleological eternal objects. Once its micro-second of experience ended, it became a non-experiencing objective entity, a part of the many, thus Whitehead's formula, "The many become one and are increased by one" (1929/1978, p. 21). However, experiences can only fuse with the evolutionary addition of an incarnate experiencer, which can allow them to be held in memory. Once such memory can be conceptually controlled, as in human beings, experience can reflexively become conscious of itself then and only then becoming conscious experience. Thus panexperientialism (a word not used by Whitehead) is based in *unconscious experience*. Whitehead was a panpsychist only in a limited sense.

Whitehead's student and colleague Bertrand Russell (1872-1970), in the latter part of his career, held to a neutral monist process view in which events were the primary reality, comprising both mind and matter. In that sense he continued the line of thinking of Bergson and Whitehead. Russell's neutral monism was unique, however, in that he proposed that mind and matter each resulted from a set of causal laws; matter from physical laws of science, mind from "mnemic" laws that were not yet understood. The relationship between these two sets of laws (if there was one) was not clear. (p. 219)

Russell seems unwilling to let experience exist on its own, so he tends more toward dualism, perhaps better seen as a pansensist. Pansensism means experiencing a sensation, which may only be momentary and unremembered by any central processor. Though its effects may linger physically, if it is not remembered, it does not necessarily imply the existence of an experiencer. Pansensism, like panexperientialism does not necessarily imply a mind or experience that is conscious of itself, i.e., a conscious experiencer. Russell recognizes that memory is necessary to bring about consciousness. Russell also appears also to be a panpsychist only in a limited sense. (To his credit, Skrbina does not deal with the hair-splitting trap of analytic philosophy when it comes to dealing with the Byzantine vicissitudes of Russellian monism, constitutive or not.)

Aside from the panpsychist views emerging from a scientific perspective, further philosophical panpsychism in the West up to the present may be broadly summarized as footnotes to Whitehead and/or Russell, the former being the more speculative. Skrbina

praises the process philosophers like Hartshorne for carrying on the panpsychist flame in the form of panexperientialism, "most notably Griffin but also including Ford, Birch, De Quincey, and others" (p. 265).

> Dual aspect views, which are at least implicitly panpsychist, were defended by thinkers as diverse as Feigl, Nagel, Globus, Plumwood, and Chalmers. In the work of Abram, Berman, Zohar, Wilber, Harvey, and Orr, populist treatments also emerged. The endorsement of panpsychism by the prominent analytic philosopher Galen Strawson was a major development in the field. So-called Russellian monism has been taken up in earnest by professional philosophers, many of whom spell out the panpsychist implications. And various efforts have been made to build upon the insights of Peirce to connect recent work in chaos theory and dynamical systems to forms of panpsychism. (p. 265)

Skrbina cites Danah Zohar in *The Quantum Self* as emphasizing "that the wavelike nature of quantum particles may be interpreted as mind, and hence 'the wave/particle duality of quantum "stuff" becomes the most primary mind/body relationship in the world'" (pp. 286-287). So the wave nature is subjective mind, and the particle nature is objective matter.

New developments in science led to materialist "heretics" – such as Eddington, Pauli, and Wheeler – embracing panpsychism, at least in some form:

> The equation of mass and energy furthered the notion that the underlying nature of matter was something vaguely spirit-like. Quantum mechanics emerged as an accepted theory of atomic and and subatomic particles; its bizarre, indeterminate implications led a number of scientists to panpsychist conclusions, beginning with John Haldane in 1932 and continuing with Jeans, Sherrington, Wright, Rensch, Walker, Cochran, Dyson, Bohm, and Hameroff. (pp. 242-243)

Skrbina does an excellent job of succinctly summarizing each of their contributions or viewpoints and relating them to one another. His last chapter, "Toward a Panpsychist Worldview", stands alone as a compelling argument for this particular ontology. But he also makes time for a stimulating – and convincing – rebuttal of many of the major recent theories of consciousness that ignore, dismiss, or mock panpsychism: "The standard materialist, being fundamentally committed to an anti-panpsychist view, has no unbiased standpoint from which to make a judgment. Thus any ruling of 'unintelligible' or 'false' is meaningless. … Materialism, and the accompanying analytical and logical philosophy, seems to have reached the terminal stage." (p. 337).

Hesitations

I would not be a worthy critic if I didn't offer some of my own criticisms or *hesitations*, as I call them, to indicate my statements are personal and do not impinge on the overall quality of the work. As an introduction to panpsychism or as an important chapter in the history of philosophy, this is still truly a five-star book.

Skrbina's definitions of panpsychism use of the terms "mind" and "subjectivity". Can an electron be said to have a mind or subjective experience? If at some point before events and perspective separate the subjective from the objective, are they not one thing, process or essence? Can they ever really be conceived separately? In the same way the idea of consciousness emerging from the unconscious mind is fallacious because without any conscious mind it makes no sense to speak of an un-conscious. In the same way, without an experiential schism between outer objective reality (including one's own body) and the inner subjective reality of one's *mind*, it makes no sense to speak of either as distinct or ultimates. You can't have one without the other. So the use of the term "mind" or even "subjectivity" is fallacious as well – until they are distinguished from their binary oppositions "world" and "objectivity". Language and its binary structure make meaning by identifying opposites and polarities, so it is likely there was no real split between mind and matter or subjectivity and objectivity until we made it so in language. This is in line with Whitehead's identification of *conscious experience* as a rare but specific form of experience, as Whitehead clearly states:

> Consciousness flickers; and even at its brightest, there is a small focal region of clear illumination, and a large penumbral region of experience which tells of intense experience in dim apprehension. The simplicity of clear consciousness is no measure of the complexity of complete experience. Also this character of our experience suggests that consciousness is the crown of experience, only occasionally attained, not its necessary base. (1929/1978, p. 267)

In this revised edition, he goes out of his way to more deeply address Whitehead and to praise panexperientialism. Still, nowhere can I find it explicitly stated that panexperientialism considers that consciousness (i.e., conscious experience) does *not* "go all the way down", only experience does. Experience happens without consciousness, so the two are differentiated: conscious experience is a rare, apex form of experience requiring at least a brain. This is essential to grasping panexperientialism.

The book's approach is generally restricted to a traditional definition of Western philosophy, mostly analytical, with some examples from scientific speculation. However, panpsychism is very much present though often disguised behind a rhetoric of spiritual idealism in the thinking of the Neoplatonists (who are briefly mentioned) and the Gnostics (who are not). There's no mention of the important European tradition of the alchemical-hermetic philosophies, which, along with their quest for purification and personal transformation, had a strong vein of vitalistic physicalism, i.e., panpsychism. Frances Yates is not cited in the book. However, such hermetic thinking was central to the Renaissance panpsychists, which put them afoul of the Church. It was such a powerful enough way of thinking that it secretly preoccupied much of the thought of Newton, often mistakenly seen as the paragon of scientific reductionism. However, he does later include Ouspensky, a panpsychist with mystical ideas.

Skrbina either disdains or doesn't bother to grapple with *phenomenology* even though, as he states, "Phenomenology … is generally centered on the notion of mind and

consciousness as a primary aspect of existence" (p. 223) He does mention David Abram's neo-animism in his *The Spell of the Sensuous* since Abram (1996) identified his method as phenomenological and relied on the intra-ontology of Merleau-Ponty. But Skrbina concludes, "Of all the Western philosophical schools addressing panpsychism, phenomenology … is among the least relevant" (p. 289). I think not, so I was disappointed to see no elaboration of Merleau-Ponty's notion (1968) of the *flesh of the world*, which implies a palpable feeling process of the world, which is an extension of that in our own bodies.

As phenomenology is the philosophy of experience, also missing are more extreme examples of human experience as found in mysticism, trance, and psychedelic trips. Some accounts claim to have unknown forms of consciousness in other processes or entities or felt that they were communing with plants or inorganic entities like the wind. My own narrative of such an experience (2019) is one example, but the full-length conference talk and YouTube presentation by Peter Sjöstedt Hughes called "Panpsychism and Psychedelic Sentience" (2017) makes the connection explicit.

Everyone has favourites, and, to his credit, Skrbina covered nearly all of mine (with the exceptions indicated above). I was very pleased to see the inclusion of the brilliant but demanding Gordon Globus, the environmental philosopher Freya Mathews, and the Whiteheadian David Ray Griffin. But I missed the potent philosophizing of contemporary panpsychists like Max Velmans (2017) for his *reflexive monism*, and Michel Weber (2011), a Whiteheadian who makes a strong case for *pancreativism* over the more passive panexperientialism. Philip Goff, perhaps now the most popular proponent of panpsychism (see 2019) has only one dated mention, which is fine by me. I also thought it was unfortunate the entire field of psychological philosophy seemed to be ignored. Wilhelm Reich was noted. But what is C. G. Jung's *collective unconscious* (aka the objective psyche) but a universal psyche, that is, pre-conscious or unconscious creative experience, that is, *panexperientialism* or *pancreativism*? Why skip that?

Conclusion

Buy this book and read it. It crosses thresholds into new ways of thinking. Mark it up, take notes, discuss it with others, cite it in your writings. Interrogate it if you must but most of all just enjoy the fine prose and stimulating ideas. At the very least, you will certainly gain some respect for panpsychism as a plausible ontology.

References

Abram, David (1996), *The Spell of the Sensuous: Perception and Language in a More-than-Human World.* Pantheon.

Goff, Philip (2019), *Galileo's Error: Foundations for a New Science of Consciousness*. Pantheon.

Merleau-Ponty, Maurice (1968), *The Visible and the Invisible, followed by working notes* (A. Lingis, trans.). Northwestern University Press. (Original in French: C. Lefort, ed., Paris: Gallimard, 1964.)

Nixon, Gregory (2019), 'Breaking out of one's Head (& awakening to the world)', in Alex S. Kohav (ed.), *Mysticism and Meaning: Multidisciplinary Perspectives* (pp. 29-57). Three Pines Press. (Previously published in JCER 2(7), 2011.)

Sjöstedt Hughes, Peter (2017, posted online 2018), "Panpsychism and Psychedelic Sentience". Online: YouTube.

Velmans, Max (2017), *Towards a Deeper Understanding of Consciousness*. Routledge/Psychology Press.

Weber, Michel (2011), *Whitehead's Pancreativism: Jamesian Applications*. Ontos Verlag.

Whitehead, Alfred North (1978), *Process and Reality: An Essay in Cosmology*, corrected edition. D.R. Griffin & D.W. Sherburne, eds. Free Press. (Originally published 1929.)

Previously unpublished but posted in several places online.

5. Christof Koch, *The Feeling of Life Itself: Why Consciousness is Widespread but Can't Be Computed*

MIT Press, 2019, 263 pages
ISBN: 9780262539555 (pbk)

This is truly a fine book, with just some minor hesitations from a non-scientist but long-time participant in philosophy of mind and consciousness studies. I find myself currently both a Whiteheadian panexperientialist and something of a "cosmopsychist", since there must be something more universal, like a "background radiation" of dimly-lit awareness-in-itself, to make Whitehead's infinitesimal occasions of experience possible. On to the book.

Koch is a famous neuroscientist-turned-philosopher. He worked with Francis Crick (who with James Watson in 1953 discovered the double-helix structure of the DNA molecule) and became well known as a reductive materialist — the view that every experience is completely caused & determined by one's brain. However, after Crick died, Koch delved further into consciousness studies, seems to have been impressed by Chalmers's "hard problem", and realized conscious experience itself cannot be so easily explained away. Now he's become something of a panpsychist — i.e., consciousness in some form pervades everything. Quite a change, but a welcome one!

However, he still has many of the assumptions of a scientist, so let me list my hesitations (not quite "objections") here at the beginning of this review.

First he explicitly defines consciousness as experience, period: "That's it. Consciousness is any experience from the most mundane to the most exalted" (p. 1). Then he proceeds to regularly speak of "conscious experience", which should be a redundant phrase. Whitehead ardently distinguished experience-in-itself from conscious experience, implying that we and all events most often experience unconsciously. By eliding these two terms, Koch has inevitably made explaining the experience of single-celled, protoplasmic, or inorganic systems that much more difficult. Few will accept that a quantum field has a *mind*.

Second, he has fallen for the fantasy of the inborn self that so many objective reductionist thinkers take for granted. As a result, he believes like any good Cartesian that the only thing he can be certain of is his own consciousness. The conscious experience of other people is a conjecture, an inference based on comparing their behaviour to his. This is the so-called "mind-reading" hypothesis that objectivists prefer. But there has been a good deal of phenomenological theory and actual empirical developmental research that reveals we begin with *primary empathy*; that is, as infants we identify with our primary caregivers and mimic their conscious experience to learn what it is like: we act self-conscious before we begin to feel it. We learn to be a self as the result of first participating in intersubjective relationships, and this continues to a lesser degree throughout life.

Koch also reveals his objectivist bias when he states that all experience is the result of evolution, giving no credence to cultural creativity or subjective self-discovery. I would

wager that language itself did not slowly evolve but was, instead, a hard-won cultural discovery that required memory and ritual to be carried on.

I am very pleased that Koch now identifies his approach with panpsychism, but he tends throughout to generalize panpsychism as though it were a clearly definable single position, but anyone who dismisses panexperientialism, pancreativism or cosmopsychism tends to lump all panpsychisms into one theory. I would like more clarity here.

He, like many, gives too much credence to the so-called combination problem of panpsychism: how could brief flashes of momentary experience combine to become the sort of consciousness that is obvious among mammals including ourselves? Why is there no combination problem for physicalists? They clearly explain how quarks and subatomic particles combine to become atoms, which combine to becomes molecules, which combine to become organelles, and then cells, and so on. It seems to me since panpsychism sees matter as experiential that precisely the same pattern would follow. Objective is subjective, after all. Just as cells combine into larger wholes, so, with memory, do occasions of experience.

Finally, in more speculative territory, he claims a mind is in effect what we mean by a "soul". He assumes minds cannot combine, yet here we are communicating through time and space on the internet: our beings are participating! Obviously, a sort of co-conscious cultural mind exists. And if that is so, why is it so impossible to imagine the soul (the unconscious mind?) of each entity having its source in a sort of oversoul, the unconscious experience of the universe itself, perhaps akin to Jung's collective unconscious?

These objections are from a phenomenological and panexperientialist perspective. I still think this is an important book — though challenged, I enjoyed it immensely. I admit that I do not entirely grasp his central theory — the "heart of the matter", as he calls it —which is Giulio Tononi's integrated information theory (IIT), somewhat arcane but still gaining influence.

Most important, he has embraced it as an approach that explains consciousness in matter as the self-caused integration of information, which is to say a mind that is able to reprocess its own information in such a way as to have self-agency. The theory claims to assume consciousness from the beginning, so it doesn't have to explain how it arose from matter. But then, with mathematical theorems I have no hope of understanding, it also claims to be able to measure the *degree of consciousness* in each process or entity, which sounds very quantitative for a theory that begins with a qualitative assumption.

In this view, brains neither cause nor correlate with experience; it sounds to me like psychophysical identity (not merely parallelism), though it is always in dynamic process:

> IIT asserts that any experience is identical to the irreducible, causal interaction of the interdependent physical mechanism[s] that make up the Whole. It is an identity relationship—every facet of any experience maps completely onto the associated

> maximally irreducible cause-effect structure with nothing left over on either side. (p. 88)

For consciousness to exist, the parts must themselves be active (likely proto-conscious), working together to make a new Whole — a mind, as it were, which then in turn is able to regulate its own processing. That's the *integration*. And Koch sees no reason why conscious experience shouldn't be found "all the way down" into quantum systems, though at that level it would be rudimentary and momentary, which is why I think "mind" or "consciousness" is the wrong term. IIT does not much speculate about supra- or trans-human forms of consciousness, but, on the other end of things, he does show an open mind to “pure conscious experience”, i.e., awareness without content, which is expressed as self-transcendent void awareness in many times and places.

Back to his final point, computational intelligence vs self-awareness… Since computers and computer programs are currently based on the linear von Neumann model of disparate, unintegrated materials that cannot combine to create a new whole, they will never become conscious: they will never experience, though, obviously, their complex intelligence will make them expert at mimicking self-awareness.

However, Koch leaves the door distantly open to machine consciousness for managing computation on materials that can combine to become new wholes and guide their information processing, which may be possible in quantum computing or by combining organics.

There you have it: clear as a bell, right? It's tough, for sure. IIT is not perfectly clear to me either, so read the book and feel free to correct me.

Previously unpublished but posted in several places online.

Section II: **Linguistic Consciousness – Human Origins**

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1. Leslie Dewart, *Evolution and Consciousness: The Role of Speech in the Origin and Development of Human Nature*

University of Toronto Press, 1989, 400 pages
ISBN: 0-8020-2690-7 (HB)

This book has been identified in some bookstores as a university textbook; however, it is most certainly not a textbook, and I very much doubt any undergraduate, no matter how advanced, could manage its depth and relative complexity. *Evolution and Consciousness* was written before the consciousness studies boom of the 90s — the so-called "decade of the brain" (which continues into the present time) — but still it was a mistake for it to languish so widely ignored. Much of the confusion of more recent writings on consciousness could have been avoided if the lessons of this book had been given a wider reading.

In my view, such wide reading never took place because of bad marketing and because, like all great philosophy, it is a damned demanding tome. It was written just as we entered the so-called "decade of the brain", the 1990s, which is apparently still going on to just by the predominance of neuroscience in consciousness studies. This is a work of high philosophy indeed by one of our major intellects who sees clearly and unsparingly and truthfully.

Leslie Dewart writes with such inexorable logic that I defy anyone to read this book without prejudgment (as much as possible) and find a way to reasonably disagree with his primary thesis. He demonstrates that what we mean by the term "consciousness" is what we know from our own experience to be consciousness: we conceive of all consciousness as being of the same quality as human consciousness. Dewart makes the case that human conscious experience is qualitatively different from experience-in-itself — without the quality of consciousness — the in-the-moment response system of infrahuman entities.

Only with the assertion of ideas in actual speech is the door opened to what will become the discovery/creation of the self and the subjective systems we call minds. Only then is conscious free agency born; only then is memory consciously accessible and rearrangeable into imagination; only then is inner speech, i.e., conscious cognition, i.e., conceptual thought born. Speech and (self-) consciousness turn out to be two faces of the same entity.

This is a powerful thesis written in exacting but beautiful prose. Anyone seriously interested in the origins and evolution of speech or of consciousness owes it to himself to give Dewart a fair reading. This perspective, that experience takes place without consciousness, and that it is only our learning to speak that allows us the ability to symbolize our own existence and make us conscious of our own experiencing, is no longer in vogue. A subject-denying objectivity has become the rule in theories of mind. Anyone

schooled in the reductive materialist worldview so predominant today will not respect the idea that crossing of the symbolic threshold into speech is what gave us the ability to reflexively conceive of our own existence in time, to learn to autopoietically construct inner minds with an objective sense of self in the centre.

Leslie Dewart does this in a most convincing manner, though the book's prime weakness is that he never fleshes out what non-conscious experience might be like (if anything) or to question to what extent other existent being or processes (organic or otherwise) might share in such experiencing. Still, this is great philosophy and great philosophy demands to be read, so I heartily recommend this 1989 book.

Previously unpublished but posted online.

2. Terrence W. Deacon, *The Symbolic Species: The Co-Evolution of Language and the Brain*

W. W. Norton & Co, 1997, 527 pages
ISBN 0-393-03838-6 (HB)

Terrence Deacon has constructed a tome in which he unleashes his considerable learning in quest of several answers to the question, 'What are we?' He is uniquely qualified to take an approach which details the origin and development of, first, language, then the brain, and, lastly, their 'co-evolution.' Described on the jacket as 'a world-renowned researcher in neuroscience and evolutionary anthropology,' all of his background is called upon at various times to pull together the mass of data and supposition that Deacon brings to the table.

In spite of the vastness of the territory he covers, Deacon's writing is most often accessible with a quiet wit which carries the reader along. This reviewer must confess, however, that he found the middle section on the evolution of the brain to be pretty dense traffic. Perhaps someone with a stronger neuroscientific background could follow Deacon into the intricacies of 'using fly genes to make human brains.'

As the title indicates, Deacon attempts to show beyond much reasonable doubt that language does not 'innately' exist in the brain like some sort of Chomskyian L.A.D. Instead he wishes to reveal that language itself has adapted to the brain over the years (much as we continue to adapt software programs for ease and complexity to computer hardwares). Over the millennia, language and brain have co-evolved, he reports, and thus there is no need to postulate a generative grammar or a single mother tongue from which all other languages emerged. He rests his case upon 'Baldwinian evolution,' the theory of American psychologist Mark Baldwin from a century ago which suggests 'that by temporarily adjusting behaviors or psychological responses during its lifespan in response to novel conditions, an animal could produce irreversible changes in the adaptive content of future generations' (pp. 322-323). Such changes over time lead to actual genetic changes.

We are, therefore, the symbolic species, the only one who crosses the 'symbolic threshold' as a matter of course—though Deacon does recognize that certain apes, chimps, and bonobo have been led across this threshold too. Borrowing from C. S. Peirce, Deacon understands that most species signal each other with iconic reference, a direct response to their environment. More advanced species learn to use indexical reference which indicates a class of potential references. With the development of actual language, we have crossed the symbolic threshold so our symbolic reference is most often to other symbols (each of which is indexically constructed). We take up residence in a 'virtual' world with senses of time, space, and personhood unknown to other animals.

These ideas will sound extreme to some but his patiently detailed exposition is generally quite convincing. He steps out into pure speculation when he suggests that the marriage

contract was likely the origin of symbolic reference. (How else could mates mark their territory when one hunts and one gathers?)

He doesn't address consciousness, itself, until page 438, where he follows the Peircean referencing system—iconic, indexical, symbolic—to speak of levels of consciousness, 'yet few would be willing to say that the consciousness of a dog or cat is of the same sort that we ascribe to humans' (p. 439). When trying to determine whether or not simpler information processing animals can be said to be conscious, he throws up his hands and declares, 'What a complicated mess!' (p. 441). Yet he eventually argues that only symbolic consciousness allows for a sense of selfhood and intersubjectivity: 'Its virtual nature notwithstanding, it is the symbolic realm of consciousness that we most identify with and from which our sense of agency and self-control originate' (p. 452). This throws into doubt just what sort of consciousness he is attributing to instinct-bounded nervous systems of iconic reference. Without agency or selfhood, can a creature be fairly thought to be conscious when terms like non-conscious experiencing would do?

It's notable that Deacon conceives of the origin of symbol use among the first toolmakers, that is, those whom we designate as *H. habilis* (ca. 2.3–1.65 million years ago). Judging the by the lack of significant cultural change during those millions of years, this so-called symbolic *signage* was certainly not formal language with syntax, recursion, time-tenses, abstraction and the ability to symbolize one's existence. This communication appears to be more akin to what Derek Bickerton (1981) had designated as a pidgen-like *protolanguage* of gesture, naming, useful only in the present for passing on toolmaking templates & coordinating hunting and gathering ventures—in other words, indexical signs at best. There is no certain evidence of symbolic self-reference, i.e., formally complete conceptual language, until later *H. sapiens*, about 70 thousand years ago in the Upper Palaeolithic.

He seems to understand the degrees of complexity as being fundamentally computational. This being the case, no one should be surprised when he predicts toward the end of his long book that computers will someday be capable of symbolic reference—but first they must attain sentience so as to become capable of self-evolution. Not an easy request! If and when this does occur, '[t]he question before us is whether we will begin to treat people like unconscious computers, or come to treat conscious computers like people' (p. 464). A rather jarring note on which to close, I thought, especially for a book which focuses mainly on human mentality and the symbolic reference of language.

References

Bickerton, Derek (1981), *Roots of Language*. Karoma Publishers.

Previously published in *Journal of Consciousness Studies* 5 (5/6), Fall 1998, 746-748. Reprinted with permission.

3. Stanley I. Greenspan & Stuart G. Shanker, *The First Idea: How Symbols, Language, and Intelligence Evolved from Our Primate Ancestors to Modern Humans*

DaCapo Press (Perseus Books), 2004, 504 pages
ISBN 0-7382-0680-6 (HB)

At last, a worthy antidote to the noxious trend that explains all human consciousness and behaviour in terms of the evolution and activities of the brain alone! Cognitive science, evolutionary psychology, and neurophilosophy, while adding complexity, have embraced the assumption that life unfolds primarily on the basis of evolving, interacting genes. But this view is unbalanced at best. Greenspan and Shanker remind us that opposition to it need not imply mysticism, idealism, or anything *spooky*. They state the predominance of cultural learning passed on from generation to generation, its content always changing and never complete.

A second theme of the book is that it supplies strong evidence that rationality and cognition are not opposed to emotion but are in fact the fulfillment of the *emotional education* hopefully received by every healthy child. To think is to emote, but it is refined emotion that functions in a controlled manner. This is an antidote to the Cartesians, Freudians, and perhaps even Piagetians who have insisted that, developmentally, the rise of reason in maturity *overcomes* primitive or childish emotional drives.

The authors propose that such emotional learning has culturally evolved over millions of years, with reversals here and dead ends there. Each generation passes on its cultural truths primarily through interactions between infant and mother or other intimate caregivers. But each generation may also contribute in subtle ways to this body of learning or, on occasion, subtract from it. Every child is regarded as recapitulating, in a matter of years or months, the learning that culture achieved over millions of years. Language is the primary example here.

They find little evidence that things so central as language or personal memory are themselves innate, though clearly the capacity to achieve them has become genetically based. The nature-nurture debate becomes appropriately complexified. The antidote to genetic imperialism involves showing that experience determines genetics more than genetics determine experience.

Greenspan and Shanker identify 16 stages of individual f/e (functional/emotional) development, plus a timeline of 12 steps for the f/e evolution of human cognition, outdoing the three steps of Merlin Donald (1991). The overused neologism “meme” is thankfully not used, though they see human behaviour and the quality of conscious experience as arising from culturally transmitted learning. They cite Terrence Deacon (1997) approvingly, so presumably accept that structural brain adaptations occur along with the slow *invention* of

formal language structures. They don't deny the brain's influence, but see it as a dance with learning, and the lead is clearly in cultural learning.

Greenspan is an expert on infant care and autism, while Shanker, apparently a Wittgenstein scholar, specializes in studying the symbolic activities of trained apes (bonobos). Perhaps as a consequence of their particular expertise, they spend less time on the (apparently) slow discovery and improvement of speech, symbolism, and thought in early humanity than they do on the rapid appearance of these capacities in individual upbringing. They appear to accept too early and gradual an origin for formal human language, not being critical enough of nonhuman communication or of early palaeoanthropological finds. As a result, many ambiguous discoveries are treated as proofs of the presence of abstract ideation. It is not noted that the islands of discovery seeming to indicate a very early emergence of symbolic interaction are just that — anomalous *islands*. There is (as yet) no indication of continuity in such activities over succeeding millennia. Nor do the authors deal with early humanity's likely immersion in the sacred world of the mythic mind (cf., Donald, 1991; Eliade, 1954); language is accepted as having been invented to meet functional (not sacred) needs and for the pleasure of communicating, as if our prehistoric ancestors had the same life experience and minds as we do.

Another reservation I have is that all the juice is in the first two parts of the book. Greenspan and Shanker lay out their case in the first 184 pages, leaving the rest for sometimes excruciating exegesis or jumps into global recommendations. Indeed, they emphasize so strongly "the hand that rocks the cradle rules the world" that they have added a hopeful final chapter to guide us all toward Global Interdependency through the education of emotional response in every child's first year. Alas, we have many hurdles to overcome before every child on the planet can receive the loving interactive attention that will lead it to the authors' highest stage of development in old age: "...true wisdom free from the self-centered and practical worries of earlier stages" (p. 91) and a peaceful world in general.

Optimistic? Sure, but this tome is still recommended for its important defence of culture and learning.

References

Deacon, Terrance (1997), *The Symbolic Species: The Co-Evolution of Language and the Brain*. Norton.

Donald, Merlin (1991), *Origins of the Modern Mind: Three Stages in the Evolution of Culture and Cognition*. Harvard University Press.

Eliade, Mircea (1954), *The Myth of the Eternal Return: Or, Cosmos and History* (W. R. Trask, trans.). Princeton University Press. Original in French 1949.

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4. Martin Jay, *Songs of Experience: Modern American and European Variations on a Universal Theme*

University of California Press, 2005, 431 pages ISBN 0-520-24823-6 (pbk)

'Experience is the best teacher' goes the cliché without ever making clear just want is meant by that first slippery term. 'Experience is never remembered unaltered' goes another. Is experience something to be undergone, like a journey, or is it perhaps the relational immediacy between organism and environment? What do we reference when we use the term experience?

In this tome, Martin Jay, noted intellectual historian from UC Berkeley, undertakes to review just this question with a grand survey of the term's use throughout the intellectual history of what was once called Western Civilization. Beginning with the ancient Greeks (of course), he reviews the surprising number of variations employed and assumed mainly among philosophers but also theologians, critical theorists, and up to the poststructuralists. Jay knows his territory and reading this review of it — for anyone with any sort of background in the history of philosophy — is often as pleasant as hearing a familiar symphony well-played in a unique way.

It seems 'experience' has meant many things to different authors over years. The current English term derives from a Latin source meaning *to try* or *to test*, thus revealing its relationship with 'experiment'. But there have many other implied meanings from the distant past, some of which have been entirely forgotten. At the same time, the meaning (or meaninglessness) of the term seems to have been a major point of contention more recently amongst the American pragmatists, critical theorists, and the European-based poststructuralists. Nowhere, however, does he deal directly with the relationship between experience and consciousness, a much-disputed area, and this I consider to be the major failing of the book.

To frame his study, Jay early on explores the two German words with slightly different meanings that we both translate into English by the word 'experience'. *Erlebnis* contains within it the root for 'life' (*Leben*) and, according to Jay, 'is often taken to imply a primitive unity prior to any differentiation or objectification. ... Although *Leben* connotes the entirety of a life, *Erlebnis* generally connotes a more immediate, pre-reflective, and personal variant of experience...' (p. 11). This implies a meaning for experience that does not necessarily accord with our assumed meaning for conscious (from the Latin, *conscius*, 'knowing together', also the root of conscience) in that it is 'immediate, pre-reflective, and personal…'. Defining consciousness (or conscious experience) is the cause of much bickering, but David Cohen (1998), in his attempt to speak for mainstream psychology, suggests that 'it can be described as the state of mind that allows us to "know" our own mind, to entertain thoughts about thoughts, to monitor our selves and our environments, and to use this information to make plans and formulate hopes and fears' (1998, p. 67). In this case it can be seen that *Erlebnis* as experience simpliciter is not the same as conscious

experience. Like the unconscious of psychoanalysis, it may be thought of as non-conscious experience.

Erfahrung, the other German term we translate as experience, is on the other hand more associated with differentiating sense impressions or making cognitive judgments about them. 'But,' according to Jay, 'it also came to mean a more temporally elongated notion of experience based on a learning process, an integration of discrete moments of experience into a narrative whole or an adventure'. Its roots are found in the Deutch words for journey or danger: 'As such, it activates a link between memory and experience, which subtends the belief that cumulative experience can produce a kind of wisdom that comes only at the end of the day' (p. 11). *Erfahrung* seems to be more in accord with our common understanding of experience, as 'the best teacher' or as the remembered present, which equates roughly with the consensus understanding of conscious experience (or consciousness, if you will).

Jay, as I say, does not deal directly with question of how experience and conscious experience may be related, if at all. Most often he seems to assume an equation of meaning, which is very strange in a book that has declared its intention to explore all meanings of the term *experience*. Some of the authors he reviews, however, do seem to have explored direct experience as the precursor and foundation of subjective consciousness. Jay refers to the 'paradoxical notion' (p. 129) of *experience without a subject* (or, sometimes, from another angle, *post-epistemological experience*) and notes the idea has been posited approvingly by no less than Schopenhauer, Heidegger, Benjamin, Adorno, Bataille, Foucault, Barthes, and possibly Oakeshott, Dewey, and the trickster of text, Derrida. Experience without a subject of that experience cannot easily be subsumed under the label of consciousness. It may be more along the lines of the non-subjective relational interaction between organism and environment. Finally, many of the post-phenomenological authors also insist that experience cannot be posited as a meaningful term at all — that without the language to speak of it directly it is ultimately an empty category.

In short, the reading was an enjoyable journey of experience (*Erfahrung*) on its own. But this reader felt that Jay's blindness on the question of experience in itself as different from conscious experience destroyed much of its consequence.

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5. Peter J. Richerson & Robert Boyd, *Not By Genes Alone: How Culture Transformed Human Evolution*

University of Chicago Press, 2005, 332 pages
ISBN: 0-266-71212-5 (pbk)

I have to admit that with a title that makes as straightforward a declaration as this one does, I anticipated an imaginative, full-frontal assault against the increasing dependence on genetics, DNA, & biology to explain our human nature. Instead, Richerson & Boyd divide the pie pretty equally among genetics, culture, and environment, noting that these three factors are mutually dependent and interactive. Fair enough, but I was disappointed how far they leaned into the genetics camp and how little they credit to human creativity. In fact, they state there really is no such thing as individual creativity but only individuals who are able to carry forth mass cultural trends that have been underway for some time. "Culture usually evolves by the accumulation of small variations" (p. 50). One should note here the early emphasis on the concept of evolution because their book turns out to take Darwin's foundational principles of biological evolution and directly apply them to cultural evolution. Language, they state, is a gradually evolved survival adaptation, as is culture itself. Apparently, we—our minds—had nothing to do with this genetic adaptation but were instead products of it.

Other animals have exhibited certain local behaviour patterns that others have termed cultural, but "only humans show much evidence of *cumulative* cultural evolution. By cumulative cultural evolution, we mean behaviors or artifacts that are transmitted and modified over many generations, leading to complex artifacts and behaviors" (p. 107). In this way, complex artifacts are not "invented by individuals; they evolve gradually over many generations" (p. 107). So human cultural evolution, though not inspired by "great person breakthroughs" is still unique, depending as it does on external memory storage and teaching-learning. I liked this as I am an educator, but what of culture as expressive symbolic interaction?

I also liked the point that culture and genes co-evolve. Still it seems to me, they tend to see the human species in a more mechanical manner than is necessarily the case: everything is ultimately done for survival. Cases where cultural choices like human sacrifice or mass witch-hunts have been undertaken are seen as mistaken attempts at survival. I wonder how this accounts for the suicide cults that have appeared and, not surprisingly, rapidly disappeared? They explain altruism or kindness in the same way, as leading to survival of the group. They even seem to disparage efforts to control population growth. Such efforts, mostly in the middle & upper classes of industrialized countries, are said to be the result of "selfish cultural variants" (p. 169). "Modern low fertility does not maximize fitness" (p. 173). Surely this puts them firmly in the evolutionary biology camp.

The writing is most often turgid and uninspired, with the many examples of cultural continuity or adaptation being local, mundane, & unimpressive. They end by pleading for the wide acceptance of "a proper evolutionary theory of culture" since that "should make a

major contribution to the unification of the social sciences" (p. 246). They call for the development of a mass of quantitative detail on cultural variation to equal the detail found in the study of genetic variation, simply equating the two.

I felt let down at the easy way cultural symbolism and artistic expression (including language, myth, and ritual) were simply dismissed by suggesting a little quantitative analysis would reveal them as evolved neural adaptations. By now I was bored. By the time they snidely state that "So many older scientists try their hand at philosophy that it can practically be regarded as a normal sign of aging" (p. 254), I was glad to finish the book and close it.

Previously unpublished but posted online.

6. Derek Bickerton, *Adam's Tongue: How Humans Made Language, How Language Made Humans*

Hill & Wang: Farrar, Straus & Giroux, 2010, 286 pages
ISBN: 978-0-8090-1647-I (pbk)

This is an engaging book that one can argue with, learn from, or both, but still always enjoy the experience.

Bickerton gets a little bit carried away with his *discovery* of "ecological niche theory", which is, after all, anything but new (though formerly called by slightly different names), and his sudden political correctness was as annoying as it was surprising. In fact, I almost gave up early on this book because he insists, first, that indexical protolanguage began when cooperation was needed to scavenge dead meat, a situation that could just as easily be applied to hunting (which is now again in the ascendency over the once-popular *man the scavenger* theory), and, second, he suggests that women were likely equal participants on such dangerous scavenging (or hunting?) forays based on nothing at all but today's "common sense". Not so sensible when in nearly all remaining archaic or "primitive" cultures observed, the role of hunter has gone to the men and that of gatherer to the women. But, in the interest of fair play, perhaps scavenging could mean either.

But this is still a top-notch, truly adventurous survey of the field in which Bickerton uses both erudition and wit to take on those who hold to the notion of most scientists and evolutionary psychologists that all that's human can be traced to deterministic biological or genetic sources. This includes Noam Chomsky with whom Bickerton had been formerly closely associated, at least in the minds of the academic public. And this is one of Bickerton's strongest suits: in the face of new evidence he has changed his mind about several of his cherished ideas—the most prominent being that an evolutionary mutation in the brain must have led to higher intelligence and hence to the development of language.

This time Bickerton takes his stand with the environmentally-specific necessity for cultural invention that, over many millennia, led to changes, first, in brain function, and then in cerebral structure itself. He makes a strong case. In doing so, he produces a bracing read with acerbic wit, self-mockery and genial arrogance. Not only does this make for zesty reading, but he reveals hard-earned insights in layman's terms. Bickerton's writing style is erudite and wonderfully edgy, a major plus for this book.

These days, symbolic cultural invention has been pushed aside in favour of the smooth evolutionary transitions evidenced in the breakthroughs of genetic science; instead, Bickerton shows that, fundamentally, humanity must have invented itself. Why? Out of sheer necessity—and Bickerton suggests the necessity was the need of tell tribemates about a new source of dead meat far away that can only be scavenged by large, cooperative groups. The communicative signal must do more than cause a reaction in the here and now (as amongst most other animals). It must, according to Bickerton, indicate a common need, a far-away place, and perhaps the kind of animal. Such indexical signalling he sees as the

rudiment necessary for the birth of symbolism, which he now accepts and which is his second great shift. His acceptance of symbolism—required for basic displacement (signals referring to distant places or even times) as the source of protolanguage (rather than complex gestures)—came after many exchanges with Terrence Deacon, but symbolism is really only hinted at by displacement, and, frankly, Deacon himself never really understood what abstract symbolic self-reference implies (i.e. the birth of self-awareness).

Real symbolic interaction can begin only when symbols refer recursively and reflexively to other symbols, so a whole new world of imaginative symbolic culture can be entered and humanity can henceforth begin its expansion across the globe as the most adaptable of species because of its complex culture and shared communal identities. This would be the move into actual language with syntactical structures that Bickerton reasonably and expansively guesses took place within the last 100 to 200 thousand years. Protolanguage, however, may go back to the beginnings of *H. erectus* and, if so, continued with little change for a few million years.

He prefers to focus on the advent of gestural, pidgen-like protolanguage—very important but still not the crux of the truly human. Very little time is spent on the creative breakthrough of the emergence of real (formal) language, which must have been the cultural invention par excellence since it led to the human consciousness we now find ourselves within. Only with the appearance of syntactic structures and, more important, semantics (the need for meaning!) did the human imagination reach out into the unknown and create a truly human universe.

Still, a fine read that carries the reader right along. One need not agree with every detail to still find it thoroughly thought-provoking. It was a powerful swan song for the late Derek Bickerton, and his input shall be missed.

Not previously published though posted online.

7. Tom Wolfe, *The Kingdom of Speech*

Little, Brown & Co., 2016, 297 pages (large print) ISBN: 978-0-316-40462-4 (HB)

I, who am usually quite critical, must admit I found this book absolutely enjoyable from the beginning to somewhere near the end at the point when Tom Wolfe offers hints of his own theory of language. If you, like me, tire of reading academic prose that disguises its emotions and intentions and pretends to be nothing but objective, this little scholarly opinion piece should delight you, as well. It is an outright polemic against both the extremes of Darwinian evolution (which cannot account for the emergence of fully human language) and Chomsky's contorted theories of innate computational language mutation in the brain (which also cannot come close to explaining the origin of language). In clear and succinct—and often dagger-tipped—prose, he defends the idea that language is a cultural artifact, that is, it was culturally invented by human minds and passed down over generations (until, presumably, brains adapted to it and began to anticipate its arrival in humans).

In this, he calls upon several difficult-to-deny sources, but especially upon the recent work of anthropologist-linguist Daniel Everett, who discovered a tribe in the Peruvian Amazon basic so very archaic (i.e., *primitive*) that they had few tools or weapons and whose language exists only in the present tense—with *no recursion* (which Chomsky had stated is essential & innate in *all* human languages) or time tenses. They could not refer to the past or to the future, and this one case was all it took to prove Chomsky's innateness theory false. Of course, Chomsky soon adapted his theory once again by claiming the tribe were simply undeveloped computers and that "language is computation not communication” (Chomsky’s exact words heard at a conference (Nixon, 2018). It's a real eye-opener to see how Chomsky and his minions closed forces and went on on prolonged and vicious personal attacks against Everett (who, in his turn, has been defended by academic paragons like Tomasello (2009), Rochat (2009), and Evans & Levinson (2009)).

Thankfully few independent intellectuals have listened to the desperate Chomsky crowd's counterattacks, and this should mean that Chomsky's dictatorial dominance over cultural construction in linguistics should now be ended at last. However, he has a pack of devoted followers as extreme as any cult, so they haven't given up yet. I am with Wolfe and Everett in everything they say though neither seems to understand the idea of a "symbolic threshold", that is, that single words or phrases or symbols in language have meaning only within the invisible background of a meaningful language (symbolic system) itself. Meaning is derived by differentiation, not by representing objects or processes in the external environment. (See the continental holistic linguistic philosophy of Saussure (1959) or Taylor (2016), for this.)

Human language, then, must have begun within the last 100 thousand years with late *H. sapiens*. Before that was "protolanguage" with only gestures and nominative pointers. I also admit I was unconvinced by Wolfe's own briefly summarized theory toward the end that all

human languages were created & spread as a result of the human propensity of mnemonic memory, but it was so underdeveloped as not to be taken seriously.

Still, this is a short, sharply-written, well-informed and most enjoyable diatribe, and it is very hard to resist the late Tom Wolfe's major points. A paradigm shift in linguistics has taken place, and Chomsky's heavy-handed enforcement of the pre-programmed language module in the brain will soon be over.

References

Evans, Nicholas, & Levinson, Stephen C. (Oct 2009), 'The myth of language universals: Language diversity and its Importance for cognitive science.' *Behavioural and Brain Sciences* 32 (5): 449-492.

Everett, Daniel L. (2012), *Language: The Cultural Tool*. Vintage Books.

Everett, Daniel L. (2017), *How Language Began: The Story of Humanity's Greatest* Invention. Liveright-Norton.

Nixon, Gregory M. (2017), 'The Legacy Conference: Report on The Science of Consciousness Conference, La Jolla, California, 2017.' *Journal of Consciousness Studies* 24 (9-10): 253-277.

Rochat, Philippe (2009), O*thers in Mind: Social Origins of Self-Consciousness*. Cambridge University Press.

Saussure, Ferdinand de (1959), *Course in General Linguistics*. New York Philosophical Library. Original in French 1916.

Taylor, Charles (2016), *The Language Animal: The Full Shape of the Human Linguistic Capacity*. Harvard University Press.

Tomasello, Michael (Oct 2009), 'Universal grammar is dead.' *Behavioural and Brain Sciences* 32 (5): 470-471.

Previously unpublished but posted online.

8. Charles Taylor, *The Language Animal: The Full Shape of the Human Linguistic Capacity*

Belknap – Harvard University Press, 2016, 352 pages
ISBN: 978-0-674-66020-5 (HB)

I have studied this book since I bought it several years ago, reading it through three times. I have written out all the most important quotations. It is an extraordinary venture that brings together the various attempts by so many others to recognize human cultural creativity, especially as found in unique human language, the most important feature in making us the complex creatures we are today. One thing we are not is ciphers or "products" of either nurture or nature, though Taylor reveals nurture as playing a more important role – which is important in this era in which everything, it seems, is being explained by genetics, the brain, and the complexity of neural functioning.

I find it hard to believe that the critics of this book actually read it in detail, but then again they may have had their own axes to grind, their own positions to defend. Taylor is too much of a gentleman and scholar to be directly confrontational, but throughout there are several intellectual broadsides against the contemporary representatives of the "HLC" (Hobbes-Locke-Condillac) approach to language – the objective, empirical, science-based approach that sees human minds as products not producers. "I will call the first an 'enframing theory'. By this I mean that the attempt is made to understand language within the framework of a picture of human life, behavior, purposes, or mental functioning, which is itself described and and defined without reference to language. Language is seen as arising within this framework" (p. 3). Some of the more famous representatives of this approach are Gottlob Frege, Jerry Fodor, Steven Pinker, and his mentor, Noam Chomsky. This objectivist approach to language remains in the ascendency, found in disciplines as diverse as evolutionary psychology, neurolinguistics, and sociobiology,

Taylor comes out on the side of the "HHH" (Hamann-Herder-Humboldt) group, including Nelson Goodman, Daniel Everett, Merlin Donald, Alva Noë, Tom Wolfe, Raymond Tallis, and others who do not accept that language is merely a biologically evolved tool used to communicate already existing information. Language is instead seen as "constitutive", that is, *it changes our thinking and expands our experiencing*. It makes us into a unique animal, *The Language Animal*, that one might call, along with Terrence Deacon (1997), the "symbolic species". Taylor: "[I]t is the antitype of the enframing sort. It gives a picture of language as making possible new purposes, new levels of behavior, new meanings, and hence not as explicable within a framework picture of human life conceived without a language" (p. 4).

As the doorway to cultural co-consciousness (intersubjectivity), Taylor might well have considered the likelihood of primary empathy, which he implies with his repeated use of term "communal." He does approach it, however: "There seems to be a growing consensus among writers on human evolution that joint attention and empathy have been crucial to the development of our species" (p. 57, n.17). This suggests that our inclination toward

interpersonal sharing, along with our enlarged brains, made possible the huge leap into language, which *has made all the difference*.

Of course, the nature of consciousness, though not emphasized, turns out to be central here. The objectivist HLC group takes for granted that human consciousness is a given that arrives with our biology (exactly like they treat language). However, Taylor states that (formal) "language makes possible a new kind of consciousness" (p. 6), which can lead toward individual self-agency and, in fact, a vastly enlarged world of experience. Furthermore, citing the empirical investigations into human development of Michael Tomasello (1995), Taylor claims that our predisposition toward "joint attention" is what made possible the "communion" of language. However, more recent work of Tomasello (2014) has admitted joint attention has been observed among some apes, so he now names *joint intentionality* as the specifically human trait that allows for language. This was foreseen by Taylor, who anticipates this advance in Tomasello's thinking and goes beyond it:

> Tomasello is undoubtedly on to a crucial point here, but I would prefer a slightly amended formulation. To speak of 'perceiving communicative intentions' still partakes of the monological framework which has dominated too much psychology for too long, whereby we take the individual subject as our starting point, and ask whether and in what mode he can recognize other agents. But the crucial human difference is rather that language transmission occurs in a context of intense sharing of intentions between the bonded pair. … Indeed, we could say that much of the point of most conversations is not the information exchanged, but precisely the sharing. (p. 56)

Shared intentionality is not the result of language but logically precedes it, just as co-consciousness or intersubjectivity precedes individual conscious subjectivity.

He emphasizes the point made by the constitutive group that we cannot enter the language world piecemeal but must engage within language itself as a whole. Words cannot be learned one-by-one until a language is understood. We must cross a threshold into language itself, for the part can only be understood in the context of the whole. We must cross what has been called the "symbolic threshold" by others like Walker Percy and Terrence Deacon. Only by crossing the symbolic threshold can we comprehend symbolic meaning: language is not a symbol-to-object one-to-one representation; it is a system of differences within the whole. It was Ferdinand de Saussure who wrote that "nothing is distinct before the appearance of language" and, "In language there are only differences without positive terms" (p. 135 in Taylor). Individual words only have meaning in the context of language itself as an assumed background of understanding.

This leads to the densest readings in the book, those to do with conscience and morality, a long-term focal point of Taylor's intellection. Frankly the long chapter, "Constitution 1" was quite a slog. It could be easily skipped if one is not so interested in connecting language with social ethics. I take the point that it matters, of course. Taylor spends some literary

time establishing that the choice of specific terms is not as random as many (including Saussure) have claimed. New terms are invented based on sub-meanings and links with the already established whole of language. There *is* a "right word" to suit the occasion.

When Taylor gets back on track in his final chapters, one can feel the crescendo coming. He, rather triumphantly, it seems to me, ties together any loose ends to close with a powerful conclusion in favour of language as the key to human nature (admittedly based in a Romantic view of nature and humanity). If I have any complaints, one might be that he hardly cited Ernst Cassirer (e.g., 1944, 1946) in these pages, and that is perplexing since so many of his arguments were previously made in Cassirer's philosophy of symbolic forms. Be that as it may, Charles Taylor demonstrates that language is both the product and source of cultural creativity, and that puts aside the claim made so often these days that we are little more than language computers responding to an inherited program in our brains, as Pinker and Chomsky so tiresomely claim. However, aside from such minor points, I believe this to be a great book (and I don't use the term lightly), which, if understood, should extend our self-understanding and awaken us to what might be called the human potential.

References

Cassirer, Ernst (1944), *An Essay on Man*. Yale University Press.
Cassirer, Ernst (1946), *Language and Myth* (S. K. Langer, trans.). Dover.
Deacon, Terrence (1997), *The Symbolic Species: The Co-Evolution of Language and the Brain*. Norton.
Percy, Walker (1975), *The Message in the Bottle: How Queer Man Is, How Queer Language Is, and What One Has to Do with the Other*. Noonday Press: Farrar, Straus, & Giroux.
Tomasello, Michael (1999), *The Cultural Origins of Human Cognition*. Harvard University Press.
Tomasello, Michael (2014), *A Natural History of Human Thinking*. Harvard University Press.

Previously unpublished but posted online.

9. Daniel L. Everett, *How Language Began: The Story of Humanity's Greatest Invention*

Liveright-Norton, 2017, 348 pages
ISBN: 9780871407955 (HB)

Can *Homo erectus* put an end to Chomsky's reductive, mechanistic metaphysics?

This should be a watershed book as it effectively demolishes the unwarranted assumptions that support the work of the major linguist of our times and earlier times too, Noam Chomsky. Instead of regarding language as predominantly computation and only secondarily as communication, as Chomsky insists, Daniel Everett offers convincing evidence that language's main function is to communicate shared meanings within a cultural community, which allows for social learning and cultural creativity.

To demonstrate this, Everett attempts to trace the origin of symbol use, which he sees as the foundation of human language, and he finds it in the distant prehistoric past amongst the far-travelled species we designate as *Homo erectus*. In linguistic terminology, Everett defends the *constitutive* view of language over the *designative*, preferred by cognitive scientists. After years of refusing to discuss the origin of language, Chomsky in 2002 agreed with the metaphysical speculation that it must have begun as a lucky neural mutation in a single individual (Hauser, Chomsky, & Fitch 2002). Everett presents a very strong case for slow cultural invention among many individuals as the impetus for language, but his certainty about symbol use among *H. erectus* is left on much less solid ground.

Daniel Everett has the academic credentials in both linguistics and anthropology to take on this task, and his personal story is intriguing. He did 20 years of fieldwork, studying rare languages amongst isolated Amazonian tribes and lived amongst the culturally basic Pirahã. He first went to Amazonia as a missionary to convert the natives to Christianity, but instead it seems they opened his perspective and he was himself *deconverted*, after which he became a cultural anthropologist. Likewise, he began his linguistic fieldwork as a supporter of Chomsky's innate universal grammar, but when he discovered that some central aspects of the supposedly inborn grammar were not present in the language of the Pirahã, he again deconverted, turning to cultural relativism instead.

After an essay in *Cultural Anthropology* (Everett, 2005) outlined his controversial position, he was drawn into an intellectual feud with Chomsky and his followers in the pages of *The New Yorker* magazine and a more than 100 page give-and-take in the June 2009 issue of *Journal of the Linguistic Society of America, Language*. Chomsky now apparently refuses to talk of Everett, dismissing him as a charlatan ("Folha de São Paulo" newspaper, 2009). In his previous two books, Everett (2012, 2017) pursued his case for cultural variation among languages and for the intersubjective invention of language. This book completes his survey by making the case that language began with the creation of meaningful symbols by *H. erectus*, the inventor of fully functional language in the human sense. Any language spoken by *H. erectus* would have been rudimentary—truly primitive, in the original

sense—in the same way Everett found Pirahã language, though he observed that it worked well enough for them.

Just what makes human language unique in this world continues to be a controversial topic, but Everett thinks grammatical structures are helpful additions to language though not the core necessity. This honour goes to symbols, which he defines as "conventional ways of representing meaning that are largely arbitrary" (7), but which everyone in the cultural group can understand. Language extends the basic symbol by stringing them together and developing ways to expand their references. He argues that Pirahã speech does not show evidence of *recursion*, the ability to extend sentences indefinitely by adding modifiers, phrases and clauses within them, which Chomsky has claimed is essential to language (e.g., Hauser et al., 2002) and it further shows no signs of the generally accepted "universal" design features of language, interchangeability, displacement, and productivity, not even to mention past or future tenses.

Beyond this, he presents strong evidence against the widely accepted neuroscientific claims that the brain has specific language modules and the announcement that the FOXP2 gene is specifically for speech. Of course, physical adaptations or *exaptations* are necessary for speech, but these may have resulted from our move into language and not caused it. "What underlies our wonderful human voices is a jury-rigged collection of anatomical parts that we need for other things. This tells us that language is not a biological object but a semiotic one. It did not originate from a gene but from culture" (89).

Many before Everett have taken on the task of opposing Chomsky's nativism, but Everett does not mention them. One of the most notable is Terrence Deacon (1997). This is a pity for Deacon's argument for the co-evolution of language and the brain could have helped Everett's case. Deacon also agrees with the early rise of symbolism, but his understanding of symbolism seems to go somewhat deeper, for he claims that for symbolism to have meaning a *symbolic threshold* must be crossed. This indicates that at a certain point in evolution, early humans entered a new world of symbolic culture in which every event or object seemed to be imbued with meaning, and every symbol's reference involves other symbols. We take up residence in a *virtual* world with senses of time, space, and personhood unknown to other animals (or to pidgen-protolanguage speakers). A single abstract sign could not symbolize in this sense; it could only be indexical or a part of a gestural, nominative *protolanguage* (Bickerton, 2000). A single symbol is understood via intersubjective consensus, for each symbol assumes a meaning from its relation to such a symbolic world (cf. Cassirer, 1944, 1953; Saussure, 2006; Taylor, 2016).

I agree with Everett's claim that the exchange of meaningful symbols is the keystone to human languages and that social conversation is the *sine qua non* of a fully functional linguistic mind. However, I suggest that Everett could have read more of the philosophy of symbolic forms, especially as found in Ernst Cassirer (1953). Once the symbolic threshold is crossed, everything changes. Charles Taylor (2016) states that "language makes possible a new kind of consciousness" (6), which leads toward individual self-agency. Cassirer notes, "No longer in a merely physical universe, man lives in a symbolic universe. Language, myth, art, and religion are parts of this universe. They are the varied threads which weave the

symbolic net, the tangled web of human experience" (1944, p. 25). As Everett himself agrees, there are few indications of myth, art, or religion in the archaeological record left by *H. erectus*. Everett cites evidence that *erectus* used fire, but he cannot prove that such use was not merely opportunistic. Finally, *H. erectus* used the same stone hand axe for over a million years: this is not a sign of the social learning or cultural adaptation that interpersonal conversation brings!

Everett bases his case for fully human language being invented by *H. erectus* on a few disputable archaeological finds that need only suggest indexical representation. He continually goes back to mentioning the seagoing watercraft that he assumes must have been built by *H. erectus* to get to the island of Java, where skeletal remains of the species have been found. However, an assumption is not evidence, and there may be other explanations for how *erectus* got to Java, such as a significant lowering of sea levels at that time. His strongest backing for social advancement among the *erectus* population is the Lower Palaeolithic Gesher Benot Ya'aqov archaeological site near the Dead Sea, but the inhabitants are unknown and his claim of social hierarchy and centralized planning there is sheer speculation. I would be happier if Everett had stuck to calling it a hypothesis and had objectively compared the sparse evidence for symbol use among *H. erectus* and *H. neanderthalensis* with the certain evidence for *H. sapiens* less than 100 thousand years ago.

The book is written for non-specialist readers and citations are sparse, though his important explanation of linguistic independence from innate neural structures will be challenging for some. His writing is clear and his witticisms occasionally amuse, but he sometimes loses his objectivity when he asserts his claims. The fact that I was unconvinced that *H. erectus* invented human symbolic language only spurred me to further thinking, so I enjoyed it immensely and recommend it to interested readers.

References

Bickerton, Derek (2000), How protolanguage became language. In C. Knight, M. Studdert-Kennedy, & J.R. Hurford, eds., *The Evolutionary Emergence of Language* (pp. 264-284). Cambridge University Press.

Cassirer, Ernst (1944), *An Essay on Man: An Introduction to a Philosophy of Human Culture*. Yale University Press.

Cassirer, Ernst (1953), *The Philosophy of Symbolic Forms, vol 1: Language* (R. Manheim, trans.). Yale University Press. Original in German, 1923.

Deacon, Terrence W. (1997), *The Symbolic Species: The Co-evolution of Language and the Brain*. Norton.

Everett, Daniel L. (2005), Cultural constraints on grammar and cognition in Pirahã: Another look at the design features of human language. *Current Anthropology* 46 (4), Aug-Oct: 621-635.

Everett, Daniel L. (2012), *Language: The Cultural Tool*. Vintage Books.

Everett, Daniel L. (2017), *Dark Matter of the Mind: The Culturally Articulated Unconscious.* University of Chicago Press.

Folha de São Paulo, newspaper (01 de fevereiro de 2009), "Ele virou um charlatão", diz Chomsky. *Cienza*. São Paulo, Brasil. Online: http://www1.folha.uol.com.br/fsp/ciencia/fe0102200904.htm

Hauser, M., Chomsky, N., & Fitch, W. T. (2002), The faculty of language: What is it, who has it, and how did it evolve? *Science* 298: 1569-1579.

Saussure, Ferdinand de (2006), *Writings in General* Linguistics (C. Sanders & M. Pires, trans.). Oxford University Press. Original in French 1916.

Taylor, Charles (2016), *The Language Animal: The Full Shape of the Human Linguistic Capacity*. Harvard University Press.

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Section III: **Transcendent Mind**

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1. Benny Shanon, *The Antipodes of the Mind: Charting the Phenomenology of the Ayahuasca Experience*

Oxford University Press, 2002, 475 pages
ISBN 0199252920 (HB)

Planos (ayahuasca vision, detail) by Céu (from Shanon, 2002, frontispiece)

What happens when a respected Israeli cognitive psychologist goes to the Amazon Basin where he ingests the famed psychotropic concoction Ayahuasca (the 'vine of the dead') again and again and again? Our intrepid philosophical psychologist is no longer a sprightly youth, maddened for adventure. He is instead a portly, accomplished theoretician with widely published articles and a noted book (Shanon, 1993) that speak from the perspective of cognitive-phenomenological psychology against the reductive tendency to view the mind's experiences as solely created by the brain's activities. Even before his Amazonian quest, Shanon placed himself in the Gibsonian camp seeing the mind as dynamic intermediary between organism and environment and active participant in both. What did happen is this extraordinary book, a scientific analysis of his own visions and the education of both Shanon's mind and, perhaps, his soul.

Benny Shanon [*Shah-nohn*′] went to the Amazon basin in the early 90s to investigate the phenomenology of the ayahuasca ingestion. This psychoactive brew was alleged to cause vivid visions with surprisingly similar content for those taking it. He gathered extensive information about its effects from interviewees as well as by taking the drug himself, which

allowed him to describe his psychedelic journeys both anecdotally and quantitatively. These experiences are truly remarkable.

He obtained *objective* data from structured interviews with members of religions that regularly use the plant brew, from other experienced users, both urban and indigenous, and also from a review of writings on the topic. He estimates that his data 'are based on ... 2,500 Ayahuasca sessions' (p. 410). His *subjective* data were obtained from his own ayahuasca 'journeys', undertaken in a variety of settings. The material in the book is mostly derived from his first 67 sessions, each summarized in notes at its conclusion. His very first major ayahuasca experience, amongst a Santo Daimo (which roughly translates as *Saint Ayahuasca*) group deep in the Amazon jungle, appears to have been truly profound. After *seeing* the atrocities of history, then the beauty humanity has produced, he felt born anew: 'It seemed this was the first day of creation' (p. 6). Beyond his professional effort to establish categories of comparative data, Shanon also found compelling personal reasons to enter what he came to regard as the 'School of Ayahuasca'. Woven within his detailed analyses is a narrative of metamorphosis.

The book gives little space to the neuropharmacology of intoxication, perhaps because Shanon quickly came to '. . . totally reject the possibility that biological accounts—detailed as they may be—can offer viable psychological explanations' (p. 35). Yet within his work, the analytical approach of this stalwart cognitive psychologist seldom wavers. This must have required great self-discipline, particularly when the objects of study were his own overwhelming visions, emotional storms, or indeed the distractions of the gastro-intestinal 'purging' so often encountered (which Shanon learned to control by 'bringing up' song instead of stomach contents).

One of the most striking findings was that particular entities or objects played central parts in a startling array of visions, especially snakes of all sorts and of course the jaguar. Strangely, such jungle denizens appeared in the visions of Europeans as often as in those of Amerindians. Often reported as well were sinuous dancers, unknown fabulous cities, and historical panoramas. Detailed tables of quantitative analyses are given in an appendix. Structural similarities in the progression through a single ayahuasca journey were also noted: the often terrifying visions of the first period – 'Quite commonly,' he states matter-of-factly, 'people feel that they are about to die' (p. 57)—to the serenity and communion sometimes experienced in later stages.

But Shanon emphasizes that undergoing ayahuasca 'education' is a long-term project. Sitting in on a class or two just won't do. There are stages of advancement into these mysteries: the novice begins passively watching visions unfold as if on a screen but, with more experience and courage, learns to enter the vision and participate in its reality. Then comes a stage where some degree of control over the process is possible, though such control is always felt as exerted in partnership with some creative source outside the self. Mastery seems to involve gaining ability to engage with many *realities* simultaneously, thus allegedly conferring power *to act* in the everyday world in new ways that a person might

never previously have attained or attempted. Act, that is, through the expressive arts, for example, or guidance and healing.

Shanon emerges as something of a shamanic *ayahuasquero* himself. The most expressive symbol of ultimate truth is found, he concludes, in songs of praise for all creation; the *Hallelujah* of his Judaic ancestors. As to the ontological question of what exactly is being so praised, Shanon avers that it is not any*thing* at all, but rather a universal process. *Creation* is what the name implies, the ongoing creative unfolding of all things, including ourselves. (Sounds like Whitehead's ultimate motivator, creativity, or even *pancreativism*.)

Obviously, such 'knowledge' cannot be attained through analytic or phenomenological reduction alone. It is ever present beyond the edge of the 'known world', that is, beyond the confines of the conscious mind. This is the point at which Shanon the scientist admits that full communion exceeds communication: 'Yet, there were occasions that it was clear to me that I had to make a choice—if I really wished to undergo the experience presenting itself to me, I would have to forgo my future recollection of it and give up any thought of ever talking about it' (p. 355). This *unspeakable* awakening is not found with ordered signposts and structured roads but intuitive discovery, well beyond categorical reasoning**:**

> [V]ery poignantly, I realized how limited the scientific approach is. ... I further comprehended that there are levels of knowledge that demand one to let go and relinquish all critical, distanced analysis. ... In this respect, despite all its limitations in terms of sociological power and cultural permanence, the indigenous stance has the upper hand. (p. 356)

This is an important message from a contemporary scholar, but a puzzling one from many points of view. I had particular difficulty myself with Shanon's brief discussion of the ontological status of good and evil: 'The ultimate reality is beyond good and evil', he says, but 'there are visions in which one feels one is encountering the Supreme Good' (p. 174). Does the Supreme Good cast no shadow then? I'm likely missing the mystical paradox here, or at least the Trickster at play. Ayahuasca has a cosmic sense of humour (not always benign), according to Shanon, and hides as much as it reveals.

The whole question of applying orderly statistics to *other realities* seems perplexing. To what do the lists, tables, categories, and structures actually refer? Does structural analysis reveal the universal latticework of creation, or at least of the Ayahuasca experience? This is uncertain. Shanon is well aware of how boundaries in the realms of visionary experience seem to shift or even, with a wink and smile, disappear altogether. Such carefully delineated categories may really exist within psychic projections, but 'there is no clear-cut differentiation between interpretation and creation. ... In essence, all is interpretive, all is creative' (p. 351). It is not perfectly clear how categories of experience can be both evanescent creations yet simultaneously stable interpretations. But perhaps that's why Shanon uses music making as his primary metaphor: the player creates by interpreting and vice versa.

Many scientists may be unpersuaded, to say the least, by Shanon's claim that ayahuasca visions and revelations 'might be psychological *and* creative *and* real' (p. 401). New Age folk may be disappointed that he remains unconvinced of reincarnation, ESP, or 'the paranormal actuality of the astral' (p. 363). Instead of sharpening distinctions, he found them disappearing — 'between creation and discovery, between psychology and ontology, between mind and world, between internal consciousness and the *anima mundi*, between the human and the Divine' (p. 401). This is a slippery metaphysics. Shanon himself allows that the many ontological questions arising from his experiences need much closer examination than they are given in this book, which primarily derives from phenomenology. Nevertheless his songs of praise for a transcendent creativity active here and now, within and around us, point to something profound. The apparently firm outlines of our 'given' world may, it appears, be but one reality among an infinitude of (equally valid?) experiential possibilities.

References

Shanon, Benny (1993), *The Representational and the Presentational: An Essay on Cognition and the Study of Mind*. Harvester-Wheatsheaf Press.

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2. Evan Thompson, *Waking, Dreaming, Being: Self and Consciousness in Neuroscience, Meditation, and Philosophy*

Columbia University Press, 2015, 495 pages
ISBN 978-0-231-13709-6 (HB)

This is a fine book by an extraordinary author whose literary followers have awaited a definitive statement of his views on consciousness since his participation in the important book on biological autopoiesis, *The Embodied Mind* (Varela, Thompson, & Rosch, 1991) and his recent neurophenomenology of biological systems, *Mind in Life* (2007). In the latter book, Thompson demonstrated the continuity of life and mind, whereas in this book he uses neurophenomenology as well as erudite renditions of Buddhist philosophy and a good dash of personal experience to argue for the reality of altered states of consciousness, but also that these states are not distinct from the physical systems that subtend them. He must have touched a nerve, for *Waking, Dreaming, Being* continues to be read and widely discussed by the literate public.

This book has caused significant dismay among scientific materialists, *and* among those who believe mind or being transcends mere physicality, but also, surprisingly, among some philosophical phenomenologists. The first are unhappy because Thompson takes his meditation experiences and the rigorous philosophy developed within Buddhism just as seriously as he does cognitive science or biology. The transcendental idealists, including some Buddhists, are disappointed because Thompson stands with a statement from the Dalai Lama, whom he interviewed, that 'even the subtlest "clear state of mind," which manifests at the moment of death must have some kind of physical base' (p. xxii). But while the Dalai Lama concluded his talk with Thompson with cheerful uncertainty — 'Whether there is something independent or not, I don't know' (ibid.) — Thompson himself seems to side with non-reductive materialism and proceeds on his fascinating exploration into varied conscious experiences looking but failing to find any that can withstand objective scrutiny of their transcendence of the physical, especially cerebral, sphere. In this process, there is some question whether his phenomenological credentials are put aside as he appears to stand with objective proof as a final arbiter as opposed to knowledge based in personal experience.

On this journey, Thompson produces a most reader-friendly book, laced with personal asides and conversations with other well-known figures. He writes both with clarity and vigour demonstrating vast knowledge over many fields from neuroscience to arcane Buddhist and Indian yogic texts to current consciousness studies. Early on he moves toward a definition of that most difficult of concepts, *consciousness*, by seeing it as making appearance possible and noting that those sorts of sciences that attempt to exclude consciousness from their purview could hardly proceed without it:

> Without consciousness, the world can't appear to perception, the past can't appear to memory, and the future can't appear to hope or anticipation. The point extends to science: without consciousness there's no appearance of the microscopic world

> through electron microscopes, no appearance of distant stars through telescopes, and no appearance of the brain through magnetic resonance imaging (MRI) scanners. Simply put, without consciousness there's no observation, and without observation there are no data. (p. 14)

He defines consciousness in a way that embraces self-identity: 'Consciousness is that which is luminous, knowing, and reflexive. Consciousness is that which makes manifest appearances, is able to apprehend them in one way or another, and in so doing is self-appearing and prereflectively self-aware' (p. 18). The word 'luminous' indicates his background as a meditator since childhood in Tibetan awareness techniques.

What does he explore? First he goes through perceptual experiences, illusions, and states of consciousness achieved by meditators, including the state of quiescent awareness possible in deep dreamless sleep and the 'fourth state', called simply that, indicating that this is said to be *void consciousness* (no time, no substance, no objects, and no subject) identified metaphorically in Buddhism as 'the clear light'. He admits that there is no scientific proof, as yet, of such states and that such proof may be impossible to obtain, but he notes that there is also no evidence of anyone attaining such a state (or non-state) without having a physical substrate. He makes no claim to such attainment himself, but, toward the end, suggests such realizations may be the result of stilling the brain via meditation into a state of pure subjectivity without objective content. The Dalai Lama himself admits that, though he believes many advanced meditators have attained the clear light, he himself has no personal knowledge of it (though I have been told that His Holiness is often ironically self-deprecating).

Thompson goes on to explore the dreaming state in some detail, sharing his own experiences of dream insight and lucid dreaming. He investigates so-called *out of body experiences* (OBEs), including his own, again concluding that such experiences likely are made of intuition, imagination and dream images — noting there is no proof of the body literally being transcended. At this point, the reader begins to wonder if Thompson is being serious or ironic since his own OBE as a child provided him with insights he could have gained no other way. Much to the disappointment of true believers, Thompson also dismisses the *near-death experience* (NDE) as nothing more than the active imagination released when the parts of the brain are left dysfunctional from heart failure, chemical ingestion, or other accidents, none of which have been proven to happen with an inactive brain or from a perceptual point beyond the body. He does not doubt, however, that the many reports reflect actual experiences, illusory or not.

His most compelling chapter asks 'What Happens When We Die?' He begins by honouring the ineffability of the experience of death by questioning the scientific perspective on it: 'Yet even if we set aside the issue of whether science gives us good reason to believe that death entails the complete cessation of all consciousness, this conception is totally inadequate because it says nothing about the experience of *dying*' (p. 275). He notes that Tibetan Buddhism, on the other hand, has built a vast literature around this very transition, from the moment of death to seeking and finding new physical embodiment in another

incarnation. However, those who have trained themselves to recognize the luminosity of the 'fourth state', that is, the pure awareness in the clear light, will not be reborn but transcend into the All, according to this view. Thompson, perhaps surprisingly, writes, 'I'm very skeptical of this way of thinking' (p. 287). He notes that any such post-mortem experience is impossible to report without a living body, leaving the theory based on inference or conjecture, in the process casting doubt on the reports of those who claim to have recovered memories of lives previously lived.

He follows this up with an investigation into the deaths of realized meditators whose bodies reportedly did not begin to decay immediately, often remaining unsullied for days or even weeks. Scientific investigation into these reports continues, but Thompson, for the time being, dutifully accepts the skeptical responses of forensic scientists that bodies often resist corruption in the right environmental circumstances. Again, the reader wonders if Thompson is actually toeing the line of scientific skepticism or if he is being ironic, for in at least some of these cases the corpse of the realized meditator was in southern India, hot and humid and perfect for rot. If these reports are proven to be true, it may be an indication that something more than observable physical life is afoot. But, finally: 'It can also help us remember that only the dying can teach us something about death, and what we're called upon to do is to bear witness to their experience' (p. 318). This is a truly phenomenological perspective.

In his final chapter, he explores the contentious area regarding the self. Influenced by Buddhist thought, he seeks a middle way between what he terms the 'neuro-nihilism' of certain scientists and philosophers who deny there is a self (for they see no brain function that could support it) and the intuitive self-reification of others who regard the self as a substantial entity existing basically unchanged along with the body. Based on the ideas of the sixth century Buddhist philosopher, Candrakīrti, Thompson sees the self as dependently arising or, more precisely, *dependently co-arising* from a juncture of causes. It begins with a self-specifying system at the cellular level. At this point, he ties self-making back to the body and denies that consciousness is merely an information processing system, 'for consciousness depends fundamentally on specific kinds of electrochemical processes, that is, on a specific kind of biological hardware' (p. 343). This becomes the basis by steps of the enactive self, 'a full-fledged I-making system' (p. 344).

He acknowledges social self-making (the narrative self of phenomenology), and he uses the extensive research of Tomasello (1999) to show that *joint attention* helps draw forth a mirror identity, the sense of self as seen by others. If he had read more recent work from Tomasello (2014), he would have seen Tomasello now supports the deeper social entanglement of *joint intentionality*, which hints at an actual sense of group identity that then makes individual self-identity possible. Beyond all this, however, Thompson as an experienced meditator must then deal with the claim that many advanced yogis have transcended the illusion of self and 'the body is said to have entered a state of suspended animation' (p. 357). With the enactive self and the socially constructed self-concept, this should be no surprise, for 'if the self is a construction, then we should expect that it could be dismantled, even while some of its constituent processes — such as bare sentience or

phenomenal consciousness — remain present' (p. 362). For Thompson, enlightenment is not self-extinguishment. 'Rather it consists in wisdom that includes not being taken in by the appearance of self as having independent existence while that appearance is nonetheless still there and performing its important I-making function' (p. 366)

Overall, the position apparently taken by Thompson on the matter of consciousness might be called *luminescent physicalism*. This is not the cold objective materialism favoured by many in the sciences that assumes that life, experience and consciousness randomly evolved out of material interactions. Here the only physical world that can be known is one in which life is already present, and, for Thompson, life is coterminous with mind — when one is present so is the other. One of the implications of this is that those sciences that attempt to explain away the activities of living organisms as driven only by the evolutionary imperatives of survival and reproduction have to make room for individual intentions and perhaps even teleological purpose in nature. At the same time, it is no use speculating about the material universe before life appeared, for, from a phenomenological perspective, such would be an impossibility; there is no form to existence, no presence without consciousness — no observed world without observers present too.

Finally, it must be said that summarizing Thompson's *position* in consciousness studies does not do this book justice. It is a big book but one written in a manner meant to reach a wide, non-specialist audience. Thompson explores a veritable kaleidoscope of real and possible experiences, most of which are familiar enough to entertain; experiences that — agree with his conclusions or not — engage us in a way that academic writing rarely achieves.

References

Bitbol, Michel (2015), 'When "altered" states become fundamental'. *The Journal of Mind and Behavior* 36, 101-112.

Thompson, Evan (2007), *Mind in Life: Biology, Phenomenology, and the Sciences of Mind.* Harvard University Press.

Tomasello, Michael (1999), *The Cultural Origins of Human Cognition*. Harvard University Press.

Tomasello, Michael (2014), *A Natural History of Human Thinking.* Harvard University Press.

Varela, Francisco, Thompson, Evan, & Rosch, Eleanor (1991), *The Embodied Mind: Cognitive Science and Human Experience.* MIT Press.

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3. Imants Barušš & Julia Mossbridge, *Transcendent Mind: Rethinking the Science of Consciousness*

American Psychological Association (APA), 2017, 251 pages
ISBN: 9781433822773 (HB)

This book arrives with a reputation. Apparently, it is the first book on *psi* and other anomalous human experiences to be published by the rather traditionalist APA (American Psychological Association). If this is true, this is likely due to the fact that much of the book relies on carefully monitored and repeated experiments to demonstrate the statistical veracity of such things as precognition, remote viewing, clairvoyance, mental telepathy, and even psychokinesis. This is the key to the authors' claim of empirical testing and scientific proof.

Many of the claims, such as the Ganzfeld telepathy experiments and remote viewing trials, are well known but have been dismissed as proving nothing because of flaws or fraud or because the results were not consistent. However, in 1996, an unbiased statistician named Jessica Utts was contracted by a U.S. government agency to review the experiments. She stated:

> Using the standards applied to any other area of science, it is concluded that psychic functioning has been well established. The statistical results of the studies are far beyond what is expected by chance. Arguments that these results could be due to methodological flaws in the experiments are soundly refuted. … Such consistency cannot be readily explained by claims of flaws or fraud. (as cited by the authors, pp. 36-37)

This is the sort of evidence that allows the authors to assert empirical validity and scientific proof for the extraordinary claims they make. These statistical reports are made throughout the early chapters and do not make for the most spellbinding reading, but later they apply their findings to conclusions about the nature of consciousness and develop a transcendent ontology of their own that requires mental experiences that escape the net of the physical in general and brains in particular.

This is not a long book, consisting of only eight self-contained chapters that work in concert to lead toward the implication of a kind of idealist ultimate reality. Despite its size, it seems they manage to cover all aspects of psi, including post-mortem communication with 'discarnate entities', and they cite nearly all the well-known authors in this field over the past decades and earlier. Perhaps a short review is in order before I offer my own critique.

The Introduction and first chapter set the tone and make it clear that reductive materialism is considered to be moribund, though they resist a spirited polemic against it:

> We are in the midst of a sea change. Receding from view is materialism, whereby physical phenomena are assumed to be primary and consciousness is regarded as

> secondary. Approaching our sights is a complete reversal of perspective. According to this alternative view, consciousness is primary and the physical is secondary. In other words, materialism is receding and giving way to ideas about reality in which consciousness plays a key role. (p. 3)

Since consciousness released from its physical limitations may be unbounded, the door is opened for an examination of the wide variety of experiential phenomena that constitute what today is called simply 'psi'. Chapter 1 is a critical examination of materialism. It contains an especially strong section noting how scientific materialism so dominates the academy that any other worldview is often subject to mockery, dismissal, or official censure. I have seen this myself when seeking promotion in my university: my consciousness studies publications (rarely involving psi) were still archly interrogated for lack of experimental proofs.

Chapter 2 explores 'shared mind', that is, a concept that will allow for 'anomalous information transfer', once known as ESP, including remote viewing. There are a great many experimental proofs of a statistical nature explored, and they certainly make the case that something is missing from the skeptical materialist worldview since there are so many phenomena that cannot be explained within it. Chapter 3 questions our daily sense of the passage of time by bringing up strong evidence for precognition. They note that unconscious precognition is common but most of us fail to bring it to consciousness or forget it once we have done so. They suggest actual time is deep time, a reversible ordering of events beyond our daily sense of apparent time.

Chapter 4 was the most difficult chapter for me to take seriously, but I strove for an open mind while reading their anecdotes or evidence. The authors make the claim that 'discarnate beings' seem to exist in some realm of their own and communications with them are possible. This leads to the question posed in chapter 5: can the mind exist outside of the brain? Here their empirical evidence centres on near-death studies. They claim impartiality by listing what they see as all possible objections to the evidence, but in the end they embrace most such claims. Mental control over physical processes (related to psychokinesis) is examined in chapter 6, and here they come up with strong scientific evidence (which will no doubt be just as strongly refuted).

This leads to their conclusions and applications in the two final chapters. Chapter 7, 'Reintegrating Subjectivity Into Consciousness Research', suggests that we need to pay more attention to our own psychological biases in consciousness studies. In this way, an open-minded logic will help us to more honestly evaluate the empirical evidence, which they suggest will lead to knowledge of anomalous ways of gaining knowledge. These insights could be transformative for the researcher, and lead to transcendent states of consciousness. 'Assuming the existence of something like what we have loosely identified as deep consciousness, extended mind, shared mind, the prephysical substrate, and so on, we are likely a long way from understanding consciousness. What is needed is a surge of creative research taking the investigation of consciousness in new directions' (p. 184). They then list 10 explicit steps that should open consciousness studies to the deeper truths

of psi and transcendent experience that they have affirmed. They seem to back the second-person phenomenological perspective as outlined in *The View from Within* issues of the Journal of Consciousness Studies (JCS) 6 (2-3), 1999, and JCS 16 (10-12), 2009, when they state, 'Again, we emphasize that keen self-observation as well as comparing notes with others can help inform a determination about whether information is being fabricated or accurately received' (p. 189).

If such transcendence of the physical is really possible — and the authors claim that's exactly what they have discovered — then a new model of consciousness (really a new ontology) is necessary, and that's what they describe in chapter 8, 'Transcendent Mind'. Their choice is called the 'flicker-filter' theory. The filter part sees the brain as what Aldous Huxley called a reducing valve, which basically limits or filters access to transcendent experiences, leaving only daily functional consciousness. The flicker part is the stroboscopic image of reality described in both Buddhist meditation texts and in some 'stochastic' quantum explanations of consciousness: 'The idea is that physical manifestation comes into existence and disappears, over and over again, producing the appearance of a continuous stream of consciousness from a series of discrete "nows"' (p. 181). Between these flashing 'nows' is the 'total aliveness' of a 'timeless, spaceless void', which implies the world is born anew in each new flashing 'now' appearance. What does this matter to us? 'This model predicts that both the future and past can be changed, although it is not clear how one would obtain evidence that that had occurred given that one is always in a "now" with consonant past and future projections' (p. 183). In other words, we would never know if this was true. Further, I am unable to imagine experience *taking place* in a timeless void, though invisible, silent, inactive awareness-in-itself—but aware *of* nothing—is conceivable.

This is strong stuff that, despite all the evidence and argumentation in the book, demands a willing suspension of disbelief to read with full attention and an open mind. It is certainly significant that a statistician who examined the pages of experimental evidence declared that the "statistical results of the studies are far beyond what is expected by chance," but for the rest of us a 54% success rate in testing, say, direct mental influence still looks a lot like chance. The statistical evidence proves mental influence, but the percentage indicates that conscious agency operates only irregularly and may reveal that such influence is often a random, unconscious event.

Barušš and Mossbridge claim they approached their evidence objectively but with open minds that led them to their extravagant conclusions. I have my doubts. The authors have, professionally speaking, a lifelong commitment to such research and, most likely, experiences of their own they only hint at here, so it seems likely they began this book as committed to their findings. I find much of their data convincing, *as data*, but this does not necessarily convince a critical thinker of the deeper truths behind these anomalies. For example, my *boggle limit* is reached by the idea of the dead contacting to us. I just feel that discarnate entities are impossible: dead is dead. Why haven't they dispersed and in what in-between realm could they possibly exist?

The authors' premier example of afterlife communication is the deceased grandmaster chess player from the beginning of the last century who played Victor Korchnoi (once ranked third in the world) through a non-chess playing medium in a slow game that lasted over seven years. The story is certainly entertaining. Even though the dead grandmaster finally lost because he had apparently not learned that the "French Defence" he used had been penetrated since his death and was now obsolete, the story finally stretches credibility. There are *so many such stories* (which may be taken as support or skepticism)! Rather than dead discarnate entities existing in a non-physical ether, it seems to me much more likely such purported afterlife communications are either fantasy projections of living psyches, or those living psyches are having clairvoyant experiences with suppressed parts of themselves.

I have not had any conscious experiences, so far as I can remember, that would incline me to believe in, say, discarnate entities, so all the statistics and anecdotes in the world cannot really turn me (and probably other readers) into a channeller or transcendentalist. My own mother promised me that she would try to contact me after her death, but, to my vast relief, has not done so. The authors' noting that most psi experiences happen unconsciously or are soon forgotten does not help the problem. In that case, it's no wonder I feel bemused by all the wonders revealed in here.

However, the evidence is there, and the authors are obviously well versed in the data, anecdotes, and their own personal experiences. I would agree that their research recommendations to the conscious studies community and psychologists should be taken seriously. If we come to recognize that such extended mind experiences are happening for others, they may be more likely to happen for us. I for one would love to gain insight or even directly experience the transcendent mind, but in the meantime I must accept the burden of my mundane consciousness and soldier on, as will most readers, though some will likely considerably expand their worldview.

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The Labyrinth of Nature —
The Centre is held not by the bestial half-animal Minotaur,
but by the wise half-animal Centaur.