

# The Problem and the Opportunity of Consciousness

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## Introduction: Birth of the Modern Mind

On a freezing eve deep in November of 1619, after an intense day of prayer and meditation, the brilliant twenty-three year old French mathematician and philosopher René Descartes (1596–1659) had an amazing dream. Upon this epiphany, and through later reflection, he envisaged a future unified science that revealed—with an objective mathematical certainty to a separate individual human objective conceptual consciousness—the precise nature of the two aspects of mind, our objective and subjective nature. This vision, based as it was in his reaction to the atavistically conditioned 17th century Aristotelian Scholastic “web of belief” (Aquinas’ union of Aristotle with the Christian schools), Descartes understood reality to be comprised of two ontologically separate, independent substances, namely, mind and matter. On this assumption, such a unified science could eventually come to know with perfect objective certainty, the very nature of the subjectivity that is mind—human consciousness—and its seemingly separate experienced material reality. Here we can know the nature of reality with the certainty of the deductive proofs of geometry, with which Descartes was quite fluent (Descartes, 1644/1911).

Our human thought systems—our conceptual paradigms—and the cultural belief systems that flow therefrom, have a history. Conventionally speaking, we are the heirs, indeed the consciousness products of that history. The great revolution of Modernity that began in the 17<sup>th</sup> century produced our Modern mind of today. Descartes’ mind, building upon Francis Bacon’s (1561–1626) proto-Modern “great instauration” of the *Novum Organum* (1620), was the lynchpin of this great revolution in science, religion and culture. It changed everything.

It was the great genius of Descartes (he published under his Latin name *Cartesius*) that liberated the 17th century European mind from the oppressive presumptive and arbitrary authority of prevailing Aristotelian Scholasticism, then cognitively framed the epistemic and cultural crisis of the Reformation: which church—Aquinas’ scholastic quiddities, or Luther’s reformation of them—is the true teaching? Just so, Descartes refuted popular Greek Pyrrhonic Skepticism; addressed the rising tide of Neo-Phythagoreanism; created analytic geometry; created a science of mechanics; utilizing the polemics of Galileo, established a new quantitative objective Modern Science; with Bacon’s rhetoric, tamed the supernatural authority of the Church; changed the view of a superstitious polity on magic and witchcraft; with his two proofs proved the existence of a separate theistic creator God; and finally, formulated the mind–body problem that haunts us still. And his Latin prose, even in translation, is a joy to the ear, as well as to the mind.

Thus, it was Descartes’ dreaming mind that began the human scientific and cultural revolution called Modernity, with its pernicious mind–body split, and its many modern miracles. This Modern consciousness revolution, with the Copernican Revolution, the Newtonian Revolution, and the Quantum Revolution, is one of four consciousness/cultural revolutions of the Western mind.

Descartes opened a rationalist door upon the darkness of Plato’s nihilistic cave. We have still to emerge into the light of day. That desideratum is the task of our fifth conscious-

ness revolution, namely, the emerging 21<sup>st</sup> century West/East Noetic Revolution in science, culture and religion/spirituality, of which I shall have more to say below.

I shall consider herein some Postmodern Neopragmatic and Neodualist ontologically relative resolutions to the destructive mind–body dualism of Modernity. Here we shall explore the recent neodualist “Two Truths” solution to this problem of consciousness as told by Thomas Nagel, David Chalmers and Premodern Buddhist *Prasangika Madhyamaka*. We shall conclude that there is indeed a cognitive resolution to this apparent problem, but it is not merely an objective, conceptual resolution.

Let us then state this ostensible “problem of consciousness” thusly: How does physical matter produce mental conscious life, and what is the relation between these two cognitive paradigms that are objective physical body and subjective mind/spirit? And how do they interact? Thus, the inherently vexed (to concept-mind) “problem of consciousness” is our primordial “mind–body problem.” The further “hard problem of consciousness” for recent Philosophy of Mind is this: how it is possible for our inner subjective experience to be explained by objective physical and functional organization of the brain? How do we bridge the “explanatory gap” between objective causal, functional, mechanistic physical reality, and subjective phenomenal experience (subjective awareness states)? Why is it so hard to relate our two modes of consciousness to any physical basis? How does the water of brain become the wine of consciousness (McGinn)? Amazingly, consciousness has yet to be defined. “In the case of consciousness, we have nothing... Researchers are stumped... No one has come up with a theoretical perspective...to narrow the explanatory gap” (Block 1994, 1997). Philosophers don’t agree on much, but everyone seems to agree that “the subject of consciousness is an irreducible feature of reality...as matter, energy, space, time and numbers” (Nagel 1986, pp. 7–8). What is needed is interdisciplinary, interontic research that includes both third person, objective, causal and first person subjective, phenomenal reports; that is to say, hard objective neuroscience, and soft noetic methodologies. Such an integral science of consciousness requires a relaxing of our deep-rooted dichotomies of objective and subjective, physical and mental.

With Descartes’ prophetic dream began 400 years of our adventitious grail quest for indubitable foundational truth, an infallible, objectively, even deductively certain perfect knowledge of a “real world out there” (RWOT) of appearing reality. Descartes and Galileo (1564–1642), with their Platonic Rationalism and Aristotelian Naturalism, and with Newton (1642–1727)—whom the great David Hume called “the greatest and rarest that ever arose for the ornament and instruction of the species”—framed the Modernist mechanistic objectivist picture of today’s much valorized foundational functionalist proto-religion (Scientism) that is Scientific Materialism. This picture set in relief the appearing physical object against its subjective consciousness ground. The cognitive pictorial elements of this consciousness masterpiece—the apparent but not ultimate duality of matter and mind—unfortunately became quickly stipulated as ontologically separate, language and theory-independent (existing independently of our theories and beliefs about them), absolutely existing physical substances, entities, or properties. Thus was “Substance Dualism”—Descartes’ “mind–body problem”—

brought into the emerging world of Modernity. Indeed, this dualistic ontological view gave birth to the Modern mind.

### **The Mind–body Problem: Two in One?**

Mind–body dualism holds that both the subjectivity of mind and the objectivity of matter are “real” properties of spacetime reality, but neither property can be reduced to, or explained in terms of the other. Thus arises the untidy “interaction problem,” the epistemic bane for both Substance Dualism and Property Dualism. If mind and body are separate dimensions, how do they interact, causally or otherwise? And clearly they do interact. Our mentations cause, or in some inexplicable way facilitate our physical and moral behavior.

Much paper and ink have been expended in service of the many species of causal Interactionism, with ever more contrived and implausible results. The materialistic/functionalist theories on offer—Behaviorism, Parallelism, Occasionalism, the Identity Thesis, Donald Davidson’s Supervenience Theory—have fared no better (Block 1997). And David Rosenthal’s higher order thought “HOT theory,” arguably the best functionalist (consciousness emerges from brain function) account does not answer David Chalmers’ “Hard Problem of Consciousness,” as we shall see.

Adding insight to injury, the acausal Quantum Field Theory (QFT) has radically thickened this epistemic plot. Roger Penrose’s quantum consciousness theory (1994), building upon the broad logical shoulders of Gödel (the two incompleteness theorems (Boaz 2013 Ch. II D), and Turing (the “halting problem”), argues that human consciousness is non-algorithmic (non-computer-like) and arises from micro-tubules in the quantum structures of the brain. QFT has, for now, demonstrated that the laws of physics/nature are not causally determined, but are indeterministic; a Postmodern shock to the system of the entire cause and effect empiricist deterministic (LaPlace’ Demon) orthodoxy of Modern Science, and of vernacular common sense Realism—Russell’s “metaphysics of the stone age”—not to mention the Buddhist Causal Vehicle. Objectivity and causality are kaput! What hath God wrought?

Another vexing problem for Cartesian and neodualist ontic mind–body Dualism, whether construed as separate substances or realms, or as Hume’s bunch of properties, is the astounding “*unity of consciousness.*” How is it that the experience of our senses, arising from many different structures in brain, become unified into a single highly functioning unified moment, and then an ongoing immaterial stream of consciousness/mind?

Such is the “binding problem” of recent Philosophy of Mind. Such a scenario would seem to require a definition of the nature of non-physical mind, or a description of the relationship among the “bundles” of properties that become such an immaterial consciousness unity. What, in heaven and earth, could an immaterial substance that unifies our disparate sense experience into a unified state of a fully functioning human consciousness, possibly be? Neither the “consciousness theory,” that consciousness itself is a substance, nor “mysterion” anti-theory and deflationist tacks (conceptual theory can never solve inherently trans-conceptual metaphysical problems (McGinn, Rosenthal) have fared well with academic, much less, common sense understanding of human consciousness.

However, the anti-theory view that relative-conventional dualistic semiotic discursive conceptual thinking cannot, in principle, penetrate the nondual ultimate reality that is consciousness-being-itself—in which relative-conventional dualistic human consciousness partakes—opens a trans-rational, transpersonal cognitive aperture that permits new paradigmatic noetic contemplative technology and methodology. This is good news for healing our adventitious perennial mind–body split, as we shall see.

Epiphenomenalism is another materialist approach to the interaction problem. This emergentist strategy propounds that mental events emerge from physical events, without any causal relations or influence upon these physical events. This is astonishingly counterintuitive and counter evolutionary. And that’s not so bad. But, that our common mental experience and states in no way affect or change our lifeworld conduct throughout historical sociocultural space and time is quite incredible, and thus leaves the problem more or less where we, and the epiphenomenalists, found it.

The ontic alternative to the ontological Dualism of Descartes, should it ultimately be found wanting, is Ontological Monism: namely, Eastern (*Yogachara/Cittamatra, Veda/Vedanta*) and Western (Berkeley, Hegel, Kant) Idealism, that our material dimension is ultimately not material/physical but immaterial Mind, or consciousness. Idealism’s ontic monistic opponent is Materialism, or, since matter or mass resolves to physical forces and energy, Physicalism (e.g. electrical charge is massless yet physical). Here, the atomic things that stuff is made of is, conventionally as well as ultimately, just plain physical. The begged question—the epistemic elephant in the room—is, of course, why must ultimate reality be merely physical? The mental dimension—consciousness—remains unaccounted for. Both ontological Idealism and ontological Materialism are purely metaphysical theories as to the ultimate nature of reality or mind. Our cultural evidentiary biases notwithstanding, there is no empirical evidence for either view.

The question of the relation of this dynamic duo of mind and matter to the trans-conceptual, non-logocentric basal ontological ground in which both arise, is little discussed in Modern and Postmodern Philosophy. And even less so in Modern Science.

I shall suggest below an epistemically risky—given the current materialist proto-religious culture of Science and Philosophy—speculative, neodualistic, panpsychic, noetic (body/mind/spirit unity) centrist notion as to this cardinal relationship between *relative* human consciousness (*vikalpa*) and its nonlocal, nondual *ultimate* primordial base (*gzhi, citatta, dharmadhatu*, nondual, non-theistic spirit) that is nothing less than the very nature of the vast emptiness expanse of mind/consciousness itself in which such theories, and everything else, arise.

What then is the actual relation of physical properties to mental properties, or of our inherent dimensions of body/matter to mind/spirit; and how in the world do they interact one to another? Is not this the very question of being—of the unbearable lightness of being—and of our exoteric and esoteric awareness/consciousness participation in the whole shebang?

Because our objective and subjective mental experience seems so different from our physical body experience, there exists a *prima facie* “explanatory gap,” the vexing problem of the apparent, obvious continuity of the two. Thus did the Modern materialist “mind–body

problem” become gradually cast in cognitive stone; and there hasn’t been a moment’s ontic peace since.

We’ve seen that this 17<sup>th</sup> century epical mind-matter duality launched our great scientific and cultural revolution called Modernity, followed by its 20<sup>th</sup> century intellectual, sociocultural Postmodern cynical, even nihilistic backlash. And this is nothing more or less than our Western intersubjective cultural preconscious and conscious conceptual “web of belief” (Quine) that defines, for our collective relative-conventional mind, who we actually are. Or rather, who we *think* we are. We might do well in this regard to recall the Postmodern wisdom of a certain auspicious bumper sticker: “Don’t believe everything you think.” If it were a really big bumper sticker we might add, “Don’t defend everything you believe.” *We limit ourselves most by our emotional attachment and defense of to our present concepts and beliefs.* Do we not? Is there an antidote to such massmind ignorance (*avidya*)? Present company excluded, of course.

For this all too brief exploration, I shall herein heedlessly subsume the various species of this perennial ever-present mind–body problem—the problems of ontology, the embodied self, other minds, causality, intentionality, free will etc.—under the rubric of the core “problem of consciousness.”

“Descartes Dream” is still just a dream, albeit today, now, this dream has become an integral noetic dream that reveals, not an idealized, objectively unified science, but an inchoate Science of Consciousness that includes both faces—both paradigms—of human being here: our third person exoteric *objective* experience data, and our first person introspective, inner esoteric *subjective* experience data, including, of course, spiritual experience.

The foundational principle of this new noetic paradigm (organized belief system) science is the ontologically prior, interdependent unity of physical and mental *form/appearance* with the basal primordial *emptiness/nondual* reality consciousness ground in which it arises. This vast post-rational, post-quantum nondual unbounded whole (*mahabindu*) is sometimes known to our wisdom traditions—both Eastern and Western—by the rather cumbersome epithet consciousness-reality-itself, or the equally recondite nondual primordial awareness being itself; big words for the ontologically necessary non-essentialist basic reality that is the very ontic basis or ground of our human consciousness/awareness, as we shall see.

Descartes understood the exoteric view (objective form). The species consciousness evolution that reveals our wisdom tradition’s esoteric and “innermost esoteric” understanding of our all-embracing consciousness basis (luminous subjective emptiness, *shunyata*, *kū*, *wu*, Tao, etc.) was not yet extant in the 17<sup>th</sup> century Western mind. Were it so, Descartes’ multidimensional genius would have, no doubt, understood, or even realized *that (tat)* as well.

With the objective Modernist reaction to Premodern Aristotelian scholastic subjectivity and presumptive authority came Modern Science with its grail quest for Cartesian absolute objective certainty, then the deflation of that cognitive *fantasque* with the advent of the quintessential, acausal, stochastic, indeterminist subjectivity of the quantum theory. The quantum theory, with its principles of indeterminacy and complementarity, has forever shrouded the hitherto concise demarcation between the dual aspects of our human nature—objective and

subjective. In this Modernity bargain we also reaped the mixed gift bag that includes the microprocessor, the laser, and the bomb.

We've seen that with Modernity also came Modern Philosophy with its Cartesian, dualistic "mind-body problem." Again, what is the actual relationship of objective matter/body to subjective mind/spirit? This is no idle philosophical game. Indeed, "The question concerns the very way that human life is to be lived" (Plato, *The Republic*, Book I). Our relative and even ultimate happiness depends upon how we—individually and collectively—respond in our everyday lifeworld ethical conduct to this challenge, this profundity of the cognitive balance of our objective and subjective experience through which our deep background sociocultural "web of belief"—our conventional reality—arises. *We live in these two worlds at once! That is our human condition.* What shall we do with this precious life we've been given? This thorny, ironic question is none other than our inherently vexed Postmodern "problem of consciousness," including David Chalmers' "hard problem of consciousness," which we shall herein further explore.

What then has the Postmodern mind made of the pretensions to rationality of the Modern scientific and philosophical metaphysical grail quest for objective certainty, this perennial desideratum that was Descartes' prophetic dream?

Since the advent of the Postmodern quantum theory with its blurring of the demarcation between our objective and subjective realities, "objective" scientific knowledge is now recognized (Quine, Kuhn, Peirce, Dewey) as intrinsically infected with subjectivity. Such objective knowledge is "ontologically relative", conjectural, fallible, corrigible, conventional, contingent, stochastic, ideological and thickly theory and value-laden, and therefore cannot provide any knowledge or truth that approaches Descartes' quest for deductive, necessary, universal, absolute objective certainty (Goldman 2004). Such is the Nietzschean perspectival truth of the Postmodern mind.

Because conventional, conceptual objective theory/knowledge/truth "is dependent on the assumptions upon which it rests" (the ontological relativity of the Quine-Duhem theory), knowledge must be, not necessary absolute and certain, but contingent, relative-conventional, contextual and pragmatic, always subject to evolutionary historical/cultural change and interpretation.

This devastating Postmodern critique (social scientists, humanists, philosophers, e.g. Kuhn, Quine, Dewey, Rorty and the Neopragmatists) of Modern Scientific theory and method (the "Science Wars" of the 1980s) has demonstrated that the prodigious enterprise of Science offers no privileged knowledge of the apparently objective stuff of material reality (or the subjective non-stuff of immaterial reality for that matter (Boaz 2012 Ch. I, "Quine's Revolution").

*On this Postmodern view, there can be no "scientific method" that offers a research program for deriving absolute foundational knowledge and truth from our raw sensory-empirical experience. Science's 400 year old problem of limiting itself to empirical experience while arriving at knowledge of reality that lies beyond sense experience, remains unresolved, if indeed it is resolvable at all. The operative metaphysic of Scientific Materialism (Scientism) and Scientific*

Realism has failed in this regard. Science can claim no objectively certain, universal truths. Philosophers of Science understand this. I suspect that most philosophers and scientists do not.

What then has this non-objective nature of the ideological, metaphysical tribal idol (cf. Francis Bacon's "Idols of the Mind" in his prophetic *Novum Organum*) of foundational Scientific Realism, and Materialism, to do with the bright inherent subjectivity that is our relative, and even ultimate consciousness?

### **A Rose Is a Rose: The "Hard Problem" of Consciousness**

Who or what is it, this diaphanous relationship we call consciousness? The problem of consciousness is the most pressing scientific, philosophical and social challenge confronting our post-postmodern, post-quantum 21<sup>st</sup> century intellectual, psycho-spiritual paradigmatic noetic (subject-object, body-mind-spirit unity) knowledge revolution. This problem has vexed the great dialecticians in the West for 2400 years. It represents a profound challenge to the prevailing scientific paradigm that is the dogmatic orthodoxy of Modernist realist, materialist, reductionist, objectivist, functionalist physics, philosophy of mind, neuroscience and cognitive science. "*Consciousness*" represents the primary epistemic cloud on the horizon of physics' Standard Model of particles and forces (Boaz 2013, Ch. II, B). Here Descartes' "mind-body problem" is visited with vengeance upon contemporary micro- and astro-physics, neuroscience and philosophy of mind. "Who is it," this awareness that arises and appears as quarks, trees and stars?

Let us tentatively consider this hypothesis: Consciousness is the ineluctable basis in which all arising and appearing physical and mental reality is embraced and subsumed. We are immersed in consciousness, like a fish is immersed in water. Can a fish be aware of the water?

Recent functionalist, materialist/realist physics (often embodied by conventionally real, but not ultimately real physicists) has failed to explain, or explain away, the obvious and immediate reality of subjective human experience—"what it is like" to experience a breath of Spring breeze, or lovely scent of the red rose, or of a Bach violin concerto? This is the inherently vexed (to Physicalism) "hard problem of consciousness"—the presumed "problem" of objectifying, or even physically explaining our inner subjective lifeworld, the "qualia" states that are our inner subjective experience, including emotional and spiritual experience. Instead, consciousness is denied and explained away by science's adventitious Physicalism, the obsessive objective functionalist epistemic and ontic reductionism (reducing the subjective qualia of experience to objective physical brain function). And all of this, in the ironic shadow of the profound, if relative-conventional subjectivity of the most successful scientific theory in history, namely the Relativistic Quantum Field Theory of Heisenberg, Bohr, Schrödinger and Feynman (Boaz 2013, *Being the Whole: Toward the Emerging Noetic Revolution*, Ch. II A,B).

So how does the subtlety of this ubiquitous mental dimension "emerge" from the blatant physical dimension? How does the beauty and the terror of our subjective inner life arise from the objective dance of geometry—the diaphanous play of the primordial atoms of Democritus and of *Abidharma*, or of the fantastic micro-vibrations of post-quantum supersymmetric superstrings and micro-tubules in human brains?

We've seen that Scientific functionalism holds that all states of human consciousness are, or are reducible to, physical/functional brain states. Mental consciousness is reducible to functional activity and states of brain. Functionalists are reductive materialists/physicalists. Both reductive and non-reductive physicalists engage the often confusing notion of "scientific" reduction in their philosophies. Here, broadly construed, consciousness is reflexively reduced to mere physical brain structure and function. Critics of such reductionism argue that such a scientific functionalist materialist monism fails the "hard problem" and leaves our subjective inner life experience quite outside. How do we get back in?

There is a continuum of cosmic consciousness...and no account of the universe can be final, which leaves these other forms of consciousness quite disregarded.

—William James

The antirealist, anti-functional, anti-physicalist panpsychic neodualists—Chalmers (1995, 1996, 2002), Clark (1999), Strawson (1994, 2006), Nagel (1979), Jackson (1982)—argue that consciousness, human or divine, cannot, in principle, be grasped by realist, functionalist, emergentist attempts to reduce it to physical structures and functions of the merely physical human organism. Here, the "*explanatory gap*" between subjective mental/emotional/spiritual experience, and any purely physical substrate cannot, in principle, be closed. This amounts to a refutation of the prevailing scientific orthodoxy of the monistic ontology of Physicalism/Materialism. Indeed, risky metaphysics in a world whose high cultural persuasion is mechanistic Scientific Materialism (Scientism). (Funding caveat: don't try if it's not orthodox, scientific materialist, Standard Model research.)

Hence, neodualist, proto-idealist, panpsychic theories are anti-physicalist, and therefore may be construed as non-reductionist, even anti-theory arguments for the non-physical, immaterial, idealist nature of consciousness/mind. Such ontological Idealism—West or East—is anathema in contemporary science and philosophy of mind. This anti-realist, anti-physicalist real work represents a brave new cognitive world in consciousness studies.

It could be said that such neodualist accounts of consciousness are liberally construed variations on Descartes' theme of modal dualism: If I can conceive that my mind may exist without my body, then it is possible that my mind may exist without my body. Therefore, my mind is not my body, but a separate substance or entity that is different than my body. This has been called the Modal Argument (Chalmers 2002). But what is the relation of such a problematic dualistic human consciousness to the all-embracing unbounded whole that is nondual consciousness-being-itself? That is the essential question of our being here. Let us then further consider this new dualism.

### **Neodualism: "Not One; Not Two, But Nondual"**

Leading edge neodualist philosophers of mind David Chalmers, Galen Strawson and Gregg Rosenberg (2004), in quite different ways, suggest a noetic, radical, proto-idealist

Panpsychism response—all matter is intrinsically endowed with mind or consciousness—to the concept-mind numbing objectivist physicalist “hard problem of consciousness.” This means that there is no *essential* difference between matter and mind. There is rather, a deep ontological unity. Hence, such luminous panpsychists—Spinoza, Leibniz, Berkeley, Schopenhauer, Schiller, Fechner, Wundt, Royce, Hartshorne, a recalcitrant William James and a profound and profoundly obscure Whitehead—are in some manner friendly to philosophical Idealism, much dreaded and feared in late 20<sup>th</sup> century materialist Science and Philosophy.

As to the invidious mind–body duality, Idealism is, among other things, ontologically opposite Materialism/Physicalism. For at least 2,500 years, in both the East and the West, there has been no sign of an outbreak of concordance between these contending ideological camps. Physicalist theories are emergentist, that is, they attempt to explain how it is that mind or consciousness emerges from matter, i.e. the physical brain. The “problem of consciousness” then, is a pressing problem for Materialism/Physicalism and its functionalist explanation research program. *But there is no problem of consciousness for Idealists for whom appearing reality is essentially identical with mind/consciousness, in some admittedly mysterious non-objective way.* Neodualist approaches to mind invoke, however timorously, this primordial idealist response. We shall see that the relative-conventional neodualist, but ontologically nondual monistic response of Buddhist centrist “middle way” *Madhyamaka* utterly deracinates the physicalist “problem of consciousness.”

Chalmers (1996), the original architect of the “hard problem,” argues, with some other neodualists, the radical view that consciousness represents a fundamental new principle or force of nature. All physical matter partakes in consciousness. Matter, all the way down to subatomic particles—quarks and leptons—is conscious, has consciousness, participates in consciousness. Modern physics, with a little epistemic help from Buddhist *Prasangika*, must at last address this problem and opportunity of consciousness.

This neodualist panpsychic view parallels the Premodern, centrist, middle way “two truths” (Nagarjuna) duality of the radical epistemology of Buddhist *Pransangika Madhyamaka*, the epistemic foundation, on the accord of H. H. The Dalai Lama, of the nondual ontology of *Dzogchen*. And it parallels as well, the *Advaita* (nondual) *Vedanta* idealist ontology of the Hindu *Sanatanadharma*. Here, especially in *Prasangika*, we find a relative-conventional (but not ultimate) duality between the ontic consciousness dimensions of our experience of conventional spacetime “relative truth” (*samvriti satya*), enfolded in primordial “ultimate truth” (*paramartha satya*, emptiness, Tao) in which, broadly construed, the former unfolds, arises and participates (Garfield 1995; Dowman 2010; Cabezon 2011; H. H. The Dalai Lama 2005, 2009; Klein 2006; Wallace 2012).

We habitually dwell and function in this conditional, relative-conventionally real, but not ultimately real, consciousness or awareness as seemingly separate individuals; lonely alienated subjects ontologically and phenomenologically separated from the intentional objects of our normal dualistic consciousness. In this realm of self-patterned ego-I experience we obsessively seek *exoteric* release, liberation or freedom from an endless, destructive cycle of attraction (desire, greed) and aversion (fear, anger, hatred, indifference). This alienated personal-

ity-self abides in ignorance (*avidya*) of, and ego-self-contraction from, the vast unbounded whole (*mahabindu*) that transcends yet embraces it. This *kosmic* (physical, mental, spiritual) ground, by whatever name, is all-embracing consciousness-reality-being-itself in which, or in whom, the cosmic physical dimension of our relative, semiotic (logical syntax, semantics/meaning, practical pragmatics), discursive consciousness arises, ambulates and plays (*lila*).

As to soteriology, on the accord of our wisdom traditions the developmental and evolutionary “eternal return” to this consciousness ground is the cause of human psychospiritual liberation/enlightenment, and of relative happiness (*felicitas*) and even ultimate human happiness (*paramananda, mahasuka*). Indeed, the nondual view of the traditions teaches that we were never separate in the first place. We are that ground. That primordial base is who we are. How shall we understand this?

According to Buddhist Mahayana tradition, prior to, and indeed at the instant of this conceptual egoic contraction from the vast expanse of the nondual source, we are, paradoxically, inherently (*sahajasamadhi*) established in this “innermost esoteric” nondual primordial, pristine condition (*kadag*). The resolution of our seemingly separate human predicament lies in our individual and thus finally our collective recognition, then realization of That/*Tat* (Boaz 2012 III, E).

*On this Madhyamaka account, such an ontic native mind/spirit cognitive stance is our inherent ultimate original position; our actual or “supreme identity (cittadhatu),” whether or not we conceptually or contemplatively recognize it in this moment. And wonder of wonders, “it is already accomplished” (Garab Dorje), deep within each one of us. As H. H. The Dalai Lama advises, “just open the door.” Then, enter in. Then practice it. This then, is the resolution of the “who question” of the problem of consciousness, as we shall see.*

Thus, on this *relative* neodualist but *ultimately* nondual “two truths” Buddhist view, we are given—to receive—the gift of the grand desideratum of a really real world of epistemological Realism. Reality is not just an idealist illusion. But ultimately, these two dimensions—relative truth and ultimate truth—are a nonlocal, nondual prior ontological unity. “Not one; not two, but nondual” (*yarmed*). Two conceptual truths in one trans-conceptual ultimate prior unity; one truth invariant across all of our objective and subjective, discursive conceptual, and contemplative trans-conceptual cognitive machinations. *Our relative, human dualistic consciousness is subsumed in basal ultimately subjective nondual consciousness being itself. But now we see it. Again, there is a relative difference. There is no ultimate difference. As Nagarjuna told, they are the same (samata) all-embracing one truth, the trans-conceptual “one taste” of the unbounded whole shebang.* This is indeed, the difference that makes all the difference (Boaz 2012, p. 34 ff.).

Such is the Buddhist centrist middle way between the ostensible solipsism and nihilism of Eastern Idealism, and the existential permanence, or absolutism or substantialism of Western Platonic/Cartesian substance that is the view of Scientific Realism and its ontic consort Aristotelian Scientific Materialism (although Aristotle was no materialist). Such a centrist view is also a middle way between a nihilistic skepticism and an absolutist/substantialist dogmatism.

Unfortunately, such promising neodualist and panpsychic approaches to consciousness have languished in the cognitive linguistic purgatory of relative-conventional discourse, dar-

ing not to venture in the praxis of the trans-conceptual cognitive contemplative dimension of our perennial, primordial wisdom tradition's perfect subjectivity of nondual emptiness (*shunyata*). It seems that even our best philosophical and scientific minds are, with some notable exceptions, still remain under sway of Descartes' ubiquitous quest for something ultimately objective and physical to cling to. However, in the fullness of time, "All that can be shaken shall be shaken" (Dōgen Zenji). Then perhaps, we shall see the truth of the matter.

Meanwhile, on this view, human epistemic, dualistic semiotic relative-conventional consciousness remains inherently (*sahaja*) embraced and included by/in its nondual ontic primordial ground, ultimate, trans-rational, non-theistic, non-logocentric perfectly subjective consciousness-being itself, whether we believe it or not. How may we know this? Through the conceptual and trans-conceptual contemplative praxis of the Path. So it is told by the buddhas and mahasiddhas of our nondual great primordial wisdom tradition.

Such nondual contemplative *theoria* and praxis is the urgent integral imperative of our emerging 21<sup>st</sup> century noetic revolution. Let philosophers of science and philosophers of mind dialogue with Buddhist scholar-practitioners.

### **The Failure of Scientific Functionalist Materialism, and an Opportunity**

We have seen that bold anti-orthodox, anti-functionalist neodualism, including Buddhist *Prasangika Madhyamaka*, views the prevailing Functionalism in philosophy of mind and in neuroscience is an inadequate theory of first person introspective data, namely, our inner and "innermost esoteric" subjective experience. The scientific functionalist, usually reductionist account necessarily omits our interior esoteric introspective, private, perceptual, emotional, aesthetic and contemplative (spiritual) experience. Alan Wallace calls this Modernist bit of conjuring, "the taboo of subjectivity." That is to say, by the lights of the neodualists, and other anti-essentialist, even anti-realist views, functionalist, materialist explanations of human consciousness ideologically, adventitiously reduce the entire dimension of human interior subjective experience to a latter day functionalist dualistic Cartesian nightmare of mere objective physical brain function.

What's wrong with this "scientific" functionalist materialist picture? Must the "what question," the recognition and definition of human consciousness; and the "how question," the explanation of human consciousness, perforce be an explaining away of consciousness? The terrible price paid is an ignoring (*avidya*) of the profound esoteric consideration of the "who question"; that is, the question "who is it, this primordial human awareness being here in form?" Who is it that seeks, and who is it that is released? That is the essential question for our emerging Noetic Revolution.

Who is it that desires to know  
and to be happy?  
Who is it that is afraid and angry?  
Who is it that is born suffers and dies?  
Who is it that shines through the mind

and abides at the heart of all beings  
always liberated and fully awake?

—David Paul Boaz,  
*Pictures From Cathedral Peak, 2009*

The brave new world of first person introspective, pragmatic centrist Buddhist Middle Way *Prasangika* conceptual and trans-conceptual contemplative technology, and the non-propositional, non-prescriptive “simply abiding” in the non-contrived, non-constructed “non-meditation” of the perfect sphere of *Dzogchen*, suggests a complementary, integral, noetic rapprochement of contemplative science with neuroscience and the cognitive sciences. If we must seek, we must seek not the contradictory, but the complementary. The paradigmatic instance here of course, is Neils Bohr’s Principle of Complementarity, which illumined the hitherto contradictory wave/particle duality of the nature of light. Such pragmatically useful, non-perniciously circular complementarity constrains the habitual empiricist and realist epistemic “web of belief” (Quine) of current orthodox Scientific Materialism (Scientism). And it encourages methodologically ambitious research programs. This complementarity principle is ubiquitous throughout our wisdom traditions (Begley 2007, Klein 2006, Cabezon 2011, Newland 2009, Norbu 1996, Padmasambhava [Wallace] 1998, Wallace 2012, Pettit [Mipham] 1999), Dudjom Rinpoche 1991, Boaz 2012, “Post-Quantum Logic: West Meets East”).

Richard Davidson at the University of Wisconsin, in concert with H. H. The Dalai Lama is engaging such noetic research (Begley 2007, Wallace 2007, 2012). Jon Kabat-Zinn, Robert Coghill, and Fadel Zeidan with their research in mindfulness meditation, and many others are now well established in this paradigm changing work (*Mind and Life Institute, Santa Barbara Institute, Dawn Mountain, Copper Mountain Institute, Tara Mandala, Naropa Institute, Upaya Zen Center*, and the many Zen and Tibetan Buddhist Centers worldwide).

Well, “what is it like” to be in the luminous, numinous “state of presence” of non-theistic, nondual, nonlocal “god-consciousness”? What is it like to be in love? What is it like to experience the taste of pineapple (Locke’s qualia contribution), or the luscious scent of a lovely red rose?

Science informs us on a multitude of so-called “easy” neuroscience consciousness problems—explaining cognitive attention and control, discrimination, integration and access of information and of internal states, and nearly everything there is to know about the physics of the color red, and the process of human perception of red—but neuroscience cannot answer the hard problem: what is it like to *experience* red? The “easy problems” lend themselves, at least in principle, to functionalist explanation, but the intransigent explanatory gap of the hard problem persists.

Neuroscientific functional explanations have little to say about our subjective human emotional experience, especially esoteric, and even “innermost esoteric” spiritual experience. This is however, changing with recent work in neurospirituality/neurotheology (Davidson, Goleman, Lutz, d’Aquili, Newberg, Horgan, Goodman, Schwartz, Beauregard, Strassman, Metzner).

Alas, most of this important research is limited by scientific functionalist and materialist-reductionist epistemological and methodological assumptions, and a bias toward Western dualistic exoteric monotheistic religion. With the possible exception of Ralph Metzner and Rick Strassman, there seems to be little understanding of the non-conceptual depth of a non-pathological, esoteric, non-theistic, nonlocal, nondual primordial spirituality.

In short, this urgent neurotheological research often reduces inherently subjective exoteric religious and esoteric spiritual experience to the dualistic, functionalist relative-conventional objective trees of electro-chemical brain structure and function (“neural correlates”), while ignoring the vast perfectly subjective background, the forest of the nonlocal, nondual, ultimate primordial unbounded whole that is our very atavistic context, the unified field, the basal ground of intertextual contemplative conceptual, and trans-conceptual direct experience (*yogi pratyaksa*) of both.

Remembering what I have elsewhere described as our integral noetic imperative, the objective neuroscience of spirituality (not to mention teachers, therapists, physicians and helpers) must understand the parameters of the hard problem of consciousness, and at least the rudiments of our perennial subjective contemplative science (*adhyatmavidya*) paradigm—the Premodern wisdom traditions—if it is to realize its potential contribution to human knowledge, morals and governance. Objective neuroscience, with its neurotheology, does after all, presume to study subjective contemplative/spiritual phenomena.

Nevertheless, the profound but inchoate consilience between the neuroscience of spirituality as neurotheology, and the contemplative science of *Prasangika Madhyamaka* Buddhist epistemology represents a huge step in this emerging noetic rapprochement of science and religion/spirituality.

Neuroscientists admit that they have not a clue as to how a physical brain could be conscious, could produce human consciousness. This should be a clue as to the woeful inadequacy of profoundly dualistic, obsessively objectivist, realist, materialist, functionalist theories of mind to explain the utter subjectivity that is human consciousness, much less the primordial nondual basal consciousness ground in which, or in whom we all arise. Modern science must finally philosophically and noetically examine the preconscious deep cultural background epistemic and methodological assumptions—Realism, Materialism, Reductionism, Functionalism, Empiricism, Rationalism and the rest, that undergird its theory and practice, in light of our Premodern wisdom tradition’s objective/subjective contemplative science and technology (*adhyatmavidya*).

This must include Stephen Hawking’s promising new “model dependent realism,” (The Grand Design 2012), an anti-realist theory-dependent epistemic about face from the theory-independent Realism of his celebrated *Brief History of Time*. Let scientists and philosophers of science sit down over pizza and ale, and talk.

What is it like to be conscious? What is it like to be a “self” that is conscious? We must conclude that the functional organization of brain simply cannot explain our subjective experience. Thus again is Descartes’ perennially vexed mind–body problem visited upon neuroscience and philosophy of mind.

Moreover, the resolution of this ancient mind–body conundrum cannot be the self-sealing “*hope for a miracle*” epistemic plea for a future “hidden variable” that some fine day will rescue Scientific Realism and Scientific Materialism from the cognitive clutches of the anti-essentialists, the anti-realists, and the neodualist panpsychists. This 400 year old question begging special pleading epistemic IOU, must now, at long last be called in.

Nor can the resolution of the mind-body problem be the Scientific Realist “*no miracles*” argument. This common sense argument is based in the prodigious predictive and technological achievements of, and the pursuant valorization of Modern Science. The fallacious, slothful inductive reasoning goes something like this: “Science has been so astoundingly successful that its primary theories must be true and correct.” This argument is deflated and refuted by the “argument from pessimistic induction.” Past scientific theories have demonstrated great predictive and technical successes, but have been proven incorrect. Newton's gravitational constant got us to the moon and back, but Einstein proved it essentially wrong. Just so, Einstein's General Relativity is hopelessly incompatible with the mathematics of the Quantum Field Theory (QED and QCD). One or both are incomplete or incorrect and in dire need of that next more inclusive syncretic, but ever incomplete theory (Boaz 2013 Ch. II B, “Revising the Standard Model”). Might we not then conclude that the much valorized scientific theories of today, e.g. the prodigious Standard Model of particles and forces with its beautiful QFT/QED/QCD, and the *ex nihilo* singularity of its monotheistic Big Bang will be transcended (but included) in fifty years by new, more inclusive, yet ever incomplete theories?

So how is it that the quintessential properties of human consciousness be only “emergent properties” of matter, as most functionalist physicists and neuroscientists believe? How is it that all of our subjective experience can be reduced to purely physical objective “neural correlates” in the brain? *We must finally acknowledge that an objectivist, materialist, physicalist neuroscience can provide no purely physical, electro-chemical explanation of subjective experience.* Here the self-sealing “hope for a miracle” subterfuge inhibits both theory construction and practice. The desideratum to be wished is that we take a hard look at the dogma of hard science.

To be sure, mental and “spiritual” subjective experiential states have neural correlates. But it does not follow that such subjective states of consciousness are identical to, or reducible to the purely physical “neural correlates” of brain neurochemistry. From the causal correlation of conscious mental states, or even of contemplative states, with physical neural brain events, it does not follow that the two are identical, nor that one causes the other. Correlation is not causation. Moreover, when we observe neural correlates of conscious experience, we do not observe or experience these same states of consciousness; nor do these states of consciousness reveal to us the requisite neural correlates. Neurosurgeons do not see (or smell, or hear) red roses and Bach fugues, nor these experiences, while exploring their patients’ brains.

Again, subjective consciousness/mind is not logically, psychologically or ontologically reducible to the objective structures and functions of physical body/matter. Mind and body may be ultimately, an ontic prior unity, but the relative-conventional *objective* face of this unity is but a part of the story. We must also include the *subjective* dimension of our human nature. And this is consciousness. Dualistic human consciousness, with its all-embracing nonlocal,

nondual consciousness ground subsumes both our objective and subjective experience. More precisely, this subjectivity that is human consciousness is the physical, mental, emotional, spiritual, that is to say body/mind/spirit instantiation of the vast expanse (*dharmadhatu*) that is the primordial ground, all-embracing consciousness reality-being itself, as we have seen. Ignorance or inexperience of such a subtle, post-materialist cognitive reality dimension does not entail its non-existence, nor its incomprehensibility. “The cessation of course minds is not the cessation of consciousness” (Anne C. Klein).

Let us now briefly review our all too speculative potential resolution of this mysterious duality of mind/consciousness/spirit and the physical matter from which, on the assumption of the materialist/functionalist, such consciousness states arise.

Functionalist neuroscientists usually presume that consciousness or conscious awareness does not exist apart from its correlation with brain function. Yes, these two are correlated. But again, correlation is not causation. *The mind’s relative-conventional objective percepts, concepts and pictures, and our subjective experience of all this cannot arise in the purely physical or electrical space of the brain. Rather, objective and subjective experience arise in the immaterial prior ultimate basic space of consciousness. Reality then, arises not in the physical electrochemical activity of the brain. The brain and all of our objective and subjective experience that is mind arises in the vast inner and outer space of consciousness-being-itself, (dharmadhatu).*

This is indeed the Buddhist *Madhyamaka* (epistemology) and *Dzogchen* (ontology) contribution to an East/West integral, noetic, centrist view of the nondual ultimate reality of the all-pervading consciousness ground in which, or in whom relative human consciousness—our objective and subjective experience—arises and participates. Two in one. As it were, an ontological “twofer.”

This vast expanse of objectively arising reality that is consciousness itself might be understood as the non-different (*samata*) inner/esoteric subjective aspect or face of the unbounded whole of nondual reality-being itself. Just so, human consciousness is the inner/esoteric subjective face, or voice of human being. Thus, this perfect subjectivity of the *kosmic* (physical, mental, spiritual) whole of reality itself has, as it were, an inside and an outside, experienced objectively by our sense perception from without, and subjectively by our identity with consciousness from within. Such dualistic conceptual relative-conventional speculation may be useful, so long as we remember our prior identity with the trans-conceptual ontic, ultimate unity. That is to say, all of this conceptual conjecture has little to do with the nondual truth of the matter. As our concept/belief cognitive dimension necessarily refers us to a more subtle, higher order cognitive dimension, trans-conceptual, or trans-rational contemplative practice is here indicated. Who is it that chooses to engage such relative and ultimate praxis? Who is it that chooses to ignore it? There is a relative-conventional difference. There is no ultimate difference. The truth of the matter “is as it is.”

### **The Hard Problem Revisited**

We have thus far identified David Chalmers’ “hard problem” of Joseph Levine’s and Francisco Varela’s “explanatory gap” between matter and mind for functionalist Scientific Re-

alism and Materialism, and for functionalist Philosophy of Mind. This “hard problem of consciousness” with its mental/physical gap challenges the functionalist, materialist thesis, that it’s all just physical. How can the phenomenal experience of a red rose be just physical? Here, there is an assumed gap between objective physical brain function, states and processes, and the subjective feeling of being, our interior conscious, and even unconscious states of experience; a gap between our phenomenal conscious experience and an ostensibly physical substrate from which such experience arises and emerges (“emergentism”). With what shall we fill this gap? Functionalist philosophers of mind presume to fill it with causality—a causal relation or law. But must a correlation between paired events entail a causal connection? We’ve seen that it does not.

We’ve also seen that the “what question” asks for a definition and a description of consciousness. What is it, actually? The “how question” asks for explanation—how can a mechanistic, objectivist physicalist explanation of human experience also explain our inner subjective experience? How do we explain consciousness by way of that which is not conscious? This then is the question of the explanatory gap, which we shall now further explore. The “why question” addresses causal and evolutionary questions as to the nature and evolution of consciousness, and its evolutionary benefit to our species. The “who question” asks, who is it this mysterious awareness presence of consciousness that we are? This is, as we shall soon discover, the most urgent, and revealing question of all.

Remember that our goal is both the objective conscious and the subjective contemplative recognition of the prior ontic unity of Descartes’ duality of the two perennial knowledge paradigms—objective physical body, and subjective mind/spirit—through an integral noetic methodology (Chalmers 1995; McGinn 1989; Rosenberg 2004; Boaz 2012 p. 89).

We must now again inquire: what physical brain function, chemistry or physiology, or electro-physical “neural correlate” could possibly produce the *experience* of the color red, or the love of a mother for her child? Leibniz pointed out 300 years ago that if the brain were as big as a mill, we could walk in and observe its anatomical structure and physiological function in fine detail, but nowhere would we find the *experience* of love, or of the taste of fine old Burgundy, or of the yogi’s bliss. Nor shall we here ever discover a ripe red apple, or a red rose.

Thus, if human consciousness is not reducible to such physical brain structure and function—the “scientific” metaphysic that is the deterministic functionalist mechanistic physicalist/materialist assumption—then the “problem of consciousness” necessarily exceeds the grasp of physics, and physics is far from complete, that is, from providing a complete explanation of both our objective and subjective realities.

*A physicalist physics is complete if, and only if, reality is only ultimately physical.* This is the very metaphysical assumption of Physicalism that heavily loads scientific theory and belief, and the theoretical conjecture of recent Philosophy of Mind. This is of course the metaphysical question at issue—the question begged—in consciousness and mind–body problem discourse. Most philosophers of physics understand this. Most physicists do not. Let dialogue begin!

*Therefore, this “explanatory gap” between electro-chemical physical brain function and conscious mental/spiritual life begs the question of Physicalism. That is, scientists usually assume without*

*argument the dogma that the ultimate nature of reality must be physical/material. But if we surrender this dubious metaphysical presumption of monistic Physicalism/Materialism, then we ipso facto eliminate the gap.*

It is this hidden metaphysics of functionalist Scientific Materialism that begets the inscrutable “hard problem” of consciousness. From this arises the theory-loaded question, “how does consciousness arise from physical matter, i.e. the brain?” But does it? Perhaps this is the wrong question. Perhaps it's the other way round. If, as Middle Way Buddhist epistemology asserts, relative physical matter arises from, and is included in the ultimate nondual vast expanse of the “basic space” (*dharmadhatu, emptiness, kadag, dharmakaya, etc.*) of consciousness-being itself, in which our human consciousness arises and participates, then where is the “problem” of consciousness?

*Again, the key point is this: human consciousness cannot arise from relative-conventional spacetime matter, for matter arises from, indeed is, the nondual ultimate reality that is the very consciousness ground which transcends yet includes both. Matter, mind, space, time are relative multiple instantiations of the ultimate basic space that is nonlocal, nondual, all-embracing perfectly subjective consciousness-reality-being-itself.* There is no essential separation. The essential relationship of the perennial duality of objective matter and subjective mind is, ultimately, if not relatively, one of identity.

Yet this proto-neodualist Buddhist view offers us the phenomenological gift of a dualistic, non-ultimate, relative-conventional Realism, as we have seen. Appearing reality is not illusory. It's a really real world out there, and in here. However, on the *Madhyamaka* view, it is a world that lacks “any shred” of intrinsic, absolute existence. Rather, it exists by way of our perceptual imputation and conceptual designation and reification (H. H. The Dalai Lama 2005; Wallace 2012; Boaz 2012 Ch. II, p. 34 ff.). Thus, as Kant told, do we create our realities.

This holistic primordial wisdom “ultimate truth” (*paramartha satya/emptiness*) is not news. It is as old as human contemplative mind. Let us then consider this reframing of the ostensible “problem of consciousness” in our post-quantum, post-Cartesian dreams of a final resolution to the imperative “hard problem” of consciousness.

Now the essential dualism of the binary, truth functional, dichotomous logical syntax of language and linguistic cognition is *ipso facto* conceptual, conventional and objective, and cannot therefore alone penetrate and grasp the higher order dimensionally subtler perfect subjectivity that is nonlocal, nondual consciousness-being itself. *The logical syntax of language cannot do the work of the direct experiential, even contemplative “logic of the non-conceptual.”* As our wisdom traditions, and Thomas Nagel (1979) have shown, we live in two awareness dimensions at once, exoteric objective, and esoteric subjective. An integral, noetic science of mind/consciousness must utilize methodologies that include both of these paradigms.

Hence, the intrinsic subjectivity of consciousness does not permit an entirely objective, rational, conceptual explanation; although human concept-mind may auspiciously approach it. This uncomfortable truth may be a bit off-putting to our habitual, objectivist uncomfortable comfort zones because it flies in the face of our cultural core belief in prevailing Platonic/Cartesian rationality, and its *logico philosophicus* ideologues, namely Frege, the young Wittgen-

stein, Russell, Carnap and the Logical Positivists. Human reason is presumed to be our defining characteristic. Since Aristotle, "Man is the rational animal." In the West we all participate together in this pre-conscious, deep background cultural "web of belief." And that is the epistemic rub for our emerging Noetic Revolution.

That this is the case does not however, preclude the trans-conceptual contemplative ultimate knowledge (*gnosis, jnana, yeshe*) and understanding of consciousness that has arisen through our wisdom traditions for millennia. This nondual primordial wisdom of consciousness, once considered, may or may not be conceptually unpacked for our dualistic, conventional linguistic edification. Such an incipient integral research program is the foundation of an emerging noetic Science of Consciousness wherein both voices of human being and knowing—objective rational and subjective contemplative—are proper programs for scientific research. These two aspects of our nature constitute the human condition. Striking a balance is the challenge. Systematic denial and avoidance by taboo of either one is a program for ignorance and the suffering of human and other beings.

Can we then resolve the conceptual dualism that is the mind-body problem? Philosopher of Mind Colin McGinn (1989) says no. Knowledge of consciousness is forever cloaked to the human mind. *But he, and most members of our high culture thinking classes naively construe mind as merely concept-mind. Fortunately, our human mind is so much more.* The luminous subjectivity of our trans-conceptual contemplative mind nature, illumined through primordial mindfulness practice (*shamatha*), combined with the quasi-conceptual analysis of noetic contemplative "penetrating insight" (*vipashyana*) of what such practice reveals, must be brought to bear. The result of such practice is abundantly demonstrated by the accomplishment of the many masters, *mahasiddhas* and buddhas of the wisdom traditions of our species.

Science and Philosophy must at long last include that voice of our human nature and cognition which is beyond the mere conceptual, objective and physical, which is to say, we enter in the subjectivity of the (gasp!) *metaphysical*; which is after all, only the ontic counterpart to the physical dimension of this Orphic unbounded whole that we are.

*Recall here that the "scientific" principle of Physicalism—that reality must be ultimately physical, or reduced to the physical, is itself a purely metaphysical assumption and belief, just as the belief of Eastern Idealism, that reality must be ultimately mental/spiritual is a metaphysical assumption (Boaz 2009, "The Idols of the Tribe").*

As to objectivity, Quine, Kuhn and the cognitive psychologists have shown that human perception and conception is ontologically relative, that is, it is cognitively loaded or theory-laden by our prior concepts and beliefs. Our interpretation of experience and theory is biased by our desires and expectations in accordance with our preconscious, subjective cultural "web of belief." In the West we incline toward objective Physicalism/Materialism. In the East, toward subjective Idealism. *Cognitive equanimity and equality requires a relative balance of these two paradigms.*

Again, this is old news to contemplatives, but may raise the objectivist hackles of scientists, philosophers and the massmind polity steeped as we are in the scientific dualistic presumptions of Greek/Hebrew Realism and Materialism. The waning Platonic/Cartesian Ration-

alism of the Modern European Enlightenment that became our prevailing Scientific Materialist cultural paradigmatic “web of belief” must now be surrendered (*wu-wei, shoshin, pistis, islama*) to this ontic theme of matter/mind holism or unity as we enter the emerging 21<sup>st</sup> century Noetic Revolution in science, spirituality and culture.

### Toward a Centrist Noetic Ontology

We can no longer afford to presume the separate, logocentric primacy of ontological monistic Physicalism, that it's all just physical. Why, other than habitual dogmatic presumption, must reality be only physical? Perhaps, because our 2400 year old preconceived, deep background historical and cultural “web of belief” dictates it. Here, so much the worse for common sense notions of free will.

*How then, in light of such noetic holism, do we explain our subjective experience? It arises not mystically, mysteriously from physical/electrical brain structure and function (form). Rather, our subjective and objective realities are the timeless play of human consciousness as we participate together in the interdependent (pratitya samutpada/dependent arising) unbounded whole that is consciousness/reality-being-itself (emptiness/shunyata).*

Thus, as Shakyamuni Buddha told, “form is emptiness; emptiness is form.” There is a relative-conventional difference. There is no ultimate difference. Once again, for human beings this is the difference that makes all the difference. These are our two ways of being here.

Here, as we have seen in our consideration of “the logic of the non-conceptual,” the conceptual “hard problem of consciousness” vanishes into the non-objective direct immediacy (*pratyaksa*) of luminous trans-conceptual timeless *now*, just as our wisdom traditions, East and West, have always told (Dōgen/Cleary 1986). Once again, the trans-rational recognition and subsequent realization of such knowing takes a bit of mindfulness/insight practice. How? As with any enterprise, by entering in and following the injunctions of those who know.

Hence, on this view, perfectly subjective nonlocal nondual primordial consciousness/awareness (emptiness/*shunyata*, *dharmakaya*, Tao, Nirguna Brahman, or whatever)—the very nature of mind—is the ontologically prior immaterial source of arising physical form, which contains, includes and subsumes all of this objective facticity of our physical/mental experience of being here. Here, as we have seen, this trans-conceptual non-logocentric, non-theistic, non-supernatural primordial ground—the basal unbounded whole itself (*mahabindu*)—must necessarily, ontologically precede embodied existence. That is to say, in contradistinction to the materialist, functionalist, existentialist view that “existence precedes essence,” *essence precedes existence!*

Again, how can we know this? Clearly, such knowledge cannot be merely conceptual and objective. So we must practice departing our limited world of conceptual objectivity, just as contemplatives—if not philosophers—have done for millennia, and relax into (*shamatha*) the selfless, intersubjective core that is the trans-rational, “always already” present presence of our “supreme identity” (*cittadhatu*) with this unbroken whole that is ultimate being itself.

Alas, the physicalist Standard Model of physics, derived as it is from the presumptive, arbitrary epistemic authority of Science, with its rationalist, realist/materialist metaphysical

legacy of Western Platonic/Cartesian dualism, leaves this natural interdependent subjectivity of our *kosmic* human consciousness out in the cosmic cold.

Scientific Functionalism (consciousness/mental states are functional states instantiated in physical brains) claims an independence from these challenges to Physicalism/Materialism. But the functionalist ontology—if it is an ontology—is at its core conspicuously objective and physicalist, and its apologists are existential substantialist, absolutist physicalists/materialists. And again, such a third person functionalist science cannot explain our first person introspective *experience* of what red actually looks like, or what love feels like.

Well then, what can be done to expand the methodological limit of this obsessively objectivist and materialist science knowledge paradigm? Recognition that the “hard problem of consciousness” has no physicalist or materialist resolution, yet does not arise in non-physicalist approaches, is the harbinger of an urgent paradigmatic shift that I have herein and elsewhere termed the “Noetic Revolution in Science, Spirituality and Culture.”

*We must now recognize and acknowledge that our subjective experience—consciousness—eludes all objectivist/ physicalist/functionalist attempts to explain it. This leaves us with a not entirely cognitively comfortable “mysterion” conclusion; sentient human consciousness is inherently intersubjective and interdependent (concept/theory-dependent) and is not ultimately comprehensible or explainable purely objectively or conceptually (James, Nagel, McGinn, Nalanda Prasangika Madhyamaka). And that's OK. Our cognitive dissonance and discomfort in the relaxation of our objective/ subjective self-sense is often an ontic aperture where the light of wisdom enters in.*

This recognition of the limits of semiotic (syntax, semantics, pragmatics), dichotomous conceptual cognition is true as well for many of the intransigent trans-physical or metaphysical “problems”—and our pursuant closely held beliefs as to their resolution—that comprise both Western and Eastern intellectual history, that is, the existence and nature of non-material conceptual entities: consciousness, theistic creator God, causality, universals, other minds, human action and free will, the *ultimate* nature of mind and of reality itself, and the rest. *Quite naturally these intrinsically subjective problems do not admit of merely logical, objective or physicalist solutions. Yet we non-reflectively, reflexively frame the “problem” conceptually and materialistically. O human hubris, that our limited concept-mind should have such sway.*

Finally, we have seen that the old paradigm Western Science “hope for a miracle” hidden variable fantasy—that some sunny day we shall finally discover a hitherto conceptually cloaked logical or even reasonable defense of Physicalism—is a 2,400 year old materialist/ physicalist IOU that must now be called in. Refreshingly, the emerging integral noetic Science of Consciousness invites the primordial subjectivity that is the basal ground of consciousness-being-itself, and provides an incipient methodology for consciousness research (Boaz 2012 Ch. VI, “The Structure of Noetic Revolutions: Reflections on Methodology”).

And we’ve seen that our conceptually (but not noetically) vexed mind–body problem of consciousness—with its “hard problem” of deriving our diaphanous phenomenal subjective experience from apparent physical neural brain function—admits of no conceptual solution. Nor, as evidenced above in our “strong version” of the “explanatory gap” conundrum, does it admit of a physicalist solution.

Yet, we must not be downcast by philosophical questions of circularity, and charges of anti-physicalist question begging. Again, in this limited, heady epistemic domain of dualistic, linguistic semiotic cognition, our ultimate concern must be, not contradiction, but the intrinsic complementarity between competing, or seemingly antithetical principles and paradigms, as Bohr's Principle of Complementarity has demonstrated regarding the quantum dual wave/particle nature of light.

W. V. Quine, in *Ontological Relativity and Other Essays* (1969) pointed out that due to the under-determination of theory in the cognitive "field of force" of our deep cultural "web of belief," there will be several theories that fit the evidential data, regardless of how much data accumulates (Boaz 2013, II E). There are many things in heaven and earth that constrain our objectivist philosophies. "There are many, many ways for the teaching to arise" (Chogyal Namkhal Norbu).

Hence, we must remain open to *noetic*, centrist, syncretic, pluralistic views—anti-realist, anti-essentialist, non-physicalist/non-quantum, non-empiricist and neodualist theories. The intrinsic intellectual tension between the epistemic dichotomies of classical Empiricism and Scientific Realism, Realism and anti-Realism, Dualism and Monism, etc. are productive. However, we have seen that we must not expect more from this dualistic conceptual cognitive domain or dimension than its inherent epistemic limit permits. The epistemic explanatory ambition of the current conceptual, scientific materialist/realist paradigm correctly exceeds its empiricist grasp; and it must recognize when non-objectivist, trans-rational, even contemplative methodologies are indicated. Let us remember that the objective and the subjective voices of our human nature are what?; yes, an ontic prior unity.

Sadly, this rational conceptual limit of dichotomous, discursive mind is little appreciated in Western Philosophy, much less Science. Thus today, a Western noetic contemplative Science of Consciousness is alas, little more than Descartes' Dream was 400 years ago. As Thomas Kuhn pointed out, consciousness revolutions take several generations. Nevertheless, such an inchoate noetic science is now upon us.

The unhappy result of such an idealization and valorization of human reason is a cause of the current cognitive paralysis in the field of consciousness studies and research. Hence, seemingly speculative, non-objective, noetic syncretic approaches that utilize Buddhist *Prasangika* and *Cittamatra*, *Veda/Vedanta*, and other Eastern and Western contemplative consciousness research are indicated. This must include both Western and Eastern dualist and neodualist proto-idealist panpsychic approaches. Eastern subjectivist trans-conceptual wisdom shall add immaterial substance (if such an entity can be conceived) to dualistic Western objectivist materialist notions of human consciousness and its place in the unbounded whole (*maha-bindu*) that is our nondual consciousness basis or ground, indeed, the very nature of mind. "East is East, and West is West," and ever the twain shall meet.

Western objectivist, absolutist and substantialist correspondence and coherence views of truth must here be bracketed, or surrendered (*shoshin*) to pragmatic notions of truth, e.g. truth as *aletheia* (revealing, uncloaking/*vikshepa*). Here we relax our demand for a Platonic/Cartesian rationalist/realist foundational ideal of objectively certain Truth. Here we revisit the

Pragmatists, James, Peirce and Dewey, with their “pragmatic theory of truth”; and Rorty and certain of the Neopragmatists who altogether deny any need of a conventional theory of Truth into which we must stuff all of our conventional objectivist philosophical and scientific theoretical baggage.

Perhaps, as William James reminds us, “truth is what is good by way of belief,” by our intersubjective sociocultural “web of belief,” but beyond mere dogma of objective, materialist concept/belief. Such pragmatic and neopragmatic “theories” of truth are socially risky, potentially nihilistic anti-theories. For a noetic Science of Consciousness, that’s a good thing. Let us then risk the grail of an idealized, objectively certain fundamentalist foundational Truth of reality, and cognitively open to an epistemic and ontic middle-way that balances our two inherent natures, objective and subjective. Such a view may result in an ontological “one truth” that transcends yet embraces the all too human duality of objective relative and subjective ultimate reference frames.

### **Conclusion: Our Two Ways of Being Here**

Let us now briefly revisit our primordial wisdom tradition’s notion of the Two Truths and its connection to consciousness, that is to say, the “logic of the non-conceptual.” For the Buddhist *Madhyamikas*, relative truth (*samvriti satya*) is the dimension of contingent dualistic spacetime physical and mental appearance or *form*. Ultimate truth (*paramartha satya*) is, plainly construed, the nonlocal, nondual ontic dimension that is the primordial *ground* of the phenomenal objects of conventional relative truth, its ultimate mode of being, which is to say, nondual reality itself or *emptiness*. Things do not arise *ex nihilo*. Even first causes (God, the Big Bang) have their ontic antecedents, though these may transcend human conceptual, and even contemplative capacity. We must acknowledge this truth. These two truths or two modes of our being here are not separate independently existing dimensions, although our dualistic binary truth functional logical syntax of language makes it seem so. The contemplative nondual realization of these conceptual Two Truths reveals that they are two faces, two voices, of the same (*samata*) singular consciousness-reality-itself, nonlocal, nondual (*maha ati*) being itself. As the Buddha's *Heart Sutra* reveals, “Emptiness is not other than form; form is not other than emptiness” (H. H. Holiness The Dalai Lama, 2005).

It is important to understand here, that the ultimate truth of emptiness, although it is referred to with such epithets as “primordial ground” and “supreme source” of arising form, etc., is not, on the accord of *Prasangika Madhyamaka*, and *Dzogchen*, itself a kind of absolute substrate, or creator that exists independently of the relative physical, emotive and mental phenomena that is form. Emptiness is merely a quality, aspect or property of form. No form, no emptiness. No emptiness, no form. “All emptiness is emptiness of something.” This relationship is often expressed as the “emptiness of emptiness.” Emptiness is not, on this view, some vast space or ground of consciousness, some essentially existent thing or entity “out there.” Nor is emptiness a dark, nihilistic nothingness. *Astonishingly, this strange negation that is Buddhist emptiness is full of the light/energy/motion that is the exoteric material cosmos, not to mention the nondual, “innermost esoteric”, body/mind/spirit kosmos, including us.*

What then is the truth status of this esoteric singular one truth that includes the duality of the conceptual Two Truths, relative and ultimate? What kind of truth can be “invariant across all cognitive frames of reference” (Alan Wallace), exoteric and esoteric form, and “innermost esoteric,” nondual emptiness?

Paradoxically, since this one all-embracing truth is, as with the relative spacetime phenomena it embraces, “utterly empty of any shred of inherent existence” (Nagarjuna)—the “emptiness of emptiness”—its truth is established, not ultimately, but relative-conventionally, by the conceptual and contemplative understanding of our human consciousness. Emptiness is merely the absence of any inherent or intrinsic existence of form. Therefore this truth of emptiness cannot be a logocentric absolute, i.e. a theistic creator God, or Brahman, or even nondual Nirguna Brahman. Hence it is not subject to deconstructionist (Derrida), nor to theistic, nor anti-theist criticism, Western or Eastern, which miss the non-logocentric point entirely. This vital epistemic distinction is grossly underappreciated in cross cultural religious studies discourse. There are more things in heaven and earth than are dreamt of in our conceptual objectivist philosophies. “Leave it as it is and rest your weary mind; all things are perfect, exactly as they are” (Shakyamuni Buddha).

*The relation of the Madhyamaka Two Truths—relative and ultimate—to consciousness? The all-pervading one truth, the “one-taste” that is nondual consciousness being itself—the very nature of mind—is the ground of, and is instantiated in relative-conventional human and other sentient consciousness. And this profound conventional duality is an ontologically prior nonlocal nondual unity.* Heady wine indeed. Let us then once again emphasize, not the contradictories of conceptual discourse, but the pragmatic complementarity of antithetical and binary, truth-functional, logically opposed opposites. The conceptual dichotomies will always persist. Let us remember their trans-conceptual ontic prior unity.

Moreover, the prevailing Western logic of the Aristotelian Law of Excluded Middle must here be tempered or bracketed, or even surrendered to the Law of Connection—everything is connected to everything else—of the Logical Intuitionists, and of the Eastern and contemplative “logic of the non-conceptual.”

Alas, all of these conceptual West/East paradigmatic, logical and ontological seeking strategies are, as indicated above, preconsciously firmly cognitively embedded in our current epistemic individual and deep background cultural historical evolutionary “web of belief.”

How then does Wittgenstein’s luminous perfectly subjective fly find its way out of the objective dark night of the fly bottle? The solution lies in the “Who Question.” And it is indeed near at hand. In the very cognitive moment of seeking, our primordial consciousness—that “flower absent from all bouquets” (Mallarmé)—is always, already abundantly present, here and now, like the red rose, through all our ordinary dualistic conceptual and emotional cognition, whether attractive or aversive; whether we know it, or believe it, or not (Dōgen Zenji in Boaz 2013, Ch. III, E).

“Who is it that shines through the mind and abides at the heart of all beings, always liberated and fully awake?” This, our “supreme identity” is inherently (*sahaja*) certain, when we

cease thinking about it, and “just open the door” to nondual being itself. Contemplative praxis is the cognitive vector that makes it so.

Deep in his heart of hearts, Descartes understood this great nondual noetic truth. Let us do so as well, that we may all be happy, and practice the causes of happiness.

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