

# Our Emerging Noetic Revolution

## An Introduction

DRAFT

For no light matter is at stake. The question concerns the very way that human life is to be lived.

—Plato (*The Republic, Book I*)

**Kosmic prelude.** On the cusp of the 3<sup>rd</sup> century CE two great scholar-masters—Nagarjuna in the East and Plotinus in the West—began the noetic nondual knowledge revolution for our species that is just now re-emerging as the new Noetic Revolution of the 21<sup>st</sup> century. ("Nondual" is prior subject/object unity, *advaya*"not two/not one, but nondual"; nondual wisdom is *noēsis/noetic* knowledge with no essential subject/object, spirit/matter separation.)

Ultimately viewed, the experiential bricolage of our physical, social, and deep background cultural relationships are necessarily subsumed and embraced by an interconnected matrix of Relationship, the vast unbounded whole, by whatever name. This perfectly subjective, nondual ultimate reality itself, is "primordially pure" being itself, the inherent basal source condition of all interdependently arising relative-conventional reality. This spacetime stuff—conscious subjects and their objects—like you and me, all arise and appear herein.

Holistically viewed, the whole subsumes and embraces the parts that arise and participate therein. Wholes include their parts. Parts participate in their wholes. No part; no whole. No whole; no part. And every part is itself a "holon" of an ever more inclusive whole, bottom up to the all-embracing physical/mental/spiritual (body/mind/spirit) *kosmos* that is ultimate reality itself.

*Kosmos* may be understood to include not just the physical cosmos, but all that is—the great mystery, our nondual multidimensional physical/mental/spiritual whole itself. Hence, the parts, while *relatively*, conventionally differing within this vast unbounded whole (*mahabindu*) are not *ultimately* separate from it. There obtains herein an *ipso facto* prior intrinsic epistemic and ontic unity. Logically, we cannot be separate from that great whole, by whatever name, in which we arise and participate. We are not separate from That. *Tat Tvam Asi*. That I Am! The recognition of this logical truth should make us feel better already.

In the beginning, starborn stuff arises as heavy elements which 1) become planets, 2) coalesce into life, 3) evolve consciousness, then 4) dualistic self-consciousness (with a bit of free will), then 5) nondual enlightened consciousness or compassionate christ/buddha mind. It is the reality *chosen* by the fourth of these evolutionary consciousness stages that begets the inherent happiness of the fifth stage. How shall we understand this?

As the developmental dialectic of humanity's intellectual, emotional, spiritual and ethical evolution proceeds, and the quite reasonable ontological estrangement of the present Modern Enlightenment scientific materialist worldview—and the nihilism of its Postmodern reac-

tion—recedes, this incipient global noetic reformation in religion, science and culture has reintroduced to humankind an urgent, profound integral, transpersonal, trans-rational knowledge paradigm. Yes.

I shall herein argue that such knowledge, even wisdom, is discoverable and attainable for human beings through the contemplative injunctions of the esoteric and nondual wisdom paths of our species premodern wisdom traditions—Hinduism, Buddhism, Taoism, Judaism, Christianity, Islam, Orphism, Neoplatonism, Shamanism. All of this toward uncovering inherent meaning, even ultimate meaning in our lives. The primary injunction here is usually a quiescence practice for taming the narcissistic self that is this obsessive, discursive "wild horse of the mind". The content of this conceptual mind is said to be at least 90 percent negative (fear/anger/hostility, pride, grasping, greed), and 90 percent self-centered—I, me, mine—(Suzuki Roshi 1970). (Monitor your own mind for an hour, or a day and see what you think.)

**A crisis in Western culture.** No wonder we're in such an anxious state. Handling this fear/anger and compensatory pride and grasping-greed is now most urgent given the present global cognitive crisis following the collapse of our Modern and Postmodern cultural meta-narratives. Here indeed is the current crisis of Western culture. Four hundred years of Modernist Enlightenment mind has given us the miracle of objectivist materialist modern science. But this hyper-rational knowledge paradigm has successfully inveighed against our transpersonal premodern primordial wisdom. Objective science without wisdom is a recipe for disaster, as we have experienced through the horrors of the first half of the 20th century.

It is most urgent that we now discover and embrace a new 21st century scientific noetic ontology, a new cultural metaphysic as to what all of this really is; of what being here now actually means to human being in time. *Who is it*, this impermanent self that desires to know, and to be happy; that is born, suffers and dies; that shines through the mind, and abides at the heart of all beings, always liberated and fully awake? Who is it that arises and appears to or in our human consciousness as trees, stars, and human beings? The new holistic ontology sees all of this as a spacetime instantiation, through human beings, of ultimate primordial consciousness itself, the unbounded whole in which, or in whom, this all arises. Wisdom understands this knowledge.

In the meaning vacuum of this cultural crisis human alienation and human evil loom large. Thus, I shall herein argue for a new integral, noetic meta-narrative. Let us discover a way out of this cognitive predicament. The way out is a path to relax back into who it is that we actually are; our "supreme identity", this vast whole, primordial ground of being itself.

Our four century old Modernity meta-narrative is a reaction to pre-modern Medieval arbitrary traditional political and religious external *authority*, and supports the ideals of the Enlightenment (the Age of Reason). Thus it idealizes and supports the ideals (idols) of "pure reason", individualism, progress, scientific objectivity, deductive certainty, and a reactionary, compensatory spiritual/religious skepticism.

Just so, the postmodernism that arose with the advent of 20th century relativity theory and the quantum theory, and the rise of often nihilist postmodern "critical theory" is a reaction to these Modern ideals, the *grands recits* of Modernity. Postmodernism is subjectivist, ontologi-

cally relative (Quine), perspectival (Nietzsche), pragmatic (Peirce and James) and neopragmatic (Rorty). In its Poststructuralist garments (Derrida, Foucault) it is a denial of any objectivist, "logocentric" religious or scientific ontology or absolutely existent, permanent observer-independent separate reality "out there". Here the potentially nihilistic Postmodern Poststructuralist mind denies any truth connection between semiotic/linguistic meaning and an absolute objectively real world out there (RWOT). Science itself here becomes a subjective social process (Kuhn 1961).

Well and good. Unfortunately, reactionary postmodern skepticism, so far from a healthy self-reflective skepticism, has become a procrustean conceptual dragon that is devouring itself (counter *uroboros*).

Case in point: during the surrealistic "science wars" of the 1990s scientific realists accuse its postmodern antirealist critics of rejecting scientific objectivity altogether, and even scientific knowledge itself (Goldman 2004). Postmodern cognitive bipolar disorder indeed. John Dewey's quasi-instrumentalist pragmatic critique of this postmodern paradigm is definitive (Dewey 1929).

The upshot of these two seemingly incommensurable paradigms—Modernity and postmodernity—is this: we cannot escape our all too human cognitive structures, our "egocentric predicament", to an observer-independently existing, absolutely, inherently existing "God's eye view" RWOT. The seed of truth in this Postmodern quantum meta-narrative, along with pre-modern middle way Buddhist epistemology is rather, that arising physical and mental phenomenal objects are *observer-dependent*, that is, dependent upon the consciousness—perception, concept and belief—of a present observing subject. Let's unpack this a bit.

On the accord of the great gravitational physicist John Wheeler, the universe cannot arise from the vast face of the Deep until an observing consciousness arises and evolves. Why? *In the beginning was Schrödinger's quantum wave function  $\psi$* . The merely physical universe is described in relativistic quantum field theory (QFT) by this probability wave function; and an observing, perceiving consciousness is required to collapse this strange wavelike ontic limbo state of neither existence nor non-existence into particle-like spacetime existent matter, an objectively real merely physical cosmos; just as Schrödinger's cat is neither dead nor alive until its black box is opened. We shall herein interview Schrödinger's inscrutable Cheshire cat.

Consciousness (usually embodied in carbon 12 based sentient central nervous systems) is inherently self-reflexive. For example, as we evolve to reflect upon this Big Bang state genesis we bring a conceptual cosmos into existence. Much recent philosophy of cosmology promulgates this "ontologically relative" view (Carroll 2012). Not what Newton had in mind with his Modernist, "classical" (non-quantum), absolutely existent, observer-independent space and time that is our materialist Western scientific, intellectual and cultural legacy.

We shall here explore the problem and opportunity of consciousness toward an understanding of its role in the "consciousness interpretation" of the quantum theory. But more importantly, we wish to understand the prodigious "hard problem of consciousness", the "explanatory gap" between the subjective, "feeling of being", the "qualia" of our experience, and an objective physical/material explanation of it. This is the "problem" of objectifying our inner

subjective lifeworld, the "qualia" states—the lovely scent of a red rose—including of course, our emotional and spiritual experience.

We shall then address the really hard problem of consciousness—the lived unification of the primordial "two truths" of our being here: our life in the finite dimension of relative-conventional spacetime existence, and our inherent relationship to the ultimate, our infinite ground in which or in whom this world of relative truth arises and participates.

On Wheeler's view, ontology—"what there is" (Quine)—is ontologically relative to, and supervenes upon, or is dependent upon the consciousness of an observer. Planck, Bohr, Schrödinger, Quine, the mature Wittgenstein, and Buddhist *Madhyamaka* would agree. Reality cannot, and does not exist absolutely "out there", independently of the mind—the consciousness—of a sentient observer. Scientific objectivist/materialist critics of such a subjectivist postmodern antirealism call this view nihilistic. However, it can be nihilistic only if *both* observer-independent *and* observer-dependent reality are denied. Enter Buddhist middle way epistemology.

**The Buddhist view.** On this ontologically relative view (reality is observer-dependent, concept/theory/model dependent) of the Buddhist Middle Way (*Madhyamaka prasangika*) an objectively real, observer-dependent reality arises and appears to a perceiving subject from its ontologically prior unified consciousness base or ground. This is a realist view; but not an observer-independent realist view because this often all too real arising appearing reality is relative to an observing participating consciousness. Spacetime reality may be delusory as to its *ultimate* nature, but appearing *relative-conventional* "scientific" reality is not all just illusory (*avidya maya*), as much of the Hindu *Sanatanadharma*, and the Western philosophical idealists would have being be.

Yet, on this centrist Buddhist view, appearing reality cannot be intrinsically or absolutely or independently real "from its own side", nor is it purely and only physical/material, as we shall see. So consciousness or mind is ontologically prior to, and embraces and subsumes material spacetime existence. As discoverer of the quantum of action Max Planck (1900) told, "Mind is the matrix of all matter".

This then is the centrist middle way Buddhist *Madhyamaka* view of (observer-) "dependent arising" (*pratitya samutpada*), the causal interdependence and interconnectedness of all arising physical and mental phenomena. And this is as well the view of quantum theory pioneers Bohr, Heisenberg and Schrödinger, and indeed of Bohr's foundational instrumentalist Copenhagen Interpretation of quantum mechanics. (Instrumentalism in philosophy of physics is the view that physical theory does not presume to describe the nature of physical reality itself, but rather, is a mere instrument for making scientific predictions. This view pretends to avoid troublesome ontic metaphysical questions as to the nature of the reality, and its observers, that the theory presumes to describe or explain.)

Middle Way Buddhism utilizes subjective, qualitative, causal pragmatic first person consciousness states to liberate the mind from the causes of human suffering, and human evil. Science utilizes objective, quantitative, causal, third person, physical/material methodologies

to explain physical and mental phenomenal experience. These two knowledge paradigms are in no way incommensurable. An integral noetic science requires both, as we shall see.

**Mindfulness: being the whole.** So, how shall we relax our ironic post-postmodern anxiety? We learn to rest in the quiet peace of the natural state of the mind; this vast basic space of mind (*chittadhātu*). On the accord of the contemplative teaching of our primordial wisdom traditions, this natural, transpersonal, trans-conceptual interval or "space between your thoughts" is utterly free of both negative and positive afflicted emotions: avoidance (fear, anger, aggression), and attraction (pride, greed, obsessive narcissistic grasping at things for the self). The natural, spontaneously arising qualities of this basic space or mind state are fourfold: 1) deep bodymind relaxation; 2) non-conceptuality or temporary freedom from the discursive, compulsively thinking "wild horse of the mind" that often functions as the cognitive vehicle for these afflictive emotions; 3) an awake vividness, clarity or brightness; 4) peace, a sense of happiness and well-being, bliss, even a *feeling* awareness of the inherent perfection of the whole of this great objective/subjective unified process. Without such subjective awareness, objective meaning is quite incomplete. Clearly, the prior unity of both our objective and subjective cognition, this profound noetic doublet, is required. Resting here, in the basic space of mind lies human freedom. This freedom is a choice. So now, let it be as it is, and be happy. We cannot *become* happy. We can only *be* happy.

Such a discipline or yoga is called "mindfulness practice", or contemplative (*vis à vis* discursive thinking) meditation practice (Appendix II, "Let It Be: A Basic Mindfulness Practice", davidpaulboaz.org). Such a practice requires no natural nor supernatural belief, no metaphysics, no intelligence or authority other than one's own. Such a practice provides a foundation, for one so inclined, to a profound holistic, even holographic lifeworld view, practice and happiness result that is a benefit for everyone—both self and other. Such awareness management is easy to learn, difficult to master, and important to directly experience. Anyone can do it, and it changes everything. Such is the essential "logic of the non-conceptual" (Klein 2006).

What is the meaning of life in this constant presence of our death? What are the causes of human happiness? The causes of our unhappiness, and suffering; of human alienation and human evil? Who am I? What shall we do with this precious life we've been given? The big questions ask of our origin, our identity and our destiny. Such ultimate questions orient us toward the recognition, rediscovery, then recovery of the ineffable mystery of both relative and ultimate meaning and happiness for one who considers them. We shall herein consider some of them. Is not such a holistic view now our urgent post-postmodern knowledge imperative? How shall we understand this.

**The Fundamental Two Truths of our wisdom traditions.** Several of our premodern primordial wisdom traditions teach of the profound knowledge/wisdom dialectic of our "Two Truths"—our two ways of being here. There is objectivity, with its social/informational, linguistic, interobjective voices. There is subjectivity, with its deep cultural intersubjective voices. These two constitute the dimension of Relative Truth (*samvriti satya*, *avidya maya*, the spacetime dimension of form). These objective and subjective worlds arise causally and interdependently

from their primordial ground via a vast but finite, relative-conventional causal spacetime matrix.

Then there is Ultimate Truth (*paramartha satya, vidya maya*) in which, or in whom, all of the realities of the spacetime dimension of the conventional "concealer" truths of Relative Truth arise and participate. This vast inter-dimensional unbounded whole (*mahabindu*) has many names and ambiguous conceptual definitions: *shunyata*/emptiness/boundlessness, *dharmakaya, kadag, Tao, Nirguna Brahman/Parabrahman, Ein Sof, Abba/God the Father*, and many more. "Truth is one; many are its names" (*Rig Veda*). We should remember that these names (*namarupa*) are merely concepts, Blake's "mind-forged manacles", or Kantian mental constructions veiling (*avidya maya*) the direct trans-conceptual noumenal truth at the emotional/spiritual heart (*hridaya*) of the matter; the very heart of the human beholder, always playing (*lila*) in the display of the sacred dance of geometry that is this vast unbroken whole itself that we actually are.

Moreover, each concept/name or experience or category of understanding generally has at least *three degrees or dimensions of subtlety of understanding*—an exoteric, often dogmatic outer meaning; an esoteric, more directly experiential inner meaning; and a greater esoteric, innermost, or "innermost secret", even nondual, transpersonal, trans-rational or trans-empirical meaning. If we conflate these levels of meaning through mere intellectual conceptual understanding, we tragically limit our potential depth of *direct* knowing experience (*yogi pratyaksa*), and argue at cross purposes with our interlocutors, resulting in emotionally reactive grasping at destructive dogmatic beliefs, and deepened ignorance (*avidya, marigpa hamartia/sin*), the very causes of human suffering.

For example, religious studies dialogue often confuses objective and subjective modes of being, the two faces of our being here in spacetime. If we conflate an outer, objectively "other" or separate theistic creator God, whether Western or Eastern, with its anthropomorphic conceptually designated attributes—goodness, omniscience, omnipresence, etc.—with an "empty of attributes", perfectly subjective, trans-conceptual, nondual, all embracing, panpsychic primordial awareness ground, the unbounded whole itself, we miss the prior, ontic nondual unity entirely. We miss the ultimate truth of the matter. Let us not throw out the baby of ultimately subjective nondual primordial wisdom with the bathwater of dualistic merely objective, concept/belief, relative-conventional truth.

"Panpsychic" means all physical and mental phenomena have some degree of consciousness or mind. More holistically viewed, spacetime physical and mere conceptual phenomena are but a reticulum veiling the infinite nondual unbounded whole that is consciousness being itself. The ontic view of the Mahayana, *Advaita* (nondual) Vedanta, Parmenides, Neoplatonism (Plotinus), Spinoza, Leibniz, James, Nagel, Chalmers and many others is panpsychic. That is to say, if we conflate the objective and subjective faces of our experience of being here, the subtle non-physical/material, even spiritual aspect of appearing reality is obscured or denied.

Let us then remember that the Two Truths of this prodigious epistemic duality—relative and ultimate—are not essentially separate. These Two Truths of appearing reality are

"always already" an ontic prior unity. We must remember this. We must live this. Why? From the epistemology you choose, comes the ontology you deserve. How then shall we understand this great nondual truth, the unbroken whole itself that we are?

Ultimate Truth (*paramartha satya*) may be viewed generally as our infinite primordial perfectly subjective ultimate reality base, the basal emptiness *ground*, supreme source, nondual being itself (*OM*), prior to any relativistic spacetime manifestation, physical, emotional or mental. This truth necessarily transcends, yet embraces and subsumes all of the conventional spacetime phenomena (*AH*) of the luminous spacetime reality dimension of Relative Truth (*samvriti satya*), wherein  $E=MC^2$ . This ultimate truth is the primordial basis in which this all arises, descends and appears as human experience, consciousness, the spacetime instantiation of the unbounded whole itself. And it is expressed spontaneously and effortlessly in conduct as kind compassionate activity toward reducing the suffering of beings (*HUM*), or Buddha mind. Thus is this View, Path and Result/fruition of the primeval liberating mantra *OM AH HUM*. It is liberating and healing to practice it, to voice it, "brief moments, many times". *OM AH HUM*.

Again, it is useful to understand that these perennial Two Truths represent an exoteric, dualistic conceptual knowing of a yet greater esoteric, trans-rational, even nondual prior unity. It is this trans-rational unity that we must be present to now, and now, in this chaos of relative spacetime everyday experience. Ordinary mindfulness practice supports this process of moment to moment awareness, this self-reflexive consciousness, this Path that awakens our always present indwelling *presence* of the very "groundless" ground that is nondual (subject/object unity) being itself. The perennial wisdom has told it: *Tat tvam asi*, That I Am!

Our premodern wisdom traditions, East and West, have told it: this vast ultimate ground of the basic primordial space of everything (*dharmadhatu*, Tao), unbounded whole of reality itself, is "non-propositional" and "non-prescriptive." That is to say, such luminous cognition is trans-rational or trans-conceptual, acausal (non-causal) and not conceptually reducible to mere causal objective, material, electro-chemical physical brain matter or brain states; and thus we cannot derive rational, conceptually based ethical principles from it; try as we may. Again, the prodigious wisdom logic of the non-conceptual.

We've seen that this vast whole, the basal nondual primordial ground or base of it, is known directly through our mindful, contemplative "primordial awareness wisdom" that transcends yet embraces human linguistic, cultural concept/belief systems—our deep background socio-cultural cognitive net (*langue*) of signification and meaning. In such wisdom there is little or no filtering of it through the reticulum of concept-mind. The ideational content (*parole*) of this primordial web of meaning constitutes for Quine and Wittgenstein our essential reality-constituting "web of belief", or "form of life", and for Peter Berger our encompassing societal worldview or "*nomos*". So meaning (*ethos*) is bestowed through *both* our objective, and cultural inter-subjective experience.

Unfortunately, subjective primordial wisdom experience remains taboo to our prevailing zeitgeist that is obsessively objectivist, realist/materialist "Science", the metaphysic of our

"common sense realism" and our materialist, consumerist view of reality—Russell's "metaphysics of the stone age".

**Soteriology: the human condition, and a reality choice.** We shall see that our precious lives are an opportunity and a choice to "ascend and return" to this basal "groundless ground" that we are (evolution), not as a self/ego-I, but as the on-going essential luminous clear light of the mind, the very nature of mind. "The future of human beings lies in the clearlight nature of mind" (H.H. the Dalai Lama). It is this "bright" (*kham brahm*) that continues. Again, on the accord of the "innermost esoteric" and nondual teaching of the traditions, That/*tat* source or ground, the bright presence of that—by whatever name—is our actual "supreme identity" as human beings. Through such a wisdom understanding lies great benefit for all beings. Here, within the nondual teaching of our wisdom traditions, lies both relative happiness, and the liberation/enlightenment that is ultimate happiness itself, the happiness that cannot be lost.

Therefore, our *human condition* is this: we must abide in and balance these two worlds, these two faces, these two voices of our actual unitary nature, our relative/objective/quantitative, and ultimate/subjective/qualitative—at once! Indeed, an epistemic and ontic happiness sticky wicket. But wait! Perhaps there's a simpler, centrist middle way choice between the dark ontic extremes of the objective permanence that is scientific materialism, and subjective idealist nihilism. We shall herein explore this impetuous brightness of our Great Wisdom Tradition's centrist views.

So the perennial dilemma for science, religion/spirituality and culture is the resolution of this invidious *apparent* duality, the essential relationship of our objective finite material existence—body and mind—to perfectly subjective all-embracing nondual "spirit", infinite ground/whole in which, or in whom, this all arises and participates.

Such is the "problem" of soteriology, the individual and thus collective challenge of human psycho-spiritual liberation/awakening (full *bodhi*) to the "always already" present indwelling *presence* of this unbroken whole shebang that we actually are. The choice of recognition, or the choice of avoidance of *That* is the rub for human beings; is it not? Well, how shall we understand, then accomplish this choiceless choice?

*I shall herein argue that the rigorous cognitive coupling of our objective and scientific understanding, with the deep trans-rational subjective realization of this momentous principle of the indivisible unity and coalescent dimensional interdependence of these two seemingly incommensurable paradigms—these perennial Two Truths, relative and ultimate—is the inherent treasure of mind, our heart's desire, and both origin and aim of all our hedonic/material and eudaemonic/spiritual happiness seeking strategies.*

To this end I shall enlist, for ultimate soteriological as well as relative polemical and pedagogical ends, the profound intertextual epistemological dialectics—both conceptual critical analysis, and contemplative mindfulness and insight practice—of 2000 years of the great centrist Mahayana Buddhist Middle Way *Prasangika Madhyamaka* philosophy of Nagarjuna, Chandrakirti and Tsongkhapa, exemplified by the eclectic pragmatic perfect Buddha mind of the Vajrayana's *Dzogchen* master Longchenpa. Moreover, we shall see how this definitive *Madhyamaka* Two Truths (objective relative and subjective ultimate) duality is resolved in the



highest or subtlest ultimate nondual *Dzogchen* (and Essence *Mahamudra*, and *Saijojo Zen*) view and praxis. Indeed, the ultimate happiness consummation devoutly to be wished. Heady wine indeed.

We shall in this connection, encounter the recent radical Neodualism of philosopher of mind David Chalmers' proto-idealist panpsychism—all matter is intrinsically endowed with degrees of mind or consciousness—from quarks and leptons to compassionate Buddha mind. We shall see that the great whole, ultimate reality, being itself—in which all of this stuff of reality arises and participates—is much more than mere material/physical substance, or physical/chemical brain structure and function. Thus do we seek a balance, a centrist view in the understanding of our objective physical and subjective mental and spiritual realities, these two voices of our inherent nature as human beings. Again, this balance represents a middle way *choice* between two cognitive metaphysical extremes, namely, an objectivist physical material existence, and a subjectivist mental idealist non-existence, or nihilism. Is this four century dualistic Platonist, Cartesian cognitive legacy never ending?

Thus, with the dialectical causal Buddhist Mahayana Sutra foundation we shall glimpse the non-dialectical acausal Vajrayana tantric view of the "always already" directly present immanent unity of objective material form (energy/matter), with the ultimate, spacious, perfectly subjective sphere of *Dzogchen*, the Great Perfection that is both pinnacle and ground of Mahayana *Madhyamaka* Buddhist view and practice. The greater esoteric view and praxis of both Christianity and Buddhism agree: "What you seek is already present... the Kingdom is within, and all about" (Jesus); "What you seek is already accomplished" (Garab Dorje).

We shall see that the prior ontic unity of the two Buddhist truths, causal relative and acausal ultimate, have much to offer the 21st century rapprochement of our two seemingly incommensurable paradigmatic realities—objective Science with its beautiful Concordance Standard Model  $\Lambda$ CDM (lambda cold dark matter) cosmology—and subjective, even ultimately subjective Spirit (whether exoteric religion, or more subtle esoteric spirituality). An epistemic choice; and an ambitious agenda, to be sure.

Thus shall we engage the ultimate meaning of the inherently vexed (to mere concept mind) profundity of the perennial duality that is these perennial Two Truths, objective form/matter and subjective boundless luminous emptiness/spirit as they arise from their spacious matrix ground, remembering all the while our primordial unifying nondual wisdom that "form is emptiness; emptiness is form" (from the Buddha's *Heart Sutra*). We shall see that, far from incommensurable, objective science, and subjective spirit are a prior ontological unity.

Again, knowing subject and perceived object, while appearing separate to relative conventional perception and conception, are ultimately a prior epistemic and ontic *selfless* unified whole. Such a holistic understanding of the inherent ontic prior unity of subject and object has great benefit for beings. "All the trouble of this world is a result of serving the self. All the happiness of this world is a result of selfless, compassionate service to others" (Shantideva).

The praxis of this lifeworld wisdom Path, with its inherent potential, the liberating result or fruition—liberation from suffering, ultimate happiness itself—is we are told by those who know, the masters and *mahasiddhas* of our Great Tradition are always here now fully pre-

sent, when we remember (Plato's *anamnesis*), the ever present reality of this great nondual truth that is vast unbounded whole itself (*mahabindu*), a trans-rational unity of the duality of being and non-being. Indeed, this is the most pragmatic "one truth", invariant through all cognitive state and trait changes—exoteric/outer, esoteric/inner and greater esoteric "innermost secret"/nondual—of the sublime asymmetry of our human cognition, our objective rational and subjective emotional/spiritual experience.

**Ontological relativity in science and culture.** To the same end we shall briefly explore an important bit of 20th century intellectual history, namely, an urgent postmodern yet non-nihilist "ontological relativity", or ontological interdependence; in short, "what there is" that is "real" is relative to and dependent upon our linguistic, semiotic (syntax, semantics, pragmatics) pre-conscious deep cultural background (Greek/Hebrew) assumptions and beliefs, our "global web of belief" (Quine 1969).

In the West this generally unexamined semiotic cultural background is substantialist Metaphysical (Platonic) Realism with its ontic cohort, objectivist monistic Materialism/Physicalism (it's all just physical). We shall consider the socio-cultural and ethical consequences (karma) of such an adventitious, potentially destructive ontology; but also its profound value as relative-conventional scientific truth. Again, arising appearing spacetime reality is objectively, really real; just not inherently (*sahaja*), intrinsically (*eigen*), or absolutely real. Rather, it is real through our linguistic and conceptual imputation and reification/objectification.

Here lies an opportunity to demonstrate a healthy, *radical skepticism*. (Is not all real psycho-emotional change radical?) *This is a skepticism of one's own closely held and well defended egosyntonic, preconscious "web of belief"*. In the West this will usually include a firm belief in a permanent, observer-independent, theory-independent, separate material/physical existence, a "real world out there" (RWOT). Such unexamined, deep cultural background belief systems have a profound impact upon our view and therefore our acts in the world, with the requisite happiness consequences.

In the East the prevailing cultural metaphysic is non-existence, a subjectivist, often nihilistic Idealism (it's all just mental). There is of course, no empirical evidence for either view. Even the necessary truths of deductive logic and therefore of mathematics are based in unproven and unprovable foundational axioms (Gödel 1931). Just so, the scientific method itself is founded not in the deductive certainty of deductive logic, but in stochastic inductive logic. The premises of inductive logic do not result in the certainty of its conclusions; only probabilities. These inductive arguments of science cannot bestow logical certainty upon even our most cherished theories as to a really real reality "out there". The relative truths of science provide instrumental and operational truths that describe reality and make predictions, but can confirm nothing as to the ultimate truth of reality itself, ontology, of what actually is. *Thus, neither physics nor metaphysics can provide objective certainty*. Does this logically entail that nothing exists? Not at all. Absence of evidence does not entail evidence of absence. The world is so much more than mere binary, two-valued "either/or, black or white deductive logic. There's a lot of grey out there.

Thus, the phenomenal existence of anything—quarks to *kosmos* to God—admit of no logical proof. The Buddhist *Madhyamaka* middle way "two truths" epistemology handles this metaphysical conundrum quite nicely (H.H. The Dalai Lama 2009). So we shall see that the things of spacetime relative truth are objectively real, just not intrinsically or absolutely real. How then are things real?

Hence, both objectivist physics, and subjectivist metaphysics are unproven massmind metaphysical assumptions embedded in our cognitive "form of life" (Wittgenstein). Most philosophers of physics and cosmology, and many particle physicists and cosmologists acknowledge this present limit of our intellectual, relative conventional knowledge (Carroll 2010).

Well, is there a centrist middle way view between these two epistemic extremes—objective physical/material existence, and subjective mental non-existence; between the invidious duality of materialism and nihilism?

The prevailing philosophical/ontological interpretation of Relativistic Quantum Field Theory (QFT, based in the instrumentalist Copenhagen Interpretation)—the core of the Standard Model of particles and forces of recent particle physics with its Concordance Model Big Bang cosmology—is refreshingly subjectivist in its denial of "scientific" causality and of the classical, Newtonian absolute objectivity of space and time. We see this inherent subjectivity in Heisenberg's Uncertainty Principle, Bohr's Principle of Complementarity, and the quantum wave function  $\psi$  of Erwin Schrödinger.

Yet unfortunately, the metaphysic of local Scientific Realism and of monistic Scientific Materialism/Physicalism remain deeply embedded in the proto-religion that is the anti-scientific dogma of ontologically reductionist, fundamentalist "Scientism". Here, everything is assiduously reduced to the mere objective physical; and the sciences and humanities are reduced to mere physics. Our subjective voice—our emotion, desire, compassion and spirituality—is missed entirely. Is this not the tragic cultural legacy of the Western Tradition?

Fortunately, as Physicists, philosophers of physics and cosmology, and Buddhist scholar-practitioners begin to dialogue, the ontic grip of such compulsively objectivist "scientific" fundamentalism upon our epistemic access to a profoundly pluralistic reality is yielding to the *ontologically relative* view that is now shared by individuals of the high culture humanities and sciences, especially the philosophy of physics and of cosmology. This ascending integral noetic view I have termed the Noetic Revolution in religion, science and culture.

By these lights let us then revision our prodigious, but waning Standard Model intellectual masterpiece. This perforce includes a holistic new look at the magical-mystical trans-empirical metaphysic of our prevailing "scientific" creation myth that is recent post-Standard Model low entropy Big Bang cosmology—the current Concordance Model—with its utterly *fantasque* dark matter and dark energy—which leaves 95 percent of the physical cosmos utterly unexplained!

We then take a fresh look at the Planck nature of space-filling vacuum energy (quantum foam) that is Einstein's diaphanous cosmological constant  $\Lambda$ , mystical dark energy itself. We shall in this connection consider the mainstream Big Bang state problems, or paradigm

busting "puzzles", as Thomas Kuhn would have called them. Just what is it that banged; why did it bang; what happened before it banged; and were there prior (or present) multi-bangs? We shall here explore the philosophy and physics of time.

**Toward a "post-empirical" science of matter, mind and spirit.** Let us now embrace the emerging post-empirical world of highly speculative exploration; even when such conjecture is in principle beyond our epistemic reach. Let our epistemic and ontic reach exceed our current empirical grasp; for example, the highly conjectural but urgent post-cosmocentric multibang multiverse. Human beings are not privileged observers of the cosmos. It seems that this non-logocentric Copernican Principle continues into the very depths of timeless consciousness-being itself. Human concept-mind is mediocre. But not the nondual primordial wisdom that abides at the human heart (*hridayam*).

Perhaps the Oracle of Delphi was correct when it pronounced Socrates the wisest of all earthly beings. He is wise beyond measure because he knows that he does not know. That is, he understands the cognitive limit of human objective conceptual knowing. He understands that our quest for mere objective certainty is illusory; that we have the inherent capacity for a yet more profound trans-rational wisdom.

So let the emerging noetic resolution to the scientific "problem of demarcation" demarcate not only science from pseudo-science, but as well, let it adjudicate between old paradigm positivistic science and new paradigm post-Popperian relaxed scientific testability criteria. Let naturalness and explanatory elegance suffice in the face of the inherently vexed scientific metaphysical conundrums that admit of no empirical testability nor experimental, observational or logical proof; as in, for example, post-Standard Model multiverse theory, and Superstring/M Theory.

The intrinsic limit of language, of dualistic, binary discursive mind must not restrain our subjective, intuitive, introspective trans-rational innate capacity to know that which transcends our small conceptual "web of belief". So let us transcend our cognitive uncomfortable comfort zones, and in fear and trembling explore and practice trans-conceptual contemplative noetic knowing and explanation. But God deliver us from the hubristic fairy dust of pop "scientific" mysticism, and from a contrived and impudent, logically impossible physicalist Theory of Everything (TOE). Again, from the epistemology you choose, arises the metaphysics you deserve.

Hence, we shall herein explore the logical and empirical possibility—or impossibility—of a physical/material "Theory of Everything." We shall see that Kurt Gödel's two Incompleteness Theorems (1931), with the greatly enhanced Gödel-Rosser Theorem (1936), demonstrate that a physicalist/materialist TOE,—besides its inability to produce the perfect omelet—is not mathematically, logically, or empirically possible. It is here that I shall criticize, as have many others, the alienating, destructive result of Modernist Enlightenment, determinist, reductionist, mechanistic, "Scientific" Materialism which has colonized the Western mind and lifeworld in an orgy of narcissistic consumerist greed.

We shall here revisit the postmodern, pragmatic and perspectival *ontological relativity* of Nietzsche, James, Peirce, Bohr, Gödel, Quine, Wittgenstein, Derrida, Wheeler, Bell, Kuhn, Ror-

ty and the Neo-pragmatists, Fuchs and Quantum QBism. We shall, as well, probe the Zen mind of premodern Zen master Dōgen, and a centrist Buddhist *Madhyamaka prasangika* anti-essentialist, relativised, observer-dependent, non-Platonist Realism.

We've seen that this centrist Buddhist middle way between substantialist, eternalist absolute existence, and idealist, nihilist non-existence holds that the world is indeed real, just not absolutely or intrinsically real. How then is it real? Once again, on this interdependent (*pratitya samutpada*), ontologically relative view, and in agreement with Quine, Wittgenstein, Bohr and Postmodernism, the world is real by way of our preconscious deep cultural background "web of belief", that is to say, by our habitual semiotic/linguistic perceptual, conceptual and belief imputations and designations. What we think and believe is what we get. For better or worse. Ontological relativity indeed.

And all of this toward a phenomenological, post-Kantian, post-materialist, noetic reconstruction and unification of our two knowledge paradigms, objective Science and subjective Spirit. We shall see that, so far from the ostensible incommensurability of Science and Spirit/spirituality, these two paradigms are a necessary requisite prior ontic unity. Let us then recognize this unity, moment to moment; "brief moments, many times", and be truly smart and happy. As Buddha told, "come and see".

**Gravity behaving badly: post-empirical quantum spookiness.** Here we shall glimpse a promising new post-Standard Model anti-realist quantum theory from a philosophically recalcitrant Stephen Hawking with his "Model Dependent Realism" (*The Grand Design* 2010). Hawking abandons the *observer/theory-independent* orthodox Scientific Realism (a RWOT) of his *A Brief History of Time*, for a healthy, ontologically relative, proto-Buddhist, *observer/theory-dependent Realism*. Here, reality depends upon our theoretical conceptual "models", that is to say, our concepts, theories and beliefs about it, not upon an absolute, permanent, observer-independent RWOT. In short, this scientific ontology is relative to, and dependent upon the perceptions, language and beliefs—Quine's "web of belief"—of the consciousness of a participating observer. Orthodox scientific realist Hawking, and the ontological interdependence of Buddhist epistemology—strange bed-fellows indeed. Religion and Science together at last. What hath God wrought!

Furthermore, we shall see that it is not philosophy (the unity of love/*philo* and wisdom/*sophia*) that is "dead", as a philosophically naive Hawking claims. (Shakyamuni Buddha told that the secret of human happiness is the realization and compassionate expression of the prior unity of love and wisdom.) Hawking has inveighed against philosophy for forty-five years. Yet his own "Model Dependent Realism" is *ipso facto* a philosophical position, namely a species of Philosophical Realism. Let us hope that this very interesting MDR metaphysic of his is not so facilely pronounced dead. Perhaps it would be useful for scientists of all ideological persuasions to understand that philosophical analysis is inherent in all peer reviewed theoretical effort.

Historically, science has always been a branch of philosophy. Now, science, especially physics and cosmology need the intervention of professional philosophers of physics and cosmology to logically unpack and discipline their theoretical models, particularly where

physics and cosmology must inevitably engage metaphysics/ontology, the very nature of reality itself.

For example, post-Standard Model Multiverse theory; and Superstring/M Theory are ontological assumptions. And of course, the quantum theory, in all of its 20 or so atavistic vestiges—even the instrumentalist tactics of the foundational Copenhagen Interpretation—are necessarily assumptions about ontology, "what there is", the nature of reality; of being itself.

Perhaps this collegial alliance of cooperating scientists and philosophers of science shall avert some future discomfiting errors in scientific reasoning. The history of science is replete with them. Let's remember that science and philosophy are not, and should not be competing disciplines. Indeed they are, and have always been, a prior epistemic unity.

So, some "scientific" reports of philosophy's death have been greatly exaggerated. But what *is* dead is nearly 2400 years of the culturally received metaphysic of Christian Platonist Foundational Realism, which is Scientific Local Realism, and its ontic cohort, monistic Scientific Materialism/Physicalism. Great 20th century mathematician-philosopher Alfred North Whitehead has told us correctly that "The history of modern philosophy is a footnote to Plato".

With the advent of postmodern quantum theory all that has changed. It is now "old paradigm" Scientific Realism and Scientific Materialism with its proto-religious fundamentalist Scientism that must be surrendered (*wu wei*) to the theme of that next more inclusive, yet ever incomplete knowledge paradigm. After all, as Thomas Kuhn (1961) pointed out, is not the end stage of any paradigmatic belief set the prelude to that next elusive, more inclusive, yet ever incomplete knowledge paradigm? A new knowledge paradigm transcends, yet includes the previous paradigm. We shall explore this dialectal structure of scientific revolutions in some detail.

Just so, our three scientific knowledge revolutions—Copernican, Newtonian, and Relativistic/Quantum—have abundantly demonstrated this Kuhnian sociological truth. We shall see that our next scientific cultural revolution—an integral noetic revolution—is an ontologically relative middle way between these paradigmatic Two Truths that are our culturally received objective and subjective reality experience. And from such fluent cognition shall spring, in due course, and by grace our Fourth Scientific Revolution in physics, cosmology, philosophy and culture—complete with that knowledge desideratum devoutly to be wished—a mathematically consistent quantum description of Einstein's gravity.

Alas, do we not limit ourselves most by our emotional grasping and attachment to, and defense of our current paradigmatic cherished and closely held theories and beliefs? Is it not our urgent knowledge imperative to evolve beyond mere habitual conceptual theory to a post-rational, post-critical, neo-realist, centrist noetic understanding? Most philosophers of physics and cosmology now understand this. Let us then practice the radical skepticism that cognitively "brackets" or suspends our own well defended concept/belief systems, that we may intellectually, emotionally and spiritually grow beyond them.

Again, we shall see that causal Buddhist middle way *Madhyamaka*, and acausal *Dzogchen* view and praxis have much to contribute to this urgent evolutionary epistemic pro-

cess that is an integral understanding of the prior epistemic and ontic unity of immanently commensurable science and spirit/spirituality.

We shall then visit some recent problematic developments in philosophy of physics and philosophy of cosmology. These are mainly epistemic problems arising from our "taboo of subjectivity" (Alan Wallace), and as well, our limited understanding of gravity, particularly in its mathematical relation to the quantum theory. These puzzles include cosmology's pressing problems as to the origin and fate of the universe, including philosophy of time, and time's entropic arrow; the spooky, mystical dark matter/dark energy conundrum; the problem of the cosmological constant; the several Big Bang state problems, including the problem of the ultra-low entropy of a pre-inflationary Big Bang cosmos; cosmic inflation itself; and the now nearly orthodox view of a super-spooky post-empirical infinite multiverse—an ensemble of utterly trans-empirical, non-falsifiable "bubble", "baby" or "pocket" universes.

Adding insight to injury, we shall briefly survey the big money reckless rush to the Higgs boson; post-Standard Model supersymmetry, Superstring Theory and M Theory; "ontic structural realism"; then on to post-quantum Quantum Bayesianism (QBism, Fuchs 2013) which offers a subjective, centrist "personalist" Bayesian probability theory rescue of the nearly century old, prevailing instrumentalist Copenhagen Interpretation from its maddening logical paradoxes, including Schrödinger's infamous inscrutable cat. After 2400 years of Western logical intellectual endeavor, Postmodern QBism places the long neglected, always epistemically and phenomenologically removed knowing subject—the ontologist philosopher and the empiricist observer-scientist—back into the ontologically relative scientific subject-object knowledge equation, where she/he inherently belongs.

**Toward a quantum theory of gravity.** These noetic, self-reflexive Quantum knowledge breakthroughs portend a revolutionary resolution to physics' and cosmology's primary conundrum, namely, the perennially vexed problem of a *quantum theory of gravity*. In short, there exists a present mathematical incompatibility of the two epistemic pillars of physics and cosmology, namely, relativistic quantum field theory (QFT), the world of the very small, with Einstein's General Relativity (GR) theory of gravity, the world of the very large. After all, the furthest and innermost reaches of gravity—the great creative and destructive force of the cosmos—is quantum in nature. All matter, micro-particles to galactic scale large structure, has a gravitational field and gravitational affects. Cosmologists and particle physicists agree that GR is incomplete insofar as its capacity to describe this quantum nature of reality at the micro-particle scale. Just so, relativistic quantum theory is incomplete in that it cannot provide a mathematically consistent quantum field description of Einstein's Riemannian/Ricci curved spacetime. Clearly, QFT, GR or both need a qbit of tweaking.

We shall in this regard revisit Mordehai Milgrom's heretical, but not easily dismissed Modified Newtonian Dynamics (MOND). MOND tweaks Newton's G term in Einstein's sublime General Relativity field equations eliminating the need for dark energy models with their utterly preposterous fine-tuning requirements. Thirty years of research have failed to disprove MOND; and it "has predictive power equal to dark matter models which have problems of the same magnitude as MOND" (Jacob Bekenstein).

Perhaps the really hard problem of gravity is a sociological one. This is the usual taboo upon considering *any* modification to sacrosanct General Relativity, the primary pillar of the prevailing Concordance  $\Lambda$ CDM Big Bang Standard Model of cosmology; our best hope of salvaging the Platonist/Cartesian ideal of local Scientific Realism, a "real world out there".

Yet, the future of particle physics and physical cosmology rides upon this prodigious unification of GR and quantum theory, a new integral theory that quantizes great gravity, this enigmatic creator and destroyer of worlds. And of course this requires GR modification, and probably, as Roger Penrose (2004) proposes, QFT tweaks as well. We *must* have a quantum understanding of Newton's gravitational constant  $G$  in Einstein's GR field equations. And yes, this grand desideratum portends our incipient Fourth Revolution in physics and cosmology. Let us now throw off the fearful parochial yoke of "theory confirmation bias" (we love it because it's habitually familiar).

As to this uneasy alliance of the two pillars of physics' Standard Model of particles and forces—QFT and GR—no physics dialogue was ever so exotic as Einstein's thirty year debate with Niels Bohr, a founding father, as was Einstein himself, of the utterly *fantasque*, seeming subjectivist quantum theory.

**Making sense of "spooky" quantum entanglement.** Einstein's main problem with the evolution of the quantum theory that he founded and helped to develop was the surrender of the basic Principal of Causality, the logic of cause and effect. Einstein's inner local realist profoundly disagreed with the relativity violating non-local "spooky action at a distance" required by the acausal or non-causal antirealist, instrumentalist view of the quantum Copenhagen Interpretation of Bohr and Heisenberg. Einstein refused to believe that some physical events are uncaused; and that the properties—for example electron spin—of subatomic particles of physical matter are indeterminate, that is, that they do not exist until observed and measured—the notorious "quantum measurement problem". Quantum mechanical action that exceeds the Special Relativity light speed limit? Spooky indeed.

At one point in the protracted debate the inveterate scientific realist/determinist Einstein is said to have exclaimed, "God does not play dice with the world!" Bohr purportedly replied, "Oh Einstein, stop telling God what to do."

Surely, Einstein thought, there must be some "hidden variable", something that is not utterly random that could determine or cause such spooky antirealist non-local particle behavior, and thereby save the prodigious Principal of Causality. The scientific realists were here desperate for a strategy to refute Bohr's *observer-dependent* view that spacetime reality does not exist until its wavelike quantum "superposition" is collapsed into a particle-like "real" objective physical event via a measurement by an observer/experimenter. Einstein's cherished belief/bias was cognitively entrenched in the *observer-independent* physical existence of a separate, objectively real world out there ("RWOT"). There *must* be a way. Philosophical realism versus antirealism. Enter, stage right, the 1935 Einstein, Podolsky, Rosen (EPR) thought experiment. It was here argued that the spooky mechanism of nonlocal "quantum entanglement" of spacelike separated electrons necessarily implies that the quantum theory is an incomplete ontology of the nature of physical reality. In short, it's a bunch of bunk, or worse.



Was Einstein right? As the question is a post-empirical metaphysical one, it admits of no logical proof. Yet history has come down on the side of Bohr. Why? In 1964 Irish physicist John Bell set out to prove Einstein right as to hidden variables. However, his definitive mathematical analysis of EPR proved, to everyone's surprise, that no mechanism of "local hidden variables" could be logically consistent.

Then, in 1984 French physicist Alain Aspect, and later many others, have demonstrated that any possible hidden variable is mathematically precluded. Therefore, the infamous "spacelike" separated electrons of EPR's "locality" can have no spin prior to an observer's measurement. More recent research (2015) has supported this conclusion (arXiv.org).

So Einstein was wrong, Bohr was right, and that is the end of the matter. Or is it? If we surrender the obsessive "scientific" metaphysic of a purely objective local realism, a new middle way paradigm dawns. Perhaps there is a centrist middle way. In any case, we shall herein enjoy a bit of spooky quantum fancy in the hope of taming the wild horse of discursive mind and doing some ontological good.

And what of quantum gravity, Wheeler's "Great Smokey Dragon" that cognitively precludes our objective understanding? Some recent theorists have suggested that gravity is essentially a spacetime expression or result of Boltzmann's "law" of entropy—the second law of thermodynamics where entropy, a measure of matter's microscopic, sub-molecular disorder, cannot decrease. It is entropy that is responsible for time's seeming asymmetry, our experience of Eddington's one way arrow of time. Is gravity's inscrutable macrocosmic nature ultimately reducible to a microscopic entropic force? (Verlinde, arXiv.org) We shall explore.

**"Something that we all have missed"**. With the advent of the emerging 21st century post-postmodern ontological relativity paradigm in science and culture we shall witness the gradual surrender by big money, "Big Science" orthodoxy of its hitherto anachronistic, obsessive theory-independent, observer-independent purely objectivist ontology—the phenomenologically impossible "Gods eye view", or "view from nowhere" of foundational Realism and monistic Materialism/Physicalism. This amounts to an academic and scientific surrender to the emerging noetic theme, not of independent, but of interdependent ontological relativity, supported by Middle Way Buddhist epistemology, and the scientific non-absolutist, quasi-subjectivist ontology of Bohr, Quine, Wittgenstein, and QBism.

At the end of his magnificent epic of 20th century physics and cosmology—modestly designated, *The Road to Reality: A Complete Guide to the Laws of the Universe*—Roger Penrose poignantly laments our present lack of understanding of that most profound mystery of all, to wit, gravity, the very key to understanding relative, physical reality itself. "...Our present-day theories are powerless to describe (it)...we shall need powerful new ideas...perhaps what we mainly need is some subtle change in perspective—something that we all have missed...." (Penrose 2004, p.1045).

Perhaps what "we all have missed" by our obsessive grasping at the descending objectivist, observer-independent realist/materialist knowledge paradigm is the "powerful new idea...the subtle change in perspective" provided by this emerging new ontology of science—what the inherent subjective nature of the quantum theory has pointed to all along—namely,

the ascending observer-dependent, theory-dependent ontological relativity paradigm in science and culture as described above.

We have seen that the descending current of the current ontology of science, especially physics and cosmology is a metaphysic of positivistic, objectivist, even fundamentalist Scientific Realism, and a monistic Scientific Materialism (Appendix I, "The Idols of the Tribe"). Scientific ideology must now soften, or even surrender its obsessive absolutist "perspective" to the emerging theme of ontological relativity as suggested in the fluent perspectives of Bohr, Quine, Gödel, Kuhn, Bell, Wheeler, Nagel, Chalmers, Buddhist Middle Way *Madhyamaka* epistemology, Dōgen's entoxic Zen ontology, and H.H. The Dalai Lama's *Kalachakra* tantra view of time and cosmology. We shall in turn engage each of these ontologically relative views.

We'll then see just how it is that this objectively softened, ontologically relative, post-Standard Model science and philosophy profoundly furthers both conventional human flourishing, but as well, our ultimate liberation from the narcissistic self-full egoic grasping and hostility that is ignorance (*avidya*), the root cause of human suffering and human evil. We shall explore the idea of "no self", the perennial view that a permanent self, an ego-I existing through time is utterly illusory. Here we shall query Hume, Buddhist middle way *Madhyamaka* epistemology, and the "selfless" view of philosopher of mind Derek Parfit.

*A robust, integral noetic science of matter, mind and spirit must utilize the phenomenological "doublet" of both objective third person exoteric quantitative Science, and subjective first person interior, introspective, esoteric qualitative spirit/value methodologies.*

Such an integral noetic research program is required to guide our evolution—that cognitive procession of preconscious, conscious, and supraconscious experience—individually and thereby collectively through the ascending life stages of human psychological/emotional/spiritual development. The end point of this evolutionary process is nothing less than the awakening or liberation of the individuals of our species; which is to say, in due course and by grace, the long deferred nativity of *homo gnostica*, an ever imperfect bright new species. A really big picture indeed.

**Toward an integral, noetic science of matter, mind and spirit.** I have here and elsewhere referred to this evolutionary reformation in religion, science and culture as the emerging Noetic Revolution of the 21<sup>st</sup> century. This evolutionary process—and its relative flourishing, and even ultimate human happiness result—liberation, enlightenment—shall herein be our ultimate concern.

Hence, such a non-androcentric, integral noetic science requires the perennial cognitive dialectic (*pramana*) of both objective reason (*doxa, vikalpa, anumana*), and subjective yogic direct perception (*yogi pratyaksa*) of, and mindful meditation (*bhavana*) upon our indwelling inherent (*sahaja*) nondual primordial awareness wisdom (innate *gnosis, sahajajnana, yeshe*) of the very nature of mind, the luminous emptiness ground, the ontic basis of mind. How shall we accomplish this?

As suggested above, these two intertextual complementary knowledge paradigms—these perennial "Two Truths", objective relative and subjective ultimate—together enhance the mundane, everyday practice of the relative socio-cultural and "spiritual" path to the recogni-

tion, then realization of our "supreme identity" with that primordial, perfectly subjective basal ultimate reality ground. The primordial teaching is this: we the parts, are not separate but indivisible from That (*tat*), the holographic, all-embracing unbounded whole itself. Indeed, by the lights of our primordial wisdom traditions, that prior ontic unity is who we actually are, our "supreme identity", beyond physical, mental human being.

Be that as it may, it is this numinous, post-empirical primordial base (*gzhi rigpa*), "supreme source" or spacious "groundless ground" (*dharmadhatu*)—the "always already" present *presence* of that—in which, or in whom all descending spacetime relative things and beings arise and participate. "Form is not other than emptiness; emptiness is not other than form" (Buddha's *Heart Sutra*). Is this integral denouement not logically necessary, and abundantly empirically obvious? Such is the prodigious and compelling "logic of the non-conceptual" (Klein 2006).

Once more, relative, objective, empirical spacetime matter and its trans-conceptual, non-rational (but not irrational) perfectly subjective ground—*these primordial two truths*—are, to contemplative, and even ordinary cognition, simply one truth, an ontic prior unity, invariant through all of our binary cognitive reference frames—our enduring state and trait changes—objective and subjective; preconscious, conscious, supraconscious; inner, outer and nondual; egocentric, worldcentric, theocentric.

Yes, on the profundity of the greater esoteric and nondual view of our premodern wisdom traditions this realization—and its spontaneous effortless actualization in everyday lifeworld kind compassionate conduct—represents, through cause and effect (karma), step by step—our relative, but also ultimate individual and collective meaning that is ultimate great happiness itself (*mahasuka, paramananda, ultimate eudaemonia, beatitudo*), the human happiness that cannot be lost. Indeed, is this not the ultimate concern of our Great Wisdom Tradition?

**What to do?** As Shakyamuni Buddha told, "*What you are is what you have been; what you will be is what you do now*". As good a picture of cause and effect, karma, as ever was told. And yes, the understanding and compassionate expression of this profound truth of reality requires a bit of contemplative mindfulness practice. The masters and *mahasiddhas* of "the three times" (past, present, future) have always told it. Remembering our primordial wisdom's Two Truths, the timeless present unity of that, equals, causes our genuine happiness—both relative conventional, and ultimate. The secret of happiness thus lies in the perennial wisdom of "doing some good"; in selfless, wise, kind compassionate service toward others in order to reduce the suffering of beings. By this light we shall explore this great primordial wisdom injunction in some of its socio-cultural, scientific and spiritual raiment.

So let us now engage our two ostensibly incommensurable knowledge paradigms—objective Science and subjective Spirit—so that we may better understand their "already accomplished" coming to meet in this 21st century Noetic Revolution that is now upon us.

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The above draft is excerpted from "Being the Whole: Toward the Emerging Noetic Revolution" (Draft), 2013, [www.davidpaulboaz.org](http://www.davidpaulboaz.org). The view is fully developed in my forthcoming book, *The Noetic Revolution: Toward an Integral Science of Matter, Mind and Spirit* (2016).