## **About Time**

Time is nature's way of preventing everything from happening at once.

-John Wheeler

Being, Time and Human Action. Being arises in time. For beings in time, being is time. Dōgen's Ugi is "Being-Time". Human consciousness is being in time, participating in the numinous vast expanse of all-embracing awareness-consciousness Being Itself, reality itself as the nondual (unity of knowing subject and object known) unbounded whole (mahabindu) primordial ground in which, or in whom personal and collective human consciousness arises and participates.

From the view of Ultimate Truth (paramartha satya) our human consciousness is necessarily self-reflexive Relative Truth (samvriti Satya) spacetime instantiation of this luminous primordial awareness-consciousness base (gzhi rigpa), Being Itself. Being displays itself and participates in time without ever departing its original beingness nature. In other words, time arises and displays in and through Being Itself; not the other way round. Ultimate being is prior to Relative time. Primordial consciousness is the prior ontic ground of human consciousness (Ch. 13).

So, being is ontologically prior to time, continuously manifesting in present moments of time to present sentient experiencers. Being is an always already arising Ultimate continuum of Relative manifest multiplicity. Time and space are its vehicles. Ultimately, being and time are a prior yet present interdependent, complementary unity. Relatively, conceptually, we dualistically split them into separate subject and its objects. That is after all, how our semiotic concept-mind behaves.

Now, being in time requires presence, a present non-logocentric embodied, or even non-embodied observer-participant sentient consciousness. In the absence of any such consciousness there is an absence of any notion of time, that is to say, an absence of any experience of time. No time experiencer, no time. Thus for Dōgen Zenji, Being-Time, or Ugi, is ontologically relative and observer-dependent, not observer-independent and absolute.

If we must conceptualize Ugi, Dōgen is closer to Einstein's nominal relative view of time than to Newton's absolute time. And closer yet to the quantum observer-dependent view than to the observer-independent view of orthodox Scientific Materialism/ Physicalism, and Local Realism.

So, being in time is our ontologically relative being here in relationship with the prior unity of the "three times", the three voices of time—our personal past, present and future.

Therefore, being in time happens only as the conscious sentient experienced presence of this present moment now; but being also bestows meaning for us in the fluent context of our personal past and future. Dōgen told that to lose the moment now is to lose reality itself; but to deny or ignore our past and future is to lose the meaning of human action in our present lifeworld. And cause and effect karma—our free choice for positive and negative action or conduct toward "other" sentient beings being here in time—is after all the very foundation of Dōgen's Zen Buddhist path wherein all beings are interdependently interconnected in the vast boundless emptiness whole of dharmakaya, or mahabindu, or kadag.

Indeed, all of the founding masters of our primary wisdom traditions have told it: our happiness, relative human flourishing or primordial liberation/enlightenment, and our suffering, is a result of our more or less selfless, skillful, engaged love/wisdom activity for the benefit of other beings as we participate together in illusive but not illusory Being-Time. For example, both Gautama the Buddha and Jesus the Christ exemplified and taught love and wisdom. Wisdom may even be construed as the skillful expression of love.

So, what little bit of free will we human beings possess causes short term and long term results to our thought, intention and action, whether we understand, or conceptually believe in "karma", or not.

Although we hear that, as to the "three times"—past, present, future—only the present moment really exists, Dōgen reminds us that our past and future bestow present meaning for us. Our personal thoughts, intentions and actions in the past have created our present happiness and unhappiness mind states. Just so, our present mind states create our future happiness. As Buddha told, "What you are is what you have been; what you will be is what you do now". No mystical hocus-pocus here. Karma is as simple as scientific causality, cause and effect, action and result. What you give, is what you get. Q.E.D.

Yes, the past is gone, the future has not yet arisen, so only the present moment now is really real. So very real. So very true. But that is only the outer exoteric part of the karmic human action story. Esoterically, but quite logically it is through our past actions that the fine threads of inexorable karma—reaping what we sow—reach through time to cause the qualitative content of all of our present moments here and now—our happiness and our suffering.

Perhaps the primary obscuring factor in this regard is the psychological fact that much of human thought, intention and action is preconscious, or unconscious; and all too easily manipulated by our duplicitous self-ego-I and its prodigious ego-defenses.

Therefore, these three times—past, present, future—are a prior and always present unity, the ultimate nature of mind (Big Mind), displayed and arrayed for our experience of relative conceptual mind (Small Mind) simultaneously, all the time. Yes, it is through conceptual analysis via the narcissistic self-ego-I that we confuse and question the simple inexorable truth of the moral law of cause and effect in human action, in a word, karma. Qualitatively and quantitatively, what we do, is what we receive.

The contents of ordinary thinking, feeling mind arise from the vast primordial awareness-consciousness "groundless ground" of everything, by whatever name or

concept. Here knowing subject and perceived object—subjective and objective—these two dimensions of our human cognition, are always a prior ontic and present epistemic unity.

For Dōgen then, time is not a mysterious logocentric entity, vessel or "thing" that contains the world and its beings. Time is the actual epistemic nature or experience, or presence of our being in the world. Being here in time is this wondrous unity of ultimate primordial consciousness-Being Itself and relative instantiations of it, some of that self-conscious beings like all of us. This whole then is the unity of being and time that is Dōgen's Ugi/Being-Time. Again, relative conventional time arises as the relative spacetime location and display of ultimate Being Itself. Being Itself is ontologically prior to its expression and display in time. This whole shebang is a process of Ugi (Ch. 5 on Dōgen).

Hence, being does not arise in time, nor in spacetime. Time arises because Being Itself needs a place to happen. Basal awareness-consciousness itself is the "supreme source" (kunjed gyalpo) or ground in whom its instances arise, not the other way round. In other words, relative human consciousness being here in time does not arise from physical brain. Rather, brain matter, indeed all matter arise and play and return to ultimate consciousness itself.

Ultimate consciousness itself is ontologically prior to its relative spacetime instantiations. Getting this contrary results in all manner of discomfiting and painful epistemic, scientific, philosophical, behavioral and moral error (avidya, marigpa, ajnana, hamartia-sin, ignorance).

To be sure, this top-down "grounding relation" view is most counter intuitive to 400 years of our deep cultural background Western reductionistic Materialism and Platonic local "common sense Realism".

Yet the perennial wisdom view is that the vast expanse of the unbounded whole that is the interconnected, interdependent (pratitya samutpada) continuum of being descends (involution), and ascends and returns (evolution) endlessly. Form arises in

this boundless emptiness (shunyata) ground, abides in relatively real time awhile, and returns again to emptiness, without ever having departed its original ground state. Heady wine indeed.

Formless, timeless primordial being becoming in time is sui generis; inherently original, trans-rational and nondual, yet arises descends and manifests as relative, real temporal and spatial form—the Two Truths).

At risk of belaboring this main point, being in time is the continuity of interdependent, impermanent change/motion arising through/in its perfectly subjective (subject/object unity) primordial matrix awareness-consciousness ground, a vast participatory causal matrix, this unbroken whole that is trans-conceptual, nondual monistic primordial panpsychic/cosmopsychic awareness-consciousness—reality beingitself (Ch. 13).

Viewed historically, movement/motion/change rides the life-breath of instantiated spacetime embodied presence of this vast basal original ground, consciousness itself. Ordinary direct pre-conceptual, "primordially pure", naked perception, the pre-reified, pre-empirical, trans-conceptual, luminous nondual primordial awareness of this great process, moment to moment, is for us profoundly good. Trans-conceptual contemplative practice reveals the direct experience of this. The affective emotional quality is a feeling of wellbeing, interconnectedness with everything and everyone, peace, bliss—Happiness Itself.

The less direct, objective, conceptual/discursive understanding of this great process is also good. The "feeling of being", subjective awareness of this great process, at the Heart, is good. These three cognitive awareness modalities—these modes of being here, sensing, reason, and feeling awareness—are always already an ontic prior unity, prior to discursive thinking about them. To paraphrase Genesis, Buddhism and common sense wisdom: it's all good.

For Vajrayana Buddhism, nondual ultimate Being Itself, instantiated in relative objective time, is Samantabhadra, Dharmakaya Adi Buddha, the All-Good

itself. Tat Tvam Asi. That I Am; bright Presence of That abiding always at the "spiritual" Heart (hridyam).

For the "I Am That I Am Presence" of Moses and the Prophets (Isaiah 41:10), and of Jesus the Logos-Christos—as expressed in the I Am literature of the New Testament —ultimately I Am always That I Am Presence. That (tat, sat, logos) is, and has always been our "supreme identity", our origin and our destiny, and "That which you seek" (Luke 17).

Therefore, for the Hindu, the Buddhist and the esoteric Christian traditions being in time is the bright Presence—by whatever name—of the ultimate Good that always, already pervades our relative, conventional being here in relative time; for those with eyes to see. Who am I? Once again, Tat Tvam Asi, That I Am!

Yes, centuries of our Great Wisdom Tradition's masters—the Christ and the Holy Saints, the Buddha, Adi Shankara and hundreds of mahasiddhas—have demonstrated through their lives and their teaching that deep meditative/contemplative prayer and its assiduous practice makes the human happiness inherent in the path to realization of our innate Love-Wisdom Mind Presence real and certain.

There is still a bit of relative time to do it. We shall now see that time is ultimately illusory, as Einstein, Vedanta and Mayahana Buddhists know, yet relatively time is all too real for most of us.

Time in Physics and Philosophy. The nature of time, the metaphysical assumption of a real objective time, the problem and opportunity of time, undergirds all of our philosophical, quantum and cosmological questions. Understanding time—conceptually, trans-conceptually and transpersonally, is key to resolving the perennial metaphysical conundrums of ontology—what is this being in the world—and epistemology, the knowing of the nature of this being in the world.

For physics and cosmology, understanding time, its objective and subjective dimensions, is imperative to the prodigious desideratum of the unity of the gravity of GRT, with quantum QFT/QED in a providential Quantum Gravity Theory (QGT). Any

propitious post-Standard Model physics and cosmology depend upon what we choose to do with 1) our objective concepts and 2) our subjective experience of time. We wish to know our being here in time both conceptually, and trans-conceptually; and more, the complementary nondual union of that.

Relativity—Special, General, and ontological—is about time. The gravity of Einstein's Relativity (SRT and GRT) slows the apparent expansion and flow of objective time (t). Time is crucial to Special Relativity (SRT), its generalization as GRT, and the quantization of the gravity of GRT in QED—the grail quest of a mathematically consistent Quantum Gravity Theory (QGT).

Indeed, I have argued here and elsewhere that it is the continued failure of GRT evolution to consider both the objective and subjective dimensions of time that has stalled progress on a QGT. We know that both GRT and QFT/QED are incomplete, and headed for more inclusive augmentation, and unification. Moreover, we know, if we think about it, that mathematics is finite and cannot ipso facto penetrate the heart of infinity which is required for a QGT, or a physicalist Theory of Everything (TOE), for that matter.

Broadly construed, physics has given up on time. With its dismissal of objective time (t), its refusal to explain why or how, and to address the subjective dimension of experienced time, physics has been remiss.

Where the mathematics of GRT theory "breaks down" at the infinite Planck scale singularities of black holes and at the Big Bang beginning of time physicists must perforce engage metaphysics. In short, physics and astrophysics must fully engage the metaphysics of human being here now in time if we are to move forward into a subtler understanding.

Sadly, it is the anti-metaphysical bias of a bygone old paradigm hyper-objectivist, super-physicalist Metaphysical Scientific Materialism and Metaphysical Local Realism that has stalled scientific progress toward the emerging Noetic Paradigm (Ch.14 and Boaz 2020) that includes the awakening new physics paradigm, and with that a

portentous, but probably logically impossible Theory of Quantum Gravity; or an auspicious post-empirical metaphysic that embodies even a more holistic gravitas.

At least one thing is objectively, empirically, even logically certain in this regard. If a QGT requires a mathematics that must penetrate infinite singularities, and such a mathematics isipso facto logically impossible to the task, then a mathematical QGT, along with an objective physicalist Theory of Everything (TOE) is utterly precluded, as we have seen above in our discussion of Kurt Gödel's Incompleteness Theorems. Yet, such objectivist data is grist for the metaphysical mill that is our brave new world of post-Standard Model physics.

Thomas Kuhn in his startling 1962 The Structure of Scientific Revolutions has told that a waning old "scientific paradigm" following its "scientific crisis" requires at least a couple of generations before the acolytes of the old "web of belief" die off to be replaced by eager new paradigmatic minds. Paradigm cases in point: The classical Newtonian Paradigm and the post-classical Quantum Paradigm that now ascends to our emerging Noetic Paradigm in science, culture and spirituality (Boaz 2020).

Perhaps, with the dawning of this inchoate Noetic Paradigm, we can improve upon our dismal Kuhnian history.

The unification of GRT's gravity of curved spacetime, the realm of the very large, with Relativistic Quantum Field Theory (QFT) and electromagnetic QED, the realm of the very small, one may hope shall produce a sublime intellectual offspring embodied as a consistent QGT; the conceptual unification of the metaphysically vexed prior and present unity of the two—if this is logically possible at all.

Because the being of stuff in relative-conventional physical spacetime (particles, fields and forces) is inherently quantum in nature, this unified quantum understanding of gravity, "Einstein's Dream", is most essential; yet still eludes us.

Clearly, ideological thrashing about and grasping at old paradigm scientific tribalist biases—our objectivist "idols of the tribe" (Appendix B), both GRT and QFT idols—must evolve in theory, and in more basic syncretic metaphysical wisdom. This

especially includes the theoretical denial of both the objective and subjective dimensional reality nature of time by Einstein, and his General Relativity heirs. Physics denies the objective reality of time, but fails to explain it, or offer an alternative explanation. Have we thrown out the "baby" of subjective metaphysical, experiential phenomenal time, with the "bathwater" of mere objective relativistic time (t)?

Because phenomenal being in time is inherently subjective, a post-empirical, post-objectivist metaphysics is unavoidable. Let us surrender our fear of intelligent metaphysical speculation in our pursuit of time. After all, the foundational theories of physics and cosmology are metaphysical theories.

For example, there is no logical or even empirical objective proof for our well defended presumptions of the purely objective, purely physical nature of matter and energy inherent in the prevailing "scientific" ideology that is monistic Scientific Materialism/Physicalism, and Scientific Local Realism.

Indeed, from such a Western "scientific" metaphysic arises the presupposition that the physical matter of brain creates human consciousness, rather than the equally speculative Eastern metaphysic that perfectly subjective primordial consciousness itself is the all embracing ground of all this objective, physical stuff arising and instantiated therein.

Is time observer-dependent, theory-dependent and thus ontologically relative to sentient observations (Bohr, von Neumann, Quine, J.S. Bell, Smolin, Wheeler); or is time observer-independent, theory-independent and absolute, existing in a "real cosmos out there" (RCOT), as Einstein, David Bohm and the classical physicalist ideology of Platonic Newtonian Scientific Local Realism and Materialism would have it to be? (Or is it neither, or both?)

Let's then explore the principal physical and philosophical theories on offer to see what benefit to our unified understanding may arise there.

Physicists have not been kind to time. Time in both GRT and QED has indeed fallen on hard times. For Einstein, objective time (t) is reduced to a

"persistent illusion". Recent physicists and cosmologists under sway of GRT, also see time as illusory. For Pythagoras, Plato (middle Dialogues), and for Einstein and theorists working with GRT toward "Einstein's Dream" of a Theory of Everything physical spacetime reality is essentially timeless. The time (t) term of Einstein's SRT, and his GRT field equations is suppressed, if not denied altogether.

For recent physics, in contradistinction to Newton's classical absolute time, our experience of time is subjective, and therefore illusory. Other than objectivist bias, why must our subjective experience of being here in time always be illusory?

I say, the inscrutable conundrums of modern science—including our metaphysical grail quest for a Quantum Gravity Theory (QGT) shall gradually be resolved as we grow through the ideological constraint of a dogmatic objectivist, materialist/physicalist old physics paradigm into the light of first person, introspective, even contemplative scientific methodologies wherein time is seen as relatively local and real, but ultimately nonlocal and illusory (avidya maya). Such a methodological program does not of course preclude the wondrous objective voice of mathematics and physical theory.

In short, the physics and metaphysics of time possess two faces, namely, objective and subjective, both arising as a continuum of physical, mental and spiritual form from the formless ground of the primordial Deep, just as the Mahayana Buddhists and Veda-Vedanta have told for centuries.

Therefore, stuff in time appears real; so let it be real. Just not inherently absolutely, permanently, eternally real. Must spacetime matter-energy as it appears in time be either absolutely real, or absolutely illusory; either exclusively existent (monistic Materialism), or exclusively nonexistent (monistic Idealism). Is there any reason, other than cognitive bias, that we must insist on a dualist binary, either-or explanation?

Therefore, remembering the perennial truth of the Two Truths, let time be relatively really real, but in the post-empirical world of the Noetic Revolution in science, culture and spirit, let time be ultimately illusory. Through such an integral view we overcome the inherent dualism of our human mind (Ch. 2).

Being and Time: Objective and Subjective. We've seen that in his SRT and GRT Einstein reduces time (objective time t) to a "very persistent illusion". Just what is this illusory time for we acolytes of General Relativity doctrine—which verily, includes the unbroken set of nearly all current physics practitioners, and philosophers of physics and cosmology. What's missing from this limited objectivist picture? Enter, the objectivist taboo against the intrinsic ultimate subjectivity of time.

We have just seen that the ambit of the metaphysics of time must transcend, yet include, the mere objective physics of time. So let's explore, all to briefly, the subtler subjective dimension of time (Boaz 2020).

For SRT objective time (t) is but a quantity of Minkowski's 4D spacetime. The proper question is, what are the subjective properties of time beyond its mere quantification as a dimension of an illusory bygone spacetime? We wish to know as well the qualities of our subjective experience of time, do we not?

Prior to its geometrical quantity (t) as a physical location/place—time is qualitative: psychological, phenomenological, historical, literary. Time is a local place for event-like stuff to happen. We've seen that for Zen Master Dōgen, time is Ugi, or Being-Time—ultimate primordial awareness-consciousness-being itself, the boundless whole; and our subjective experience of That. Formless nondual Being Itself, original ground, involves itself as the forms of time and space. Human consciousness is thus being in time; participating in this vast expanse of the unbounded whole (mahabindu) in which human consciousness is instantiated (Dōgen above, and Ch. 5).

Physics denies the existence of both past and future tenses (Presentism). Edmund Husserl, father of European Phenomenology, along with Mahayana Buddhists see beyond such objectivist, reductionist quantification to the always present, but often ignored or denied subjective qualitative dimension of this arising, appearing reality that

is being in time. Indeed, on Dōgen's accord, to deny a subjective personal past and future is to lose human meaning altogether.

Experienced time has the psycho-emotive quality of "lived time", that is to say, subjectivetime consciousness requires the presence of a sentient, observing experiencing consciousness. Thus, any present moment now for an observer-experiencer is present to both the past, and to the future of that being.

Therefore, tensed time presupposes presence—the consciousness of a present observer. Notions of past and future require a present observing consciousness to sequence them. So, in this present moment now we naturally, necessarily live in a tensed present.

Physics denies—in contradistinction to the complementary metaphysics of Zen wisdom of Dōgen Zenji—a tensed qualitative reality and reduces time to the mere objective quantity (t), a spatial location, a dimension of Minkowski's four dimensional spacetime continuum—our quantitative geometry of spacetime.

In short, the objectivist reduction of time to the mere objective time (t) of relativistic physics leaves the subjectivity that is the human being quite outside!

How do we get back in? What wisdom shall penetrate this conceptual dark cloud of unknowing—our inherent conceptual uncertainty? Please read on.

Hence, a cursory metaphysical analysis reveals that time is clearly more than a purely objective physical quantity; and it is not reasonably reducible to the mere objective spatial 4D geometry of relativistic physics, nor to the physical brain of a conscious participant.

Again, time is, holistically viewed, sui generis, non-reducible, and transconceptual. Or as the Zen masters have told it, "Who are you in the space between two thoughts". In objective observer-independent physics time (t) abides as a physical quantity. What we need is a subjective, qualitative observer-dependent time arising within the context of the consciousness of a present observer. GRT reduces time (t), unlike the qualitative observer-dependent view of SRT, to an observer-independent quantitative location in space. This must be so should we choose to restrict our view to only the objective dimension of our being here in this bright inwardness of time's transcendent subjectivity. But why must we so limit our cognitive and emotive experience of time? Habit? Fear of the unknown (the taboo of subjectivity)? The biased momentum of an objectivist, realist, materialist ideology? All of the above?

On the other hand, QFT/QED sees time as observer-dependent; ontologically relative to the consciousness of a sentient observer. Unification of these two? Quantum Gravity wherefore art thou?

Whence this complementary pair of objective and subjective reality dimensions that are the two voices of our mind nature? What is their original nature before the Taoist One became two, and the two became the multiplicity of the mental/physical spacetime dimension of this world? Is not the noetic doublet of the whole of both our objective and subjective experience requisite for a full understanding of our ontologically prior and present unity with the primordial ground or base of all this present arising light-form embraced therein?

Note here that the perennial conversation between objective science and subjective religion/spirituality usually presumes a concept/belief supernatural, theistic, even anthropomorphic Creator God—not to be conflated or confused with a pantheistic, panentheistic, or panpsychic subjective view or experience of a trans-rational, transpersonal nondual ultimate primordial ground of our being here in this miracle of objective time. If an objective dualistic theistic Creator God, existing separate from His creations, is presumed to exhaust the meaning of God, then dialogue among theists and non-theists will continue to miss the point of pantheism and panpsychism/cosmopsychism altogether (Ch. 13). As if ineffable godhead could be created and constrained by our human concepts and beliefs. Oh human hubris!

Is not whole real God—theistic or otherwise—greater than our concepts and beliefs about God? Are we human beings created in God's image; or have we created an

objective anthropomorphic God in our image? Must godhead be only objectively theistic?

Conflating these views—outer exoteric objective, and inner esoteric subjective—risks missing the mark entirely of the trans-conceptual ultimate perfectly subjective primordial ground. This vast unbounded whole—Being Itself, prior to its manifestation in time—transcends, subsumes and embraces all relative and ultimate views, and all of our concepts, beliefs and feelings about the ultimate ground of being, by whatever name or concept, and the meaning of That for we who participate therein.

Primordial Ground: In Whom Does Time Arise? With the collapse/decoherence of spacetime ("The End of Space", above), what is the fundamental ground of all of this arising relative, conventional, classical spacetime stuff with its foundational global non-objective quantum wave function ( $\Psi$ ) that is the mysterious quantum emptiness ZPE vacuum energy, Dirac's "zero womb", analogous to Buddhist shunyata boundless emptiness/dharmakaya? What is its nature beyond mere concept and belief (namarupa).

Such learned discourse demonstrates our nondual wisdom tradition teaching that all of this spacetime cosmic form arises from, and is inherently embedded in a formless, atemporal, panpsychic kosmos. This all inclusive ground is ontologically prior and present trans-empirical, trans-rational, non-spatial basal primordial awareness-consciousness-being itself, by whatever name or concept. It is this vast formless ultimate unbounded whole of being in whom all of this temporal arising, including us, are relatively really "real" (vidya maya) arising consciousness instantiations (Appendix C: "Toward an Integral Ecology of Mind").

Our participating conscious observer knowing "Wisdom Mind Presence" of that great whole has, as we have seen, an exoteric, quantitative objective aspect, and an esoteric, qualitative subjective aspect—numinous face of this boundless whole that is "innermost esoteric" core of the perennial wisdom tradition of our species. Whether quantum ZPE emptiness, or Buddhist interdependent boundless emptiness, we must

abide the inherent conceptual uncertainty of kosmos. Wisdom Mind knows this as the wisdom of uncertainty.

Knowing that the ultimate nature of appearing reality is beyond our objective rational cognition, yet recognizing the subjective nondual wisdom herein may well be "the wisdom of uncertainty"; but here's the catch. This perfect subjectivity requires that we culture our innermost Wisdom Mind. And that takes a bit of integral mindful contemplative practice.

And that takes a "radical skepticism" of our present objectivist, physicalist "global web of belief". Such recursive "bracketing" or placement of our well defended concept and belief systems and cognitive biases in momentary abeyance, that we may directly, trans-conceptually receive what abides prior to, is indeed rare. Thus do we balance our objective knowing with our subjective wisdom. Not so easy. Cognitive growth requires a bit of courage; does it not?

Be that as it may, it is this, our natural, subtle, not at all supernatural original face that is denied or ignored by the prevailing dualistic, obsessively objectivist ideology of Metaphysical Scientific Materialism/Physicalism.

Remembering the Two Truths—Relative objective conceptual, and Ultimate subjective trans-conceptual, we reflexively utilize objective science and logic to critique itself. Just so, we use our subjective "innermost esoteric" Wisdom Mind to reveal our self-ego-I narcissistic, often destructive cognitive biases.

As we accomplish this rather spooky task we begin to understand that binary truth-functional (true-false) logical, habitual objectivist "scientific" reasoning results in a plague of discomfiting logical contradictions. Immanuel Kant, in his portentous The Critique of Pure Reason (1781, 1787) called these cognitive variances "antinomies". Such conceptual/belief contradictions belie the possibility of conceptual objective certainty.

Cases in point: 1) quantum uncertainty and nonlocality; 2) the mathematical incommensurability of QED and GRT in a logically consistent Quantum Gravity Theory; 3) Gödel's Incompleteness and propositional undecidability; 4) mathematically

consistent alternative geometries (which one is the correct one); recent physics abandonment of the objective reality of space and time ("The end of space" above); 5) physicists denial of the possibility of defining the ultimate nature of matter; 6) The failure of finite mathematics to penetrate infinite singularities at the Big Bang and in black holes, and many more—all of them nails in the proverbial coffin of logical scientific objective certainty.

The primordial ground of space and time? We've seen that for Buddhism's Mahayana Middle Way Madhyamaka Prasangika the primordial ground of arising spacetime physical and mental phenomena is the prior and pre-existing kosmic nondual unity of all cosmic arising form. This ostensible subjectively certain proposition is perfectly subjective Ultimate Truth (paramartha satya)—trans-conceptual, nondual all-embracing panpsychic perfect Sphere of Dzogchen, the Great Completion (Ch. 13), formless "groundless ground"—in which, or in whom arises and appears the duality of Relative Truth (samvriti satya), physical form, conditional spacetime E=mc² stuff. Once again, physical form or matter is not ultimately real; it's real via perceptual imputation and conceptual reification. Here, physics and Buddhism agree.

The cosmic irony here is that Middle Way Two Truths Buddhist View attributes more objective reality to appearing stuff than recent post-Standard Model physics; in spite of physics' inconsistent insistence on reducing what has become a most problematic spacetime existence to the Local Realism of a "real world out there" (RWOT).

In other words—as if we have not already enough big words—arising objective physical and mental form are spacetime, relatively real non-separate instantiating participating parts arising in this ultimate perfectly subjective primordial ground state; formless boundless awareness-consciousness whole itself.

This vast unbounded whole is the one truth, invariant through the consciousness processional of all our cognitive dimensional state and stage changes—exoteric objective and esoteric subjective; preconscious, conscious and super-conscious; dualistic self-eqo-I, and our trans-conceptual already present nondual Wisdom Mind.

The formless panpsychic/cosmopsychic whole transcends yet embraces the quantum emptiness potential of zero point energy (ZPE) quantum vacuum of form, physical source of the worlds.

Our open loving Zen Mind Wisdom Mind Presence—vidya, rigpa, gnosis, logos-christos—of this nondual original primordial ground or "supreme source" in whom this all arises and participates—conceptual and trans-conceptual contemplative continuing experience of that, is how we know the truth of the matter of our being here in time.

This always already present indwelling, innermost Wisdom Mind penetrates and heals, for those with ears to hear, the illusory dark cloud of human unknowing that is being here in time—our trans-rational "wisdom of uncertainty" (H.H. The Dalai Lama 2000; Wallace 2012; Klein 2006; Wilber 2017).

David Paul Boaz Dechen Wangdu www.davidpaulboaz.org www.coppermount.org