Explorations

ISS Theory: Cosmic Consciousness, Self, and Life Beyond Death in a Hyperdimensional Physics

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Abstract

The *Infinite-Spiral-Staircase Theory (ISST)* posits a hyperdimension of consciousness populated by faster-than-light, high-energy, sub-Planckian *sygons* pervading the pluriverse. This HD is in fact triune, a braid of hyperspace (Center, C), hypertime (Rhythm, R) and consciousness (Syg, S), topologically organized as a double phi-based golden spiral set on a double BlackHole-WhiteHole Kerr system. Within the Terminal Black Hole of a parent universe, all matter-systems are translated into pure CSR information or syg-fields steered by the sub-quantum sygons; and through the White Hole at the origin, these syg-fields are translated back from virtual sygons into post-Planck particles and matter systems, still retaining the sygons as a 5th dimension at their core. ISST builds on the *Semantic Fields Theory (SFT)* in modeling a semantic layer of organization in all systems—their syg-fields (semantic fields) ranging from proto-consciousness to self-consciousness. As human beings, our mind or consciousness is our global syg-field, organized in dynamical networks and steered by syg-energy—the sygons (Hardy 1998, 2001, 2003). The ensemble of all syg-fields form the cosmic CSR hyperdimension of consciousness, as a gigantic hologram, self-conscious and evolving.

Positing a consciousness-HD layer in the universe leads to envision a new paradigmatic stand in philosophy as well as in physics. The syg-HD operates clearly beyond-spacetime and is a beyond-matter layer (thus in accord with dualism); yet, given that consciousness-as-process is steered by the sub-quantum sygon particles, the syg-HD is definitely a blend of energy and mind (as in monism/materialism). Thus ISST reframes the mind-body split in a complex dynamical network systems' framework, as a consciousness HD existing at a sub-quantum scale in all matter systems (thus setting a type of panpsychism), and also as a bulk in its own CSR-HD region.

At the scale of the pluriverse, the spacetime regions of specific universe-bubbles are constantly birthed and then die. The HD preexists and survives to these matter regions in the BH-WH double spiral, and pervades them during the life of a universe.

In a consciousness-HD (syg-HD) framework, consciousness and our mind—the syg-field—operate mostly via the HD, and only a small part of our syg-field is branching into the brain's neuronal networks. It is because the Self and the mind belong to the syg-HD that they instantiate psi capacities, high meditation states, and some independence from spacetime. In this framework, death is just the severing of links to the brain-body and the Self, at death, becomes fully independent from the body and enjoy (in the HD layer) the same intelligent, creative, and individualized capacities as when embodied, yet with greater psi capacities.

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INTRODUCTION: ADDRESSING COMPLEXITY AND A MULTI-LAYERED REALITY, THE NEW PARADIGM IN SCIENCE

While physics has been plagued by four centuries of materialism, psychology and philosophy were, during that same period, trapped into the insoluble antinomy between idealism (mind wholly different from body/matter) and materialist monism (mind as a by-product of body/brain); in the mid 20th century, the materialist paradigm became enforced in science.

My theoretical stand in Semantic Fields Theory (SFT, Hardy 1998) was that both positions—materialism and dualism—are lacking, something amply demonstrated by the fact that the *mind-body split* could never be resolved and that the qualia couldn't be accounted for unless one takes a first-person subjective perspective. In brief, we need a new paradigm. But there is also an arduous problem arising from these two positions' links to the two contending frameworks of physics—Relativity founding a perfectly ordered and causal spacetime, and QM instating indeterminacy at the quantum scale (with materialist monism espousing the causal and local one, and dualism partly so). As I argued in a 2001 article, at a certain threshold of complexity, causality and determinism break down. The complexity of neuronal networks in the brain, and that of multilevel webs in the mind and social interactions, demanded that we move *beyond causality and determinism* and postulate instead instantaneous or synchronistic inter-influences between complex semantic systems (such as minds or social groups). These could also imply retrocausality, that is, the influence of future events on past ones, as well as nonlocal proactive effects—modifying the future environment with intentions, a sort of proactive PK, as proposed in a Retrocausal Attractor modeling (Hardy 2001, 2003).

I. JUNG AND PAULI'S MIND-MATTER DEEP REALITY

In the 1950s, Carl Jung's work, discoveries, and his depth psychology, started to fully impact both the scientists and the public. One discovery was the concept of *collective unconscious*—a lattice of collective psyche connecting all human beings unconsciously (via their personal Self) with the planet (thus nonlocally); of course, this was clashing with biology and materialism viewing mind as local, i.e. contained in the 'space' of the brain (Hardy 2015c, JCER). Let's clarify that for Jung the personal unconscious has a subject—the Self—(just as the ego or 'I' is the subject of the conscious), and that the Self is a supraconscious entity, having access to the immense knowledge of the collective unconscious and able to guide the individual Self. Another concept was that of *synchronicity* as "spontaneous, meaningful coincidences" and connections at a distance, that he deemed "trans-temporal and trans-spatial," that is, nonlocal (Combs & Holland 1995; Peat 1987; Hardy 2004). Moreover, Jung's definition of synchronicity made clear

references to psi: in his book *Synchronicity* (1960, pp. 109-110), he defines three types of correlations between the mind's content and an event: "The coincidence of a psychic state in the observer (1) with a *simultaneous*, objective, event; (2) with a corresponding (…) external event taking place (…) *at a distance*, and only verifiable afterward; and (3) with a corresponding, not yet existent, *future event.*" Thus case 2 refers explicitly to clairvoyance, while case 3 refers to precognition. With physicist Wolfgang Pauli—one of the pioneers of QM—they stated in their fascinating correspondence that synchronicities were *acausal* phenomena, instantiated by a *deep reality*, in which mind and matter were blended; the name came to Pauli in a clear dream featuring this "deeper reality" at a scale below quantum fields and distinct from them (Pauli & Jung 2014; Hardy 2015, pp. 89-92).

This layer of deep reality, they postulated, was a psyche-matter medium in the universe, at a subquantum scale—a layer in which mind and matter were deeply enmeshed and merged. The synchronicities would be springing from, and expressing, this underlying connective lattice. Based on his clinical experience and the science of the Ancients (alchemy, mysticism, Greek and Middle-Ages philosophy), Jung referred to this deep layer (as the Ancients did) as "The One world" (*Unus Mundus* in Latin) or the "world soul" (*Anima Mundi* in Latin): "We have all the reasons to suppose that *there must be only one world, in which psyche and matter are one and the same*, and in which we establish distinctions for the sole purpose of knowing," says he in his autobiography *Memories, Dreams, Reflections* (Jung 1965). Jung and Pauli posed acausality (instantiated by synchronicities, the unconscious, and the Self) as a fundamental principle equal in strength to causality, but working through instantaneous meaningful interconnections, thus outside of time or space constraints.

As we'll see, the syg hyperdimension of consciousness (syg-HD) postulated by ISST fits perfectly their definition and accommodates the types of nonlocal processes that they listed as belonging to the deep reality, such as psi, the quantum entanglement, and the spin complementarity – Pauli's law of spin (Jung & Pauli 1955).

II. HYPERDIMENSIONS, MAJOR PHYSICS PARADIGMS & THE INDEPENDENCE OF MIND-SOUL

II.1. Hyperdimensional physics neither determinism nor indeterminacy

Physics has been seminal in showing us that the setting of any problem in an *either-or* logic is bound to fail. This is what happened during the nearly 230 years of debate between the proponents of light as waves (interference patterns) and those of light as particles (quanta and photons). From Huygens opposing Newton in 1678 to that of Young's 1801 famous double-slit experiment demonstrating wave-interference patterns (and still to our day spurting out unsolved paradoxical results), to Einstein solving the photoelectric effect by light quanta in 1905—both schools could cite successful experiments proving clearly that their theory was supported by facts. The ultimate solution had to be a leap into a paradoxical framework—light was both waves and

particles—a leap achieved by Louis de Broglie (1939) in his 1926 doctoral thesis, when he posited that all particles (such as electrons) are driven by what he called a *pilot wave*; soon followed by David Bohm (1980) who developed his own Pilot Wave theory (Bohm 1980; Bohm & Hiley 1993).

Yet physics once again fell in the grip of a dual competing logic, when it became clear that Einstein's Relativity (instating causality) was validated at the matter and spacetime scale or region (and the 2016 discovery of gravitational waves was its latest acclaimed success, see Hu & Wu 2016); yet, the quantum indeterminacy posited by QM was validated at the quantum vacuum and Zero Point Fluctuations (ZPF) scale. What was the reality of the universe then, and how could we ever get a picture of the whole universe—the Unified Field theory physicists are progressively building since Einstein spent in vain the last decades of his life looking for it? To do that, we had to make a leap toward hyperdimensional physics—a solution implemented as early as 1919 by Theodor Kaluza, soon joined by Oskar Klein in 1926.

Let's ponder a bit the crucial entanglement problem and EPR Paradox. Einstein rejected at first QM's indeterminacy (as posited by the Copenhagen or Bohr's interpretation), because he didn't want to let go of causality equated with order ("God doesn't play dice," said he). And this is why, with Podolski and Rosen, he proposed the famous *EPR* thought experiment to disprove QM. Yet Alain Aspect's experiments in 1982 (1982a, 1982b), using Bell's theorem protocol, brought a solid proof of the entanglement of paired particles and their correlation at such great distances that it forbade a signal transmission through space. Thus the entanglement was definitely shown to be beyond spacetime, that is, nonlocal. As John Bell stated it (disproving Von Neumann's previous argument), theories proposing nonlocal yet causal dynamics (such as de Broglie's and Bohm's pilot waves driving particles' behavior) could thus be a viable solution. The unnerving point is that, as history has it (based on Von Neumann's faulty but resilient argument), both QM and indeterminacy (as opposed to causality) were *proven* by Aspect et al. (1982a, 1982b) and other EPR-type experiments. Yet the entanglement conforms to Pauli's Law of Spin (or spin complementarity) for two entangled paired particles—that the sum of their spins always has to be equal to zero. Therefore, if an apparatus changes the spin of particle A (e.g. with a mirror) from +1/2 to -1/2, the paired particle B, even already as far as the moon, has to shift instantly from spin -1/2 to +1/2. That's what Aspect proved. Thus the entanglement, as a global dynamics driven by the Law of spin, is a clear contravention to indeterminacy, and to the opposite, it definitely is a nonlocal type of interconnection or influence. Then it can be modeled as an *acausal* or *synchronistic process* (as Pauli deemed it) or else as driven by a *formal cause*—an influence due to a more global organization, as in Aristotle's 4 causes and as opposed to material or billiard balls causality—such as Rupert Sheldrake's (2009) morphic fields. (The indeterminacy, nonetheless, remains at the level of each particle having such or such spin.) So that, in either case, it falls in the category of the nonlocal *hidden variables* (i.e., unknown causes or processes).

When Jung and Pauli defined synchronicities as *acausal* processes, it meant they instantiated a wholly different organization than material and sequential causality—a new universal principle of interconnection *beyond spacetime*, and as fundamental as causality. Then we are back to HD physics as the most probable explanation, and the only viable one at the present, given that materialist monism, positing a one-block spacetime, is out of the question, and given that dualism doesn't offer a real foundation or a substrate for consciousness in the matter and biological universe.

Since the mid nineties, I developed the Semantic Fields Theory (SFT) that postulates mind and Self to be complex dynamical networks coupled with the brain's neuronal networks but being nevertheless able to operate independently and beyond Newtonian-Einsteinian laws; for example, experiments show that psi violates EM inverse square law, and even linear time. In SFT, all systems and beings have semantic fields instantiating a layer of consciousness/sentience (from a proto-consciousness to a self-referent mind), and these can thus be part of a HD organization as posited by ISST (Hardy 1998, 2015). Semantic fields are steered by instantaneous network connections based on meaning and an index of *semantic proximity* (meaningful and affective resonances and links). These instantaneous network connections (that I call *spontaneous linkage process*), are also the basis of our mostly unconscious thought process (Hardy 1998, chap. 4). This connective dynamics based on links and meanings instead of causal chains, in my view, is the way synchronicities work; and ISST now clarifies the nature of the (semantic) syg-energy creating these connections, as being the HD sygons.

II.2. Hyperdimensional physics: only way to unify QM, GR, and the 4 forces

Theodor Kaluza, in positing a 5th dimension, showed that only hyperdimensional (HD) models could unify the four forces (Brandenburg 2011, Kaku 1994, Witten 1981). In 1919, Kaluza rewrote Einstein's equations with a 5th dimension, which was a 4th dimension of space—a hyperspace, best represented by a hyper-structure like a hypersphere or a hypercube (also called tesseract), like the one in Christopher Nolan's 2014 movie *Interstellar*. (See Figure 1)

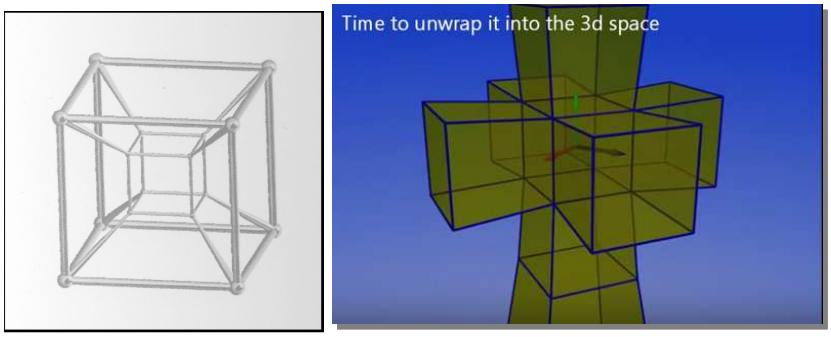

Fig. 1. A tesseract or hypercube. (a) Creator: Robert Webb, using Stella software. Find it at http://www.software3d.com/Stella.php Credit: Wikipedia Commons. (b) Extracted by CHH. On YouTube "Unwrapping a tesseract" (0'47") https://www.youtube.com/watch?v=BVo2igbFSPE)

Kaluza's solution produced both Maxwell's EM field equations and Einstein's field equations for gravity, plus a mysterious scalar field he called the *radion*. John Brandenburg (2011, p. 197) comments: "The boundary between geometry and forces was now gone, EM was geometry in five dimensions, and gravity was a force. The fields could now be unified." Then the mathematician Klein (best known for his *Klein bottle*) calculated that the 5th dimension not only had a physical reality, but was compact, that is, curled up in a tiny circle, the radius of which was Planck length (of about 10^{-33} centimeters). Klein's equation thus integrated Planck constant, and now, astonishingly, the equations of QM could be derived from it. The Kaluza-Klein theory (KK theory) was at the time overshadowed by the rise of QM, but it became forefront research in the nineties.

Several theories propose a hyperspace (5th extra dimension) in compactified or warped models (5thD extremely small, curled up) or in an extensive form called a *bulk*; the leading one by Lisa Randall and Raman Sundrum (1999), within a string theory framework, and called the Randall-Sundrum (or RS) model, implies a 5-dimensional *warped geometry,* and comes in two versions, one with a bulk. In the bulk RS model, the 5D bulk surrounds two branes, the Planckbrane (on which strings are 10^{-33} cm in size, the Planck length), and the Tevbrane, our 4D world (16 orders of magnitude higher, at 10^{-17} cm). Also, various superstring theories (9 or 10 D) pursued the integration of the four forces and were unified by Edward Witten into M-theory (1995), positing a multiverse with 11D, elaborated upon by Susskind (2003).

II.3. A hyperdimension of consciousness: integrating psi and psyche with physics

Just like in physics the only way to integrate QM and Relativity (the 4 forces) is by adding extra dimensions, so the only way to integrate consciousness with physics is by postulating a hyperdimension of consciousness that would then be blended to the physics hyperdimension. This solution is also required by the fact that a gamut of mental and psi processes operate beyond spacetime and cannot either be founded on indeterminacy since they are driven by meaning (see Bem 2011; Mishlove 1997; Mitchell 1996; Nelson *et al* 1996; Radin & Nelson 1989; Targ *et al* 1979.) Therefore they can only be grounded by positing a hyperdimension of consciousness—one that would, just like hyperspace in the Randall-Sundrum bulk model, surround and contain the 4D spacetime universe. Bernard Carr (2007, 2014) proposes a hyperdimension based on sheets (2D brane surfaces) to account for consciousness (mainly in its perceptual and psi facets).

While SFT and ISST postulate a type of panpsychism, some may question ISST's solution consisting in integrating consciousness with physics in a single physics paradigm that, nevertheless, is not a monism (even a dual-aspect one). Let me clarify my own position.

Physics cannot anymore tolerate having two distinct sets of theories reflecting contradictory paradigmatic stands—spacetime causality versus quantum indeterminacy; it has worked ceaselessly to bridge the gap, pursuing Einstein's grand vision of a unified theory. Following the same logic, we cannot any longer allow to have two paradigmatic

stands to account for the whole universe—one physics-based and the other addressing the reality of the mind (and awareness/experience). And even less so to have so-called Theories of Everything (TOEs) accounting for a matter-only universe (but not accounting for awareness of that matter-only universe), especially when the latest data show that ordinary matter (particles, atoms, stars and galaxies) amounts to only 5% of the total energy of this universe.[†]

Jung and Pauli laid the foundation for such a unified theory of a mind-matter universe. They observed and modeled a region, or deep reality, in which mind and matter were merged. The Self and the collective unconscious bathe in this deep reality, in which acausal instantaneous meaningful connections are the prominent dynamics (as in synchronicities). ISST postulates this deep reality to be a triune hyperdimension (hyperspace, hypertime, and consciousness). Both models (rather complementary) have an impact on the question of life after death. But first let's review the survival question in the light of the main actual paradigms.

II.4. The survival question within major physics and philosophy paradigms

Let's note first that the question of a consciousness living or dwelling in an extra dimension is much wider than just our survival beyond bodily death; it has also an impact on whether any entity (intelligent or not, in any galaxy or any region of the pluriverse or multiverse) may inhabit another manifold than our 4D spacetime. For example, do fifth or eighth dimensional beings exist, the way they have been pictured in various movies, such as W.D. Richter's *The Adventures of Buckaroo Banzai Across the 8th Dimension* (1984) or Christopher Nolan's 2014 *Interstellar*? Could some intelligences dwell in an unfathomable hypertime? Could immaterial spirits such as fairies or angels have some reality?

It has always been recognized that in our materialistic-reductionist monist paradigm in which only matter is considered to be real, no survival of the soul, nor any immaterial or extradimensional being, may ever exist. The argument is that since mind or consciousness cannot function independently from the brain's neural networks or space localization, then it doesn't exist without it and the death of the brain-body means the death of its captive mind. However, with 95% of the total energy of the universe being non-matter—either dark matter or dark energy whose nature is still an enigma—the materialist paradigm has suddenly become, at the turn of the century, somewhat of an antiquity. As for Cartesian dualism, with mind being a totally different substance than matter/body/brain, of course non-matter entities (souls or n-dimensional beings) are allowed and therefore the survival of bodily death as well. However, dualism has failed to give a satisfactory ground for the observed two-way interactions of mind with the brain-body. As for, idealism, it has no explanatory power either, being it is too is weak at

[†] See the PLANCK cosmology probe team's release of March 2013, then early 2015 at: http://en.wikipedia.org/wiki/Planck_%28spacecraft%29 - 2013_data_release [last accessed 10/16/2016]

explaining consciousness without a material body, and it has clarified neither the nature nor the processes of individualized thoughts and experiences.

An interesting solution is that of Rupert's Sheldrake morpho-genetic fields: a theory positing that fields of form (morphic fields), of a nature different from the biological and matter systems, would in-form these systems (and even behavioral and mental processes) via *morphic resonance*, acting as the memory of a type or family of systems and guiding their morpho-genesis (thus along memorized paths). Morphic fields would then be akin to a *formal causation* (one of Aristotle's four causes). Let's note that Sheldrake and other scientists have conducted successful experimentations that lend credit to the existence of such non-matter fields guiding the organization of biosystems or the psyche (Sheldrake 2009).

Let's see now the two contending paradigms in physics. Each one of them, taken alone, is a dead-end just as far as a viable and evolving universe is concerned. How much more about one in which intelligent beings like us—not even to mention n-D beings—could dwell!

(1) A fully deterministic universe, run by spacetime laws (Relativity framework), doesn't allow the creation of novel organization, of diversity and transformation in matter- and bio- systems. It doesn't lead to evolution and innovation in nature (not even to the Darwinian *selection* or simply the *favoring* of the fittest), nor to creativity and choice, and even less so to free will and consciousness!

(2) A fully random and indeterministic universe (QM framework) wouldn't even allow a spacetime or any law whatsoever to exist—even less so intelligence! (We have to grant that intelligence leads to innovation and thus the creation of order.)

In order to give a foundation to the evolution of matter- and bio- systems, to conative processes (intention, will…), to choice, creativity and consciousness, we need a layered and complex universe, one favoring the interplay of (1) fixed laws (spacetime), (2) stochastic processes (randomness at the quantum scale), (3) nonlinear dynamics (chaos theory) leading to the creation of novel organization, and lastly (4) a dimension of sensitivity, choice, intended behavior, and intelligence, in a word, *consciousness*—all intermingling and interacting. In brief, to simply get to an evolving universe allowing intelligence to blossom, we need some leeway from set laws (in the form of diversity, chaos, divergence, change), and a selective or intentional ordering of this chaos and diversity—at the minimum as a Darwinian *favoring* or *selection* within life forms, at best as basic intelligence.

But now, if we want to have also the types of nonlocal processes we observe (1) in psi (communication and influence beyond brain localization and beyond spacetime laws), (2) in the unconscious (archetypes and Self guiding the ego and providing information), and (3) in some physics dynamics—such as the entanglement, faster-than-light speed during the inflation phase, etc. (Guth 1997)—then we need to posit a hyperdimension—not only as hyperspace (and possibly hypertime), but also as a HD of consciousness.

And within a physics+consciousness HD (that gives a foundation to all nonlocal processes, whether physical or mental ones), then the nonlocal part of the mind-psyche can dwell and live as a self-conscious and evolving entity, autonomous from the body with which it was coupled. Thus, given that all semantic fields (the Selfs or sentient entities) of beings and systems belong to, and exist within, the semantic or Syg hyperdimension, ISST postulates that the death of the body/brain does not entail the death of the hyperdimensional Self. To the contrary, the syg-field acts as an informational, sentient or self-conscious field—as a Syg HD field (hyperconsciousness), coupled with a morphic field (Center HD or hyperspace), and a frequency field (Rhythm HD or hypertime). The triune HD allows evolved self-referent systems such as human psyche-minds to not only keep on living beyond the death of the body, but to do so as self-conscious cognitive entities (the Self or soul), endowed with volition, intention, autonomy, and able to learn and evolve. Furthermore, the HD gives them access to greater nonlocal cognition and psi capacities at large. While the ensemble of all the Selfs (of all cognizant individuals) form the collective or cosmic consciousness that is the triune HD (Jung's Anima Mundi or collective unconscious), the individualized Selfs maintain their own individuality and personal sensitivity, experience, knowledge, memories, mode of thinking, network of relations, emotional bonds, etc. This, whether having an actual body in 4D spacetime, or after the death of this body.

Ironically, a triune hyperspace-hypertime-consciousness HD also solves the dualism-monism conundrum: mind and consciousness are different from spacetime as in dualism, and yet they have an energy component—something that can always be translated in virtual mass—as in materialist monism. Moreover, this HD (in ISST) is pervading all matter systems by being at their very core, and is thus strongly coupled with them, and yet autonomous. This, of course, is in agreement with Gödel's (1992) theorem—that the coherency (self-consistency) of a system can only be founded on a more global level than that of the system itself. In brief, the self-consistency of spacetime can only be founded on an extra-dimension.

Let's turn now to the framework postulated by ISST.

III. ISST: COLLARS OF UNIVERSES EMBEDDED IN THE HYPERDIMENSION

III.1. The Infinite Spiral Staircase Theory (ISST)

The Infinite Spiral Staircase Theory (ISST) postulates a hyperdimension (HD) at the very origin of the universe, that would have contained all the information about myriads of systems optimized in previous universe-bubbles (UBs), as a cosmic DNA, this information being the blueprint of matter- and bio- systems that would then, due to their nonlinear dynamics, evolve during our universe-bubble timeline as new types of systems.

This hyperdimension is both consciousness and a topological order (geometric or rather, geodesic) in the form of a spiral driven by the logarithm of phi—thus a *golden spiral*. A golden spiral embeds, at each quarter of circle, a specific radius (and thus

frequency) following the Fibonacci sequence, each radius being a multiple of phi = 1.6180). This sequence is infinite, and thus the Infinite Spiral Staircase bears a quasi-infinite set of frequencies (or frequency spectrum) starting from the virtual infinite (at the X Point of origin) down to Planck frequency (happening at 10^{-43} second of the universe). At the Planck scale (the first quantum), the frequency of the universe is about 10^{43} hertz (Planck frequency is precisely 1.85×10^{43} s^{-1}), which means that the quantum-scale universe vibrates more than 10^{43} times in one single second. How much more near the X-Point, where this frequency tends to the infinite. It's only after Planck's scale (acting as a threshold), with the frequencies getting lower, and the radius (and wavelength) of the universe larger, that particles, space, time, and thus causality are allowed—and all the Standard Model particles will appear in due order, starting with the Higgs boson, and they will acquire mass while crossing the Higgs field. ISST calls this region the Quantum-Spacetime or QST manifold, driven by QM + Relativity. In contrast, the hyperdimension exists before and below Planck scale, this HD thus occupying the pre-spacetime, at a sub-Planckian or sub-quantum scale. Many physicists have argued that the laws acting before Planck scale (still unknown) are of a different order than the ones we know are acting beyond it. Yet Stephen Hawking (1988, 2003) predicted sub-Planckian wavelengths inside a Black Hole's (BH) event horizon, in an argument referred to as the *Trans-Planckian Problem*. And John Brandenburg, following Erik Verlinde (2010), argues that gravity can be fundamentally tied to entropy as a cloud of states (an entropic state-space) above Planck scale, and that this co-dependence makes it necessary that it be founded on a sub-Planckian cloud of states, or frequency spectrum, thus giving some weight to the ISS' frequency spectrum (Brandenburg & Hardy 2016). Let's note also two theories postulating a constant death and rebirth of the universe: Penrose's (1989, 2010, 2014) *Conformal Cyclic Cosmology* that resets entropy at each new origin, and Lee Smolin's *Fecund Universes Theory* (1997) positing that massive black holes (issued from dead stars) may be the seed of budding universes, which would retain some of the parameters of their parent universe. However, neither Penrose nor Smolin postulated a hyperdimension (and even less so a consciousness HD).

III.2. A triune HD as hyperspace-consciousness-hypertime

In ISST, the HD is triune: firstly the immense set of frequencies forms (by *phi*) the HD of time—hypertime—spread in virtual space along the steps of the spiral; secondly, the set of radii produces (by *pi*) the bows (quarters of circles) of the spiral, and thus forms hyperspace as a curved line, thus time-like. Hermann Minkowski, modeled the light cone in 1908 (using Special Relativity), as a hourglass in which events/particles (at the center or present time) have straight *worldlines* running into the future (top cone) and from the past (bottom cone). Outside of the double-cone is the Elsewhere (beyond spacetime), in which time is space-like (extended), and space is time-like (a line). The cosmic ISS, as HD, presents a space-like Hypertime and a time-like Hyperspace; but it adds another dimension: an HD of consciousness, the semantic or syg-HD, which is the whole spiral itself and its immense databank as a set of frequencies. Thus, the language of the cosmic

hyperdimension is music, and its dynamics are basically spins and resonances, waves and interferences, "spin networks" and "loops" (as in Smolin 1997; Sarfatti 2006)—myriads of meaning-driven networks of frequencies (as closed, spinning, strings) that will form the seed of the syg-fields expressing (coding for) all systems existing in our universe-bubble.

This is why hypertime is called Rhythm-Rotation (R), and hyperspace is called Center-Circle (C), and the semantic/syg HD is called (S). Thus the ISS is embedding the creative dynamics of pi and phi—two non-finite numbers. HD Center is the dynamics of the center (or node) creating its circle (via pi) to set the organizational closure of its own system—and in the process it creates the identity of a specific system (a property that will be essential in our 4D region, as systems and chaos theories have shown). As for HD Rhythm, by oscillating, each bow puts its circle/torus in rotation and creates a sub-quantum wave-particle carrying its own frequency, a *sygon*, that, due to its entanglement with HD Syg and HD Center, is a semantic system by itself. The sygons will be propelled from the ISS by its initial thrust and energy and will create our whole universe-bubble with its two regions, the HD bulk and the quantum-spacetime or QST.

As we know, any frequency is a wave and thus a virtual string/particle; and since we are in pre-spacetime, the virtual particle is sub-quantum of course, but it has also a speed immensely superior to C (the speed of light limit being effective only within the QST region). Thus all bow-frequencies of the cosmic ISS are ejecting faster-than-light (FTL) sygons (and networks of them) endowed with the properties of the CSR HD, notably, information and consciousness.

The ISS spiral at the origin is a White Hole (WH) issued from the Terminal Black Hole (BH) of the previous universe-bubble. This double BH-WH system has been modeled by Roy Kerr (1963); it has an hourglass or X-funnel shape (hence the name I give to the origin, at the center of the hourglass: the X-Point).

As the WH starts erupting from the Terminal BH (TBH), the spiral staircase unfolds (and enlarges) at blinding speed and ejects myriads of sygons whose wavelengths get larger and larger, while their frequencies decrease. The first and highest frequency sygons (called *Free Sygons*) will launch the bulk of the HD—as a large and curved region, probably spindle-shaped. When the sygons' size reaches Planck length, they will start interfering and creating a foamy lattice—the Higgs field—and later and bigger sygons will take on mass while crossing it, becoming the particles of the Standard Model. Yet all particles of the QST region retain at their core the sygons, as a sub-Planckian, compact and curled-up hyperdimension. These particles will *create* the spacetime region as they dart along, propelled by the ISS initial energy, itself issued from the TBH—starting with the first wave of neutrinos (the decoupling of the neutrinos happens within the first second), then the photons wave (the photons' decoupling, within the first 2 minutes) will illuminate spacetime and leave the relic radiation or CMB, the Cosmic Microwave Background that we detect now at about 370,000 years after the Big Bang.

These first waves of particles will form the spacetime region (as a spindle or near cylinder) *within* the HD larger region, with the vacuum and zero-point-fluctuations (ZPF)

as a membrane demarcating the two regions—QST and CSR HD. (Such a complex boundary membrane has been modeled by Jack Sarfatti, 2006)

III.3. The sygons in-forming the syg-fields (consciousness) in complex systems

The sygons are consciousness-as-energy, semantic or syg-energy belonging to the CSR hyperdimension. They are able, via the HD Rhythm, to interact instantaneously and exchange information between the systems they dwell in. They constitute and drive (via HD Center) the self-organization of the syg-fields of all systems, whatever their complexity (from a proto-consciousness to a mind). All systems within spacetime have syg-fields, that are their self-organizational dynamics and information, and their identity as systems. And the syg-fields of all systems (whether a rock, a tree, a person, or a planet) (1) are conscious, (2) embed the whole evolving information about this system, and (3) form the HD of this system. This is of course the foundation of the panpsychist view of ISST.

- *At the human individual level*

For human beings, syg-fields are the whole dynamical semantic network of the person (intelligence, mind-psyche-body organization, self-consciousness, memory, emotions, skills, etc.). Human syg-fields are complex dynamical networks, multilevel, that comprise myriads of semantic constellations, each steering a set of cognitive acts in a specific domain of activity (such as driving, reading, etc.), each being network-linked to associated, co-evolving, constellations (Hardy 1998). The syg-fields belong to the CSR hyperdimension, yet each constellation is coupled to all neuronal, physiological and somatic systems needed for its functioning in the 4D world. The dynamics are based on meaningful connectivity and networking, on parallel and multilevel processing, rather than on hierarchy (top-down) and commands as in dualism.

For us human beings, our syg-field is our whole individualized consciousness field/network, that is, our mind and semantic dynamics + psyche + body consciousness + our relational and interactive network. The Self is the supraconscious subject of our syg-field, while the ego (the 'I') is the subject of our ordinary state of consciousness, the one taking care of our social interactions (Jung 1960, Tart 1969). The distinction Self-ego (whatever the terms used) is the basis of many inner, initiatory, hermetic, mystic, spiritual, and religious paths of knowledge—defined as a striving to harmonize oneself with our higher or spiritual Self (soul, atman, Ka…). And in ISST, this makes a lot of sense if we understand that the ego-consciousness is mostly centered on the social and physical world. In contrast, the Self (via the syg-field and the sygons) can have access to the collective consciousness and the capacities allowed by the hyperdimension—meditative and spiritual states of consciousness, psi communication at a distance in space and in time, influence on bio- and matter- systems such as healing, connection to the collective unconscious and its immense accumulated knowledge… In ancient cultures such as the shamanic ones (covering Aboriginal and Siberian ones and most African, Native American and South American ones, and also pre-buddhist Asiatic ones, as well as in eastern religions, alchemy and esoterica, we know that a gamut of practices have

been developed in order to reach or operate within the "spirit world" or dreamtime (e.g. the shamans' out-of-body trance, the possession trance), or to achieve this ego-Self harmonization (e.g., the nagual or Eagle consciousness in Yaqui culture, samadhi meditation states and yoga paths, mystical fusion states in Christianity and Islam)—many of these paths of knowledge said to lead naturally to the awakening of *siddhis* or psi capacities such as clairvoyance, prediction, healing. (Let's note that the field of psychological anthropology acknowledges that most ancient cultures, as its pioneer Erica Bourguignon (1976) observed it, had a form of trance, and these are sorted out as either shamanic (intentional and volitional conscious trance) or else possession cults (impersonation of spirits without self-consciousness within the trance.)

- *At the collective and cosmic levels*

Carl Jung has defined the *collective unconscious* as a sort of lattice or medium of communication among all human psyches (and their subject the Self), in which *archetypes*—collective psychic blueprints (such as that of heroes) endowed with consciousness and an immense "psychic energy"—may influence the psyches of individuals attracted to them. Yet, on the one hand, Jung integrated the animals and plants in this collective unconscious, in an alchemical way, for example as symbols and archetypes (expressing the guidance of the Self), or else as animal or plant *souls*—a perspective that concurs with that of the shamans on sacred plants and animals, viewed as self-conscious and able to guide and teach individuals on a quest (for example in South and Central America). On the other hand, the collective unconscious, as Anima Mundi, partakes of a sort of supra-consciousness (as an entity, a whole, being more that the sum of all psyches/Selfs constituting it) that Jung deemed *trans-temporal* and *trans-spatial*, thus definitely nonlocal, and the stuff of the *deep reality* that, with Pauli, they explored at a later time. And there, we meet the concept of an extra dimension.

In ISST-SFT, the part of the psyche that is not strongly coupled with the brain-body and contains all the information is the HD syg-field (whose subject, or organizing self-consciousness, is the Self). The syg-fields of all individuals and all systems form a hyperdimensional collective consciousness at a planetary level (collective unconscious, Anima Mundi), fueled by syg-energy, and in which the linked or resonant syg-fields (the personalized mind-psyches) keep interacting and exchanging qualified information (via the sygons). Let me note that when viewed from the perspective of the 'I' or ego involved in the social and material spheres, his/her own Self and syg-field are relegated to the unconscious; it is mostly with a self-development, shamanic, or yogic, path that the Self or Atman may become part of conscious awareness. (The leap from SFT [1998] to ISST [2015] consists in modeling the syg-fields and the semantic dimension as a HD, and syg-energy as HD sygons.) And at the cosmic scale, the CSR HD is the ensemble of the syg-fields of all systems (matter-, bio-, or just *HD systems*) in our universe. This is why the HD is not only self-conscious but quasi omniscient in this universe, and why it is a collective and evolving Anima Mundi at the cosmic scale, system-linked to all its components syg-fields (all minds and all systems' psyches). As a consequence, any syg-

field with enough syg-energy may have an influence on any group of syg-fields (e.g. a society, a planet), or even theoretically on the whole.

This is in total contrast with a creator god who would be of a different substance than his creation/creatures and would only issue commands, and with a one-time-created and non-evolving creation. (Note the parallel in logic with the dualist framework of a mind only issuing top-down commands to the brain-body.) In ISST, not only each psyche-mind is a personalized and meaning-generating part of the hyperdimension, but the evolution of the whole—The One—is instantiated by the evolution of all its parts—the individual syg-fields of all systems, each a self-conscious and free creative entity. Now, since syg-fields are networks and use a connective dynamic based on meaning, the syg-field itself (e.g. that of a human being), as a system, is already a collaborative, dynamic, self-organized and constantly evolving, self-creation. The cosmic HD is just the same type of semantic dynamical system at the cosmic scale—its *body* being the matter region of the universe, that is, the QST. Thus, the cosmic consciousness is constantly evolving because its component systems —the individualized syg-fields/minds—are in a permanent creative evolution by themselves. In ISST, the cosmic consciousness is only the ensemble of all the Selfs of all beings and systems—it is a One-Plural, a multifaceted holographic self-conscious system, yet an entity who is more than the sum of his/her parts but who evolves via his/her self-conscious parts (the syg-fields). Moreover, being beyond spacetime and nonlocal, the self-conscious cosmic HD knows the far past as well as the future and its lines of probabilities. The trends toward specific probable futures are constantly reorganized with the real time creative input of all beings and minds of all intelligent civilizations (via their syg-fields). So that the cosmic anima is, like us, an individual constantly self-creating and self-organizing her/his mind and mindscape with intelligence, creativity, sensitivity and art, and through myriads of connections with other syg-fields and their environment. Yet, as a One-Plural, her/his knowledge and capacities are more that the sum of the minds-psyches composing it, and therefore we can expect that she/he is endowed with wisdom and hyperconscience.

- *ISST: On the ontological side*

(1) The global systemic and holographic framework of ISST is that the triune hyperdimension (CSR HD) preexists the spacetime region (QST) and gives birth to it, thus forming a collar of universe-bubbles (Figure 2). So that a universe-bubble like ours consists of a CSR HD preexisting, then birthing, surrounding, and pervading the QST region whose boundary is the quantum vacuum and Zero Point Fluctuations.

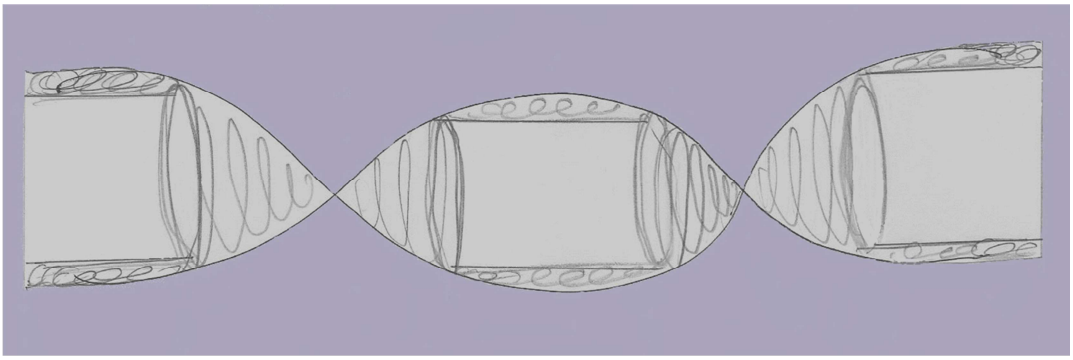

Fig. 2: A collar of universes: The CSR hyperdimension existing in the Phi-based spirals in a BlackHole-WhiteHole system, and surrounding the QuantumSpacetime (QST) region.

(2) The information-seed of all systems evolving in spacetime is transmitted from a parent universe-bubble via the cosmic CSR HD (acting as a cosmic DNA) via the ISS' immense data bank at the origin. Therefore, there is no *creatio ex nihilo* (creation from nothing), and no personalized divine creator as totally different in substance from his non-divine creatures. In contrast, all beings have a HD Self (or soul) and their ensemble constitutes the collaborative cosmic hyperdimension. Then all beings and even matter systems—all having a HD syg-field—not only partake of the One-Plural, but continuously in-form or create the Whole who has given birth to them. It is a sort of self-creating consciousness loop at all scales.

(3) The self-creating, self-organizing, and self-conscious cosmos is neither deterministic nor random; but rather the creative interplay of both, plus nonlinear dynamics and creative intelligent input from the beings that constitute it.

(4) The whole cosmos (HD+QST) is a collective intelligence, a multilevel system both in its wholeness and in its parts (Hardy 2015b).

(5) ISST posits a type of panpsychism since all systems have a consciousness-HD core (the sygons as a compact HD), the syg-fields of these systems being more or less evolved (from a proto-consciousness to a mind).

(6) The universe's global organization is holographic and self-conscious—all parts have the information of the whole, and can influence groups of syg-fields.

(7) The cosmos is a fine-grain blending of mind and matter, at all scales.

(8) ISST's paradigm of a self-conscious cosmos and collective consciousness is a leap beyond monism versus dualism, beyond QM versus Relativity, beyond the mind-matter and mind-body split.

(9) The image of a personalized god creating the universe at a specific point in time switches to a collective consciousness perpetually self-creating through the input of all its parts—the syg-fields of all beings and systems, and relatively to their syg-energy strength—and who, as a holographic system, keeps learning and evolving at all scales.

(10) An interesting consequence of the ISST model is that all intelligent civilizations in our universe are somehow co-evolving among them and influencing each other

(despite the fact some could be a million years ahead of us or behind us), and moreover they are also co-evolving with the planetary bodies they inhabit.

(11) And of course ISST transforms deeply not only the perspective on human freedom and free will, but it has also a deep impact on the question of life after death.

IV. CONTINUOUS LIFE OF UNIVERSES AND BEINGS IN THE HYPERDIMENSION

IV.1. Birth and death of universes: the cosmic scale

Since the triune hyperdimension (CSR HD) preexists the spacetime region (QST), we have, in between universe-bubbles (UBs), a Kerr BH-WH system. ISST postulates it to be—within its two singularities—pure Center-Syg-Rhythm hyperdimension, that is, a field of dynamic self-conscious information or cosmic consciousness, as a near infinite set of frequencies spread in hyperspace on the phi spiral.

In the Terminal Black Hole of the previous universe-bubble, all matter- or bio-systems lose their matter layer and are transcribed (sublimated) into pure CSR sygonic semantic energy (thus forming the cosmic DNA). These were the systems that had been viable, enduring, and optimized in the previous parent UBs.

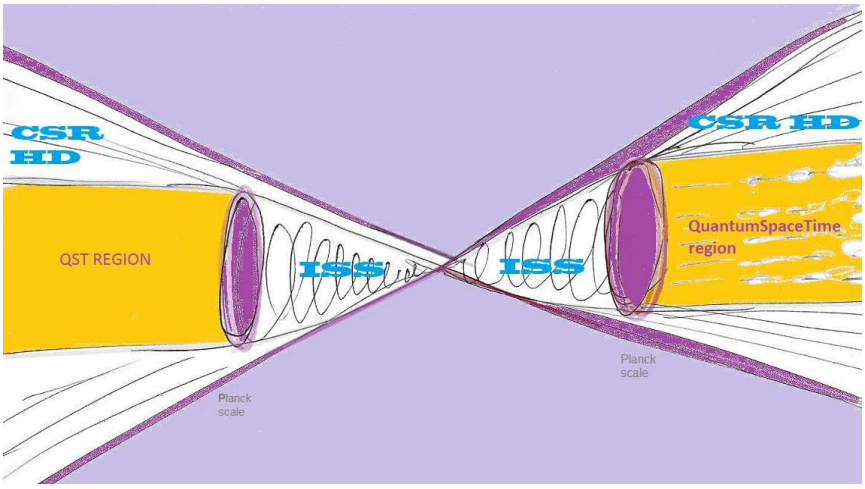

Fig. 3: Phi-based ISS spirals in a BH-WH system (Black Hole on the left; White Hole on the right), instantiating the pure CSR hyperdimension surrounding the QuantumSpaceTime region.

In the White Hole of a new UB (the birthing cosmic ISS), the bow-frequencies of the spiral eject FTL sygons, the nearer to the X-Point of the origin, the higher the frequency (and the smaller the radius). The early high energy sygons—the Free Sygons—ejected with tremendous momentum, will form the large HD region (in the form of a spindle) of what will become a UB. Then, when the bow-frequencies are down to Planck frequency, the sygons' wavelengths are so large that they start interfering, creating foam and loops at

the mouth of the ISS, thus forming a lattice in front and perpendicular to it, that will give rise to the Higgs field. The large sygons will now have to cross this lattice, which is becoming denser and denser, and they acquire mass and bloat in size, thus morphing into the particles of the Standard Model.

The first two waves of high energy particles we know of—the *decoupling* of the neutrinos (within the first second) and that of the photons (at 1.40 minute)—literally create the spacetime region as they speed forward, within the HD bulk already created by the Free Sygons, as a smaller cylindrical region. Meanwhile, the foamy lattice extends around the spacetime region as the latter moves forward (like a balloon) and becomes the vacuum, a complex boundary surface between the spacetime and the HD regions—behaving as the double membrane modeled by Sarfatti (2006), standing between spacetime and the sub-quantum Dirac sea of negative energy, and through which virtual particles tunnel). The (false) vacuum is an oscillating and bubbling surface boundary, showing permanent fluctuations of virtual particles (hence the ZPF indeterminacy). However, the Free Sygons had occupied the region that is now spacetime (QST), and they are still there, immensely more numerous than the large sygons that have been *clothed* in mass while crossing Higgs field—the known particles, assembling themselves to form atoms, then molecules, etc. The new particles retain in their core the original sygons (and their information), thus forming the 5^{th} D, compact (sub-Planckian), of these particles. These core-sygons are *individual ISSs*—a quasi-replica of the cosmic ISS, and bearing its information as in a hologram—and they constantly send sygons back to the source, the cosmic ISS, about their own evolving system. Thus, all systems, via their individual ISSs, are constantly in conversation with the cosmic ISS, and their information is imprinted on the cosmic ISS—acting as the Akashic information field (see Laszlo 2004). But here, in contrast with Ervin Laszlo's *A field*, this Akasha is sub-Planckian, that is, sub-quantum, and does not reside in the quantum vacuum iself which, in ISST, would bear only informational traces of the tunneling of sygons through the vacuum membrane, appearing as loops.

The ISS theory thus highlights the deep coherence and systemic dynamical organization of the pluriverse—the collars of UBs. It also brings an interesting understanding about a puzzling fact: that all simple atoms (hydrogen, helium, deuterium) still existing at our present time in our whole universe have been formed within twenty minutes after the Big Bang. If we consider that all particles and atoms bear a priceless information about all possible systems they can form or be part of, then nature being economical wouldn't get rid of this information and the atoms would keep on existing until they are transcribed back into pure CSR information within a black hole. It has been calculated that the photons from the first light (the photon decoupling) make up 96% of all photons reaching us—that is about 400 Big Bang photons by cubic centimeter around us when we walk in the street! (Bogdanov, 2004) The remaining 4% come from the light of stars.

So let's see the consequences regarding our topic, the post-mortem life issue.

In the collar of UBs, each UB receives at birth the cosmic DNA of its parent UBs (the information about optimized systems), yet it will be free to improvise and create, transform these systems, and make them evolve. So that in a Terminal BH, the information field on the cosmic ISS will be drastically different than the one received at birth (Hardy 2015a). The HD sygons (whether free or embedded as a 5th D in systems) are the deep reality of our universe, and they steer all nonlocal communications and inter-influences between entities—a constant two-way interaction with the origin, and among resonant syg-fields (such as minds); thus high states of consciousness and psi phenomena are instantiated by the sygons and the HD, including weird forms of nonlocality such as retrocausality or synchronicities (Hardy 2016).

In brief, at the pluriverse scale, there is no loss of information, ever. Matter is birthed by the hyperdimension, and when disintegrated within a BH, it is translated back into pure HD sygonic information imprinted on the ISS. Thus is preserved an axiom of QM, that no information is ever lost. As modeled by Nobel laureate Gerard 't Hooft (1993), the whole information about a volume (i.e., a BH) is inscribed on its surface (i.e., on the surface of the BH's event-horizon); consequently, the Holographic Principle states that all information about this universe is inscribed on the 2D surface of its cosmological horizon.

In ISST, the universe as we experience it in our 4D world had an origin and will die in a Terminal Black Hole (and numerous partial BHs before that). However, the *HD pervading* the universe, unfathomable, dwells beyond the birth and death of matter systems (including universe-bubbles); it is eternally existing as a self-conscious whole (the Hindu *Tat Vam Asi*—I am That, I am What is); yet, in contrast with a creator god deemed immovable and distinct from the created, the CSR HD is constantly evolving and learning through its component systems. As the whole is more than the sum of its parts, the cosmic CSR HD knows more than all of its parts but both its knowledge and its beingness, constantly evolving, are neither perfect nor total. Thus the ISS theory opposes the concept of a creator god—especially when viewed as immovable, omnipotent and omniscient. Its originality is that it is neither a creator god nor a blind materialistic universe, but a self-creating and self-evolving, multilayered, hologram. In brief, as a holistic (whole, coherent) and holographic system, the CSR HD knows all of its parts, and is self-conscious in its wholeness and in its parts as well. Thus, universe-bubbles are constantly birthed and then die (in terms of their QST matter region); yet their information is preserved and passed on to the following UB, via the CSR hyperdimension. Death at the cosmic scale is only a transformation, a translation into pure hyperdimensional consciousness; and birth is the reverse process.

Thus is shed a new light on an impersonal, yet self-conscious and creative Wholeness, with whom each one of us intelligent beings may communicate through our Self. The implicit aim of the perpetual creation of UBs would thus be the exploration and expression of creative acts and mind potentials by entities at all scales and at many embedded and interactive levels.

IV.2. The hyperdimensional Self alive beyond spacetime

We saw that ISST (and SFT) have integrated and elaborated upon Carl Jung's concepts of a collective unconscious, and of the Self as a supraconscious and transcendent subject of the personal unconscious, as connected to other Selfs and to the Anima Mundi (the collective Self as the One-Plural).

It is within cognitive psychology that I developed SFT yet, as a researcher on world cultures and PhD in psychological anthropology and a practitioner and expert on meditation and self-development techniques, I'm totally in accord with Jung's concept of the *individuation process* that reframes the ancient paths of knowledge and initiation in the language of depth psychology. Initiation paths are found in most ancient cultures and religions, as well as in Christian and Muslim mysticism. As Mircea Eliade (1954) has shown, initiation was a world-wide path of knowledge aiming at exploring the spiritual dimension of the world (the dreamtime for the Australian Aborigines) and at developing one's own mental and psi capacities, yet its practices differed with each culture.

Individuation and initiation reflect a layered cosmos and the perennial knowledge that: (1) each human being has a transcendent, supraconscious, Self (or soul), and an ordinary state of consciousness driven by the ego, which is more centered on one's body and social environment (Tart, 1969); (2) this Self can access a deeper knowledge than the ego, and activate new mind potentials by getting connected to the world soul or dreamtime. According to some ancient knowledge paths, enlightenment (or awakening) is the ego-Self fusion ("death of the ego," "Mystical or Alchemical Marriage"), and once attained, the individual reaches *beyond duality* (*advaita* in Hinduism) and can connect or harmonize oneself with cosmic consciousness (Brahman, the Tao, The One)

Now, let's focus on the topic of the bodily death for human beings.

SFT posits that the main part of our being is extra-dimensional, that is, operating in the *semantic dimension* beyond space and time (just as Jung had predicated it about the Self and the unconscious); and that only a small part of our semantic field is intermingled with the brain's networks and the body via eco-fields (body consciousness). In ISST+SFT, our syg-fields are thus operating freely in the syg hyperdimension and create spontaneous interconnections with resonant syg-fields (e.g., those of our loved ones, but also those of our pets, our houses, relished works of art and systems of thought, etc.). The Self is the supraconscious subject of the whole syg-field, and is steering the individuation process or ego-Self integration. As Jung showed it, it is the Self of a person who acts as a guiding entity in most symbolic and numinous dreams—mostly appearing as the repressed side of the psyche, either the feminine *anima* or the masculine *animus*, in order to balance the person's psyche—and this explains the representation of a personal *guardian angel*. And in one's life, the Self is ever devoted to the awakening of the ego and is able, from within the syg hyperdimension, to concoct synchronicities, events, or situations that will send a message to the ego.

Thus, to draw the global picture, the syg-field, being both the information-field of the person and steering his/her semantic and organizational dynamics, contains moreover the

whole dynamical memory of this person—as information, selfhood, organization, procedures, and processes.

In this framework, death is just the shedding of the bio-matter system by the Self—something like an uncoupling of the Self and its HD syg-field from matter—both Self and syg-field being highly personal and strongly individualized. In fact, the degree of originality of the syg-field and Self of a person is higher than that of their fingerprints because the syg-field is also the ensemble of their affective, social, and intellectual networks. Bodily death, for the individual Self, is just severing the connections to the brain's neuronal networks. However, all past connections of this person's syg-field with still living loved ones, objects, places and environment are enduring, because they are primarily psychic and mental (i.e., semantic) links and bonding. However, ISS Theory—as a cosmic consciousness framework—doesn't lead to any judgment of the souls or punishments after death. If the global aim of an incarnation is to learn and expand one's consciousness and talents, then it's likely that the Self will ponder its achievements and shortcomings during its past life; but this is only a learning process and has nothing to do with a condemnation and even less so with an eternal judgment; here, we only have a Self taking one's own responsibilities.

CONCLUSION: FULLY CREATIVE INDIVIDUALS POST-MORTEM

As we have seen, before/below Planck scale (at the origin, then surrounding the spacetime or QST region, and at the end of a universe bubble), there's the pure CSR HD—the syg-fields embedding the ISS, before they express (or clothe) themselves in matter after/above Planck scale, in the QST region (as in Figure 2). Thus, an interesting consequence of ISST's framework is the fact that a self-conscious hyperdimensional region leads to the necessary existence of beings and systems that would be pure CSR-HD systems (that is, syg-fields without material bodies in spacetime), and networks of them (such as groups of Selfs or souls). While these immaterial beings are devoid of ordinary matter or bodies, they nevertheless have a high syg-energy (as well as a morphic field) and may have an influence on the organization of matter systems in the spacetime region. This is similar to an alive human being doing a self-healing visualization and whose syg-field will transmit a healing energy toward his/her body. After the death of the body, the syg-field, as we saw, still exists as an intelligent, creative, volitional and evolving personality. Thus, the Self of a deceased person is a pure CSR HD being that exists only in the hyperdimension. I surmise that a pure Self (disembodied) wouldn't have as much influence on spacetime systems as an embodied Self on his/her own body, but could still tinker with 4D reality.

Another pure CSR-HD system could be the syg-field of a galaxy that has been swallowed by a Black Hole (at any point in the spacetime of a UB), and whose matter would have been crushed by gravity. It would now exist as a pure field of information—syg-energy organized as a syg-field and able, under favorable conditions, to act as galactic DNA and give birth to a new galaxy.

To give a more precise picture of the question of the survival beyond bodily death within the ISST framework, a deceased person, having shed his body, would be his pure Self—having all the memories and also the accumulated talents of his previous life. This is in accord with the Buddhist and Hindu concept of the Self (atman) being conscious between incarnations, in the Bardo.

Given the large research on communications with the deceased (e.g., Brune 2009; Gurney *et al* 1886; Myers 1903)—and my own experiences recounted in *The Sacred Network* (Hardy 2011)—my stand on this issue is that the pure HD Selfs (as individual *souls*—the deceased) (1) have maintained their individuality and their mindscape, (2) are still thinking, creative, acting, and learning, able of intention and volition, (3) they have kept their past relational network and have even added new HD friends to it, (4) they moreover enjoy the larger scope of a HD consciousness (reaching to any coordinates in space or time) that allow them to communicate freely with their past loved ones and colleagues, whether this is registered consciously or via their unconscious by the living individuals. (All these properties and capacities can be fluidly derived from SFT-ISST). This means that, as intelligent beings living in the 4D spacetime, the more we are able to connect and harmonize ourselves with the syg-HD—to our own Self through high meditative states—, and the more we may be able to communicate with HD beings.

REFERENCES

Aspect, A., Grangier, P., & Roger, G. 1982a. "Experimental realization of Einstein-Podolsky-Rosen-Bohm Gedankenexperiment: A new violation of Bell's inequalities." *Physical Review Letters*, Vol. 49, Iss. 2, pp. 91-94 (1982) doi:10.1103/PhysRevLett.49.91

Aspect, A., Dalibard, J., & Roger, G. 1982b. "Experimental test of Bell's inequalities using time-varying analyzers." *Physical Review Letters*, Vol. 49, Iss. 25, pp. 1804–1807 (1982) doi:10.1103/PhysRevLett.49.1804

Bem DJ. 2011. "Feeling the Future: Experimental evidence for anomalous retroactive influences on cognition and affect." *J. of Personality and Social Psychology, 100* (407-25). <http://dbem.ws/>

Bohm D. 1980. *Wholeness and the Implicate Order*. London: Routledge & Kegan Paul.

Bohm D. & Hiley BJ. 1993. *The Undivided Universe: an Ontological Interpretation of Quantum Theory.* London, UK: Routledge.

Bogdanov, I. & G. 2004. *Avant le Big Bang*. Paris: Grasset Poche.

Bourguignon, E. 1976. *Possession*. Corte Madera, CA: Chandler & Sharp.

Brandenburg J. 2011. *Beyond Einstein's Unified Field. Gravity and Electro-magnetism Redefined*. Kempton, IL: Adventures Unlimited Press.

Brandenburg JE. & Hardy CH. 2016. "Entropic Gravity in Pre-Spacetime & the ISS Theory of a Cosmic Information Field." *Prespacetime Journal 7(*5), 828-838. (April 9, 2016). <http://prespacetime.com/index.php/pst/article/view/968/944>

Brune F. 2009. *Les Morts Nous Parlent*. Paris: Livre de Poche.

Carr B. (ed.) 2007. *Universe or Multiverse*. Cambridge, UK: Cambridge Univ. Press.

———. 2014. "Hyperspatial models of matter and mind." In E. Kelly, A. Crabtree & P. Marshall (Eds.). *Beyond Physicalism: Towards Reconciliation of Science and Spirituality.* Lanham, MD: Rowman & Littlefield.

Combs A, & Holland M. 1995. *Synchronicity: Science, Myth, and the Trickster*. New York: Marlowe.

de Broglie L. 1939. *Matter and Light: The New Physics* (trans. W. H. Johnston). Mineola, NY: Dover Publ (original in French 1937).

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

Gödel K. 1992. *On Formally Undecidable Propositions of Principia Mathematica and Related Systems.* Mineola, NY: Dover Publ.

Gurney E, Podmore F., & Myers FWH. 1886. *Phantasms of the Living*. Forgotten Books.

Guth AH. 1997. *The Inflationary Universe*. Reading, MS: Perseus Books.

Hardy C. 1998. *Networks of Meaning: A Bridge between Mind and Matter*. Westport, CT: Praeger.

———. 2001. "Self-organization, self-reference and inter-influences in Multilevel Webs: Beyond causality and determinism." *J. of Cybernetics and Human Knowing,* 8 (3). UK: Imprint Academic. *https://independent.academia.edu/ChrisHHardy/Papers*

———. 2003. "Multilevel Webs Stretched across Time: Retroactive and Proactive Inter-Influences." *Systems Research and Behavioral Science,* 20, (2), 201-215. *https://independent.academia.edu/ChrisHHardy/Papers*

———. 2004. "Synchronicity: Interconnection through a semantic dimension." Presentation at 2d Psi Meeting, April 2004, Curitiba, Brazil. *https://independent.academia.edu/ChrisHHardy/Papers*

Hardy CH. 2011. *The Sacred Network.* Rochester, VT: Inner Traditions.

———. 2015. *Cosmic DNA at the Origin: A Hyperdimension before the Big Bang. The Infinite Spiral Staircase Theory*. USA: CreateSpace IPP.

———. 2015a. "Topological Dynamics Setting a Field of Information at the Universe's Origin. ISS Theory." Paper presented at the Space Technologies & Applications International Forum (STAIF-II). Albuquerque, NM, April 16-18. *https://independent.academia.edu/ChrisHHardy/Papers*

———. 2015b. "A systemic and hyperdimensional model of a conscious cosmos and the ontology of consciousness in the universe." *Proceedings, 59th meeting of Intern. Soc. for the Systems Sciences (ISSS)*, Berlin, Germany (Aug. 2015). *https://independent.academia.edu/ChrisHHardy/Papers*

———. 2015c. Nonlocal processes and entanglement as a signature of a cosmic hyperdimension of consciousness. *J. of Consciousness Exploration & Research (JCER)*, 6(12), 12/04/2015.

———. 2016 (pre-print). Nonlocal consciousness in the universe: Panpsychism, psi, & mind over matter allowed in a hyperdimensional physics. *J. of Nonlocality.* *https://independent.academia.edu/ChrisHHardy/Papers*

Hu H. & Wu M. 2016. "Celebrating Einstein's general theory of relativity: LIGO has detected gravitational wave predicted by Einstein 100 years ago." *Prespacetime Journal* 7(2*)*, February 2016, 442-444.

Hawking SW. 1988. *A Brief History of Time*. New York: Bantam Books.

———. 2003. "Cosmology from the Top Down." Paper given at Davis Inflation Meeting, 2003. http://arxiv.org/abs/astro-ph/0305562

Jung CG. 1960. *Synchronicity: An Acausal Connecting Principle*, in *The collected works of C.G. Jung: Vol. 8.* (Bollingen Series, XX), Princeton, NJ: Princeton Univ. Press.

———. 1965. *Memories, Dreams, Reflections*. New York: Vintage/Random.

Jung CG, & Pauli W. 1955. *The Interpretation of Nature and the Psyche*. NY: Pantheon Books.

Kaku M. 1994. *Hyperspace: A Scientific Odyssey Through Parallel Universes, Time Warps, and the 10th Dimension.* New York: Anchor.

Kerr RP. 1963. Gravitational Field of a Spinning Mass as an Example of Algebraically Special Metrics. *Physical Review Letters* 11(5): 237–8.
Laszlo E. 2004. *Science and the Akashic Field: An Integral Theory of Everything*. Rochester, VT: Inner Traditions.
Mishlove J. 1997. *The Roots of Consciousness*. New York: Marlowe & Co.
Mitchell ER. 1996. *The Way of the Explorer*. New York: Putnam.
Myers FWH. 1903. *Human Personality and Its Survival of Bodily Death.* London, UK: Longmans. https://archive.org/details/humanpersonality01myeruoft
Nelson RD, Bradish GJ, Dobyns YH, Dunne BJ, & Jahn RG. 1996. "FieldREG anomalies in group situations." *Journal of Scientific Exploration,* 10(1): 111-41.
Pauli W. & Jung C.G. 2014. *Atom and Archetype. The Pauli/Jung letters, 1932- 1958.* Princeton, NJ: Princeton University Press.
Peat FD. 1987. *Synchronicity: the Bridge between Matter and Mind*. New York: Bantam Books.
Penrose, R. 1989. *The Emperor's New Mind*. Oxford, England: Oxford University Press.
———. 2010. *Cycles of Time.* Oxford, UK: Oxford Univ. Press.
———. 2014. "On the gravitization of quantum mechanics 2: Conformal cyclic cosmology." *Foundations of Physics* 44(8): 873-90.
Radin D. & Nelson R. 1989. "Evidence for consciousness-related anomalies in random physical systems." *Foundations of Physics, 19,* (12), 1499–514.
Randall L, & Sundrum R. 1999. "An alternative to compactification." *Physical Review Letters* 83: 4690-93.
Sarfatti J. 2006. *Super Cosmos; Through Struggles to the Stars*. (Space-Time and Beyond III). Bloomington, IN: Author House.
Sheldrake R. 2009. *Morphic Resonance. The Nature of Formative Causation*. Rochester, VT: Inner Traditions/ Park Street Press.
Smolin L. 1997. *The Life of the Cosmos*. New York: Oxford Univ. Press..
Susskind L. 2003. "The anthropic landscape of string theory." *arXiv:hep-th/0302219*
Targ R, Puthoff H, & May E. 1979. "Direct perception of remote geographic locations." In CT Tart et al. (Eds.), *Mind at Large* (pp. 78-106). New York: Praeger,.
Tart C. (Ed.) 1969. *Altered states of consciousness*. New York: John Wiley & Sons.
't Hooft, Gerard 1993. "Dimensional reduction in quantum gravity". *arXiv:gr-qc/9310026*
Verlinde E. 2010. "On the origin of gravity and the laws of Newton." *arXiv:1001.0785 [hep-th]*
Witten, E. 1981. "A new proof of the positive energy theorem". *Communications in Mathematical Physics*. 80 (3): 381-402.
Witten, E. 1995. "String theory dynamics in various dimensions". *Nuclear Physics B*. 443 (1): 85-126. arXiv:hep-th/9503124

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