TECHNOLOGY, ART, & SCIENCE OF HOMO DEUS



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The one who plants trees, knowing that he will never sit in their shade, has at least started to understand the meaning of life. —Rabindranath Tagore

A bridge is a blend of poetry and practicality. By harnessing tensions and forces, we can span abysses, link separate lands, and create a structure of beauty. But soaring girders and graceful arches must be firmly anchored in a solid foundation, lest a load of unplanned aspirations cause a collapse, destroying both bridge and travelers on the dangerous but wonder-filled journey of life. —Kevin Cahill

The collection of 27 paintings used for the cover design is from AWARENESS ART by Mira Joy Vivant, Founder of AWARENESS ART MOVEMENT—a multisensory-experience exhibition of visual art, music, textile, fragrance, and confection, covering all senses of our experience in the phenomenal world, created for the purpose of elevating human consciousness to its higher reaches.

1. THE ECSTATICS: IMAGINING THE UNIMAGINABLE

Others have seen what is and asked why. I have seen what could be and asked why not. - Pablo Picasso

A truly new future is created by the *Ecstatics* in ecstasy. 'Ecstasy' means 'to stand (*static*) out (*ec*)'. The Ecstatics are those who stand outside. They stand outside of the time-bound self and the paradigm-bound system. The ultimate in creativity is that creativity which creates entirely new perceptions and conceptions of reality. That creativity is the highest expression of the human imagination. That is the creative imagination of the Ecstatics.

The Ecstatics are gifted with the ability to imagine the unimaginable. Their gift is not something given at birth but something earned through great effort. Johann Wolfgang von Goethe, an Ecstatic, said: "Everything that is worth thinking has already been thought; one must only try to think it again." In order to "try to think it again," we need already to have thought and to know "everything that is worth thinking." In order to think again and imagine anew, we need to have fully known and mastered the old, the tradition, the paradigm.

To know means to know all. Not to know all means not to know. In order to know all, it is only necessary to know a little. But, in order to know this little, it is first necessary to know pretty much. — George I. Gurdjieff

When we thus know all, we come to the boundary of the knowable and encounter with the unknowable. How can we know that something is unknowable? We can only know that something is known or unknown, but we cannot know that something is unknowable in the same way. How can we know that something is absolutely impossible? We can know that something is possible or impossible in the relative sense, but we cannot know that something is impossible in the absolute sense.

When we encounter with the unknowable at the boundary of the knowable, it transforms us to who we never have been, while it still remains to be unknowable relative to the paradigm in which and as which we operate and exist. When we encounter with the impossible at the boundary of the possible, it transports us to where we never have been, while it still remains to be impossible relative to the paradigm in which and as which we operate and exist.

When we thus encounter with the unknowable or the impossible, we are transformed to be an Ecstatic at the boundary between the knowable and the unknowable, and the possible and the impossible. We stand outside of the time-bound self. We stand outside of the paradigm-bound system. We simply stand out, alone and free, and become an Ecstatic.

George Spencer-Brown states in Laws of Form (1969):

A thing is not possible unless it is imaginable, and we could never confirm that it was possible unless it appeared in actuality. Thus, what is possible will always be found to exist, and its actual existence will be discovered soon after its possibility has been imagined. What exists [as a possibility] is formally constructed

by postulating the imagination of a hypothetical being about the construction of different existences. A totally different being will construct a completely different existence.

Thinking and doing follow being. Our thought and action follow who and what we are *being*. To construct a new perception or conception of reality ("completely different existence"), and to act to manifest that new reality, we need first be a "totally different being." An Ecstatic is that totally different being. 'Think Different' thus follows 'Be Different'.

Further, when we know all (*per* Gurdjieff), we realize that we ourselves have become the very problem that prevents us from evolving further in our knowledge, consciousness, and being. We realize that our *being* has become the *paradigm* which we must transcend in order to evolve any further. We thus find ourselves thrown into an existential predicament (a predicament is a complex of problems in which a solution to one problem contradicts or nullifies a solution to another problem):

"I am the problem which I must solve in order for me to evolve further, but I am unable to do so, because it is the problem itself that is trying to solve it. The presence of the problem in the very act of solving it negates the possibility of any solution. So long as 'I' exist, there is no solution and there is no evolution. There is not going to be 'my' evolution so long as 'I' exist, but if 'I' no longer exist, then whose evolution is it? Who or what is it that is going to evolve, if there is to be any evolution at all?"

Collectively humanity faces this existential predicament as well. Only few realize that we *are* the problem that are preventing a new kind of future from emerging. We have become our *ontological paradigm* (how we are being), *epistemological paradigm* (how we know and think), and *praxeological paradigm* (how we act and relate), which together create a host of problems, a predicament, that cannot be solved. Further, instead of allowing new generations to develop new kinds of consciousness, in the name of education we program them with our old, moribund, dysfunctional paradigms.

Yet, to choose to let go of your familiar self-identity and all that you know—to choose your absence instead of presence, your nonexistence instead of existence—is the most difficult thing to do. It is doing that is *not-doing*. It is doing that is *un-doing*. It is not only the most difficult thing but also it is in fact an impossible thing to do.

Paradoxical though it may sound, however, our evolutionary new solution, new transformation, and new future will come only through an encounter with the impossible of this kind. When we encounter with the impossible, if we can stay with its presence, following it wherever it leads without ever letting it out of our consciousness, without ever letting it go, a revelation will come from a source outside of ourselves. We then can begin to imagine the unimaginable and generate a new perception of reality hitherto unperceived.

The solution, the ultimate solution, is never an answer but the initiation of a quest in the intimate presence of the impossible. The unimaginable that we begin to imagine is at first a question that we have never imagined or thought to ask. The unimaginable is the question that we have never asked before, the asking of which *ipso facto* transforms us. The quest is eternal while answers are temporary. By *becoming* this quest, instead of being a body of known answers, we become the Ecstatics who are the transdimensional portals for the arrival of a new future.

Life is the eternal present in the temporal, and every moment of the now is the momentum of the eternal. From the eternal, with the momentum of the eternal, the Ecstatics create in time a future that will end, while the non-ecstatics, namely, the rest of humanity, repeat the future that has already ended.

The ancient Hindu cosmologists synthesized various personifications of the Hindu Deity into the *Trimūrti* (*tri*; three, *mūrti*; form), the threefold Supreme Deity, symbolizing the eternal regenerative process of the universe, consisting of *Brahmā*, *Visņu*, and *Śiva* in which *Brahmā* is designated as the creator, *Visņu* as the preserver, and *Śiva* as the destroyer-transformer of the universe.

The Ecstatics embody in their being and consciousness the *Trimūrti*. They are the trinity of *Brahmā*, *Visnu*, and *Śiva*. Therefore, they know that the future they create will end and be creatively transformed into a new future in this eternally regenerative universe. The Ecstatics are the precursor of *Homo Deus* to come.

2. FROM HOMO SAPIENS TO HOMO DEUS

HOMO FABER AND HOMO LUDENS

We *homo sapiens* (or *homo sapiens sapiens*), the only extant species of the genus *homo*, has evolved over the period of over 300 millenniums to create cultures and develop civilizations that are completely unique and singularly advanced amongst all living creatures inhabiting our planet, our solar system, and our galaxy.

Technology, art, and science are three of the spheres where *homo sapiens* has expressed its evolution in culture and civilization. Of the three, technology and art are as old as *homo sapiens*, and for milleniums until the time of the Renaissance, there was no real differentiation between the two. Etymology shows that the Greek root of techno-, *tekhne*, means 'art, skill, craft in work' while the Proto-Indo-European root, *teks-na*, means 'craft' and its root, *teks*, 'to weave'. Technology and art are thus pre-linguistic and pre-scientific in their origin, both originating and evolving as an aspect of the mimetic culture of the primitive humans from which emerged the oral culture of language and myth, and then evolved the literary culture of science and philosophy, weaving the luxurious tapestries of culture in the loom of evolution.

Technology and art are both expressions of creative imaginational human intelligence. This creative dimension of *homo sapiens* is captured by the designation *homo faber*, 'man the maker'. The first known use of this term was by Appius Claudius Caecus (c. 340 BC – 273 BC), a Roman censor and politician. In his *Sententiæ* (maxims) he writes: "Every man is the maker of his destiny ('*Homo faber suae quisque fortunae*')." In *Creative Evolution* (1907) Henri Bergson defines human intelligence as the faculty of creating artificial objects, and claims that humanity is essentially *homo faber*. Umberto Eco echoes Bergson in *The Open Work* (1989), stating that *homo faber* describes a manifestation of the innate being of the human being in nature. *Homo faber* thus captures an essential feature of humanity as the maker of artificial objects as well as of its own destiny.

Homo sapiens with its creative imaginational intelligence is also named *homo ludens*, 'man the player'. In *Homo Ludens* (1938) Johan Huizinga argues that the element of play has been essential for the creation of civilization, stressing the critical importance of the play-element *of* culture in culture for the development of a healthy and vibrant culture. When we are absorbed in a creative activity, we freely exert ourselves to please and delight ourselves. This voluntary act of self-pleasing or self-delighting is the essence of playfulness, which not only does not contradict but also includes the 'intentional suffering and struggle' that accompanies our effort at improving our skills for finer expression of our creative ability, imagination, and vision.

Creativity (*homo faber*) and playfulness (*homo ludens*) are evolutionally mutually conducive and reinforcing, culminating in the being of the Ecstatics among us. In the playful act of creation, *homo faber* and *homo ludens* evolve ever closer towards *deus faber* ('god the maker') and *deus ludens* ('god the player'). *Homo sapiens* thus teleogenetically (purpose-generatively) evolves towards *homo deus* ('man the god').

ŚIVA STRIPPED OF DIVINITY

The potential of human creativity is immense, but the potential of imperilment is also enormous. As the model of the *Trimūrti* demonstrates, the cosmic process of creation includes the phase of creative destruction without which the eternal regeneration of the universe is not possible. *Śiva* represents this creative destruction phase, which is at once the transformative phase. However, devoid of this creative context, *Śiva* stripped of divinity and wholeness, the force for transformation and regeneration becomes only devolutionarily destructive. This devolutionary destruction is what is meant by the concept of 'evil', which is curiously 'live' spelled backward. That is, *homo sapiens* can become *homo diabolus* ('man the devil").

Where there is a recognition of beauty as beauty, ugliness comes to be. Where there is a recognition of good as good, evil comes to be. —Lao Tzu

In the world of duality, without transcendence, evil, actual or potential, will always be with us. As James Carse reminds us in *Finite and Infinite Games* (1986), however, our desire for wanting to eliminate evil is essentially the same as the evil desire of *homo diabolus* to extirpate the unwanted such as political dissidents or religious infidels. The creative pursuit of technology, art, and science are three of the ways in which *homo sapiens* of today, and *homo deus* of tomorrow, can outwit the devil through wisdom.

Theodore John Kaczynski, the mathematical genius and domestic terrorist known as the Unabomber, wrote in his infamous 35,000-word "Unabomber Manifesto" (1995):

The system does not and cannot exist to satisfy human needs. Instead, it is human behavior that has to be modified to fit the needs of the system. . . [This] is the fault of technology, because the system is guided not by ideology but by technical necessity.

A psychopathic killer and diabolical menace to society, i.e., a *homo diabolus*, astutely identified the imperilment that is inherent in our modern technological society: "The system does not and cannot exist to satisfy human needs. Instead, it is human behavior that has to be modified to fit the needs of the system." That is, the creator becomes subjugated to its own creation that has its independent logic for its systemic survival and perpetuity. The creative human context becomes lost to the systemic necessity of the human creation, which becomes the new context to which the human context becomes subsumed.

What Kaczynski described is the predicament of the modern age—a trapping that we have set up for ourselves inside of the system of our own creation. Recognizing this trapping, the postmodernists made an attempt at resolving the predicament, but ended up producing yet another predicament, another trapping, which is the dissolution of the self and the system—of the creator and the creation in the voidance of a creative context or constructive framework. *Deconstruction* without reconstruction leads only to destruction.

Postmodernism is essentially reactionary; it is a psychoepistemological reaction to modernism and therefore it is fundamentally of the same mindset as modernism. For instance, for the contemporary modern-postmodern mindset, the predominant image of the human mind is that of a computer. The human mind has become an information processor, which is a function that can be performed in principle by other computing machines. We

have become excessively obsessed with the idea of developing artificial intelligence precisely because we have first made intelligence artificial: "If the mind is like a computer, why can't a computer be like a mind?"

T. S. Eliot asks, in the opening stanza of *The Rock: A Pageant Play* (1934): "Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?" In order to fulfill the immense potential of *homo sapiens* and *homo deus*, humanity needs not only to regain the lost wisdom but also to gain a new kind of wisdom, if it is to survive and thrive in the future. What would that new wisdom be?

TOWARDS NEW WISDOM

The English word 'information' is derived from the Latin root, *informare*, which indicates a transmission of intelligible content. The intelligible content that constitutes information is defined by, and thus limited to, what can be conveyed across a distance and into other contexts. This tends to imply a breaking down of a whole into movable bits, that is, into as simplified a form as possible so as to be able to be conveyed and transferred into new arrangements and contents.

Information is knowledge *about* something, as distinct from knowledge as direct acquaintance. There exists a fundamental separation between a reality and the variety of information that can be recorded about it. This separation between information and reality is the difference between information and presence, which lies at the heart of the decline of meaning that characterizes the modern and postmodern age.

Wholeness is indivisible (*analog*). In order to convert a whole intelligible content into movable bits (*digital*), the whole must be first reduced to a divisible totality (*digital aggregation*), and then the totality must be reduced to various aggregates of bits. In this two-step reduction process, the wholeness becomes lost, while, when bits of information become rearranged in another context, the best that can be achieved is constructing a totality, but not a wholeness, unless we bring to the knowledge assembled an invisible element that transforms a divisible totality to a wholeness, undivided and indivisible. What is that invisible element?

Information is inherently partial. Knowledge as a totality, comprehensive knowledge, can be achieved through a coherent structural integration of information. Wisdom is that intelligence which emerges when knowledge is held in the heart of wonderment where the eternal quest quickens. Wisdom is that intelligence with which what is known is enlivened by the unknown and enlightened by the unknowable. Wisdom is that intelligence which is the transcendental consilience, or the coincidence of opposites (*coincidentia oppositorum*), forming the cosmic conscience (*con-science*) that transcends paradoxes.

The unknowable is fundamentally irreducible to the known, and yet it transforms the knower. That invisible element that transforms a divisible totality to a wholeness is this irreducible element, the unknowable. That which is irreducible to anything else defines what the sacred is. Knowledge is thus transformed to wisdom with the infusion of the sacred into our intelligence. When the sacred is infused into our intelligence, and then when our intelligence becomes suffused with the sacred, we become intimately connected to the higher source. We become 'spiritual' in the true sense of the word. Therefore, the Ecstatics are by nature and by definition spiritual.

As the Ecstatics, *homo sapiens* will be able to fulfill its evolutionary potential and destiny as the 'man (*homo*), the wise (*sapiens*)'. *Homo sapiens*, integrating *homos faber* and *homo ludens*, will then be *homo deus* of cosmic wisdom. We may designate the homo *sapiens* aspect of humanity primarily as the scientist, the homo *faber* aspect as the technologist, and the homo *ludens* aspect as the artist. Through this holistic evolution of *homo sapiens*, these three aspects will become three integral constituents of the consciousness and being of *homo deus* of the future.

To imagine the unimaginable future of science, technology, and art is therefore to imagine the science, art, and technology of *homo deus* that is the teleogenetic integral of *homo sapiens, homo ludens,* and *homo faber*. The seed of *homo diabolus* will be continually transmuted to be a *Śiva*, the creative destroyer and transformer who ushers in a regeneration, a renewal. That future is the culture and the civilization that *homo deus* will be able to create as a *Trimūrti* incarnate who as the scientists, the technologists, and the artists embody the sacred *Brahmā*, *Visnu*, and *Śiva* in their regenerative creative expression.

3. BEAUTY, TRUTH, & GOOD

We have defined wisdom as the intelligence that is the transcendental consilience, the coincidence of opposites (*coincidentia oppositorum*), that forms the cosmic conscience (*con-science*) which transcends paradoxes. Beauty, Truth, and Good, herein capitalized, are three variations in the human experience of *coincidentia oppositorum* and of wholeness.

In so far as Beauty, Truth, and Good are three varied experiences of *coincidentia oppositorum* and wholeness, each contains a paradoxical tension, *suspense*, and a transcendental reconciliatory release, *catharsis*. That is to say, all three are *dramatic*. Also, as an experience of wholeness, each contains the other two within. Therefore, Beauty is Beauty because it contains both truth and good; Truth is Truth because it contains both beauty and good; and Good is Good because it contains both beauty and truth. Beauty is truth and good *perceived* in the world of *appearance*. Truth is beauty and good *conceived* in the world of *abstraction*. Good is beauty and truth *achieved* in the world of *action*.

A survey of philosophical descriptions of Beauty throughout history—from the ancient, through the medieval, and to the modern and postmodern world—confirms that however different the accounts of Beauty may seem on the surface, with a surprising regularity, the descriptions agree upon presenting Beauty as a *coincidentia oppositorum*—a paradoxical unity and a transcendental consilience of elements that would otherwise seem to stand in irreconcilable opposition.

Therefore, Beauty sought and achieved in art is the sublime experience of a transcendental consilience of the merely beautiful and the merely ugly of the dualistic mundane existence. Following Friedrich Schiller, we can say that Beauty fulfills our humanity in all of its irreducible complexity; however paradoxical it may seem, Beauty satisfies our desire for enlivenment, movement, change, surprise, and novelty, while simultaneously our longing for rest, stillness, permanence, stability, and familiarity.

Beauty is an intimate encounter between the human soul and reality, actual and possible, which takes place in the meeting ground of appearance. According to Thomas Aquinas, Beauty represents a kind of hybrid between Good and Truth. Like Good, Beauty appeals to our appetite, but what distinguishes it from Good is that, like Truth, it includes an ordination to the intellect at the same time. He states in *Summa Theologiae*:

Thus, it is evident that beauty adds to goodness a relation to the cognitive faculty.

Whereas the desire for Good is a desire to have the reality itself (Aquinas: *a thing is desired as it exists in its own nature*), Beauty is a more graceful or gratuitous appetite that allows the reality simply *to be* in itself, and accepts what the reality gives or shows of itself.

While Beauty appeals to our intellect, it does not satisfy our desire for understanding, in the way that Truth does. The desire for Truth concerns the concealed inner reality beyond mere appearance (therefore "truth is *unconcealment*," as Heidegger illuminated), while the desire for Beauty is an intellectual desire that rests in the appearance itself. Some reality is implicit in the appearance in which we delight as beautiful. We experience a

profound sense of fulfillment in Beauty because we are made to perceive the appearance of things—because it is not just "all men by nature desire to know" but "all men by nature desire to perceive." In so far as Beauty tells us something about appearance, it follows that learning to love Beauty opens up a depth dimension in our experience of reality more generally.

Few people have the imagination for reality. —Goethe

The act of will, the realm of Good, can be seen, as did Aquinas, as a kind of joint work, a co-operation, between the will and the determining power that lies beyond the human soul, indeed, infinitely so. All of these factors are involved in every choice made, which is why we need always to view the agent, not as an isolated, sheer power to choose, but as a subject embedded always in concentric circles of relations, that is, as organically connected to the world from the beginning. Therefore, the will is moved, in different ways, by the intellect, the sensorial appetite, the will itself, and an extrinsic principle, that is, the good and ultimately the Good (which is often synonymous with "God").

Aquinas defines the will (*voluntas*) as the 'intellectual appetite' (appetite: *ad-petere* = to move towards and seek out), which implies that it is essentially a desire for what is good in truth, as the intellect reveals it. The will is the intellectual appetite, a movement, originating in reality to which we join ourselves through free choice. It is our power to be attracted by the good, and to move ourselves inside of that attraction. It is a movement whose principle lies beyond itself, and as such is able to initiate a movement that allows it to reach beyond itself.

Those who have no holistic wisdom, no holistic intelligence, fail to perceive Beauty, conceive Truth, or achieve Good that *transcludes* ('transcends and includes') the contradictory or the paradoxical. Beauty presents an open invitation to intimacy with reality. Truth represents our deep reception of unconcealed reality into ourselves. And in the acts of volition rooted in Good, we give ourselves to that which is other than us, that is, we actually involve ourselves with others. The integral act and movement of perceiving, conceiving, and willing evolves as a dynamic trialectic interface and interchange between consciousness and reality, and the self and the world.

Art, science, and technology are three realms of conscious human experience in which a wholeness is sought and achieved. Therefore, art, science, and technology are three fields in which human consciousness evolves and expresses its evolution. The wholeness that is sought through art is Beauty; through science is Truth; and through technology is Good. Beauty, Truth, and Good designate three distinct qualities of experience of wholeness that transcend the contradictions and dichotomies of the beautiful and the ugly, the true and the false, and the good and the bad at a higher level of reality (*ontological*), of perception and conception (*epistemological* and *gnoseological*), and of action (*praxeological*).

As consciousness evolves, more Beauty, Truth, and Good will unfold in human experience and culture.

4. CONSCIOUSNESS IN EVOLUTION

EVOLUTION

Evolution is Life's thrust for optimization manifesting as ever-greater complexity and ever-higher order in lifeforms and systems. It is the expression of higher order-generating *syntropy*, in contradistinction with disorderproducing *entropy*. Further, evolution is a *synergetic* process, where *synergy* means behavior of whole systems unpredicted by behavior of their subsystems taken separately and observed apart from the whole. Evolution is an open-ended, syntropic, synergetic process and phenomenon.

The evolution *in* consciousness of the individual and the evolution *of* consciousness of the species involve that the content of consciousness and the dimensionality of experience become increasingly richer, more complex, more extensive, and more multifocal, multireferential, multilayered, and multidimensional. There is more of the universe contained and held, in an integral and orderly manner, in the consciousness of the humans than in that of the other animal species, in the consciousness of modern humans than in that of primitive humans, or in the consciousness of the cultivated than in that of the uncultivated.

The increasing body of scientific research into the human brain and consciousness indicate a clear link between the brain and consciousness, demonstrating that the evolution of consciousness has paralleled the evolution of the brain. Also, unlike other sentient beings on the planet whose environment is nature, human consciousness is adapted to the environment of culture as well as that of nature. Human consciousness is thus encultured and the biosemiotic mechanism of enculturation has played an essential role in its evolution. Evolution of human consciousness is therefore biocultural.

Human consciousness is a semiotic hybrid of nature and culture, and evolves as a coevolution of neurobiology ('biosemiosis') and culture ('noosemiosis') which comprise an evolutionary double helix. The optimization for which consciousness thrusts in its evolution is the optimization of the experience of wholeness and knowledge thereof. Consciousness *wills* to experience and apprehend the wholeness of reality at an ever-higher degree of order and an ever-greater measure of complexity. This is Nietzsche's *Will to Power*, which is his designation for the evolutionary impulse—the thrust for optimization.

Evolution *in* consciousness of the individual is five-fold: (1) evolution in perceptual acumen; (2) evolution in conceptual complexity; (3) evolution in volitional power; (4) evolution in *introceptual* capacity, (5) evolution in *imaginational* degrees of freedom. (The *introceptual/Introception* will be explained in the next section.)

Evolution in perceptual acumen makes us perceive more of reality in appearance (*phenomenon*). Evolution in conceptual complexity makes us conceive or conceptualize more of reality in symbolic sematic abstractions. Evolution in volitional power makes us be more capable of actualizing our intention and executing our will through action. Evolution in introceptual capacity makes us categorically more aware of the self and of the reality beyond appearance (*noumenon*). Evolution in imaginational degrees of freedom (or dimensionalities) makes us freer in imagination and therefore more imaginative and creative.

Evolution of consciousness of *homo sapiens* to *homo deus* will be six-fold: (1) evolution of perceptual capacity; (2) evolution of conceptual capacity; (3) evolution of volitional capacity; (4) evolution of *introceptual* capacity; (5) evolution of imaginational capacity; (6) evolution of the executive functions of the brain-mind system which corresponds with the evolution of the first five capacities.

Whereas in the evolution in consciousness there is no increase of the basic potential but only in the degree of actualization, in the evolution of consciousness there is a discontinuous mutative increase of the potential and the range of possibility for actualization, concomitant with the complexification or modifications of the brain and its functional efficacy. Since the evolution of consciousness is a biocultural process, a complexification of culture will have an impact upon the brain, structurally and operationally, as well as nature—i.e., biology and cosmology.

INTROCEPTION AND IMAGINATION

'Introception' is a unique faculty and operation of human consciousness that is irreproducible or irreplaceable by any artificial intelligence.

Introception is the neologism of the philosopher-mathematician Franklin Merrell-Wolff. He describes the introceptual state of consciousness as the 'Consciousness without an Object (and without a Subject)'. The psychiatrist Richard Maurice Bucke and the artist-scientist Walter Russell called the human consciousness awake with introception *Cosmic Consciousness*. Introception is also similar in meaning to Upanishadic *Turīya*, Yogic *Samādhi*, Buddhist *Nirvāṇa*, and other such terms used in the ancient Eastern spiritual traditions.

In Japanese Zen Buddhism, introception is called *satori*, which means the voidance (*tori*) of distance (*sa*) between the observer and the observer and the known, or the self and the world. *Satori* is atonement in the sense of *at-one-ment* between the subject and the object of awareness so that the distance becomes voided. In Tibetan rDzogs-chen Buddhism, introception is identical with *ye-shes*, which Herbert Guenther translates as 'originary awareness' (vibrating with the whole's *supraconscious ecstatic intensity*).

What is often called the "meditative state" is, in its purest state, the state of introception with *ecstatic intensity*. In the normal mode of consciousness, the light of awareness moves outwards towards and reflects upon the object of awareness. Introception is the movement of consciousness that is a *turning around*, a *revolution*. In introception, the light of awareness turns around inwards towards the source of light, the source of awareness—i.e., the consciousness itself. It is the mode of consciousness in which consciousness is being conscious of itself without a movement of objectification hindering it. In introception, therefore, the knower *is* the knowing.

Introception is categorically different from introspection. In introspection, the self that is introspecting is not the same self that is being introspected. In introspection, the subject is made into an object, and thus the self becomes split into the subject-self ('I') and the object-self ('me'). The self is thus transposed onto the field of objects. What is called the human ego, the 'I', is the object-self acting as the subject in the field of objects. The knower (the subject-self) is not the known (the object-self); the knower is hidden in the very act of knowing the known. Therefore, real self-knowledge, the knowledge of the whole self, is not possible through introspection.

In introception, on the other hand, there exists no division into the subject-self and the object-self but only the whole self as a pure consciousness (without an object and without a subject). In introception, not only you are the Consciousness but also you are being (at one with) the Real, or the Meta-Reality, that is ontologically prior, phenomenologically immanent, and epistemologically transcendental to the phenomenal reality of experience which we normally identify as reality.¹

There is a self-knowledge, a self-recognition, in the way of light's self-illumination. This kind of knowledge is called 'Knowledge through Identity'. Although the Meta-Reality, with which we attain identity and atonement (at-one-ment) in and through introception, is beyond perception, the introceptual experience or '*imperience*' has a profound perdurable influence on our perceptual experience and conceptual imagination.

Human consciousness becomes tremendously enriched and enlivened by the confluence of introception with perception and conception. The Meta-Reality of the introceptual awareness, knowledge through identity, will remain imperceptible to the perceptual faculties of our consciousness, and yet that Meta-Reality now becomes accessible and available as the source of revelation. That which previously was inconceivable or unimaginable becomes conceivable and imaginable.

Introception is what is called the 'awakening of consciousness', which Buddhism and countless other spiritual teachings have taught people through various practices of meditation. What is meant by 'spiritual awakening' or 'enlightenment' is the opening of the introceptual channel and the initiation of the introceptual movement in human consciousness. A 'Buddha' is an individual who has begun actualizing the introceptual potential and who has begun the process of opening a full-spectrum consciousness including introception. It is only through introception that the self comes to realize itself. When the process of introceptual imperience begins, you will, for the first time, authentically ask and receive answers to the question, "Who am I?"

In introception, we also become at one with the Collective Consciousness (*Anima Mundi* –World Soul) resident in Meta-Reality. The collective consciousness is usually called the Collective Unconscious because we normally have no access to it without the introceptual penetration. An unconsciousness does not exist ontologically but only phenomenologically.

With the introceptual penetration into Meta-Reality, and into Collective Consciousness, a vast cosmic reservoir of collective memory, which Rudolf Steiner called the "cosmic memory", becomes more actively accessible and available. Creative imagination is the work of the human mind of creatively rearranging and recombining the material resources stored in memory. Memory is the source material for imagination and the capacity of our imagination is limited to the capacity of the reservoir of our memory.

¹ The Real, or the Meta-Reality, is akin to Immanuel Kant's 'noumenon' or 'thing-in-itself (*Ding an sich*)', while introception is akin to his 'transcendental apperception'. Kant's noumenon or thing-in-itself (with slightly different meaning) is posited as the Real in the sense of pure objective reality transcendental to the human sensory perception. Therefore, though he does not deny the possibility of transcendental apperception, he denies the actuality thereof. The Real is the zone of non-resistance to human experience including the sensory perception, and hence Kant is right in this regard. However, introception is not identical with transcendental apperception in that it is the Real being the Real (ontologically speaking) as the Consciousness being conscious of itself (epistemologically speaking). It is not an objective reality. It is Reality-as-such and Consciousness-as-such which includes the proto-sensory-perception.

The *at-one-ment* with the Collective Consciousness that is attained through introception is also reachable in the state of (dreamless) deep sleep from which genius artists, inventors, and scientists, i.e., the Ecstatics, receive, in dreams or after awakening, new revelations, insights, and imaginations, but unconsciously, that is, without an introceptual self-awareness.

Imagine having access to the collective memory of all of humanity. Our capacity for creative imagination will exponentially increase. This introceptually empowered imagination is unique to humans and no machine intelligence can replicate or reproduce it. The introceptual faculty is a vastly untapped capacity of human consciousness, which nevertheless uniquely defines human consciousness and differentiates it from what is possible for AIs or AGIs that are capable of intuition or even introspection.

The opening of the introceptual pathway for conscious imperience and creative imagination is the secret of the future Ecstatics beyond the at-one-ment that they achieve through their 'unconscious/subconscious mind'; they will *introceive* while being awake to the process. The spirits that breathe the life into the Ecstatics reside in the world into which only introception can reach while awake. If our future does not include a renaissance of the Ecstatics, if we cannot evolve in introception and creative imagination, if we cannot develop wisdom in pace with knowledge and technology, the *Śiva* of our future will become devoid of divinity and wholeness.

5. TECHNOARTESCIENCE OF HOMO DEUS

TECHNOARTESCIENCE (TECHNO-ART-SCIENCE)

The Ecstatics of tomorrow, and *homo deus* of the future, will be technoartescientists, each a unique integration of *homo faber, homo ludens,* and *homo sapiens,* of technology, art, and science, and of Good, Beauty, and Truth. The technoartescience of the future is the triune entelechy of technology, art, and science—*entelechy* (evolutionary purpose-actualization) in the sense not of *teleological* (purpose-determined) but of *teleogenetical* (purpose-generative), as evolution is an open-ended, synergetic process.

In the beginning, technology and art were one, which in the course of time became separated into two different disciplines, but now as the technoart, they are becoming reunited but in a new way. Initially science (as natural philosophy) came much later than technology but they have merged as the technoscience of the modern age.

Sometimes art and science become integrated in a person of great genius such as Leonardo da Vinci or Johann Wolfgang von Goethe, both Ecstatics, and in the case of the former, technology was also integrated with art and science into his remarkable genius. The American artist-musician-scientist-architect-philosopher Walter Russell (1871–1963) was called the modern-day Leonardo da Vinci, which he was. All three were great scientists and artists in the truest sense of the words.

A Leonardo da Vinci, a technoartescientist of the past, was possible, though rare, because not only there were a few who were so highly gifted and born into so fortuitous an environment but also even for them the amount and level of knowledge required to "know all" (*per* Gurdjieff) were relatively less compared to what is required of us today or tomorrow.

However, the age of increasing specialization is ending, and with the advent of the "Integral Age" (Jean Gebser, Ken Wilber, *et al.*), we have the possibility of producing technoartescientists in a much larger number at a much higher percentage than the past. That is to say, we will see a new emergence of the Renaissance men and women, the Ecstatics of today and tomorrow, ushering in the age of technoartescience.

Technoartescience is increasingly more possible because:

- We are able, and will increasingly be more able, to outsource our memory to 'cloud storage' and similar systems so that we can have 'just-in-time' access to and retrieval of requisite information or knowledge.
- We are able, and will increasingly be more able, to outsource our intellectual functions to artificial machine intelligences (AIs/AGIs) so that we can free our intelligence to do what is uniquely human.

- We have, and will increasingly have more, artificial machine intelligences (AIs/AGIs) that think differently from the humans so that we can augment and extend our ability for problem-solving and for knowledge-development.
- With the advent of technology-empowered neo-capitalistic abundance economy and abundant omnicentric society, we will increasingly have more time for engaging in creative intellectual and artistic pursuits as infinite-game playing.

Yet, in order to make that possibility a reality, we need to infuse and suffuse the consciousness of humanity with the kind of Wisdom expounded in this essay—that is, Intelligence that is touched by the sacred and endowed with the consciousness gifted with introceptual and imaginational ecstatic intensity. We need to create a natural-cultural environment in which the individuals can grow more culturally naturally into being the Ecstatics.

REBIRTH OF THE LOGOS

Behind the scenes of this world we have fabricated for ourselves, there is a power just waiting patiently. . . And [it] is what logic [logos] used to be. It was a fine, fine thread connecting us with another world: a gift from the gods, a magical lure drawing us into oneness. But that was before it was transformed into reason and used to tie us in knots . . . before people learned how to use reasoning as a mask to disguise their terror of logos. —Peter Kingsley

In *The Question Concerning Technology* (1953) Martin Heidegger redefines the German word *Gestell*, which means, in common usage, rack, skeleton, armature, or framework, as *enframing*, identifying it as the essence of modern technology. Enframing signifies our mental habitude to put everything into boxes—that is, in frameworks or paradigms. The most basic paradigm or the episteme to which humanity is habituated, as Peter Kingsley reveals, is the *modality of reason* into which (the original) *logos* has been reduced. The enframing is the habit of the human mind that prevents us from becoming the Ecstatics.

What characterizes the essence of modern technology is thus the human impulse to put the world into boxes, to enclose and confine all of our experiences inside of certain categories of understanding, such as mathematical equations, physical laws, or sets of classifications, which we can control. Heidegger claims that enframing stems from the human drive for precision and accuracy in knowledge of the world. This drive, in Kingsley's view, is how we have learned to use reason as a "mask to disguise [our] terror of *logos* – a fine, fine thread connecting us with another world: a gift from the gods, a magical lure drawing us into oneness." *Logos* is the thread that weaves the kind of wisdom and intelligence discussed in this essay.

We usually think of technology as the application of the discoveries of science. In fact, much of the discipline of applied physics is devoted to the construction and the testing of devices, instruments, and apparatuses: hence the designation 'technoscience'. Heidegger argues, however, that the essence of technology *precedes* the historical emergence of both modern science and modern technology. That is, modern technology and modern science are both applications of the enframing. There are inherent imperilments arising from this enframing. Heidegger lists four such imperilments:

- In continuing on the path of enframing, humanity will eventually reach a point at which the human, too, becomes just an instrumental 'standing-reserve' (i.e., raw material resource—"human resource").
- Humanity's overinflated sense of its power over the natural world will lead to humanity believing that it has control over all existence.
- This excessive sense of self-conceit leads ultimately to the delusion that humanity encounters itself and only itself everywhere it looks—a kind of narcissism or solipsism at the species level.
- Such an orientation to the world will blind humanity to the ways in which the world reveals itself. In spite of (or, because of) the whole set of scientific apparatuses and theories that are meant to guarantee our precise knowledge of the world, we will miss the truth of what the world is.

However, once we recognize how enframed (*boxed-in*) we are by our own act of enframing (*boxing-in*), we come to realize a way out and free ourselves from that enframing. We can restore the original *logos*, the fine, fine thread connecting us with the sacred beyond, regain the wholeness lost, and gain the intelligence, the wisdom, of the Ecstatics endowed with an introceptual capacity and with a full-spectrum consciousness. We can establish a new relationship with the world, with reality, that is not ultimately destructive.

The future world of *homo deus*—the world populated with a significant number of technoartescientists—will be not only a technoscientifically advanced high-tech society but also an advanced high-wisdom society adorned with artistic beauty. Technology, art, and science will merge not only in individuals but also in communities and societies to engender a greater harmony and beauty within and without through the higher unity of culture and nature. It is the re-birth of the *logos* and the re-enchantment of the world.

METATECHNOLOGY

Buckminster Fuller, in *Synergetics*, formulates:

311.02 Universe is technology—the most comprehensively complex technology. Human organisms are Universe's most complex local technologies.

311.03 ... Humanity cannot shrink and return into the womb and revert to as yet unfertilized ova. Humanity can only evolve toward cosmic totality, which in turn can only evolvingly regenerate through new-born humanity.

The universe that is technology, is the 'proto-technology' relative to the human technology. The technology that is the universe, is the 'meta-technology' relative to the human technology. As the proto-technology, it is more primary, and as the meta-technology, it is more comprehensive, than the human technology. As the proto-technology, it is the evolutionary thrust for optimization manifesting as the creative evolutions *in* the universe.

As the meta-technology, it is the evolutionary thrust for optimization manifesting as the creative evolution *of* the universe.

(Human) technology is the universe-*qua*-technology expressing itself through the human brain-mind system and conscious human intelligence. The universe-*qua*-technology evolved the human culture in nature, which in turn through the synergetic interaction with nature evolved the symbolic technology such as language and number that made the evolution of the self-reflexive and self-referential consciousness possible. Accordingly, art (in the sense of the arts) is the technology for the optimization of the human experience of life in the universe, while science (in the sense of the sciences) is the technology for the optimization of the human knowledge of everything in and of the universe.

Richard Feynman says: "To those who do not know mathematics, it is difficult to get across a real feeling as to the beauty, the deepest beauty of nature. If you want to learn about nature, to appreciate nature, it is necessary to understand the language in which she speaks." Feynman (and Galileo and most other physicists before him) considers mathematics to be the language of nature. Therefore, he claims that the scientific knowledge gained in the language of nature, mathematics, extends and deepens our experience of the universe.

Goethe would agree with Feynman on that scientific knowledge extends and deepens our experience of the universe, but disagree that mathematics is the language of nature. He says: "Science arose from poetry... when times change the two can meet again on a higher level as friends." Though for Feynman mathematics was indeed poetry, nature is not monolingual, as poetry and the whole world literature are not.

Elsewhere Feynman says: "If our small minds, for some convenience, divide this universe into parts—physics, biology, geology, astronomy, psychology, and so on—remember that nature does not know it." Goethe was a biologist, not a physicist. He was a phenomenologist, not a mathematician. The language of biology is different from the language of physics, while the languages of phenomenology are not limited to mathematics. Therefore, there is no need to be exclusively *for* (Feynman) or *against* (Goethe) mathematics, because nature is multi-lingual. Nature as technology is multi-lingual and at the highest and finest level of comprehending and appreciating nature in language, nature is language and it is pure poetry.

Beauty is a manifestation of secret natural laws, which otherwise would have been hidden from us forever. —Goethe

Marc Chagall states: "Great art picks up where nature ends." Great art indeed expands and enhances, that is, optimizes our experience of the universe, but so do science and technology.

"Universe is technology." From this perspective, technology is seen as more phenomenologically primary than art and science, because cosmology (the *logos* or the *design principles* underlying the existence and the evolution of the cosmos) as the comprehensive technological principle of the universe, underlies the organic mechanisms of art and science. There are technologies of living—of thinking, learning, creating, expressing, communicating, relating, and evolving. And there are technologies of art and artistic expression and appreciation, of science and scientific (theory) development and advancement, and of human technology and technological innovation and application.

Therefore, to design our future means to design a comprehensive technology, a metatechnology, that includes but is not limited to new artifacts, products, and processes of technology, art, and science. This comprehensive evolutionary design metatechnology is a symphonic orchestration of technology, art, science, and other creative cultural praxes.²

TECHNOLOGY OF TECHNOARTESCIENCE

Our most important thinking machines will not be machines that can think what we think faster, better, but those that think what we can't think. . . Humans are for inventing new kinds of intelligences that biology could not evolve. Our job is to make machines that think different—to create alien intelligences. We should really call AIs 'AAs', for 'artificial aliens'. . . The greatest benefit of the arrival of artificial intelligence is that AIs will help define humanity. —Kevin Kelly

Of Beauty, Truth, and Good—the three *valuations* in and of the human experience of wholeness, of *coincidentia oppositorum*, of transcendental consilience—the primary realm and aim of technology is Good, which includes beauty and truth. Good is the *telos* that we *will* to pursue to attain and keep. Beauty and Truth each qualifies as a *telos*, as we *will* to pursue it as conscious, intelligent, imaginative, and sensitive human beings.

The universe as technology has no Good, no *telos*, other than itself; it is to exist and it does. Yet as a technology, it has the design of self-organization inside of the repetitive cyclic patterns of differentiation (creation-genesis) and integration (evolution-epigenesis). Those self-organizing creational-evolutional processes of the universe are symbolically or allegorically described by the *Trimūrti* of the Hindu cosmology or by the *Genesis-Exodus* of the Judaic cosmology.

The human technology is a singularly creative expression of the self-organizing universe whose self-organizing principles and processes are part of the cosmic technology. The human technology has the same *telos* as the evolutionary process: self-optimization. By aligning the *telos* of technology with the Good of human evolution, which is the continual optimization of the Good, we can make the technology help us evolve as a species and create a world of ever-greater Wholeness, Harmony, and Beauty.

Homo sapiens and *homo deus* ('the most comprehensively complex local technology') completes the work of God (Universe as technology) by bringing into existence all that which nature alone, without the humans, cannot produce. Likewise, AIs/AGIs, along with other technologies, complete the work of *homo sapiens* and *homo deus* by accomplishing tasks the humans alone without technologies and machine intelligences cannot accomplish. The evolution of consciousness, with the evolution of the introceptual faculty and the introception-empowered imagination, will steer, facilitate, and engender new inventions and innovations in AI/AGI, which in turn will supplement and complement the works of the humans, forming an evolutionary double helix of the humans and the machines.

 $^{^2}$ The Infinite Game Platform (IGP) being developed by Yasuhiko Genku Kimura and Neelesh Marik is one of such metatechnologies.

As Kevin Kelly points out, the artificial intelligences that think differently from the humans are akin to aliens with alien intelligences. Therefore, we humans will need to learn not only to coexist but also to cooperate and collaborate with the artificial aliens or AAs. That is, the humans and the machines both will need to learn to better relate to one another.

ART OF TECHNOARTESCIENCE

In the Beauty before me, I walk. In the Beauty behind me, I walk. In the Beauty below me, I walk. In the Beauty above me, I walk. In the Beauty around me, I walk. In the Beauty within me, I walk. All is complete in Beauty. -A Navajo Benediction

The psychologist Dorothy Tennov in *Love and Limerence: Experience of Being in Love* (1979) introduced the term "limerence" to designate a distinct psychological state of "being in love" identical among normal persons across cultures, educational levels, genders, and other traits. Limerence is the ecstatic resonance experienced when we are in love, while love is a relation most specifically to Beauty. Beauty is the emotive cause of love, as love is the emotional response to Beauty. Beauty is a transcendental property of being to which love corresponds, and thus love becomes a revelation of being. Limerence is therefore the psychological state that arises from the recognition of Beauty in the being of another. A great artwork also creates an experience of limerence.

Thomas Aquinas, in *Summa Theologiae*, mentions three primary effects of love (wording mine):

- *Union*: a relation between two in which they become one without losing their distinctiveness from each other.
- Mutual Indwelling: in which subject and object are not only present to one another, but also
 present in one another.
- *Ecstasy*: a movement beyond the self—the *ecstasis* (standing outside) of the object of love (and beauty) and of the subject of love/the lover (and the perceiver of the object of beauty).

As stated before, Beauty does not lie in the reality in itself but the reality in its *appearance*, which is the *ecstasis* (*ecstasy*) of love. For, in the appearance, the object comes as it were *outside* of itself, and joins with the *ecstasis* of the perceiver of Beauty. In this way, *ecstasis*, like *union* and *mutual indwelling*, represents a reciprocal exchange between subject and object. Limerence is the resonance that arises in this reciprocal exchange between subject and object.

Love is the most original and foundational relation between the soul and reality, and it is inside this profound openness, which precedes every deliberate self-conscious act, but provides precisely the proper condition for it, that the soul can exercise its distinctive operations. Beauty, the cause of love, thus pre-conditions truth and good, or the act of logic for truth (science) and the act of will for good (technology), and therefore the other two reveal

themselves to be a deepening of the love which they presuppose. This is the reason that we can indeed say that love *is* a union, is caused by union, and results in union.

Mark Frazier states: "Persistent patterns of limerence [ecstatic resonance arising in love caused by Beauty] in a community create foundations for a higher organization to form, in which the original boundaries of one's self dissolve into a higher trust-based new formation." Therefore, art, through the generation of limerence, has the power to bring people together in the formation of communities and societies of a higher order. The Ecstatics or the technoartescientists, as the artists, with their creations, can bring to the world an omni-limerence, and create a world of Beauty and Love.

As the organization of the world becomes decentralized and reticulated through the planetary distributions of machine intelligences and technologies, we will have the opportunity to spread limerence patterns through the arts as well as the art of love. The *omni-limerence* thus will engender an *omni-aesthetics* throughout the planet, and an integral planetary *omnicentric* Beauty arising from the harmony between the beauty of nature and the Beauty of human creation. Through the omni-aesthetics we can *re-nature* nature and *re-universe* the universe.

SCIENCE OF TECHNOARTESCIENCE

The ultimate aim of the individual can never be only the cultivation of a single faculty but the development of all the capacities that slumber within us. Knowledge has value only in so far as it contributes to the allround development of human nature as a whole. All true philosophers have been artists in the realm of concepts. For them, human ideas were their artists' materials and scientific method their artistic technique. Abstract thinking thus takes on concrete individual life. The ideas become powerful life-forces. Then, we do not merely have knowledge about things, but have made knowledge itself into a real self-governing organism; our actual working consciousness has risen beyond a mere passive recipient of truths. —Rudolf Steiner

Technoartescience is the *philosophy* of the future. It is not only the love of wisdom but also the wisdom of love. The science of technoartescience is the knowledge of the technology that is the universe, the technology of attaining knowledge of the universe, and the art of thinking in the multiple languages of nature and the universe in accord with *logos* with the primary focus on Truth in the sphere of concepts that includes beauty and good.

Nature is not only multi-lingual, but also multi-logical. For example, besides the usual binary logic, the ancient Chinese developed a tertiary logic, which the mathematician John von Neumann applied to the construction of artificial intelligence—that is, yes-no-maybe. The ancient Jains used this tertiary logic to construct a seven-fold logic by combining yes, no, and maybe (the indeterminate). In the West, we have the Aristotelian and Baconian logic, which is a binary logic of the excluded middle. In *Laws of Form* (1969) G. Spencer-Brown describes three mathematical logical systems, none of which fundamentally deviates from the Aristotelian principles.

Stéphane Lupasco (who influenced Salvador Dali and many other artists), in the mid-20th century, in response to the 'quantum paradox', developed a decisively non-Aristotelian logic of the Included Middle.

The Logic of Stéphane Lupasco

- 1. Non-Identity: There is no A at a given time that is identical to A at another time.
- 2. Conditional Contradiction: A and non-A both exist at the same time, but only in the sense that when A is actual, non-A is potential, reciprocally and alternatively, but never to the limit of 100%.
- 3. Included Middle: An included or additional third element or T-state exists ('T' for *tiers inclus*, 'included third') [at a contiguously higher level of reality or complexity].

The T-state (the included middle) emerges from the point of maximum contradiction at which A and non-A are equally actualized and potentialized (*coincidentia oppositorum*), yet at a higher level of reality or complexity the contradiction is resolved (*transcendental consilience*). The evolution of real processes is therefore asymptotically towards a non-contradiction of identity or towards a contradiction.³

Also, in contradistinction to the Hegelian triad (thesis, antithesis, and synthesis), the three terms (A, Non-A, and T) of Lupasco's logic coexist at the same moment of time. The Logic of the Included Middle does not abolish that of the excluded middle, which remains valid for simple and consistent situations. Therefore, Lupasco's logic is not only non-Aristotelian but also trans-Aristotelian or meta-Aristotelian; it includes the Aristotelian logic and the excluded middle as a special case. However, it is the privileged logic of complexity, of the real mental, social, and political world.

In addition, with the advent of machine intelligences that think differently from the humans do, using different logics from those of the humans, we will become increasingly multi-logical as well as multi-lingual in our pursuit of Truth—theoretical knowledge of everything in and of the universe. *Logos* itself evolves and becomes enriched with finer and finer internal distinctions of multiple logics, of the humans and of the machines.

Logos becomes the Meta-Logic, and we human beings become trans-logical and trans-paradigmatic. The science of technoartescience thus becomes a conscience (*con-science*) — a consilience of multiple sciences, of multiple ways of thinking and knowing or cogitating and cognizing, in multiple languages and with multiple logics, combining perception, conception, introception, and imagination, and suffused with soulful and sensitive feelings. It is the conscience of the Ecstatics, and *homo deus*, vibrant with deep limerence and ecstatic intensity.

The frontier of knowledge is at once the event horizon of the unknown. Thus, new knowledge opens up a new event horizon of the unknown and brings forth a new set of questions. And the quest beyond the event horizon continues. This is the progress in knowledge, and the evolution in consciousness. The eternal quest, the timeless wonderment, filled with suspense and drama, never-ending in this Dramatic Universe.

³ The action of the logic of the included middle induces an open structure of the set of all possible levels of reality, similar to that defined by Gödel for formal systems.

EPILOGUE: A POETRY OF THE HIDDEN THIRD

Beauty, Truth, and Good are manifestations of *coincidentia oppositorum*, of the transcendental consilience, and of evolving wholeness in perception, conception, and action. Art, science, and technology are three spheres of human creativity where Beauty, Truth, and Good are pursued and achieved. In technoartescience, technology, art, and science integrally come together to create a dynamic, synergetic Whole that weaves and interweaves Beauty, Truth, and Good in a myriad of different ways.

Therefore, the future of technology, art, and science appears resplendent and sublime because we *will* it to be so, and because, when you become at one with the evolutionary thrust for *optimization* pulsating at the heart of our Life, we are bound to become *optimists*—the *optimizers* of the evolutionary thrust itself and hence of the present and the future. And the optimist of this kind is another name for the Ecstatic, the precursor of *homo deus* to come.

The poet Clara Janés beautifully captured in a poem the logic of the Ecstatics — of transcendental consilience and of Stéphane Lupasco. What the logician-philosopher expressed in formal logic, the poet expressed in poesy. The poem is called the "Hidden Third (original Spanish, Tecero oculto). Allow me to close this essay with her poem.

To rest in the green of the forest in the bird that calls out the alphabet, in the suspended drops of water, your letters beyond all concept descending on the foliage, like a gentle breath that tempers the dark swirling of the word.

Return to me the virginal call in a form of pure resonance that pierces the heart and fills it with communicant light annulling the limits that establish the other through enunciation.

> And you, tired mouth, follow attentively the secret of waves and learn transparency.