SYNCRETIC REALITY:
ART, PROCESS, AND POTENTIALITY

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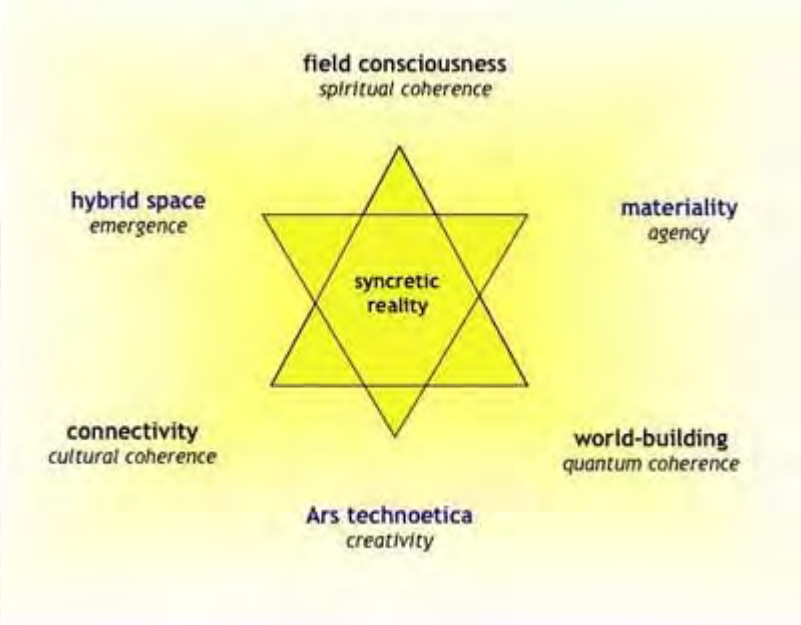

This paper will argue that Syncretism, which has been seen historically as an attempt to reconcile and analogise disparate religious and cultural practices, may contribute today to our understanding of the multi-layered worldviews -material and metaphysical -that are emerging with our engagement in, amongst other things, ubiquitous computing and post-biological technology. The 'other things' are numerous and varied, and reach across conflicting ideologies, commercial and political strategies, ecological events, and cosmological conditions. The emphasis in this paper however is on digital and biological technology, and especially in its relation to and effect upon, art practice. In short, it's about new media art and the *syncretic reality* that is both construed and constructed by that practice. Above all it is about breaking boundaries while maintaining cohesion, a most subtle attribute that is as necessary in the aesthetic as in the social sphere. Of the myriad universes of discourse that constitute whole cultures and countries, only those open to change and adaptation are likely to survive the step change in evolution exerted by scientific development and technological innovation. If countries and communities are to avoid homogenization in this process, it will need to be a syncretic process that maintains the plurality of difference.

The syncretic process is not in any way to be confused with synthesis, in which disparate things meld into a homogenous whole, thereby loosing their individual

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distinction. Nor is it mere eclecticism, which usually signals a wavering course of thought of only probable worth. In the syncretic context, extreme differences are upheld but aligned such that likeness is found amongst unlike things, the power of each element enriching the power of all others within the array of their differences. Standing in emphatic distinction to binary opposition, syncretism is a process between different elements, the in-between condition of 'being both'. In trying to describe syncretism, it is useful to bring into play the "both both/and and either/or" formulation of Marilyn Ferguson. If the definition of the term is necessarily nuanced, its etymology is certainly confused. According to Plutarch, syncretism refers to the ancient Cretan's decision to unite in the face of a common enemy (e.g. sunkretismos). Subsequently, it has been taken to derive from the Greek sun-kerannumi meaning "mixing together". Its original meaning will be retained in this paper. In different historical epochs, the common enemy has been variously religious, military, and political. In present day cultural terms the enemy is habit – the passive, uncritical repetition or acceptance of behaviors, opinions, perceptions and values, and the enshrining as verities, metaphors that have passed their sell-by date. Habit is the enemy of art, impeding the search for new ways of being. The syncretic process is always an assault on habit, confounding the certainties and orthodoxies of unconsidered homogenizing convention. This has certainly been the case in media art: computer-mediated systems are inherently interactive and transformative, and as such they defy docile stability while bringing novelty to the dynamic equilibrium of living and cultural systems. After all, the first rule of cybernetics is to acquire 'requisite variety', and variety is the spice of syncretism.

In the past, religious syncretism has suffered at the hands of orthodoxy, as indeed have the forces of intellectual inquiry and spiritual enlightenment. One thinks of the Gnostics, Neo-Platonists and Hermeticists of the late renaissance, the eradication of the Cathars, the wholesale burning of witches, and the assault on Rosicrucianism. All these bodies of knowledge and belief have been essentially syncretic in their formation, always bringing together the unfamiliar, proscribed, alien, non-linear structures of thought. The early 20th century saw the emergence of spiritual and psychic syncretism in Brazil in the Afro-Brazilian movement of Umbanda, and in Vietnam, the Dao Cao Dai or Caodaism as it is known in the West. There is an argument that says that all religions are effectively syncretic in their absorption of external elements either consequent upon colonization, conversion or simple geographical proximity. But this is to describe the process of synthesis or covert eclecticism rather than the sustained heterogeneity that is celebrated in authentic syncretism.

But this is to describe the process of synthesis or covert eclecticism rather than the sustained heterogeneity that is celebrated in authentic syncretism. In this respect there are claims that the syncretic impulse in Brazil is not limited to Umbanda but constitutes a direct challenge to Christianity, seeing its canonical religious orthodoxy as the "enemy" as has happened so frequently in the past.

> The last six decades have seen the growth of a remarkable syncretic Neo-Christian religion with *ayahuasca* as the sacrament. Following humble beginnings in the state of Acre in Brazilian Amazonia, these contemporary religious groups communing with *Santo Daime* or *Chá Hoasca* (as *ayahuasca* is known to them) have grown into major international religious movements with thousands of members. Far from being an aberration or anachronism, these churches, and the African Bwiti religion centered on the entheogenic sacrament *eboka,* rather represent the future of Christianity, stripped of its Doctrine of Transubstantiation by the Entheogenic Reformation, and with one or another *genuine* entheogen replacing the *placebo* sacrament.[i]

However over-stated this claim may be, the use of entheogens[ii] and their chemical correlates, in the search for altered states of consciousness and direct spiritual engagement, is likely to grow over the coming decades. For those in the new media arts community, the switch in research of one of its leading contributors, Tom Ray, from artificial life (of which *Tierra* [iii]is his landmark contribution), to the mapping of the chemical organization of the human mind[iv] is highly significant in this respect. Since it is at the frontier of research in science, the great mysterium consciousness is likely also to be at the top of the agenda in art practice and theory over the coming decades. In a very limited but perhaps significant way, the international conference *Consciousness Reframed: art and technology in the post-biological era*[v] has sustained an annual contribution by artists and scholars of some 70 - 100 papers each year since 1997. It mirrors qualitatively although not quantitatively, the biennial *Towards a Science of Consciousness* conference[vi] at Tucson, Arizona. As I argue below, the rituals and procedures of sacred ceremonies find their equivalent in Western codes and protocols of

computer technology. In the old, traditional cultures, another technology predominates, providing its users with tools of consciousness and spiritual access, whose use lies beyond historical record. This is the technology of the psycho-integrator plant, a vegetal technology.

In this regard also, the state of consciousness described as delirium in other contexts, for example as proposed by the French symbolist poet Arthur Rimbaud, is a feature of Islam in its least orthodox form, namely in the language of the Sufi. Indeed, Sufism is in itself highly syncretic, a spiritual practice which is essentially in-between the tangible and abstract, the known and unknown, the visible and invisible, keeping each distinct yet related in their difference. The Syrian poet Adonis elicits a significant link between the syncretism in art and in the spiritual domain in his study *Sufism and Surrealism*, in which he writes:

> [Surrealist writing] like Sufi writing, appears for the most part to be filled with strange things, contradictions, obscure references and disjointed images ... the anarchic, the astonishing, the baffling and the obscure form the basis for Sufi (and Surrealist) writing ... When the poet enters a world of transformations, he can leave it only by transformative writing: waves of illuminating images, which do not bear scrutiny by reasonable or logical means, and through which reality itself is transformed into a dream.[vii]

It is in this heterogeneity of form and meaning, where synthesis is neither resolved nor sought, that syncretism finds its salience. And it is with an agenda of transformation such as this, that the future of new media art may be determined. While the significance of syncretic influences that bear on Sufism would be lost on those without Arabic scholarship, we can grasp the syncretic embrace of Surrealism by looking at those influences bearing on the Surrealist enterprise. They include Heraclitus, Abelard, Meister Eckhart, Rousseau, Swift, Sade and Lautréamont. . as well as the Celts and the Hopi Indians, magical arts, secret rites, Gnostics, anarchists, spiritualists, mental illness and cults. While surrealism is not a tendency of any direct urgency in new media art, never the less, the hyperlinks and non-linear modality of the digital culture lend themselves to the irrational and unexpected semantic elisions and links of Surrealist practice. How Breton would have Googled!

What is asserted here is that understanding contemporary reality as *syncretic* will lead to significant changes in the way we regard our identity, our relationship to others, and the phenomenology of time and space. Syncretism not only destabilises orthodoxies and changes language, it may also result in the release of the self from the constraints of overweening rationality and totalising dogma. In religious or spiritual contexts, syncretism means combining rituals, psychic instruments, the assimilation of plants and herbs, into new forms of sacred communion. A parallel process of the bringing together of disparate technologies (interactive and digital, reactive and

mechanical, psychoactive and chemical), and new rituals of communication (mobile, online), and forms of community (the Net), is seen in our society, and indeed remains open to the incorporation of the older arcana.

Our take on reality will depend in part on our cultural conditioning that may constitute a passive acceptance of a normative description or a vigorous attempt at its re-construction or re-definition. Interactive, digital and post-biological art provide us with tools and media that facilitate such construction, not only in virtual space but also in our very attitude to the nature of presence and interaction in and with the world. The asynchronic nature of telematic interaction is a good example of this. Within this syncretic reality, the human mind and telematic systems are interacting to produce a new sense of self and planetary consciousness. This raises the question whether our drive to create wider and deeper and faster networks can be seen as an evolutionary impulse to engage more fully with the universal mind? This in turn questions the nature of mind, where it is located, how it is constituted, and whether for example it can be considered as an epiphenomenon of the brain, or part of a larger field of consciousness.

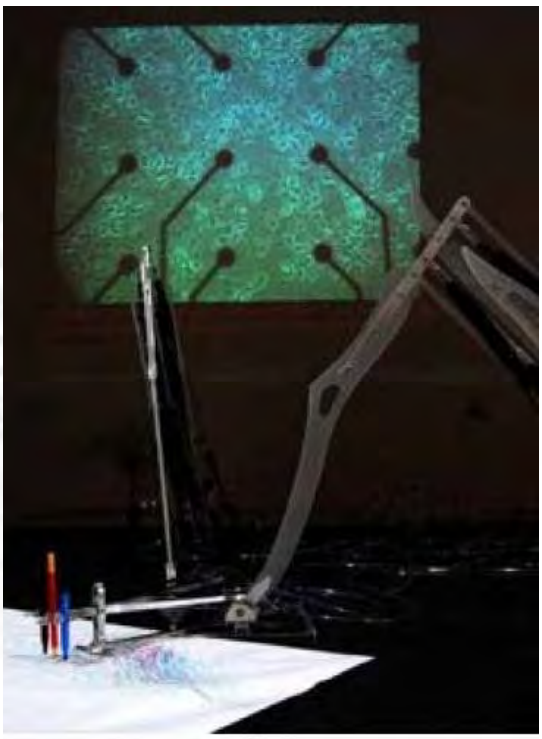
Similarly with matter, its nature and status is in doubt. Our culture is grounded in materialism, but in penetrating the material world beyond the nano level of observation we find there is no matter. Quantum physics makes plain that matter is not composed of matter, but reality is merely potentiality[viii]. The immaterial connectedness that defines quantum reality, is a quality we associate equally with the spiritual domain, and is the essence of telematic art. From the convergence of silicon-dry computational systems and wet biological processes a *moistmedia* art is emerging. There may be an emergent faculty of cyberception that augments our awareness of the field of consciousness. Does the flow of electrons and photons across the planet's telematic networks parallel the biophotonic information network of the body?

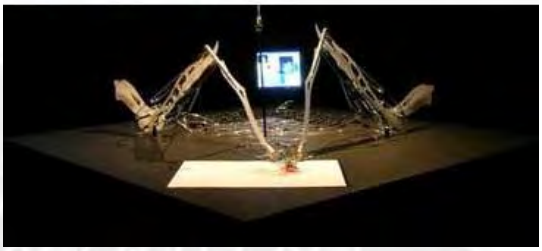
In addressing these questions, one may reveal the nature and source of a new reality that is being formed, the *syncretic* reality that is emerging from the convergence of Mixed Reality technology and altered states of consciousness, and metaphors drawn from biology, quantum physics, field theory, language, combined with cultural, social and spiritual practices, in a hybrid space of potentiality. In terms of the syncreticity of new media art, the following factors might be taken into consideration:

- Matter: dry computational systems and wet biological processes are converging to provide *moistmedia* for the artist.
- Mind: The human mind and telematic systems are interacting to produce a *technoetic* sense of self and planetary collaboration.
- Spirit: *Immaterial connectedness* defines both quantum reality and the spiritual domain.

- Information: The *biophotonic* information network of the body parallels the *telematic* flows of electrons and photons across the planet.
- Technology: Both the media artist's *interactive* technology, and the shaman's *psychoactive* technology offer immersive pathways into altered states of consciousness.

We can claim that a *syncretic* art can arise when media is moist, the mind is technoetic, the body is transformable, and the planet is telematic. Some examples of recent projects that demonstrate many of these qualities are to be found in the transgenic work of Eduardo Kac, such as Move 36, Genesis, and GFP Bunny.[ix] An example of collaborative work of this genre can be seen *in MEART: the semi- living artist*[x], the product of Steve Potter's lab at Georgia Tech and Guy Ben-Ary's lab at the University of Western Australia, involving the brain signals of cultured rat cells controlling robots on the other side of the planet. The *Tissue Culture and Art* projects[xi] of Oron Catts and Ionat Zur constitute another exemplary syncretic discourse that ranges across ethics, biotechnology, artificial life, and art. Their studio is located in the laboratory environment of a university biology department, and it is likely that the development of advanced forms of syncretic transdisciplinarity of this kind will increasingly come from artist's "studios" located not only within or across scientific laboratories and engineering centers, but in truly remote regions such as the deep ocean or outer space.





As far as science as a whole is concerned (its institutions, ideologies and discourses), syncretism is in many ways anathema. The whole history of modern science has been to keep to the straight and narrow path of reductionism. This tunnel vision has had huge success and undoubtedly is the bulwark of pragmatism. So much of the economy of utility depends on it. But it has been singularly unsuccessful in terms of human development, biological understanding and psychological or spiritual insight. Science is firmly cautious of straying beyond the bounds of strict causality and reductive materialism, but artists are prepared to look everywhere and anywhere to try to reveal what is real and authentic in human experience. Science is caught in a trap of its own making: for example, it recognizes the counter-intuitive precepts of quantum physics, while refusing to recognize their metaphysical implications. In so far as matters of consciousness are concerned, science is in denial.

Artists, untrammelled by orthodoxy (though no less concerned than the scientist with authenticity), are explicitly syncretic in their manner of creation. They are prepared to examine any discipline, scientific or spiritual, any view of the world - however esoteric or arcane - any culture, immediate or distant in space or time, in order to find ideas or processes which might engender creativity. There is no meta-language or meta-system that places one discipline or world-view automatically above all others. Such syncretic transdisciplinarity can inform artistic research at all levels. This is why we look in all directions for inspiration and understanding: to the East as well as the West; the left hand path as well as the right; working with both reason and intuition, sense and nonsense, subtlety and sensibility. Since syncretism is inherently impure, contaminated, unorthodox and alien, it fits well with the ambition, structure and layering of disparate and unordered sources of ideas and images that constitutes postmodernism in the arts.

The conditions causing the emergence of a syncretic art reflect the order of things in the world at large, and the many epistemological and ontological conflicts and uncertainties that shape our cultural scene. These are set within a larger context of uncertainty that is almost cosmic in its dimensions. We have, for example, no knowledge of what constitutes the very ground of our reality. We know very little about “dark matter” and “dark energy”, just as the purpose and function of “junk DNA” is unclear to us. Science claims that ordinary matter comprises only five percent of the stuff in the universe, with dark matter comprising twenty-five percent and dark energy seventy percent.

Similarly unknown to science is the location of mind and the source of consciousness, which is not to say there is not a multiplicity of hypotheses. Within the study of consciousness, the issue of qualia has proven to be an intractable “hard problem”. In the early 20th century, consciousness became taboo in science. Before

that, for millennia in fact, and certainly with the emergence of science in the 18th century, consciousness was openly discussed. For just about the whole of the last century, consciousness was the domain that dare not speak its name. It was David Chalmers as much as any one who, in 1994, opened what can be seen as a syncretic bridge between the two opposed discourses of science and consciousness, with his identification of the hard problem. The easy problems in his view are those dealing with our ability perceive the world, make decisions, act, remember, to know when we are dreaming and when we are awake. On the other hand,

> The really hard problem of consciousness is the problem of *experience*. When we think and perceive, there is a whir of information-processing, but there is also a subjective aspect. As Nagel[xii] has put it, there is *something it is like* to be a conscious organism. This subjective aspect is experience. When we see, for example, we *experience* visual sensations: the felt quality of redness, the experience of dark and light, the quality of depth in a visual field. Other experiences go along with perception in different modalities: the sound of a clarinet, the smell of mothballs . . . . What unites all of these states is that there is something it is like to be in them. All of them are states of experience[xiii].

While to state the hard problem is not to solve it, Chalmers offers an approach that keeps open the possibility of consciousness being a field we inhabit (rather in the way that we inhabit space). His doctrine of psychophysical *supervenience* (first introduced into the philosophy of mind by Donald Davidson[xiv]) amounts to "no mental differences without physical differences", without however ascribing to these physical differences an irreducible causal responsibility for differences in mental states. We know that these states of experience are limitless in their variety, some seemingly having their source on other worlds - not just different universes of discourse (though they can alter powerfully our perceptions and sense of self), but new spaces of consciousness which we access through somatic or spiritual exercises, ritual ingestion of plants, sacred dancing, or the technologies of virtual reality and telematic communication. Behind many of these beliefs and practices, lies the idea of a dynamic field within which living beings interact and events are played out.

Some of the more compelling field theories have been usefully sketched out in both their biophysical and metaphysical dimensions by Jean McTaggart in *The Field*[xv], just as a fieldbased morphogenetic model of biological process and its spiritual implications informed Richard Sheldrake's *A New Science of Life*[xvi] twenty years ago. Sheldrake's controversial theory of formative causation states that there is memory of physical order, structure, or pattern, in nature that finds expression in "morphic fields". The memory in these formfields comes from previous forms of a similar kind. Morphic fields are an organizing principle of nature. He supports the contention that genes carry

only a very small part of the biological information in a living system; most of it is in the memory carried within the organizing fields of an organism. Over time, the development of a larger memory of species experience, leads to the process of "morphic resonance", where at all levels in nature, the form of systems is influenced by the form of previous systems. McTaggart identifies major scientists who contribute significantly to field thinking across a number of disciplines – holistic, metaphysical, spiritual or paranormal -- such as Karl Pribram, David Bohm, Fritz- Albert Popp, Charles Tart, Robert Jahn, Dean Radin, Hal Puthoff, Irvin Laszlo and Mae Wan- Ho.

Field thinking informs an understanding of healing practices of various kinds. Research into the connection between the biophotonic parameters and the parameters of electromagnetic fields active on living system such as that undertaken at the laboratory of the International Institute of Biophysics at Neuss, Germany[xvii] may provide some scientific validity to those ideas of self-regulation of the body to which various spiritual practices and somatic therapies subscribe. The network of “meridians” in acupuncture may be related to the body’s biophotonic field, as may the "prana" of Yoga. But the very inconclusive nature of scientific research in these areas, opens them, perhaps inevitably, to consumer abuse on the web, just as western medical jargon has long been exploited for the purposes of quackery, deception and commercial gain. However, just as the healing rituals in older cultures involved performative, interactive and imaging activity, it may be that art in contemporary society will come to acquire a more compelling value. In art, it is the field of interactivity that integrates the work, the artist and the viewer in what is both a material and an immaterial connectedness.[xviii]

To discuss art in the syncretic culture it can be useful figuratively to locate any given work through the triangulation of three points, each weighted to a greater or lesser degree towards sacred art, conceptual art, or entertainment art. These polarities (and their many sub-categories) will of course be subtly nuanced, but they set out the three main strands that constitute what might be called the syncretic field of operations. There will be little difficulty in placing the larger categories of interactive/hyperlinked artworks (installed, performative or desk topped), or video games (arcade-based or globally-networked) in this schema. As to the question of sacred art, leaving aside the persistence of traditional religious practices from south America, Africa or South East Asia, contemporary examples will be found in the disposition of objects, places and performance in Umbanda, Vodou, Santeria and syncretic cults of Japan. One that is more extensive than most, in that it involves an entire township, a total spiritual ecology, is located in the State of Brasilia, called Valle

do Amanhecer ("Valley of the Dawn"). This is the center of the religion of Tia Neiva that practices spiritism and mixes Egyptian, Inca, Maya and Christian rites. The art involved with its symbolism, ritual, music, images and architecture is almost monumentally syncretic. (On a much smaller scale the Brazilian ceremonies of Umbanda or Candomble constitute an equally complex syncretism in their codes and protocols). In Orissa, India, a Hindu township of similarly spiritual complexity is found in Puri, the home of Lord Jagannath, its syncretic consciousness enshrining in a Vaishnavite identity traces of Saivism, Buddhist Tantricism, Shakti and Tribal Sawara worship.

Within this syncretic taxonomy of the triad, there is also a hybridity of space to be accounted for: the in-between of psychic space, cyberspace, and ecospace, just as there is of embodiment: apparitional presence, telepresence, and physical presence. Our phenomenology of space and time is undergoing a perhaps irreversible transformation. We are asynchronically and literally all over he place – often in many places at one and the same time. The distributed self is not only a well recognised feature of telematic networking, it also possibly marks an evolutionary development towards the multiple self - a multiplicity not just of (virtual/cyborg) bodies but of attitudes, values, intentions and purposes. The double consciousness experienced in shamanic states (being both in the physical world and the psychic world at the same time) is no more than a precursor of the multiple mind states we may come to inhabit (or which will inhabit us) in the syncretic combination of mixed reality technology, sacred plants, and other technoetic processes that we can expect to emerge over the next decades.

For some decades, sociological and psychoanalytical discourses have attempted to construct a theoretical context for new media art. Often immured in a morose materialism they have failed to see the spiritual horizon, myopically setting their eyes on the “Other”, limited to the gross level of reality, and maintaining a false dualism. Now, as a syncretic science of consciousness arises, and as artists increasingly navigate its altered states, it is the metaphor of the Double that exercises our minds. In

telematic space we are both here and out of body; mixed reality technology combines physical and virtual actions into a new kind of event space; the ingestion of entheogens allows us to move freely between worlds. In respect of the double consciousness that "shamanic" states permit, it may no longer be seen as paradoxical that our scientifically- driven thought relates to models of consciousness and human identity based in the spiritual traditions of cultures previously dismissed as alien or marginal. Art may increasingly take on a more psychoactive complexion, and it will be found useful to link archaic models of consciousness, such as we find in Amazonia for example, or amongst the Tsogho of Gabon, and ideas of quantum coherence, such as we find in biophysics, and biophotonic research. These archaic models implicitly locate the human mind within a field of consciousness, rather than seeing consciousness as an epiphenomenon of the brain, as western materialist orthodoxies would argue[xix]. Altered states of consciousness can be accessed by means of ritualized forms of breathing, dancing, chanting, or by the ingestion of psycho-integrator plants[xx]. This understanding of consciousness as a field, and our ability to navigate it (and, as many aver, to be navigated in it by other spiritual entities) is seen most vividly in the syncretic doctrine of afro-Brazilian Umbanda[xxi], which brings together Yoruba (originally from S. W. Nigeria and Benin), and the spiritist beliefs of Kardecism (originally from France), with the native wisdom and traditions of the forest. Equally, from the Buddhist point of view, the mind is not a biproduct of the brain, but a field that is a separate entity from the body, and which confers an inherent connectedness on the human condition.

If we move our focus from entheogens to engineering, that is to say from the immaterial to the profoundly material, we are confronted by an apparent paradox: the nano level of perception leads not simply deeper into matter but further into the quantum consciousness that lies beyond the molecular domain. As the nano scientist excavates matter, moving, reassembling, and coordinating atoms and molecules in the nanofield, the distinction

between the organic and the technological is becoming less distinct. Similarly our molecular knowledge may lead us to a better understanding of changes in consciousness and perception afforded by pharmacology. What ever is the case, we are now increasingly focussing our attention on the very small, at a level far beyond miniaturization: a nanometer is one billionth of a meter. This is at a level of perception that is, in any retinal sense and however technologically augmented, literally out of sight. So much so that the scanning tunnelling microscope (STM) calls for touch rather than vision to navigate the nano field, and to manipulate individual atoms. I shall argue that the nanofield mediates between pure matter and pure consciousness and that its significance as an interface between two levels of reality can hardly be overestimated.

There are a number of ways to view the nano phenomenon. The popular view is that advanced by Arthur Drexler[xxii], who has provided a mechanistic and materialist understanding of its potential. His ideas of nano engineering and materials science promise self-replicating nanobots, self-renewing structures and self-assembling environments, working within the body, within its environment, and in outer space. Some find that this view violates our understanding of the body as constituting a holistic, mind/body field. When the body is seen as no more than a material collection of atoms, it may make sense to apply a materialistic strategy of repair. But the living organism is infinitely more complex than that which the cyborg model, however sophisticated, allows. Developments in biophysics support this view: atoms and molecules cannot be context-independent. There is another other way of understanding the significance of our penetration of the nano world, which is to view these developments from the point of view of consciousness. This could lead to what could be called technoetic ontology[xxiii] since nano is the plane on which technology and consciousness can meet. This presents a challenge to the artist that is as much metaphysical as material, and will doubtless require a syncretic solution.

Materialist may see working in the nano field as the end game, but it is not necessary to embrace a radical transcendentalism to see that nano is located between the material density of our everyday world and the numinous spaces of subatomic immateriality. The STM cuts through the dense complexity of matter to focus on the individual atom – at a level that is touchable and untouchable, immediate and remote, as Gimzewski and Vesna have shown[xxiv]. Their recent exhibition at LACMA[xxv] was worthy of note. Christa Sommerer and Laurent Mingnoneau have also tried to give artistic

expression to these ideas in their work Nanoscape[xxvi]. Nano watching changes the ratio of the senses: to touch is to see. The auditory sense can also be involved. Grimzewski has discovered that to touch the atomic plane is to hear the voice of molecules, whose sounds may signal distress as much as harmony[xxvii]. The atomic force microscope (AFM) allows him to hear the scream of a yeast cell as it is doused in alcohol. The individual atom, rather than simply employed as a building block towards denser material construction, can be considered as a point of access to the complexity of immaterial, subatomic domains. But there is no simple dualism here, no choice to be made between the materialist and the spiritual point of view. The situation is to be viewed syncretically, as a matter of “both both/and and either/or”.

It is through our eventual understanding of that subatomic domain that we may discover the source of consciousness**.** We should be prepared to discover that “individual consciousness” is no more than an oxymoron. While individual *self-awareness* is a prerequisite of living beings, consciousness is more likely to be the attribute of a field than of the individual organism. A strong advocate for this point of view is Hans-Peter Durr, of the Max-Plank-Institut für Physic, Munich[xxviii]. He argues that quantum physics reveals that matter is not composed of matter, but reality is merely potentiality. His research suggests that the world has a holistic structure, based on fundamental relations and not material objects, admitting more open, indeterministic developments. From this it follows that in this more flexible causal framework, inanimate and animate nature is not to be considered as fundamentally different, but as different order structures of the same immaterial entity. In a stable configuration, effectively all the uncertainties are statistically averaged out, thereby exhibiting the unique and deterministic behavior of ordinary inanimate matter. In the case of statistically unstable but dynamically stable configurations, the ‘lively’ features of the

underlying quantum structure have a chance to surface to the macroscopic level and be connected with what we observe as the phenomenon of life.

The phenomenon of life may owe much to what has been shown to be a biophotonic information network between molecules within the body, possibly extending to other living organisms in the world (this suggest a parallel to the telematic flows of electrons and photons across the planet). Briefly to describe the basic proposition concerning biophotonic process, we can turn to Fritz-Albert Popp, director of the International Institute of Biophysics in Neuss, Germany:

> Biophoton emission is a general phenomenon of living systems. It concerns low luminescence from a few up to some hundred photons per second, per square centimeter surface area, at least within the spectral region from 200 to 800nm. The experimental results indicate that biophotons originate from a coherent (or/and squeezed) photon field within the living organism, its function being intra and intercellular regulation and communication[xxix].

Also illuminating are the following points Popp has made in conjunction with J. J.Chang.

- Bioelectrical or bio electromagnetical phenomena have been known for a long time, but the coherent bio-electromagnetic fields, including biophoton fields are a new concept.
- They exist in living biological systems although we cannot see them.
- They are some kind of structure with specific patterns, but they are not real matter, only fields that regulate and bring the living system into a coherent state.
- In such a state within the coherent volume, there is no difference between particles and waves, therefore distance has no meaning.
- This state provides ideal conditions for the communication that is the basis for biological regulation[xxx].

It is with this kind of theory that we can see a correspondence to the Sufi's syncretic view of in-between-ness of the physical and immaterial world, which was mentioned earlier. The biophoton is palpably visible and quantifiable at the macroscopic level, but at the same time has the quality of quantum immateriality.

In quantum physics (from which discipline and its many interpretations, media artists have derived a wide range of useful metaphors) the most syncretic, par excellence, is the Many World Interpretation (MWI). The MWI of quantum mechanics was first proposed in 1957 by Hugh Everett III, who argued that, whenever sufficient possibilities exist, the world splits into many worlds, one world or universe for each possibility. In each world, everything is identical, up until the point of each split,

whereafter worlds develop independently, with no communication between them, so the people living in those worlds (and splitting along with them) may have no idea that this is going on. This endless branching and splitting of the world creates more and more diversity in what we can see as a kind of infinite syncretism, where anything is at all times possible, separate but related. Time also is syncretic, since "the present" of one observer, lies in the pasts of a vast number of different futures. At the same time, quantum physics yields insights which not only highlight the defining idea of interactive art- that it is the action of observing that creates meaning – but also provides a parallel to the inherent fuzziness of mind and content, the semantic potentiality of the truly open-ended, inconclusive, emergent quality of interactive art. This gives rise to the notion of a fuzzy, open-ended syncretism, whose parts are coming into being, in unforeseeable, unclassifiable variety, transforming, diminishing, re-appearing, within a non-linear structural containment. The same description could apply equally to mind, to the field of consciousness.

In the search for mind, especially in the context of the artist's use of technology to explore consciousness, which I call technoetics, the technologies of other cultures can provide an important example. As much as data is stored deep in the memory space of the computer, so knowledge is stored deep in the psychic space of the shamanic world. In the technology of the psycho-integrator plant, (the vegetal technology to which we have already briefly alluded), such varieties as salvia divinorum or the shamanic liana, ayahuasca (banisteriopsis caapi), called the vine of the soul, and used in countless communities in Brazil and Colombia, are known as teachers, imparting wisdom as spiritual avatars. The researches of ethnobotanists such as Richard Evans Schultes[xxxi], Eduardo Luna[xxxii] and Benny Shanon[xxxiii] document the power of these plants in their sacred setting to enable us to transform consciousness, to enter into other states of being, to communicate over great distances, to connect with other entities, and to receive knowledge and instruction from the plant domain. In recent decades the use of vegetal technology to heighten spiritual experience has extended in towns and cities, in Brazil most extensively, but increasingly in other countries, largely through the practices of Santo Daime[xxxiv] and União do Vegetal. The opening up of public awareness to the power of plants to heal the body and to transform the mind will doubtless infiltrate art theory, if not immediately the practice of art. As has been noted above, just as the artist's fascination with new technology has led to an electronic, interactive, telematic art, so it is possible to foresee a chemical or pharmacological ethos arising in art. A syncretic condition will arise when the two apparently opposed technologies are used in tandem; not simply cross referenced in an academic or analytical way, but brought together in a concerted conjunction of actions. From this,

new syncretic ontology may arise, just as our notions of outer space and inner space may coalesce into another order of cosmography.

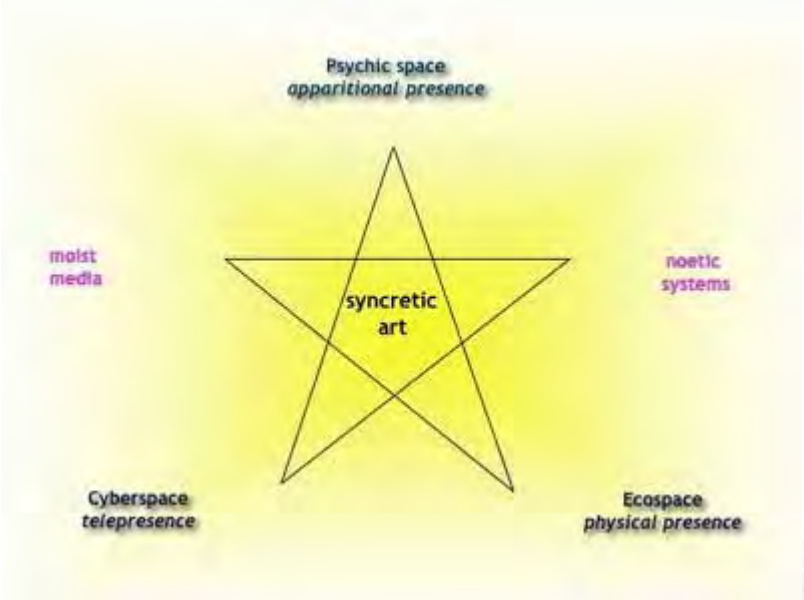
Within this emergent ontology, evolution can be considered as a purposive pathway towards increasingly greater access to the field of consciousness, where survival is measured on a spiritual level: the fittest being those most able to adapt their individual self- awareness to the larger whole. This proposition could temper the often aggressive interpretation of 19th century ideology of Darwinism with a more purposeful model of co-operation and collaboration, from the molecular to the macroscopic level of life, in the way that Lynn Margulis has argued [xxxv], and as the research of Mae-Wan Ho supports:

> Many remarkable individuals and local communities are indeed changing their own lives and the world around them for the better. They all do so by learning from nature and recognizing that it is the *symbiotic*, *mutualistic* relationships that sustain ecosystems and make all life prosper, including the human beings who are active, sensitive participants in the ecosystem as a whole[xxxvi].

In the evolutionary process, which the scientific community may yet come to see as more teleological than wholly random, both telematic and pharmacological technologies can serve the transformation of the self and the connectivity of minds, enabling what ever purpose is held in our genes, the increased facility of expression. Human expression, along with cognition and perception have been enhanced and perhaps changed by technology, to the extent that what can be seen as a wholly new faculty has arisen in the human sensorium: that of cyberception. This faculty enables us to see deeper into matter, further into space, to see the invisible, speak of the ineffable, to multi-task, and micro-measure. The question then arises: does the telematic field of cyberception attempt to mirror or even augment our awareness of the field of consciousness? Locative media and telematic communication put the mind out-of-body and globally distributed, altering the phenomenology of space and time. Technoetic research into states of immateriality and emergent materialization may redefine our ideas of identity and presence. Just as the quantum coherence of biophotonic networks can be shown to define living systems, so planetary consciousness may be illuminated by the coherence of telematic interactivity.

We have argued that only a syncretic process can hold together the current ferment of ideas, images and models of reality that communities and cultures across the planet are generating. To recite the story of media art in its syncretic mode is not to advance its development, nor is it sufficient simply to outline the syncretic reality that is emerging.

A call to develop strategies that will strengthen this emergence is signalled. We started with the announcement that the original etymology of syncretism would be



observed, wherein 'habit' would be viewed as the enemy. Firstly, then, it is necessary to identify new knowledge fields, and to develop transdisciplinary discourse and practice to replace what has become clichéd and intellectually ragged. In the case of uncritically pursued conventions of learning, research and creativity (the universal staple of universities and colleges), it will be necessary effect a reversal of the classical agenda by always insisting on prioritizing subject before object, process before system, behavior before form, intuition before reason, and mind before matter. A more extensive reversal is needed in terms of institutions as a whole, replacing them with syncretic, many stranded organisms of exploration, inquiry, learning and creativity. This will require a truly syncretic schedule of artistic, computational, psychic, biophysical and nanotechnological projects in order to bring about new material conditions for life and art, and liberate the requisite variety of cognitive modes and spiritual states for the fulfilment of our human potential.

[i] Ott, J. Ayahuasca Analogues: Pangaen Entheogens. Kennewick, WA: Natural Products, 1994).

[ii] The term *entheogen* was first suggested in Wasson, R. et al. The Road to Eleusis: Unveiling the Secret of the Mysteries (Ethno-Mycological Studies, No. 4). (New York: Harcourt Brace Jovanovich, 1978). *Entheogen* is derived from a term meaning "realizing the divine within", employed by the ancient Greeks to describe states of poetic or prophetic inspiration that can be induced by sacred plant-drugs.

[iii] Synthetic organisms were created by Ray based on a computer metaphor of organic life in which CPU time is the "energy" resource and memory is the "material'' resource. Memory is organized into informational patterns that exploit CPU time for self-replication. Mutation generates new forms, and evolution proceeds by natural selection as different genotypes compete for CPU time and memory space.

[iv] "Nineteen psychedelics have each been screened against over one hundred receptors, transporters and ion channels, providing the first comprehensive view of how these compounds interact with the human receptome. […] The project aims to understand the mechanisms underlying the qualitative diversity of actions of psychedelics, by locating each drug in an abstract "receptor space", a coordinate system with one axis for each receptor." Ray, T. The Chemical Architecture of the Human Mind: Probing Receptor Space with Psychedelics. http://consciousness.arizona.edu/conference/tucson2004 (accessed 16.8.05)

[v] See http://www.planetary-collegium.net/conferences/ (accessed 23.9.05)

[vi] See http://www.consciousness.arizona.edu/Tucson2006.htm (accessed 2.10.05)

[vii] Adonis. Sufism and Surrealism. Trans: J. Cumberbatch. (London: Saqi, 2005.) 114

[viii] Dürr, H-P. 'Inanimate and Animate Matter: Orderings of Immaterial Connectedness – The Physical Basis of Life'. In: H.-P. Dürr et al (eds). What is Life? Scientific Approaches and Philosophical Positions. (New Jersey: World Scientific, 2002). 145.

[ix] See http://www.ekac.org/transgenicindex.html (accessed 1.10.05)

[x] See http://www.fishandchips.uwa.edu.au/ (accessed 25.09.05)

[xi] http://www.tca.uwa.edu.au/ (accessed 1.10.05)

[xii] Nagel, T. (1974). 'What is it like to be a bat?', Philosophical Review, Vol.83, no.4, 1974, 435-50.

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[xiv] Davidson, D. Essays on Actions and Events (Oxford: Clarendon Press, 1980).

[xv] McTaggart, L. The Field: The Quest for the Secret Force of the Universe. (New York: Quill, 2003).

[xvi] Sheldrake, R. A New Science of Life. (London: Granada, 1983)

[xvii] http://www.lifescientists.de/ib_000e_.htm (accessed 16 November 2004)

[xviii] Ascott, R. 'Towards a Field Theory for Post-Modern Art'. Leonardo, vol.13, 1980, 51- 52.

[xix] See: Dennett, D C. Consciousness Explained. (New York: Pantheon, 1992). Dennett could be described as the pope of epiphenomenalism.

[xx] Winkelman, M. 'Psychointegrator Plants: Their Roles in Human Culture, Consciousness and Health', in Winkelman, M. and W. Andritsky (eds), Yearbook of Cross-Cultural Medicine and Psychotherapy. (Berlin: Verlag fur Wissenschaft und Bildung, 1995), 9-53.

[xxi] Brown, D. Umbanda: religion and politics in urban Brazil. (New York: Columbia University Press, 1986).

[xxii] Drexler, K.E. Engines of Creation. (Garden City, NY: Anchor Press, 1986).

[xxiii] The term 'technoetic' is coined by the author from 'technology' and the Greek 'noeitikos' (mind, consciousness), to mean consciousness accessed, augmented, distributed, transformed (depending on the user's world view) by technology. This may have an ontological the effect on the sense of self and of the world .

[xxiv] Gimzewski, J. and Vesna, V. The Nanoneme Syndrome: blurring of fact and fiction in the construction of a new science. In: *Technoetic Arts: a journal of speculative research*. Vol.1 no.1. 2003, 7 –24

[xxv] http://www.lacma.org/info/press/nanoPR.htm (accessed 23.9.04)

[xxvi] http://virtualart.hu-berlin.de/common/viewWork.do?id=523 (accessed 13.8.05)

[xxvii] Nature Vol.423,2003, 106 - 107

[xxviii] Dürr, H-P. Ibid.

[xxix] www.lifescientists.de/ib0204e_1.htm (accessed 16 November 2004)

[xxx] J.J.Chang and F.A.Popp. 'Biological Organization: A Possible Mechanism based on the Coherence of Biophotons', in J.J.Chang, J.Fisch and F.A.Popp (eds.), Biophotons. Dordrecht: Kluwer Academic, 1998). 217-227.

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[xxxv] Margulis, L. *Origin of Eukaryotic Cells*. (Yale University Press, 1970.) Her proposal that mitochondria and chloroplasts evolved symbiotically, although in no way a displacement of Darwinism, nevertheless initially made the Darwinian faithful very uncomfortable.

[xxxvi] Ho,M.W. Towards a New Ethic of Science. 2000. http://www.i-sis.org.uk/newethic.php (accessed 8.10.04). See also: Ho, M.W. The Rainbow and the Worm. (Singapore: World Scientific, 1993).

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