

Consciousness Reframed , Making Reality Really Real

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Toward a Cybernetic Ontology of Thingyness

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Abstract

In my work as a sculptor I am faced with a paradox, how to approach the real, the secret of things in a visual/spatial medium. How does a plastic artist go beyond superficial appearance in search of a more fundamental reality?

I summarise my thinking and practice as a praxis, a 'practice based metaphysics'. My 'open sculptural systems', multi-component contextually responsive sculpture-kits can be combined into a virtually any arrangement in the museum, street or other site. They are provisional, playful, they invite audiences to collaborate in their deployment to help determine how they will negotiate and disperse into their context. The main system I am talking about here, *Paratekton* – 'beside the structure' - has an 'alphabet' of about 40 characters that have a syntax encoded into them in terms of how they combine with each other and how they respond to the space they find themselves in.

Paratekton is consciously an entelechic structure. Entelechy, 'in-end-having' is Aristotle's term for what it is to be; the inner drive, principle or purpose. In Western metaphysics, the inmost soul of things, persons and entities is taken to be that which remains unchanged during the process of transformation which characterises a thing's fleeting manifestation in the world, hence when Gertrude Stein says "a rose is a rose is a rose" she means that a rose is a rose whether bud, pollen, bloom or withered seed head. The changing phenomenal manifestation of the rose is not the substance (standing under) of the rose. So with my sculptural systems I am trying to get beneath their 'thingyness' and think of them as a process, a system. Sculpture could be seen as a less than ideal medium for the apprehension of such immateriality; but I maintain that paradoxically it is through this very concreteness that the elusive effulgence at the base of reality may be glimpsed.

Full Text

'Creation is only the projection into form of that which already exists'
Shrimad Bhagavatam, III.2, XI.10

In my work as a sculptor I am faced with a paradox, how to approach the real, the secret of things in a visual/spatial medium. How does a plastic artist go beyond superficial appearance in search of a more fundamental reality?

As an artist I seek a sense of the real; I am perplexed by the question of what it is to be. My practice skirts apprehensions of what it is to be in various guises and investigates the three magisteria of science, art and religion for the accounts of reality they provide in different but sometimes overlapping ways. The interplay between these accounts of reality sustains a rich and passionate discourse. The limits of science, what it is possible to know leads to the question: what can a human being in all his or her finitude know and what types of knowledge do the three magisteria furnish? As Steven Jay Gould pointed out in his famous essay *Non Overlapping Magisteria*, science and religion work well within their own domains, when the epistemologies are confused there is trouble and today where we are confronted by a literal reading of the Christian creation myth as a factual account on one hand and on the other, science as an ideology denies the validity, the existence of anything that does not fall within the definition of a testable hypothesis or the ability to be mathematically quantifiable. Both seek certainty and certainty is the enemy of enquiry, or to put it in a religious way, certainty is the enemy of faith; doubt is an essential characteristic of faith.

I am indebted to both Mythos and Logos— for me, the real is approached in the reconciliation of the rational and the irrational. As Ingmar Bergman said "I throw a spear into the dark -- that is intuition. Then I have to send an expedition into the jungle to find the way of the spear -- that is logic."

"All the explanatory arrows point downward, from societies to people, to organs, to cells, to biochemistry, to chemistry, and ultimately to physics."

Stephen Weinberg

In the argument between reductionism and holism, reductionism holds that complex phenomena including consciousness are nothing more than the sum of their parts; that the explanatory arrows always point downward. Holism sees wholes - entities, agents and phenomena as self-ordering and teleological, not explicable from the sum of their parts. Complexity theorist Stuart Kaufmann in *Reinventing the Sacred* speaks of a world of ceaseless creativity that continuously transcends its initial conditions, is far more than the sum of its parts. He sees this as immanent in nature with no need for further explanation whereas I would say that there are further mysteries to be explored.

I think that we are in the midst of a shift from a reductionist to a post-reductionist paradigm and that this is coincident with shifts in the relationship between science and religion. Significant rethinking is occurring in the history of science and religion away from a largely conflictual account toward more intriguing and complex interpretations.

“The reason why our sentient, percipient, and thinking ego is met nowhere within our scientific world picture can easily be indicated in seven words: because it is itself that world picture.”

Erwin Schrödinger

The above quote expresses, contra reductionism, the idea that knowledge is an artifact of human consciousness and is therefore ill-placed to account for that which created it. Some spiritual traditions see humanity's relationship to God similarly.

Topology of Knowing – God could be said to be that ultimate reality which underlies all, in Paul Tillich's words – ‘the ground of being’. In his theology God does not exist rather God is the source of all that exists. I have a sense of God (whatever God might be remembering the the German etymology of Gott – that toward which one directs worship) as the substrate from which all arises; I see humans and all creatures as isomorphic with God and in my work I use the analogy of epitaxy, a term used in solid state physics to describe the way that the orientation and structure of crystals is determined by the substrate from which they arise. God is a useful taxonomic metaphor for the first branch of the system, if you zoom out far enough you can apprehend this, though paradoxically this is also to be perceived in ‘the dearest freshness deep down things’ like, for example, a rose bud.

Paratekton (from the Greek-beside or beyond the structure) is a highly organized spatial system that incorporates something of the rigour of industrial design but has a freedom and a ‘recombinant openness’, it carries an irrational signal, coming out of my world view which needs both the grandeur and poetry of the creation myth of the book and the wonder and rigour of science and ‘the book of nature’. In esoteric traditions, and in Aristotelian metaphysics, the inmost soul of things, persons and entities is taken to be that which remains unchanged during the process of transformation which characterises a thing's fleeting manifestation in the world, hence when Gertrude Stein says ‘a rose is a rose is a rose’ I take it to mean that a rose is a rose is a rose whether bud, pollen, bloom or withered seed head. The changing phenomenal manifestation of the rose is not the substance (standing under) of the rose. So with my sculptural systems I am trying to get beneath their ‘thingyness’ and think of them as a process, a system. You might wonder whether the lumpy corporeality of sculpture is the best medium for such an apprehension, I do to! But there is a wonderful reassurance, solidity, concreteness in this thinginess which can only contain a glimpse of that elusive effulgence at the base of reality. *Paratekton* is a river flowing through and underneath its vegetal nodes which could be seen as its phenomenal events. It is a carrier wave, a message carrying signal. It is not a thing, it is an event, a process of becoming, or it is a thing that lays its own substance (in the original Greek sense of that inner unchanging property that stands under illusory appearance) bare, it could be stripped of events and would be unaffected. The soul, or substance of a thing could be said to be topological, containing the properties of form within it that are prior to and will remain invariant during the distortions and transformations of the thing's existence in the phenomenal world. This is similar to Goethe's notion of the ‘urpflanze’ or ‘primal plant’ expounded in *the Metamorphosis of Plants*, whose essential characteristics define all plants.

The ways in which *Paratekton* goes together are almost infinite, its randomness is part of its meaning as is letting go some of the authorship and sharing the possibility of creating a virtual infinitude of possibilities with the audience. One could see *Paratekton* as a cybernetic system linking artist, artwork and viewer in a loop of interactive intentionality. As Gregory Bateson said in *Steps to an Ecology of Mind* 'in no system which shows mental characteristics can any part have unilateral control over the whole. In other words, the mental characteristics of the system are immanent, not in some part, but in the system as a whole' (1972:p.316).

Paratekton as in much of my work fuses notions of time with space and matter, much in the way that Leibniz proposed with the monad, a metaphysical corpuscle with properties of 'ultimate thinginess' that constitute the irreducible elements of reality. They are analogous to but radically different to the atoms or corpuscles of the mechanistic cosmos of Newton and Descartes. In *Process and Reality* Alfred North Whitehead apprehends Leibniz's monads as 'occasions of experience' that conflate space, time and matter into events, manifestations of the universe. In my work I try to connect, go beneath the appearance of separation to that fork in the branch of reality from which seemingly separate phenomenal events spring.

So *Paratekton* is a multi-dimensional non-linear manifold; many possible realities pulse through its recombinant system. It embodies many dimensions in its gross anatomy including the linear in that it follows stochastic paths determined by the user; the graphical, i.e it is made from shapes drawn in 2d on a CAD programme; the three dimensional in its overall spatial arrangement and it implicitly the fourth dimension in the growth patterns that it is in the process of generating. Like much of my work it could be seen as a snapshot or a frozen moment within an unfolding cybernetic system whose final form is unknowable but whose purposive action may be discerned by the way it interacts with its co-creators: artist and viewer/collector/curator/preparator etc.

To return to the idea of the three magisteria, borrowed from Gould and also referenced from the theosophy of Steiner who saw art, religion and science as three intertwined ways of apprehending reality, *Paratekton* three ornamental nodes, the Pugin, a transcription of one of his neo-gothic ornaments, the Haeckel, a transcription of one of his drawings of a diatom, and the Agni, named for the Vedic god of fire. These three motifs symbolise the proper separateness and also the overlaps of science religion and art into a coherent world picture that allows a unified world picture to flourish.

How to visualize the above mentioned effulgence at the base of matter? In Vedic metaphysics, the separateness of things in the phenomenal universe (*maya*) is an illusion and the goal of enlightenment is to understand that the distinction between self and universe is a false dichotomy. *Infinitesimal* and *Plenum* are respectively a wall drawing and a real time animation in the form of a grid of dots which is occasionally interrupted by the insertion of an extra dot that pushes the immediately surrounding dots aside or a missing dot which pulls the immediately surrounding dots into toward the empty space. The viewer is confronted with a swirling universe of perceptual possibilities. The slight imperfections in the grid send optical ripples over walls ceiling and floor, undermining the solidity of

the architecture and inducing a vertigo and perceptual confusion in the viewer. It references the illustrations of crystal lattices found in a science textbook. These lattices are invariably contaminated by missing or extra corpuscles that disrupt the perfection of the grid. At the molecular scale there is no solidity, no 'thing' just atoms vibrating about their loci attracted and repelled by fundamental forces of nature.

Infinitesimal and *Plenum* question the separateness of the points so that they are perceived as a field of events rather than a collection of separate entities just as what we perceive as physical bodies in the cosmos are manifestations, concretions of the created order held in dynamic balance with each other by gravity, electromagnetic and nuclear forces depending on what scale they occur at. In terms of the implications of quantum theory these fragments popping in and out of existence could be said to be a system containing all possible worlds, latently waiting to manifest.

Plenum plays out as a creation myth, a meditation on the relationship between the created world and creator. It can be read on a material, cognitive and spiritual levels. Its crystalline grid is a plenum from which phenomena with increasing levels of complexity and freedom grow. The imperfections could be seen as self-awareness and autonomy awakening out of a universal atman, or alternatively, out of the pre-human lesser cognition of animals. This intelligence, this autonomy, this free will is our gift to use for good or ill and the calamitous history of humanity is the price for that freedom. The created order of the natural world is also necessarily free so that evolution and higher life forms like us can come into being and become creators ourselves. The laws of nature have provided the conditions for us to exist that include plate-tectonics, dynamical weather systems, tsunamis, tornadoes etc. Creative freedom cannot exist without risk. There cannot be the freedom to grow in conscience without the freedom to be evil.

In this essay I have used the image of branches, of forks at different scales as if attempting to hang my argument on a huge tree. This arborescent analogy is useful in organizing my thoughts but could be flawed by a scalar determinism if taken too literally. What I have called the effulgence at the base of reality is to be glimpsed at any branch of this isomorphic tree.

But I am not ultimately interested in the intellectual aspects of this. I am interested in the fact that when we feel a sense of isomorphism, of identification, we become contextually fused, unbounded, part the same exhalation as all creation. I have such a strong sense of unity occasionally that it leaves me shocked, almost unbalanced at the the enormity of perceiving the intricate, blooming buzz of spiders, people and trees in their act of being. That is the secret, the 'dearest freshness, deep down things 'when the world flames out, like shining from shook foil' and mundane reality is transfigured into a blessed joy which is also a lament at each precious thing's passing; the irreversibility of time's arrow.

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