

Extracts Towards Contemplating: The Arts and World Peace

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I. Propositional Music

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INTRODUCTION

How is the universe evolving? What is the natural form of its evolutionary trajectory? What is the place of humanity and intelligent information processing in this evolution? Is the collective mind and body of music an active component in this transformational scenario? How do we perceive music in which the language of composition evolves and emerges in the listening experience and is not known, a priori? The mental state required to search for intelligence outside of ourselves given that the nature of that intelligence is unknown is both invigorating for the human spirit and indispensable for the health and survival of our species and that of our evolutionary successors. ...

FORM AND CAUSE

... Form emerges. Form evolves. Forms emanate from points of singular genesis, defining the space surrounding them, along with sets of dimensions and axes for describing their dynamic processes of change. ...

... In recent times, some Western minds have begun to assimilate the impermanence of all forms and its ramifications for art making. The evolution of many constructs in Western philosophy has been coerced by the psychological demand for permanence in all structures—the heavens, the molecule, the atom, the fundamental forces and cosmological constants—when all life experience reinforces the presumption of **continuous processes, interactions and morphodynamic change**. Even the idea of numbers—the most purely permanent construct we have and the foundation of mathematics—is a cognitive pretext born of the continuous interaction of forces in the mind driving the obligation to **differentiate**, to identify one and then two. Humans must, it seems, attempt to act as ordering agents. ...

... On global scales, all distinctions result from **interaction**, not from the hierarchical imposition of ruling agents handing down ordering forces onto lesser agents. Those who act as ordering agents, *as all life forces do*, and who view themselves as **rulers** operate under an illusion. They are interacting, ordering agents in consort with all regionally effective forces. It may be that all hierarchical (i.e. global) descriptions are synthetic extractions. It may be viable to view only atomic level events and elements as foundational and all else as emergent, summary phenomena.

...

... Musical forms have been misapprehended as ruling agents rather than emerging properties of interacting components. Hierarchical descriptions of forms do not, by definition, require such ruling orders. Our interpretation of the word *hierarchy*, though, is unconsciously and profoundly imbued with an interpretative overlay inherited from post-Neolithic **dominator** societal structures. Other models for society may have flourished on Earth in the past. ... A return to partnership models may be required for us to continue participating in evolution ...

A worldview emerging now includes these notions: ruling and ordering agents are illusory; all forces act; entities of distinction interact; forces are of different relative strengths; all agents of order arise from self-organization and are locally effective; ... This worldview is expanding rapidly during our time, offering new paradigms for perception, evolution, cosmology, physics and the genesis of ideas. ...

EMERGENT, GLOBAL PROPERTIES AND WHOLES

... There are, ... billions of human beings on the Earth, ever more closely linked to each other by various communications media, including a self-built, electro-optical nervous system. If evolution continues in such a direction, and barring self-annihilation, a catastrophic cusp may be crossed. When this happens, a fundamental change of state in earthly society may occur and a **global, organic consciousness** may emerge. ...

COMPREHENDING EMERGING BEAUTY

One who carefully observes the spread of a phenomenon throughout a population — the constituent parts of any interacting group — can witness how easily a group of sufficient size can become a medium for newly emerging forms, any of which carries the potential for manifesting tangible substance. The spread of ideas throughout a human population is an example. Such emerging forms influence the way in which a population interacts with another population, often with real, material consequences. When viewed from the top down, these consequences may easily qualify as corporeal and palpable.

Detecting and perceiving newly emerging forms requires continuously evolving frames of reference. Because it is by definition impossible to conceive new orders of intellect from within pre-established frames of referential mind, it becomes necessary for nature to evolve an exploratory mind state in which the recognition of new

orders – the perception of new messages – carries with it the fundamental transmutation of those inquiring minds that perceive and recognize. New forms in art and music can be agents of this transmutation. Such metamorphic actualization, such entelechy, will occur in the universe. Forces on the obverse will become extinct, as always in the natural order.

Notions of **beauty** are often phrased in some way involving the creation of striking **simplicity** emerging from an underlying **complexity** among uncountable and unknowable component parts. A growing community of musicians, allied artists and scientists are exhibiting a keen interest in attempting to understand notions of complexity, as it is being cast the modern context. This is a natural result of the need to explore transformative processes as we participate in the evolution of a massive, **complex adaptive system**: namely, the human family. ...

TRANSFORMATION AND EVOLUTION

... There exists a universal human fascination with **transformation**. This may stem from a biologically driven desire evidenced by the creation of mythical or technological **doubles** of human form, by the invocation of occult powers to transform, by transformation in science fact and fantasy and by transformation as an art process. The ability to recognize and manipulate multiple versions of sensory constructs may be referred to as **transformational skill**. The brain works on, or transforms, images for a variety of purposes, including the following: (1) to test for the identity or similarity of two things, measured over the axes of some perceptual space, (2) to produce novel variations of some image for creative or humorous purposes and (3) to construct expressions relating to common or socially understood ideas ... This skill appears to be valuable for survival. It aids in perceptual recognition and facilitates the creation of useful outputs or products. It must function in both top-down and bottom-up hierarchical processing.

Accepting continuous transformation as a fundamental principle of the universe may require a redefinition of ego. This may involve a struggle against the possessiveness that is so fundamental to status and survival in a hierarchical society. The musical forms of transformation, improvisation and loosening fixed notation may all result from an innate and **intuitive** drive. Intuition – the immediate apprehension or knowing of something without the conscious use of reason – may result from an important biological mechanism that responds to the underlying morphodynamics of the universe. When combined with open-minded **reasoning**, these two forms of **intelligence** may lead to improved **systems of judgment** ...

New ideas in the arts and sciences of dynamical systems, evolution, cosmology, dissipative structures are giving glimpses of possible reconceived realities. These are not just reductionist approaches to dissecting the bank of a priori human observations derived within previous paradigms. We are now capable of imagining new paradigms and even testing them through technological or other simulations, especially in the arts. In this way, we can anticipate observations we might make from within

potentially new paradigms. The synthesis of new paradigms can be considered an artistic process in which change is a given. ...

SOURCES OF NEW MYTHOLOGY

... In the last century or two, art making moved from a **synthetic-hierarchical** paradigm that of generalized concepts being constructed within the cognitive framework of higher things operating over lower things to an **analytic-reductionist** paradigm of processes being broken down in search of underlying explanations contained in relationships among component parts. Now, art making may be moving to a new paradigm of **holarchic-interactive** descriptions with **emergent phenomena**

...

Synthetic-hierarchical work was fraught with symbolist content derived from an imposed higher mentality and reflecting blinding, socio-politico-religious orders. These may have originated when the agrarian, ecologically aware, partnership-based societies of the Neolithic were supplanted by the warring, dominator societies that followed ... Such dominator societies could only be maintained through subjugation of otherwise freely inquiring human minds. This was accomplished by means of enslavement to vindictive, vengeful and threatening [political and] religious icons that [have] lasted to the present day. The more cool, analytic-reductionist emphasis of inquiring into the nature of human perception, cognition and the conscious and unconscious mind typifying modern art of the late nineteenth and twentieth centuries freed art from the baggage of this highly charged, unquestioned symbolic and emotional lexicon that weighed it down.

During the current era, art seems to be moving towards a natural confrontation with the beautiful, holarchical forms of the natural universe. This is happening on many levels of society. The common theme is **interactivity**. This includes heterogeneous socio-cultural interaction and global, technological networking.

During recent centuries, scientific themata have evolved with such power that, when combined with empirical investigation and phenomenic verification, they have succeeded at denuding traditionally powerful myths of their power to guide society. New myths may arise from a critical level of interconnectedness. Such mass phenomena are sure to evince emergent properties. Hopefully they will be accompanied by images of sufficient power to garner forces of healing within our culture once again. Cultural crossings, with imaginal dialogs circulating in communication networks, may become the art objects of focus. This may be accompanied by a new phase of **dematerialization** in art. Objects may be created as **instantiations** of experience or **embodied realities**, growing out of the current notion of **virtual realities**. Myths based on continuous transformation, and change are needed to help humanity become comfortable with its necessary evolution toward partnership-based societies. Art can help, partly by bridging cosmogony and theogony in modern language.

THE INFOSPHERE; WHO'S THE AUDIENCE?

... Natural selection will insure that a planetary society that is incapable of structuring itself along the lines of cooperative transformation will not survive. Increases in the mobility of populations and global communication are forcing interaction among people with diverse cultural backgrounds. Such admixture of peoples is probably the most powerful energy source currently driving our cultural transformation. The fact that the technological facility to create global, interactive networks, with virtual and embodied electronic realities is being developed at the same time as this growth in cultural juxtapositioning will result in major transformations of society. We can only partially glimpse these at present. We know that emergent, global properties among many interacting components are fundamentally unpredictable. Therefore, we must be able to recognize them and interact in what we determine to be the appropriate manner, using our best judgment and without having full knowledge in advance.

The greatest single threat to human survival presently known is that the population of minimally sentient human beings will increase beyond the capability of the Earth's environment to sustain life and that the collective intelligence will not have advanced far enough to bring controls to bear on preserving our support structure. Furthermore, current societies are becoming bogged down in huge bureaucratic structures arising from organizing principles that are focused primarily on the legalities of individual liability. More of society's time and energy is consumed by managing blame, retribution and protection against responsibility than on creative thinking, education and inventing solutions. Time will tell the story and nature will act to choose appropriate outcomes.

II. Collapsing Distinctions

[From: Rosenboom, D. (2003). *Collapsing Distinctions: Interacting within Fields of Intelligence on Interstellar Scales and Parallel Musical Models*. Santa Clarita, CA: David Rosenboom Publishing. [Available online at: <http://music.calarts.edu/~david/>] }

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Ascendancy of empathy, altruism, and self-consciousness

... Is the ascendancy of empathy instinctual and reflexive? The automatic sensation of repulsion and horror upon viewing brutality inflicted upon another seems like an instinctive reflex. Is it the result of the human species' ability to imagine what the experience of another would be like if experienced by one's self? This underscores the trait of imagination among human species and, consequently, the ability to imagine another's experience. A moral agency may then be required to differentiate among the possible results of imagining and taking on another's experience, such as jealousy versus shared joy when the experience is perceived as good and rewarding, or

repulsion and looking away versus compassion and outreach – when the experience is judged as bad and damaging. Imagination and altruism are, in these respects, intimately linked.

The development of self-consciousness would seem to be required for all this. However, without the parallel development of understanding the non-differentiated self – as in *zazen* – the differentiated self (ego mind) is easily led toward self-maintenance in response to imagining the experience of others rather than altruistic consciousness and compassion born of understanding unity and universality. From this perspective, acquisition of deep self-knowledge seems to be a primary prerequisite for consciousness to reach higher orders and, in turn, a prerequisite for all higher human evolution. ... Co-creative, interactive, co-communication may only be possible among forms of intelligence in which altruism and empathy have ascended naturally in evolution. What better way to begin communicating altruistic intentions than by inviting co-creative interaction? What better way to recognize being in communication than by participating in co-creative processes? ...

The problem of concrete forms in communication

Meaning plus structure produces form. Isn't it interesting how each generation and culture finds its utterances, words, to connect with emotions and feelings. We witness the development of language all the time; a kind of *emotional syntax* is developed to go with semantics and the binding of structure with feeling. ...

The requirement of concurrent imagination for the recognition of signs and labels

... To accurately represent an object, the communication object must be the *thing* itself, rather than a sign of a significant. The sign and the significant are distinct. The sign is illusory. The relationship between them has to be imagined. Communication, then, only takes place if the imaginations of the various parties in communication are the same. ...

The two-way-ness of communication

Communication requires two-way co-creation to exist in any form. Communication is a form of relatedness and an interaction that brings about new forms. The emergent forms of our culture provide many examples. Even large-scale, cultural forms like cities can be thought of as emergent patterns in time, ... we are better off not [relying on] labels, but rather, ... processes that unfold and invite response. Labels rely on the coincidence of imaginations and are one-way. ...

III. Leading the International Culture Artists as Global Community

[From: Rosenboom, D. (2007). *What Makes a Great School of Music?* Santa Clarita, California: California Institute of the Arts.]

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Culture can have no spatial or temporal limits. Culture is endlessly open – any open form involves joyous struggle. The possibility for positive evolution in the human struggle requires that organized societies cease to constrain that which emerges from culture. Rather, it must blur the boundaries of what we do together, which is the authentic, emergent form of culture. ...

... And that motion must be global... This is very important in our time of divided governments working against the forces of increasingly shared cultural information.

We are reminded of Jean Jacques Rousseau’s famous declaration: “Man is born free, and everywhere he is in chains.” Reducing ignorance and neutralizing pertinacious hoarders of opinions – to paraphrase T.S. Elliot “...minds not gifted to discover truth but tenacious to hold it,” – is our only hope. ... In order to engage in competition, in order to engage in conflict, in order to engage in war, we must first convince another to see us as their enemy. ... The competitor with whom I want to compete may not recognize me as a competitor until I persuade him to act that way. The arts can help mitigate this. ...

The arts can help because the community of artists is co-creative. The field of human imagination is infinitely pluralistic and non-concurrent. Therefore, culture must come from co-creative emergence. Communication and language are co-creative agreements. The arts can be about learning to be positively engaged in such agreements. We take energy from our experience that the global community of artists, while recognizing differences, is remarkably, necessarily, organically unified.

IV. What More Can Musicians Do?

{From: Jester, J. (2007). Interview with David Rosenboom. Ed. D. Rosenboom. [In press.]}

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JJ: For the musicians of the world is there something greater that you see that musicians should be addressing? Like, is there something greater that the world could benefit from that musicians could offer that we aren't?

DR: Well, I think right now the integration of all aspects of creativity brought in front of audiences or brought together with audiences is something that musicians can do very well. I think looking everywhere, at every kind of border that can be made fuzzy and less defined is something that musicians can contribute to society, whether it's separation of performers and not performers, audience and performers, cultures, all sorts of things.

Globally, of course, in the current cultural and socio-political environment, it's more important than ever that there be a continued global view of art making, because the artistic community around the world is able to bond and work together in ways that are really profound regardless of what their governments are doing to each other.

So it's a dangerous time in the world right now and artists can have a profound effect on it, which doesn't mean they have to go out and make political work, you know?

JJ: Right.

DR: But just contributing to the culture in ways that help it evolve is critical. Things are very precarious at the moment. Spontaneous creativity tends to enable individual people to join together and be effective as one.

JJ: Wow.

DR: Just like a classically trained musician who learns to improvise suddenly realizes it's not so scary out there, because, if something happens you can just make it up, right?

JJ: Yeah, exactly.

DR: Giving that kind of license to people to be individually and collectively comfortable with blurring boundaries and being original, helps them get along better

and do a lot more for the world. So, musicians, just like all artists, must develop the broadest views of culture, the broadest perspectives on society, the broadest contexts and sense of scales in time, space and history that they can possibly have right now and take those out into the world. In this way, artists have the possibility of profoundly helping the course of the world toward less suffering and greater unanimity of purpose as citizens of the universe.

V. Ah! An Opera No/Now Opera for the World

{From: Bellen, M. & D. Rosenboom. (2007). *Ah! Opera No/Now Opera, PROSPECTUS*.

[Description of an opera by poet/writer, Martine Bellen and composer/performer, David Rosenboom, inspired in part by the Buddhist *Diamond Sutra* and which is currently in the process of emerging.] [In press.]}

Ah! is such an opera that is not an opera and is called an opera for our time. *Ah!* is an offering for the betterment of humanity on Earth today. *Ah!* is an environment for discovering. *Ah!* is an immersive opportunity for illumination, a flight simulator for psychonauts. *Ah!* is an opera. ...

... *On one level – the work is about language* – about language’s power, language’s failure and its relationship to the world human condition. First, there is the failure of both language and mathematics to evoke a unified and consistent, background-independent imagination of the nature of the physical world, from either a reductionist or constructivist points of view. Related to this is the problem of how the language of prediction relates to the language of observation. We run headlong into the limiting walls of explanation and reason. ...

... there is the genesis differentiating – albeit co-creative differentiating – of linguistic units – origins of language – giving rise to tools for labeling what become fervent systems of attachment (i.e. belief systems). These tools become the bases for the articulation of ideologies, which further become the *language* bases for the articulation of conflicts, arising fundamentally from the emerging survival tactics of differentiated self-hood. (This assumes the self-nature of groups as well as individuals within groups. Group behavior is thought of as emergent phenomena.) ...

... And *now*, we humans take language further still, out of the sonic, and into the purely visually symbolic. Some of our primary mental activities now couple graphic marks with thought units – mind-symbols taken outside of physical sound embodiments. And thus, a book can cause a war. ...

... a critical evolutionary hurdle for humans to overcome now is how to use those same tools, of language, symbols, utterances, music, etc., to nurture the ascendancy of empathy, altruism and the kind of self-consciousness permitting these tools to be used increasingly efficiently in activating the deep imagination of the experiences of others and the co-creative experience that is universally shared. Neither religion nor science may be applicable to the understanding needed. Still, practicality in alleviating suffering and participating in evolution is necessary.

As language emerged, it became possible to make symbolic references to internal systems and states of belief. This was different than the way prior conditions of domain specific minds framed gesture communication in interacting with individual and social survival needs. With symbolic language, co-evolving, ballooning, bubbling, thought/mind/body/emotion states could be referenced. The act of referencing further enabled the growth and evolution of these states. Then, it became possible to *attach*, to give palpable substance to such belief states/systems, to experience threat to a self merely by perceiving the existence of different belief states/systems in another. Thus, separation, self-boundary emphasis, anger, aggression, and destruction based merely on perceived differences in illusory belief states/systems followed. This seemed absolutely essential and justifiable for survival. But, belief states/systems are illusory. So, conflict arises from illusions symbolically referenced with language.

Our impulse towards such an idea as an *opera/no-opera* inspired by the *Diamond Sūtra* is followed with a profound essential presence of the paradoxes of description. What is the role of language in this? How can the invitation into the resulting experience nurture forward evolution? This must emerge from *co-creativity*. From a future point of whatever may result, the beginning point (*now*) may be indescribable. And from this genesis, any eventual manifestations are by definition indescribable. ...

The most meaningful opera might be an assemblage of strangers listening to the world.

The opera must transcend itself—send itself—surrender self—

[No inside no outside.]

Opera for our time, emerging from our human condition, the monkeys we are, here on this little planet among billions.

Opera, distributed cyberspace resonance, speaking, singing, changing, book, libretto, music, interactivity, drama, engagement, embodiment, thought space, non-thought, space, our symbolic species, —true engagement with the impulses of differentiation, origins of substance.

Return again and again to the Diamond Sūtra, its soaring ascent into the manifestation of wisdom, its rhythm, its repetition, its use of
time in tuning beingness,
its pointing towards living at the impulse of the origin of the fact of existence.

Author's Biography

David Rosenboom (b. September 9, 1947) is a composer, performer, interdisciplinary artist, conductor, author and educator. Since the 1960's he has explored ideas about spontaneously emerging musical forms, languages for improvisation, new techniques in scoring for ensembles, cross-cultural collaborations, performance art and multi-media, the interactive music of the infosphere, an approach to compositional modeling termed *propositional music*, and extended musical interface with the human nervous system. His work is widely published, recorded, distributed and presented around the world, and he is known as a pioneer in American experimental music. Since 1990 he has been dean of the School of Music at California Institute of the Arts where he now holds the Richard Seaver Distinguished Chair in Music and has also been a conductor with the New Century Players, co-director of the Center for Experiments in Art, Information and Technology and board member with the Center for New Performance. He has worked in numerous innovative institutions, including Center for Creative and Performing Arts (SUNY, Buffalo), Electric Circus (New York), Aesthetic Research Centre (Canada), Banff Center, Simon Fraser University, San Francisco Art Institute, California College of Arts and Crafts, Bard College, and Ionian University (Greece). In the 1980s he held the Darius Milhaud Chair at Mills College where he was also director of the Center for Contemporary Music, head of the Music Department, and a professor of music. In the 1970s he was a co-founder of the Music Department at York University (Toronto) where he became a professor of music and interdisciplinary studies. He studied at the University of Illinois in the 1960s with Salvatore Martirano, Lejaren Hiller, Kenneth Gaburo, Gordon Binkerd, Paul Rolland, Jack McKenzie, and Soulima Stravinsky among others where in 1995 he was awarded the George A. Miller Professorship in conjunction with a residency celebrating the centennial of the School of Music. More can be found at:

<http://music.calarts.edu/~david>