

The Jeffrey Rubinoff Sculpture Park

May 22nd -24th, 2009 Company of Ideas

Forum Director's Report

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The Dialectical Relationship Constituting Individual Minds and Group Mind

The Threat of Nuclear Winter: The Art Historical Perspective

Appended to essay: Jenni Pace Presnell Powerpoint Presentation

Living Sculpture: Multiple Dimensions in the Six Suites for Solo Cello by J.S. Bach

Purpose of the Company of Ideas Forum

The work of Jeffrey Rubinoff is ambitious in that it claims art to be a vehicle for the evolution of mind, and as such it must deliver penetrating insights that form the basis for ideas. These ideas are realized in the evolution of the sculpture, and to the artist are complete within the work itself. However, the insights alone are based on linkages within a large and diverse knowledge base and as such are not easily contemplated or widely utilized by other thoughtful and interested minds.

Communication of the inherent value of art through the sculpture of Jeffrey Rubinoff is the essential mandate of the Park.

It has been perceived that the insights evolved with and from the work can increase that communication and enrich the knowledge of the public and art students. It has also been perceived that the explication and extension of the insights may contribute to the diverse knowledge base itself.

The goal of the May 2009 Company of Ideas Forum was to generate and disseminate new ideas from the consequences and questions arising from the insights that evolved with and from the work of Jeffrey Rubinoff. This Forum was a key step towards our objective to develop an interdisciplinary collegial group that can contribute to and disseminate these ideas to art students and a wider public.

To that end we invited scholarly collaborators from the fields of music, philosophy, sociology, evolutionary biology (zoology), art history and international development to present papers for the Forum. Presenters were asked write papers that specifically addressed and extend any one, or collection of, the insights that evolved with and from the work of Jeffrey Rubinoff.

One of the purposes is for the papers to be used to educate art students and the general public about the context of the work of Jeffrey Rubinoff. Another goal of the collaboration is to highlight the role of the artist as a contributor at the centre of human intellectual endeavour.

We now refer to the insights that evolved with and from the work of Jeffrey Rubinoff, which serve as the subject matter for this Forum.

The Insights that Evolved With and From the Work of Jeffrey Rubinoff

Tribalism

Tribal behavior is an ancient evolutionary trait. By definition, a human tribe recognizes descent from a common ancestor. From this recognition, rules of membership are created. As populations grow and genetic distance evolves, the tribe becomes wholly metaphorical.

At the metaphorical level, tribalism is realized in religion, nationalism, and racism.

Tribal myths of origins are distributive memories of existence that substantiate the rules that separate tribes.

The End Of The Age Of Agriculture

The domestication of animals is believed to have begun 13,000 years ago. However, with crop cultivation 9,000-10,000 years ago, a large majority of the population was required to be bound to the land. Cultivation leads to the first continuously settled villages and to civilization itself.

Security and continuity, rationalized by predictable food production, originated specialized political, civil, religious, and military institutions. Institutionalizing a warrior class was the most dangerous necessity of this social sea change. If the military were not directed outward, it would threaten the stability of the non-military institutions. Thus, a constant state of war became inevitable, and indeed the history of city-states and empires appears to confirm perpetual states of war.

The feasibility of escalating war has become absurd with the advent of strategic bombing and nuclear weapons. No military institutions can claim to guarantee security of territory.

Moreover, at the end of the age of agriculture only a minute fraction of the population is required to produce the current surpluses of food and thus the fundamental assumptions of the age of agriculture, security of territory as the means to secure food production, must be revised to the era of global vulnerability.

Resurgent Tribalism

Agriculture not only failed to supplant tribalism, it extended tribalism through periods of technological development. As agricultural and civil practices advanced, continuously larger populations could be supported and larger armies with more sophisticated weapons deployed.

From the Renaissance through the mid-twentieth century, Europe led the world to modernity, scientifically and technologically, warring endlessly in ancient and re-invented tribal rivalries. Finally, much of Europe lay in smoldering ruins bearing the moral degradation of the Holocaust: mass theft and murder precisely organized and recorded by collaborating modern states.

The culmination of World War II was the profoundly ironic gift of nuclear weapons, given to us by science. With the reality of mutually assured destruction (MAD) becoming the ongoing policy of the

nuclear-armed nations, modernity would have to adapt to a balance of terror if the human experiment were to survive.

As nation-states recognize the potential suicide of all-out war, the danger is that extant tribalism can continue to trigger genocide and continue the attempt to draw modernist nations into apocalyptic confrontation.

The Importance Of The History Of Science

The history of the universe is the collective memory of the universe. The science of cosmology probes the limits of what we can know of the collective memory. At the root of science is the simple idea that there can be a methodology by which intelligent people can agree on what they observe and, as a corollary, agree to disagree without murdering each other. Science itself evolved in the West as a necessity for stopping the ongoing murderous tribal wars lodged in separate arguments about divine truth and divine favor. Science is a process that creates conventions of truth. It is the process that itself must be either accepted or denied. Necessarily, to accept science is to accept the process that has led to the scientific concept of evolution. The evolution of life is the collective memory of life on our planet, and it determines what, at any point in history, we are capable of knowing of the collective memory of the universe.

Evolution

Evolution is directional and progresses to ever more complex and adapted orders of organization.

Quite elegantly, the concept is constantly evolving rigorously validated evidence of itself. As rigorously validated evidence expands the idea of evolution, the human mind itself can evolve, thereby contributing to the collective memory of life itself. Arguably, the theory of evolution supports the concept of the potential value of all humanity, as opposed to theistic or other rationalizations for the ascendancy of specific tribes.

Importance Of The History Of Art

Art is the map of the human soul; each original piece is proof of the journey. As the artist navigates the unknown, the art adds to the collective memory.

The artist's journey on the path of art history takes him to the farthest reaches of his predecessor as his point of departure. The artist who follows that history then possesses the chart for evolution, which he in his turn is obliged to extend to his successors.

In its turn, art history is one strand wrapped around the historic cable of Modernism.

Modernism And The New Synthesis

There are important carryovers from modernism to the new synthesis.

Modernism addressed the entire social spectrum implied by the evolving history of science. Modernism was by its nature progressive.

A key concept in the new synthesis is the carryover that life opportunities are not divinely ordained but can be distributed equitably based on merit. And that the corresponding changes in social organization can be implemented. This is the means by which civilization itself can evolve.

Humanism And Integration

In a post-agricultural age, political territories can no longer promise security. Globalization demands a common basis of understanding and action over both geographic and ideational space. Humanism is the conceptual thread with which to weave this common understanding.

Cultivated Ignorance

The easy view that truth is only subjective leads to cultural lethargy. This view of reality does not represent ideas but opinions. These opinions are merely a means to intellectual and moral conformity and to the avoidance of the effort required by independent thought. For some, there is just a cessation of growth, for others a deliberate security of stasis.

Leadership

The highly successful in any field are the masters of convention. In marketing, they are also the masters of the conventional. Learning from original art, true leadership is the quality to navigate beyond the boundaries of convention and to return with the charts of the newly explored. Leaders as navigators continually return to a vision beyond the horizon of convention. Like original art, the highest purpose of leadership is to serve the evolution of human consciousness.

Evolution Of Mind

Evolution of mind results from the dynamic engagement of truth with both analogy and metaphor.

Science has created conventions for truth by using analogies to model material reality. For much of their history, artists have been bound by their innate analogical ability to portray external reality. By science externalizing models of underlying structures of material reality and photography replacing the demand for illustration, art has been liberated to address the internal, intuitive reality of the collective human memory.

Analogies are tools, and as such they are accepted conventions; they are by their nature repeatable, measurable, and predictable. Metaphors exist beyond logic in the realm of intuition; they are the basis for truly original thought and are by their nature unique. Metaphors are self-contained truth, and they cannot be used as analogies.

Science is truth by analogy. Art is truth by metaphor. Resonating together, they are the New Synthesis.

Company of Ideas Forum Director's Summary of Proceedings

Introduction

The Company of Ideas is an annual forum to which we invite a multidisciplinary group of thinkers to assist the Jeffrey Rubinoff Sculpture Park to explicate the context of the ideas in which the sculpture is made. This year we invited practicing scholars to assist with the task of explicating the preceding insights which are crucial to understanding the work itself. 2009 members were: Jeffrey Foss, a professor in Philosophy at the University of Victoria BC, Sam Yeaman, a PhD student in Zoology at the University of British Columbia (UBC), Gerald Swatez a professor in Sociology at the University of Phoenix, Jenni Pace Presnell a PhD student in Art History at UBC, and Brian Mix a professional cellist and music writer. In addition one essay was written by the Sculpture Park activities director Karun Koernig, who also serves as the director of this annual Forum.

Structure of the forum

Each essay responded directly to one of the insights, quoting a particular passage initially and then using ideas from the author's field to broaden our understanding of its meaning. All papers were distributed prior to the Forum to each author, who were each asked to prepare questions for at least one paper. In addition we had non-author Forum participants, Leba Haber Rubinoff, Mary Beth Rondeau, and Robert Dening who were invited to prepare questions or participate in the dialogue.

We also invited a local audience to observe and participate in the dialogue: Susan Cain, artist, Richard Goldman, retired, USAID, Heather Goldman, retired, USAID, John Kirk, Park Curator, Janet LeBlanc, RN, administrator, Michael McNamera, architect, Vaughn Neville, artist, Elaine Savoie, artist, Klaus Schmid, architect.

Jeffrey Rubinoff's contribution to the Forum

Rubinoff conducted a tour of his work for all contributing scholars and non-author participants of the Forum. This was a chance for the Forum presenters and participants to see the work, and have a personal explanation from the artist himself. Following the presentation of each essay, Rubinoff commented in detail on each scholarly explication of his insights.

Structure of the summary of proceedings

The summary of proceedings is organized in the order of the essay presentations.

1. Each author has a biography that outlines his or her academic credentials, and intellectual interests
2. The subject matter of each essay is then summarized briefly
3. The Forum director then relates each essay to Rubinoff's insights explaining how each author has addressed or extended them from the perspective of their discipline
4. The highlights of the dialogue are summarized briefly
5. Key excerpts of the dialogue are edited by the Forum director and re-presented as statements on specific topics

From the Garden of Eden to Terra's brain: A New Humanism

BY JEFFREY FOSS PHD

Biography of presenter

Jeffrey Foss has a Ph. D., in Philosophy. He is currently a Professor in the Department of Philosophy at the University of Victoria. He is the Associate Editor of Philosophy in Review and a freelance writer for the Globe and Mail Toronto, reviewing books on the brain, the mind and consciousness. His major intellectual interests are the Philosophy of Science, Philosophy of Mind and Philosophy of Nature. He has written numerous publications in scholarly journals, and most recently published a book called: Beyond Environmentalism: A Philosophy of Nature. Hoboken, NJ: John Wiley and Sons (2009).

Summary of paper

Jeffrey Foss outlines his proposal that humankind should seek a fundamental unity with nature to become 'Terra's brain.' His view is that the assumption that human beings are outside and against nature is absurd, and that environmentalists' metaphor of humans as cancers of the planet need to be revised in a post-agricultural age. In this Age, when all out tribal battle cannot attain the fruits of war, any ideology that has the potential to exacerbate resource driven conflicts is highly dangerous.

What we need, Foss argues is a new and larger metaphor to ennoble the human spirit. His vision is not one of scarcity and the shrinking of human prosperity. He proposes a new metaphor that humans are Terra's emerging brain. He argues the concept of Terra's brain can unite human beings into a project that would see the planet itself transformed into something approaching an organism in its own right. Furthermore, Foss argues that nervous systems are given a privileged position within organisms that have them. He thus asserts that our technology, our science and our art should be viewed as part of nature, not opposed to it. Humans can and should seek their own good within the good of nature as a whole, and in so doing use our most advanced technologies to guard the planet, preserve life and further evolution of consciousness.

Key linkages with the insights of Jeffrey Rubinoff

One of the most important linkages Foss makes to Rubinoff's work is his acceptance and extension of the concept of the End of the Age of Agriculture. He acknowledges its origin in the insights of Rubinoff, and 'reasons' his way to the same conclusion:

"The twin crises of the 1900s were the climax of centuries of warfare on the brink of nuclear holocaust and the climax of our technology on the brink of a deafeningly silent spring. These twin crises, were—we can now see in retrospect—the explosive and implosive events marking the end of the Age of Agriculture."

"Perhaps the main consequence of nuclear holocaust was that it made war in its original sense—as a battle in which there are literally no rules at all—impossible. And with the impossibility of war came the end of the Age of Agriculture. These facts are breathtaking from the human point of view, and significant even from the point of view of planet Earth itself."

– Jeffrey Foss, forum paper

Accepting the concept of the End of the Age of Agriculture, Foss reminds us of the extant dangers of tribalism and expanded tribal metaphors in a post-agricultural age. This reinforces Rubinoff's insight that agriculture merely extended and provided the means to intensify tribal wars that had adaptive value from the perspective of the successful tribes for over 10,000 years.

“Both forms of human organization, the tribe and the state (the latter being the expression of the agricultural requirement of territory), persist today. ... Neither the tribe nor its territory can be preserved, much less enlarged, by nuclear warfare. ... Warfare is impossible precisely because unrestricted conflict entails nuclear weapons, but nuclear weapons cannot possibly gain the fruits of war: winning more territory for one's tribe, one's kinsmen, one's fellow citizens. To put it bluntly, neither the rulers nor their generals can get out of the line of fire, and so they have lost their enthusiasm for war. ... When you see them doing this, you are witnessing the end of agriculture.”

– Jeffrey Foss, forum paper

Another key linkage Foss makes is his recognition of the importance of metaphor as a driver of history. Rubinoff has stated that the critical difference between an analogy and a metaphor, is that you would die for a metaphor, but not for an analogy. For him art speaks the language of metaphor, which is an extremely powerful medium to intervene in human consciousness and behaviour. Foss as well sees the power of metaphor as centrally important to survival in this post-agricultural age:

“Metaphors can have a power that other non-literal forms of language do not. And that is good, given that the business at hand, the destiny of humankind, demands such power. Terra's brain is worth dying for. The issues we are considering here require the power of metaphor if they are to be handled with the deftness and delicacy demanded.”

– Jeffrey Foss, forum paper

As well, there is an implicit support in Foss' arguments for Forum presenter Karun Koernig's assertion of the inherent value of art to evolve human consciousness in a post-agricultural age. For Koernig, artists with a mature conscience transmit highly ordered information through metaphor to the perceiver. Foss' insight is that humanity has become *informavores*, “[c]onsuming choice bits of ... information, turning them over in our minds, recreating them and then passing them on transformed to our fellow human beings ...” He asserts that music, dramas, literature, and spirituality, in other words the domain of metaphor, is what makes modern life meaningful. This reinforces Koernig's argument that artists ought to recognize the power of their mode of perception and communication to evolve human consciousness.

Fundamentally, Foss' thesis of a New Humanism based on a shared metaphor, reinforces Rubinoff's insight on Humanism and Integration. Rubinoff asserts that “[g]lobalization demands a common basis of understanding and action over both geographic and ideational space...” and that “[h]umanism is the conceptual thread with which to weave this common understanding.” Humanism is the assertion of the primacy of human values, and by implication the value of all human beings. Foss's New Humanism extends Rubinoff's insight and gives us one potential idea of a ‘common basis of understanding and action.’

Overall, Foss accepts and extends Rubinoff's insight that humanism is what is needed to end the cycle of now maladaptive tribal warfare that marks the End of the Agriculture. Foss agrees that our old tribal metaphors are obsolete and what is now needed are new metaphors of sufficient power to realign the human mind to the task of preservation of life and to further evolution of consciousness. Foss demands that we see the logic that human science and technology are essentially part of nature, arguing further that the artistic and spiritual fruits of metaphorical perception are what make us essentially human. This perspective points to a further convergence between Foss's thoughts and Rubinoff's concept of a 'New Synthesis' between analogical and the metaphorical perception and communication.

"Science is truth by analogy. Art is truth by metaphor. Resonating together, they are the New Synthesis." – Jeffrey Rubinoff

Summary of highlights of the dialogue

Foss argues, in his paper, that humans are unique in their ability to care about other organisms. Humans in Foss' view thus are uniquely suited to become the nervous system of the planet. In the dialogue he mentions also the valuation of life, and consciousness as a key aspect of his idea of humans merging with nature as the Terra's brain. Pace Presnell comments that the methods of processing and understanding information currently are based on scientific methods, and posits the need for a humanist method of approaching the information gathered by such a nervous system. Koernig comments that the wisdom of how to apply that information well doesn't happen automatically, and that we must encourage the development of conscience in those animating the spirit of any such global regulatory institution. He further comments on the lack of processing capacity within the institutions and within the individual people within them as a definite constraint. Rubinoff points out that before we can even start thinking about new institutions we need to fully understand the history that brought about the End of the Age of Agriculture and the ideas and institutions that have been able to prevent disastrous nuclear escalation. Rubinoff argues that our cultural evolution made a sharp turn away from the path of continually escalating tribal warfare, fuelled by basic agricultural logic. Presumably this cultural turn was made by some, because the logical conclusion of *that* cultural evolutionary path—mutually assured destruction and concomitant mass annihilation has so far been avoided. He asks the question of who prevented this and notes that the humanities have been blind to this question since the Cuban Missile Crisis of 1962. Those that lived through it went into a state of denial, but in doing so, denied the possibility of anticipating an effectual future; their children inheriting this sense of loss.

Key excerpts of the dialogue

On Possible new humanist method of evaluating and processing information

"...And it seems that one of the biggest issues when we think about how to manage information, all this wonderful information that you're talking about, understanding more about nature, but it seems like we don't have a humanist infrastructure either for accessing this information, for tabulating it or for understanding it. Because it does seem to a large extent rationed, based on I guess scientific methods to, which to a large extent still sort of dictates the way we intake information and understand it. And I wonder if you have any thoughts on a possible sort of, a new humanist model for understanding." – Jenni Pace Presnell

On wisdom and knowledge vs information processing

"There's the information process but then there's the wisdom that comes with understanding how to apply the information and use it." – Karun Koernig

On Development of conscience to guide role as nervous system

“So on the one hand, we need to build a model of the world, at least detailed enough to understand how to manage it in harmony with ourselves. On the other side, we need to understand enough about ourselves in order to know what to do with that information and how to deal with the morality of that knowledge and taking that role. So you can call it moral development, you can call it development of conscience.” – Karun Koernig

On Inadequacies of current institutions to act as nervous system

“Individual human beings form networks that do things that influence control and regulation. As you may suggest at some point, you're suggesting some sort of influence, control, feedback mechanism, like a nervous system.

But the neurons or axons or whatever, the elements of that system have to be sufficiently either networked, so they have to have a sufficient nodality or they have to have sufficient processing capacity in and of themselves to deal with that complexity. ... I just think on a pure nuts-and-bolts level the complexity might be overwhelming for the current method by which we institute the brick-and-mortar institutions. I think that we need to think about other kinds of institutions that can handle that. “– Karun Koernig

On making the ‘Turn’ away from the evolutionary path of agriculture

“I think our first steps here, and a lot of them will come out in the papers, is to try and understand what it is that we're talking about before we look for a solution or a vision past it. We are missing a tremendous amount of information. That information is contained in the acts of first inventing, then dropping the atomic bombs on Hiroshima and Nagasaki . To me, this was the equivalent to an asteroid strike for human cultural evolution.

There have been a limited number of periodic mass extinctions that have had major affects on evolution. The last major one was 65 million years ago which accounts for the extinction of the dinosaurs. In the period of the destruction of the dinosaurs, there was a cataclysmic event or cluster of cataclysmic events that turned evolution away from its continuous direction. The momentum of evolution will keep it on its inertial path unless something enormously powerful turns that path.

So I think that the first level of consciousness, especially for the humanities at this point, is that our asteroid, the thing that turned ...our human evolution, was the dropping of those two bombs. But the inertial momentum of the evolution of civilization—consciousness that was rooted in agriculture—continued in the same direction in the inertial period.

We were very lucky that although the turn happened, we have managed to survive thus far. Because, those of us who lived through the Cuban Missile Crisis [also] died. It was as though the bomb *had* dropped. There was immeasurable mass trauma at that point, and I think most of us denied it. We survived it. But we also accepted: 'This is a disgrace. Let's forget about it.'

The genius of human beings in the last 50,000 years, which makes us, *us*—our evolutionary state—is that we can anticipate and build a future. So, when we lose the sense that we can

anticipate and effect the future—which I think happened in 1962—we also lose the genius of our humanness.

And I think that's probably more of what you're talking about—rebuilding the confidence that we can actually make it through.”—Jeffrey Rubinoff

On the wreckage of 1962 and the failure of the Humanities to make the turn

“Surely the terror must have gone through everybody at that point. We were all at ground zero. The unthinkable became thinkable, and we all underwent an irreversible transformation. The difference is that we've all had our own way of hiding it. ...Many of us have raised children since then. And so the denial factor of this thing must be overcome, because the inertial parts of all of this are the wreckage that we've seen of John Kennedy being assassinated, the wreckage that we've seen of Martin Luther King being assassinated, the wreckage of Vietnam and Johnson's presidency, the wreckage of Richard Nixon's presidency, the residue of Richard Nixon elected—Rumsfeld, Bush and Cheney. And clearly this list is incomplete. We're still living in the wreckage of 1962.

The unthinkable came to be thinkable, and we in the humanities, as far as I can see, haven't applied ourselves to that reality: we know there are people managing the levers [since 1962] and the weapons remain. ... And what I have come to understand... is that you have to first recognize the facts before you can make the turn. “– Jeffrey Rubinoff

On the Apocalyptic consciousness of evangelical Christians in the United States

“I'd be worried about the Chinese and the Africans, because they didn't go through '62 the way we did. However, before that I'm worried about half of America because half of America are apocalyptoids. They believe that the rapture is coming, for heaven sakes. I'm exaggerating a little, it's not quite half. But a very large proportion of that, almost 50 percent, the 50 percent who elected Bush for the last eight years, they're evangelical Christians in the most fundamentalist, primitive sense. They believe the rapture is coming in the next 10, 15, 20 years, the second coming of Jesus. And these people are living and voting on the basis of that kind of consciousness. “– Gerald Swatez

On evangelicals controlling US armed forces education and rapture by default

“The problem that happened in 1962 was that this progressed on its inertial path because we defaulted. ...And as long as it's been done by default, then we have to answer for it. Now, one of the continuations of that default is that the evangelicals may be gaining an army. They've reportedly taken a prominent position of influence in the American Air Force Academy as well as other American military academies. Very serious stuff. Now, there are attempts to back that off.

So if by default, we leave it to them, we have to account for their vested interest in the rapture. We must assume that they will attempt to bring it about. The alternative is to turn the corner.” – Jeffrey Rubinoff

Cultural transmission, network architecture, and the evolution of human self awareness

BY SAM YEAMAN

Biography of presenter

Sam Yeaman is working to complete his doctorate in Zoology at University of British Columbia. He collaborates with Michael Whitlock on theoretical and experimental questions related to evolution under migration-selection balance. He plans to defend his thesis in September 2009, after which he will begin a post-doctoral position at the University of Neuchatel in Switzerland with Laurent Lehmann. For his post-doctoral research, Sam will be exploring questions related to the effect of network architecture on evolutionary dynamics in culture. He also plans to continue his theoretical studies of multi-locus adaptation.

Summary of paper

Yeaman explicates Rubinoff's insights on Evolution and the Importance of the History of Science, by first explaining that for most of history, all life, including humans, evolved through natural selection. Yeaman goes on to say how significant the development of the ability of humans and other animals to evolve cultural information relevant to their survival. He presents an approach to understanding the evolution of culture through the idea of memes, first proposed by Richard Dawkins, which are roughly analogous to genes but are instead self-replicating units of cultural information. What makes memetic transmission so much faster than genetic is that memes that memetic variants can be refined and recombined to suit a particular problem, whereas genes are primarily selected upon because of their effect on reproductive fitness.

Memes also evolve and spread faster because of the differences in their transmission architecture. He states for example that a genetic mutation which has the effect of increasing fitness by 2% has only a 1% chance of spreading to the entire population, whereas a cultural meme which increases fitness by 1% has a 100% chance. This is because beneficial alleles are passed from between generations vertically, whereas through transmission networks beneficial cultural memes can be passed horizontally between many individuals within one generation.

He then explores how the twin variables of dogmatism and competitiveness within scientific, religious, and artistic memes evolve and perpetuate particular transmission architectures. Yeaman argues that understanding the transmission patterns of by each set of memes, is central to understanding their own evolution as well as their potential for fostering or ending human conflict.

Key linkages with the insights of Jeffrey Rubinoff

Yeaman celebrates the evolution of human consciousness and especially our unique capacity for self-awareness. He is fundamentally concerned with how this awareness has led to dangerous conflict over mutually exclusive explanations of human genesis. He agrees with Rubinoff on the importance of the wider understanding of evolution as a new common human shared history: as Yeaman states "[t]he emergence of scientific explanations of human origins has effectively challenged the dogmatism of earlier religious explanations..."

However, Yeaman concedes that a scientific understanding of evolution is not sufficient to supplant religious memes.

“... [S]cience is fundamentally constrained in its depth of explanation due to its reliance on empirical observation and logical axioms. As many of the questions surrounding the existence of the universe and the nature of human consciousness lie beyond the reach of the scientific method, the replacement of religious explanations with scientific ones has left a void where science can make no comment.”

– Sam Yeaman, *forum paper*

One of the most significant contributions Yeaman makes to the explication of Rubinoff’s insights is the reinforcement of the assertion of the role of art in contemplating this void. Yeaman proposes that “... art has evolved and flourished, providing a complement to scientific understanding; art can provide an entry point and means to reflect upon and enrich the understanding of any given subject material.” Yeaman proposes that artistic memes should displace religious memes and compliment our scientific ideas on human evolution, with an understanding that is necessarily beyond the purview of science. This lends support to Rubinoff’s assertion that metaphor and analogy (art and science) can resonate together in a new synthesis.

Key meme characteristics’ effect on transmission structure and memetic functions

	<i>Dogmatism</i>	<i>Competitiveness</i>	<i>Transmission Architecture</i>
Religion	Dogmatic	Competitive	<ul style="list-style-type: none"> • Inter-generational transmission of religious memes from one highly connected node to other highly connected nodes • One to many architecture for the communication to minimally connected nodes • Reticulation from minimally connected nodes, or highly connected nodes actively discouraged • Suitable to conserve specific memes that address a large range of human experience
Science	Non-dogmatic	Competitive	<ul style="list-style-type: none"> • Inter-generational transmission of scientific memes from one highly connected node to other highly connected nodes • One to many architecture for the communication to minimally connected nodes • Reticulation encouraged both from minimally and highly connected nodes given proper codification • Suitable for evolving mutually exclusive memes, addressing a small part of human experience
Art	Non-dogmatic	Non-competitive	<ul style="list-style-type: none"> • Inter-generational transmission of artistic memes is between highly AND Intra-generational transmission between minimally connected nodes • One to many architecture for the communication to minimally connected nodes • Reticulation not restricted or structured, as the artistic communication network structure is fluid • Suitable for evolving mutually non-exclusive memes addressing a large part of human experience

Summary of highlights of the dialogue

One of the more important points of the dialogue was made by Yeaman, who argued that consciousness by its nature teleological, (has a function or goal). On a separate point, Rubinoff addressed Yeaman's treatment of religion in his paper, commenting that he believed that religion was a metaphorical extension of tribalism, which itself confers an evolutionary advantage on individuals who prioritize the fitness of their close genetic kin. Yeaman mentions that what Rubinoff is speaking of is an established concept in evolutionary biology, called Hamilton's rule, which predicts the extent of genetic distance to which sacrificing one's own fitness is evolutionarily favoured. As the dialogue moved on, Vaughn Neville, a Forum Observer, asked how ancient cave artists could maintain their culture for over 30,000 years. Rubinoff responds that this is an example of memes being passed forward specifically between generations of artists. He remarks that the artists' drawing lines in the Chauvet cave are embodied in the works of Michelangelo and Leonardo, 24,000 years after the last visit to the cave but only 200 miles away. Swatez comments that the 'line' may represent some part of the human soul, our collective internal world that keeps being repeated by different artists. Mix diverges to bring together Foss concept of the nervous system of the planet, and Yeaman's information systems theory, stating that our dominant information architecture seems to have no central authority. Swatez rejoins that because there are no central nodes this architecture encourages information to degenerate into meaninglessness. Koernig reminds the Forum of Yeaman's proposition that such 'scale free' network architecture favours the spread of memes regardless of their fitness or 'truth' value, and questions whether this inhibits the recognition and development of quality information. Yeaman mentions Wikipedia as one successful example of the marriage of scale free information architecture with rigorous quality control.

Key excerpts of the dialogue

On the teleological nature of consciousness and cultural evolution

"I think cultural evolution, just because it's based on consciousness which has the capacity to envision and imagine things, takes on direction in a way that biological evolution doesn't.

...as soon as you invoke consciousness, I think teleology is a fait accompli. It's part of it. Consciousness is by its nature teleological." – Sam Yeaman

On the transition between tribalism and metaphorical tribalism

"My opinion is that religion in fact is metaphorical tribalism. It has nothing to do with truth. It has to do with the perpetuation of the tribe and at the agricultural level the perpetuation of a community and its justification for all of the things it's going to do in relation to invasion and slavery and everything else. But it does begin from that very first premise of, 'I will die for my brother, I will die for my first cousin, I will not die for my fourth cousin.' – Jeffrey Rubinoff

On Hamilton's Rule

"... you've really independently arrived at Hamilton's Rule, which states that as long as the benefit that your kin receive exceeds the cost that you suffer by a factor equal to the relatedness, your genetic relatedness, so that's one half for your brothers and one quarter for your half-brothers and one eighth for your cousins and so on as you get further and further related, as long as that inequality works, sacrificing your own fitness will be favoured." – Sam Yeaman

On ancient cave art

“Just curious about the prehistoric art that was discovered in 1996. They discovered some caves in France dating back even 16,000 years earlier than the Lascaux caves. So that, here were these artists that were making paintings that were incredibly beautiful, and they maintained a consistent discipline for 30,000 years in their culture. And these were hunters-gathers. I'm just wondering what—they must have had villages or there must have been stable areas where these folks existed in order to create these caves and places they went to. And so the art was in a way, kind of a religious thing as well as an art thing, and it related to their whole way of being. So how does that fit into this? How can people that can exist that long and be so consistent.” – Vaughn Neville (Forum Observer)

On examples of meme transmission among artists

“What he's (Sam Yeaman) talking about is the ability to pass a meme along, which is a framework. You're talking about the Chauvet cave. It's 200 miles from Florence, and if you look at it, you'll find the same artistic drawing lines in the Chauvet Cave in Michelangelo and in Leonardo. So that was passed from generation to generation to generation. What we're talking about is a meme—that part of something that can pass along consistently over and over through generations.

And it's amazing that the possibility exists that for 30,000 years, artists in that part of the world were passing along a concept for viewing reality. Those are the units we're looking at. We're trying to get some subset, just a hypothetical subset, of memes that would allow that subset to be passed along and held. So that's the value of this particular conversation.” – Jeffrey Rubinoff

On the collective base of potential human experience

“...what I'm going to say about the human soul,[is] that the human soul has this genetic potential for experiencing in the kind of environment that humans live in. And so we keep making similar maps. The artist goes to this place, you bring it back and you show it to someone else who hasn't been there, but they recognize it because in a way we're there anyway. So this universal human similarity is based on our genetics and our similar environments.” – Gerald Swatez

On the current information architecture and its effects on cultural evolution

“I was struck by the models of communication which you had shown, so the priestly model down the line with the circle around it, the scientific model in which things come back in and the model of information dissemination where it can't get from this point to that point around the outside of the circle at the edge. And I want to bring it back to your discussion which was essentially how do we create a humanity-based nervous system, a web of information, so to speak, and what you were saying about information theory.

It strikes me that we've reached a point very recently in history in which information can go around the outside edge of the circle exceedingly easily, and there's no more center.” – Brian Mix

On equal insignificance of democratized communication architecture

“Every individual is a node, which means that they're all equally insignificant to some level. There are many nodes. So now the information that's being passed around is devolving into meaninglessness because there are no particular nodes.” – Gerald Swatez

On the rapid spread of fit or unfit memes in scale free communication architecture

“In Sam’s argument, basically anything irrelevant, whether it's fit or not or whether it serves any purpose or not, can spread equally well. So if the only arbiter is popularity a la Google, what does that mean for us in terms of being able to filter through it and assess quality?”—Karun Koernig

On Wikipedia as an example of high quality information using scale free architecture

“I think that's the success of some things like, say, Wikipedia is that it's become an institution that now has kind of a natural selection to it. People update single entries, and the access to Wikipedia, anybody can put something on there that will be viewed by lots of people, but then anybody can also revise it. And so any given entry in Wikipedia goes through a process that's kind of like natural selection on culture.

And so these kinds of institutions are really successful institutions that mix the best of the Internet with the best of more formal, consistent one-to-many architectures like science, where there's actual people charged with consistently passing on the canon of science.”—Sam Yeaman

The Inherent Value of Art at the End of the Age of Agriculture

BY KARUN KOERNIG

Biography of presenter

Karun Koernig has held the position of Activities Director for the Jeffrey Rubinoff Sculpture Park for the past 2 years. For the past 15 years he has been the Senior Manager of the Environmental Youth Alliance International Division. He currently works in Kenya as a UN-HABITAT consultant on micro-enterprise, for youth in slums and youth-led programming in general. His co-founded a consultancy in Vancouver which focuses on developing the business case for resource efficiency. Karun Koernig graduated with honours from Simon Fraser University, where he majored in Political Science with a focus on local government.

Summary of paper

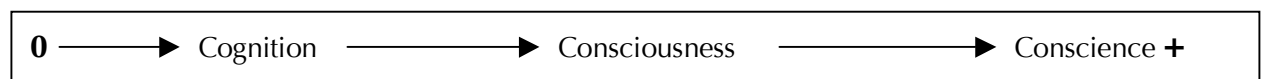
Koernig begins with the assertion that we are living at the End of the Age of Agriculture and that the order of consciousness that evolved agriculture no longer serves an adaptive purpose. Extending Rubinoff's assertion that art is particularly valuable at this time, the essay is meant to stimulate artists to address their potential role in the evolution of human consciousness.

Koernig defines the concepts of conscience and evolvable consciousness, and traces human development (including institutions, techniques and morality) from prehistory to the End of the Age of Agriculture. He argues that the development of these tools of consciousness to the point of enabling large-scale destruction brought about a state of profound entropy. Koernig empowers artists to realize their work as an existential commitment to conscience so that they may constitute a force to balance science in the further evolution of consciousness.

Key linkages with the insights of Jeffrey Rubinoff

Koernig's goal is to explicate Rubinoff's insight that "art is an act of will in accord with a mature conscience." He conceives of conscience as a point on a continuum from basic cognition to human consciousness to a mature conscience. The continuum is pictured below:

Continuum of Cognition



Koernig defines a key aspect of cognition as "...the ability of an organism to flexibly apprehend the connection between changing patterns of information and their behaviour with the goal of predicting future outcomes beneficial to their survival."

This echoes Rubinoff's statement that one of the key characteristics of human beings is their ability to plan a future. Similarly for Koernig, cognition, consciousness and conscience lie on a continuum of an organism's ability act in accordance with predictions of an increasingly distant future. The ability to act

in accord with an increasingly distant predicted future outcome, or 'ability to plan', is defined by Koernig as the level of maturity.

Moreover as Koernig states:

"One cannot attempt to perceive patterns with survival consequences deep into the future without a deep engagement of the collective memory. Maturity is a the degree to which consciousness is engaged with the collective memory."

– *Karun Koernig, forum Paper*

Another linkage with the Rubinoff's insights is Koernig's explication of the concept of 'collective memory', which he defines both from a physical and human point of view as:

"Persistent evidence of past states of matter and energy. For humans it is the experiential knowledge of the individuals in each generation that can be passed on to subsequent ones through externalization using language."

– *Karun Koernig, forum paper*

Here Koernig groups together concepts normally conceived of as human characteristics such as memory, with their counterpart examples in the larger physical and biological context. For example memory is not just something stored by human minds, but also in rocks, fossils, ice, the DNA in every cell of every life form.

This collective memory represents the human knowledge about nature and the human experience, as well as all that which is not yet human knowledge but nevertheless is stored in our bodies and in nature. In short it is the pool from which our soul or spirit, that which makes us essentially human, can be distilled. With this conception Koernig sweeps away any doubt in a supernatural conception of spirit or soul, firmly situating it within the realm of nature.

Echoing Jeffrey Foss and Sam Yeaman, Koernig agrees that consciousness and conscience are not indications of our supernatural origins: "...human knowledge has progressed to the point where consciousness itself can be convincingly explained as a spontaneously emergent property of nature and matter itself."

For Koernig, humans have a soul, but it is an entirely natural one. The collective memory can be probed scientifically, by analogy, by building models to create knowledge. However, to get to the essence of what the knowledge means, what the essential and deep patterns are, a person of highly mature conscience, an artist by Rubinoff's definition, is required.

Rubinoff's contention is that "art is the map of the human soul," and that map is drawn by metaphor. To further explain Rubinoff states, analogies are tools, and as such they are accepted conventions; they are by their nature repeatable, measurable, and predictable. Metaphors exist beyond logic in the realm of intuition; they are the basis for truly original thought and are by their nature unique."

Koernig states that science has been successful at expanding human knowledge of the collective memory through rigorous analogical analysis by highly mature individuals. However, for Koernig metaphor is the only mode of perception suitable for the exploration and transmission of highly complex and profound experiences of the human soul. Metaphorical thought must also be conducted

as that same level of maturity, hence his exhortation of artists to become engaged with the entire human knowledge base of the collective memory.

In support of Rubinoff, Koernig proposes that artists of mature conscience will approach the collective memory from the perspective of metaphor, fully conscious of their role as navigators of the human soul. If they recognize and accept this task they can “rightly claim to constitute a force to balance science in the further evolution of consciousness.”

Recognition of this role by artists themselves, and also other disciplines, would make them essential contributors to moving past, as Rubinoff puts it the ancient and reinvented tribal rivalries that culminated in the absurdity of mutually assured destruction at the End of the Age of Agriculture.

Summary of highlights of the dialogue

Koernig firstly re-explains his conception of consciousness, as it relates to the concept of the nervous system of the planet. Koernig does not agree with the notion of group consciousness spontaneously evolving, but requires instead individuals of highly mature consciousness to effect the ‘equation’. Yeaman wonders whether there are objective criteria for measuring such consciousness in art, citing an example of a friend who was funded to drop potato chip bags on the roof of the SkyDome stadium in Toronto. Koernig states that in judging art, artists have an obligation to their ancestors. Rubinoff extends this, stating, that artists also have a responsibility to their own conscience. He insists that artists must engage with and make that art that is consistent their whole body knowledge. Heather Goldman then asks about the role of leaders in the evolution of consciousness. Koernig addresses the issue of individual will, or individual agency, anticipating a topic that will be treated in detail by Swatez in a following dialogue. Koernig states that will is not, not the absolute lack of constraint on consciousness, but it does mean that consciousness has a degree of freedom to choose, and this is the kernel of leadership. Rubinoff responds that leadership is demonstrated by example, by action in accord with a highly mature consciousness. He also states that the derivatives of a culture without a future are of little value themselves either. Mix states that science has provided a convincing material explanation of ‘what we are’, but we need artists need to tap into the consciousness of humanity becoming aware of itself in order to answer the question of ‘who we are.’ Swatez agrees that art’s inward orientation is, more powerfully than religion, a compliment to the outward orientation of science. Foss questions art, and for that matter science as being defined as virtuous, he asks, can white supremacist racists make art? Rubinoff answers that consciousness must be understood to be on a continuum leading to conscience, so people’s consciousness evolves on a scale of maturity.

Key excerpts of the dialogue

On spirit within individual conscience as disequilibrium for evolution

“My feeling is what steers a system is the spirit of the system, is the soul of the system. It's not just the feedback and control mechanisms of the system. So we're not conceiving the nervous system of the planet as having a homeostatic, directionless sort of feedback control, hunting for some sort of optimum. We see it as a goal-directed evolution of consciousness. So that requires a spirit, and that spirit sets things out of equilibrium, and that disequilibrium moves things forward.

To me, I don't know how group consciousness can do that. That's why I located ... within what I'm terming “individual consciousness,” which is the consciousness that's embodied in a

specific body. The maturity of that person's soul determines to me the degree of the future survival value of their consciousness. And we can see this. You can see the great souls that have put themselves out there and they've really taken huge risks and have moved the rest of us forward. Everyone knows examples of that. “– Karun Koernig

On the lack of objective criteria for art

“Science has really clear criteria for defining, like for evaluating objective truth and things that fit or not. I think a lot of people have trouble with the notion of similar criteria in art. So identifying what is mature and what's not mature, I think a lot of people would have trouble with applying any kind of label like that in some absolute sense.

Just one example. A friend of mine got a grant from the Canadian government to fly over the SkyDome in Toronto and drop 80,000 bags of chips, like, shredded up chip bags, on the SkyDome and that was art. And however you interpret that, I don't know whether there's an objective interpretation or whether there's an objective way of saying that that is or that isn't art. I'm just wondering what you think about this in terms of this idea of a mature conscience.”
– Sam Yeaman

On measuring art by that of your ancestors

“Artists have a history that's longer than civilization. Just as science has a history and Newton says he's standing on the shoulders of giants, artists have that lineage. So it's not like they're coming from nowhere.

So you're judging yourself on the other artists, so it's the artist who's judging this. So the artists—and Jenni [Pace Presnell] will touch on this tomorrow—you're responsible to your predecessors to say, “Okay, if I'm playing jazz, what are the people that I look at and say what standard do I have?” If you're playing cello, what are the standards that I have? If I'm doing sculpture, where am I coming from? And that history apparently, as Vaughn has mentioned, is 30,000 to 40,000 years old. Well, that's older, way older, than science.” – Karun Koernig

On judging art with your own conscience

“To explicate that a little farther—the act of will in accord with a mature conscience—I wanted a definition of art that did not define art in any way, shape or form under a specific set of conditions, but rather one that exposed the idea of a mature consciousness as well as a mature conscience. So you can't have a mature conscience without having a mature consciousness. The level of awareness and the level of learning that you yourself know becomes the measure of what art is.

The other part of this is the measure that the individual artist has of his own work, which only he knows. But he knows, he knows deep down in his soul. So your friend who's dropping the potato chip bags knows. He is the one who will be the ultimate measure of it.

The problem I had with post-modernism was feeling that it was totally vacuous. So, in order to have a measure, I needed those 30,000 years. I needed knowledge of those 30,000 years. I needed the experience of those 30,000 years. Then when I could access that, I could say, to myself—'...I think this act is in accord with what I know, and I'm still doing it'. It means that instead of dismissing that knowledge and its necessity, 'I did it in spite of it'. And 'in spite of

what I know' is really the whole body of this knowledge that a mature artist really does act on.
"— Jeffrey Rubinoff

On the effect of will on the computation of group consciousness

"One of the more complicated sentences my essay was the concept of how—and it's not a new concept in at least social theory—is that group consciousness is computed from individual consciousness. However, it also resides in the embodied consciousness of individuals. So you need group consciousness to actually have individual consciousness, but at the same time, there's a degree of will in determining which aspects of that you're going to take and which aspects—so there's a degree of flexibility. Obviously you can't—you couldn't even talk, if you didn't have language, which is an aspect of group consciousness. You couldn't even have that without that group—or you couldn't have individuals having any kind of consciousness without language.

But the amount of flexibility in rearranging aspects of memes or aspects of group consciousness that we've been talking about is fairly substantial: the permutations that you can use. So that to me constitutes will. I mean, sure, you can call it mechanical because there's only 40 quadrillion combinations that you could possibly have of these, okay, great, that's a limitation.

However, I do think that individuals have some degree of ability to be aware of these principles and to choose. And so in that awareness, I believe that constitutes—the awareness and the choice constitutes the kernel of leadership.

To me, at least as regards to the essay, I think that if you develop and act in accord with that very high order of consciousness, you can in effect pull the equation towards order or towards a great adaptive future of survival value by the extreme position you hold in the computation. So it's like you pull the average by being so far out. That's how I conceptualized it. That's an analogy." – Karun Koernig

On individual vs group consciousness in the process of evolution

So I just wondered if someone would like to help me understand better the role of leadership and sort of what we've been talking today about individuals versus group consciousness and processes of evolution. – Heather Goldman

On leadership by example

"What I've tried to do with some of the things that I've outlined is tried to say that leadership comes from example. So if there is an ability to act at that level of consciousness with a mature conscience, that that is something that is self-generating. So there have been leaders in the world who have done that. Gandhi, Mandela.

So there are acts both politically and in leadership that are acts of art, by my definition. And those people who can act at that particular level are becoming fewer and fewer as we go on. I really believe that the world went through a time when it no longer believed it had a future. And when it no longer believed it had a future, the derivatives of the culture itself had no value. And derivatives are essentially betting on future value. So once you are able to have a false sense of future values or no sense of future values, then anything goes, so nothing really matters." – Jeffrey Rubinoff

On the role of artists in answering who we are

"I could respond, too, I suppose, being an artist. A performing artist and an interpretive artist as opposed to a creating artist, I suppose is a way to put it. I think the hinge word in that sentence is "a force to balance." So that if science has become the mode of furthering the evolution of human consciousness, if we now define ourselves as something that has gotten to this point in history, from a beginning that was just mere matter or whatever, is that an answer to who and what we are? It's an answer to what we are. It's not necessarily an answer to who we are.

So I think that the artist is a person who says, "Well, materialism answers one side of the coin of what it is to be a human being," and the artist, in terms of a commitment to conscience, an existential commitment to conscience, is the person that says, "If I'm going to contribute to the group consciousness, if I'm going to use my mature individual consciousness to affect the group consciousness, I need to tap into the other stream of evolution, which is humanity becoming aware of itself." Which is completely separate from the science that brought us to its awareness, in a way." – Brian Mix

On art's inner exploration as a compliment to the objectivity of science

"I think that art functions to develop and to mature group consciousness in a way that no other human institution does. And if mature conscience depends on a mature consciousness, then a collective conscience, mature collective conscience, depends on a mature collective consciousness. And I think art does show us ourselves, both individually and collectively, in a way that no other human practice does. Even religion.

And science is turned outward. Even when it looks at human psychology and biology, it's still objective, turned outward. Whereas art is always subjective. I believe not only personally subjective, but collectively subjective. And so that art does necessarily constitute a force to balance science and the evolution of human consciousness. And that artists who can consciously realize their art as an existential commitment to conscience can do that more effectively, more powerfully, more beautifully than artists who don't realize their art as existential commitment to conscience." – Gerald Swatez

On why art is only being defined as virtuous

"Art is being defined as virtuous, and this makes me a little uneasy. Perhaps science is being defined as virtuous as well. If science doesn't find the truth, it's not science. But science of course has in many cases failed to find the truth and was nevertheless science. At least now we look at it and say it wasn't very good. Certainly it's not as though racists have no artists. I mean, you can define art in such a way that only virtuous art, art that takes us forward in some sense toward what we consider to be a good objective, would count as art." – Jeff Foss

On art not being absolute but along a continuum of consciousness and conscience

"One of the things that is missing from Karun's [summary] presentation today is his graphic of the continuum of cognition. There's no evolution without a continuum. There is no direct, absolute, this goes from here and it goes to there. So what we're really talking about is a continuum. And how an individual or how an artist measures him or herself on that continuum of cognition.

So you as an audience (of one) perceive it from one continuum and the artist perceives it from another continuum. What I'm saying is, and what Karun's contention is, is that there is a scale of maturity to these particular actions measured on the continuum. "—Jeffrey Rubinoff

Interrogating The Peninsular Individual: The Dialectical Relationship Constituting Individual Minds and Group Mind

BY GERALD M SWATEZ PHD

Biography of presenter

Gerald M. Swatez holds an M.A. in Sociology and Psychology from Penn State and a Ph.D. from the University of California, Berkeley. He is faculty member of the University Phoenix Online and Upper Iowa University.

Summary of paper

Swatez utilizes the Jungian concept of the “collective unconscious” to explicate Rubinoff’s insight that art is the map of the human soul. Swatez suggests that perceptions of “individualness” are a fantasy and that individual consciousness is dependent upon and stores, collective consciousness. He draws on a body of literature, specifically Lakoff and Johnson to support this claim. He agrees with Rubinoff’s contention that art is the map the human soul, and goes on to differentiate between the collective and individual notions of soul. He then creates an analogy between mind and soul in order to bring thinkers on the subject of mind to bear on the subject of soul. He outlines the ideas of several thinkers that point to a mechanism by which metaphor could function in structuring the human mind/soul. Swatez also differentiates aspects of the space that is being “mapped” by visual art and music, the human mind/soul, the “collective unconscious,” or the “collective memory” which he understands as having both biological and social elements.

Key linkages with the insights of Jeffrey Rubinoff

Swatez’ essay sets as its task the further elaboration of the Rubinoff’s insight that ‘[a]rt is a map of the human soul; each original piece is proof of the journey.’ He first seeks to address the term ‘human soul,’ as it can mean both individual human soul and the collective soul of Humanity.

Jung, whom Swatez considers a key thinker in his field, lends credibility to Rubinoff’s insight that what Rubinoff terms the Human soul is indeed something collective, in Jung’s terms ‘the collective unconscious.’

“I consider that the space [the Human soul] thus being mapped by art and by music corresponds to what Jung called ‘the collective unconscious.’ “

– *Gerald M Swatez, Forum paper*

For Jung the collective unconscious relates to the concept of ‘mind,’ not soul, however, Swatez perceives there to be a strong analogy between them.

“...[T]he human soul...implies numerous exemplifications: the human spirit, the collective unconscious, the human mind, the human body, the human genome, human experience, human behavior, social structure, culture, the works of humankind: art, technology, patterns of

residence, subsistence strategies, types of economies, political systems, etc.”
– Gerald M Swatez, *Forum paper*

For Swatez the individual and group soul are mutually dependant opposites, like ‘inside’ and ‘outside,’ each they requires the other to exist. The individual soul is dependent upon the collective soul for its very composition; however, the collective soul itself is contained within individuals themselves.

“Individual minds are within, are contained by, group mind; as group mind is composed of individual minds. And yet group mind is an idea contained within individual minds.”
– Gerald M Swatez, *Forum paper*

Swatez thus relates Rubinoff’s concept of soul to established thinkers in on subject of mind, proposing a dialectical way of understanding the apparently opposite concepts of group and individual mind/soul. With the clarification of the term ‘Human soul’ and the establishment of a working definition, Swatez turns his attention to the instantiation of the individual mind/soul from within the collective soul.

Swatez uses John Donne’s analogy of the peninsula and the mainland continent to describe the relationship between the individual human and collective Human soul. For Swatez, the continent is the collective human soul from which the peninsular individual soul is extruded or instantiated. The continent of the Human soul is conceived to be our collective biology, personal social histories (initial family unit) and collective social history. From Swatez’ perspective, individual human souls are instantiations of these three aspects.

One of the most important linkages he makes to the work of Rubinoff is his conception of metaphor as a key mechanism for structuring the instantiation of the human soul. Using ideas from credible thinkers in his field such as Sigmund Freud, Wilfrid Bion, and George Lakoff & Mark Johnson, Swatez describes how they all believe metaphor plays a role in the structuring of the human mind.

Swatez draws on the ideas of George Lakoff and Mark Johnson’s book *Philosophy in The Flesh: The Embodied Mind And Its Challenge to Western Thought*. In it they assert that there are two main systems that communicate with eachother and develop together, the sensorimotor system and the abstract/subjective experience system:

“...as the abstract/subjective experience neuro-system develops, as its neurons extend and make new connections, it does so in dynamic interaction with the sensorimotor system. Consequently, the cognitive structure of the abstract/subjective experience neuro-system establishes most easily in congruence with the cognitive structure of the sensorimotor system. The [abstract/]subjective self experience develops as a set of metaphors mapped from the sensorimotor system.”
– Swatez on Lakoff and Johnson

So the first extrusion of the individual human soul, is essentially the abstract/subjective neuro-system being structured using metaphors from the sensorimotor neuro-system. These metaphors originate from certain conscious and unconscious mental structures evolved for the kinds of bodies we have. Thus human languages, and other basic mechanisms of emotion and cognition share a deep collective structure by virtue of our shared physiology.

The second extrusion of the soul is from each individual's personal social history, specifically that of the infant-mother-father family unit. For Sigmund Freud, later elaborated by Melanie Klein, the 'self' is formed out of the unitary mother-child object through the metaphor of the father-as-"another mother."

"Freud claimed that the infant child only psychologically separates out from the primordial mother-child unity, only begins to be born psychologically [by] 'getting the idea' of a possible separate-from-mother existence by observation of the father-as-'another mother' and thus as an introjected seed-crystal of the infant's 'separated' self."

– Gerald Swatez, *Forum paper*

The third extrusion is the further development of the abstract/subjective neuro system through interaction with the 'other'. The 'other' is could be conceived of as collective social history, or culture, which is both contained within the self but also outside of it.

"The other is a domain that exists 'jointly,' both intra-psychically and externally, externally as both the multiplicity of human embodiments...and as the culture shared among the members of a societal system. The other exists both inside each of us and outside of us in the socio-cultural space we share and which we together constitute."

– Gerald Swatez, *Forum paper*

Swatez takes the stance that culture, the 'self' and the 'other' are mutually dependent and that no individual mind/soul could exist without the collective mind soul.

"Cultural elements are crucial constitutive components of minds. No individual mind can exist without a framework consisting of cultural components. Isolated human minds (isolated from birth) cannot, on this interpretation, exist. There is no such thing in reality. No non-social – totally without culture– human mind can possibly exist. ... Without interaction with others, there is no soul."

– Gerald Swatez, *Forum paper*

So in this third extrusion of the individual from the collective soul, our conscious mind (abstract/subjective neuro-system) is structured at least in part by metaphors from our collective social history.

In agreeing with Rubinoff's statement that "Art is the map of the Human soul" Swatez differentiates three aspects that the artist could map, the collective biology, personal social history, and collective social history. As art develops metaphors to map these aspects, it too becomes a powerful part of the collective social history.

Summary of highlights of the dialogue

Swatez begins by explaining that what the artist is mapping 'where we all are anyway', and bringing pieces of the collective human soul back into consciousness. Foss argues that we should not underestimate the flexibility of human consciousness citing the example of children raised by animals not behaving like humans, not having a human soul. Koernig asks Yeaman about the line between the flexible aspect and the genetically determined aspect of our collective human soul. Yeaman responds that it is an established truth in his field that aspects of the human mind vary genetically. Koernig states that generally social historians and theorists have not been very interested in exploring biological

causes of human behaviour. Sam responds that because the human mind evolved through variance and natural selection, you would be able to axiomatically state that variations in the brain still exist, even if we didn't have significant evidence for it, which we do. Rubinoff comments that there is a great opportunity for social historians and theorists to team up with those studying evolution. This could result in more complete understanding of the line between genetic and memetic evolution.

Key excerpts of the dialogue

On artists mapping the collective human soul

"The artist in the modern world is very much an individual. The artist in the ancient world may not have been. The artist in the modern world obtains their greatest capability for realizing art, from the dialectic between separateness and the join—the joinedness. When an artist isolates from the group and goes into his own experience, my theory argues that where he's going is to where we all are anyway." – Gerald Swatez

On the plasticity of human consciousness

"One thing I'm very fond of is studies of feral children, of which, unfortunately there are a great many these days, particularly in the former Yugoslavia, where you can access quite a few studies. I welcome you all to Google it, it's a politically incorrect term, you're not supposed to call them "feral" children, which means literally wild children. But, I am absolutely convinced some kids are raised by dogs and turn into dogs. Dogs, in all ways, dogs are dogs. They howl at the moon, they can smell things that we can't smell. They walk on their toes. Anyways, there's a lot of evidence that it's true. We are programmable. We are, as I call, point of view shifters." – Jeff Foss

On the influence of the genetic history on the collective human soul

"One of the things that I'd like you to—that I want to ask Sam actually is, Gerry talks about the genetic sort of base, of the potential experience of the collective unconscious. So that's—there's a genetic base for it and I'm wondering, from the perspective of a biologist, zoologist, what—now he has gone as far as to give credit to the nature versus nurture. To the nature part of it, to the extent that, at least every human being has the same potential, and so there's a degree of universality there.

But, to me, what I'm wondering is, you know, does our genetic heritage over the last however many million, hundred thousand or ten thousand years or whatever you want to call it, does that actually impinge on our human soul and actually structure it in a way that's a little less potential and a little more actual?" – Karun Koernig

On the influence of evolution on the psychology of human beings

"There are now some genes associated with things like schizophrenia and different mental issues. There's genetic variation for all sorts of things that are related to the way that minds work. And, so there are definitely variations segregating the population. Some people have different copies of different genes, and that affects the way that mind works. And, so there's definitely, at that level, I mean, it's not clear exactly how they work, but there is definitely lots of evidence for genes doing things to the way that minds work, and a lot of variation there." – Sam Yeaman

On the ignorance of the humanities of the biological basis for behaviours

“To me, that’s an enormous fault line within sociology. Because your whole profession is based on— and I’m a sociology minor, so I’m speaking from knowledge— there is a definite denial of the salience of genetic and biological bases for behaviour. “– Karun Koernig

On variation in the evolution of the brain accounting for variation in behaviour

“The bottom line is that if you believe in evolution, then we’ve come from chimpanzees somehow, and if you evolved from chimpanzees or something like a chimpanzee ancestor , then there must have been variation in the underpinnings of the brain...because evolution is done by natural selection on variation.

And, so if there was variation back then to get to where we are now, then it stands to reason there’s plenty of variation out there. ...Even if we didn’t have any evidence for it—I think you’d almost just axiomatically have to say that there’s still variation out there for it, even if we hadn’t found it, and there’s plenty of evidence for it, I would say, at this point. “

– Sam Yeaman

On the combination of social and biological studies of human behaviour

“Okay, now the second part, which I would love for you and Sam to be able to get together on and Karun has described a gap that is absolutely enormous between you two intellectually, which I would like to see filled. Because I think it’s ridiculous that it’s there.

Cro-Magnon man—modern man—is ourselves. This brain pan, this body shape, everything else, is only fifty thousand years old. The distance between us and chimpanzees could be millions of years. So, you can see that there is this enormous continuum of diversion. The modern chimpanzee and modern humans have developed along very, different paths for very, long periods of time.

You can’t just look at a chimpanzee and say that’s you, without dealing with the entire other history that goes with that. So, what I would like, if you two could work together at some point, because I think you (Sam Yeaman) want to move deeply into social reality. That’s Jerry’s field, he’s done this for so many years and he’s done it in isolation from Darwin. The perception in my opinion, of sociologists in regard to Darwin, is “Social Darwinism”; it’s a put down and natural selection just hasn’t been part of their study.” – Jeffrey Rubinoff

The Threat of Nuclear Winter: The Art Historical Perspective

BY JENNI PACE PRESNELL

Biography of presenter

Jenni Pace Presnell earned a master's degree in art history from the University of Massachusetts-Amherst and she is currently a doctoral student in art and architectural history at UBC. Her academic interests include: city planning and social housing, particularly British and French colonial design; orientalist art history; the history of public institutions including museums and libraries; and, museum collecting and stewardship. Jenni will be in residence at the Canadian Centre for Architecture in early 2010.

Summary of paper

Pace Presnell starts with Rubinoff's premise that since the bombing of Hiroshima and the subsequent Cuban Missile Crisis, humankind has lived with the constant threat of mutually assured destruction. This, she suggests, is in fact nuclear winter. This new reality fostered the widespread conviction that there is no future and spawned an absurd culture. In response, an absurdist avant-garde art formed in the early 1960s.

This essay considers the development of the American military industrial complex in this period, exploring the parallels between technocratic society and avant-garde art. The public debut of Pop art at the 1964/5 New York World's Fair and the rapid dissemination of Pop art to a mass audience, are examined.

Presnell extends Rubinoff's insight on the importance of the history of art to practicing artists and considers how visual art practice, the art market, museum programming and arts education evolved to reflect the absurdist culture.

Key linkages with the insights of Jeffrey Rubinoff

Pace Presnell explicates Rubinoff's assertion that we have lived in a state of nuclear winter since the Cuban Missile Crisis of 1962. The willingness of the US and the Soviet Union to fully apply the policy of mutually assured destruction, which marked the End of the Age of Agriculture, was first demonstrated during that conflict. Pace Presnell agrees that since the bombing of Hiroshima and the subsequent Cuban Missile Crisis, humankind has lived with the constant threat of mutually assured destruction that, even though nuclear winter, in a real sense, did not occur, caused a nuclear winter of the mind.

"As the United States became increasingly focused on the escalating Cold War with the Soviet Union, an unprecedented level of government and private effort was focused on the development and application of nuclear technology, and carefully balancing the promise of increased power in many forms with the threat of total annihilation."

– Jenni Pace Presnell, *Forum Paper*

She argues that this new reality fostered the belief that there is no future and spawned an absurd culture. As Rubinoff described in his insight on *The End of the Age of Agriculture*, the “feasibility of escalating war [became] absurd with the advent of strategic bombing and nuclear weapons”. This sense of absurdity permeated the culture with the conviction that there is no future. Because human consciousness did not adapt to the new reality, this sense of absurdity remains. Thus, culture has atrophied, and mentally we have remained in a state of nuclear winter ever since.

For Rubinoff it is the role of artists to ‘navigate the unknown’ to ‘serve the evolution of human consciousness.’ And as Pace Presnell points out some artists of that period did address the possibility of total annihilation.

“The first generation of artists to address the unprecedented level of devastation that brought the war to a close and would, purportedly, serve as an agent for lasting peace, were the Abstract Expressionists, chiefly Jackson Pollock (*Autumn Rhythm*, 1950), Barnett Newman (*Vir Heroicus Sublimis*, 1950-51) and Mark Rothko (*No. 3/ No. 13: Magenta, Black, Green on Orange*, 1949).

They deemed naturalism and representation in painting to be aesthetically and morally inadequate to cope with these horrors. They drew from a deep knowledge of art history to produce works that pushed to complete abstraction, asserting that this was their way of rejecting the horrors committed in the name of peace. In the wake of the new realization that man now possessed the ability to destroy all life, these artists sought to forge new spaces of introspection and reflection, all the while maintaining a critical dialogue with art history.”
– Jenni Pace Presnell, *Forum paper*

However, as Pace Presnell points out, the abstract expressionists did not become the main artistic response to this new reality, which Rubinoff terms the End of the Age of Agriculture. She argues that the Pop artists of the 1960s referred to an absurdist culture instead of referring to art history. In doing so, they forfeited the possibility of producing profound works. As she illustrates by recounting its public debut at the 1964 World Fair in New York, Pop Art successfully marketed ironic conventionality.

Initially, fairgoers were either repelled by the Pop art on display, or they considered it an extension of the flashy visual program of the Fair. On the first day Indiana’s E.A.T. was illuminated, for example, a crowd lined up underneath it expecting fast food service. This was a certifiable instance of modern art establishing a connection to modern life, but of course, unless the public acknowledged E.A.T. as art, it can’t really be counted.

In his failure to include any cues to aid the public’s comprehension of these installations as art, Johnson and the art world in effect abandoned the masses of the Fair. As Fedders suggested, when left to their own devices, the majority of people inevitably choose the simpler, commercialized pleasures that were so readily available. When situated within the context of the Fair for its public debut, Pop art became one consumer choice among many. This possibility was anticipated and even embraced by the contributors.
– Jenni Pace Presnell, *Forum paper*

In the aftermath of the Cuban Missile Crisis, the Pop artists failed to chart a new path for the evolution of consciousness. They refused to address or add to what Rubinoff terms the ‘collective memory’ or to

act as 'navigators of the human soul.' Pace Presnell points out that the Pop artists abandoned what Rubinoff deems is essential for artists, namely to follow the path of art history 'to the farthest reaches of his predecessor as his point of departure', to possess 'the chart for evolution,' and to extend it his successors. Instead the ironic absurdist position taken by the Pop artists defined postmodernism, which reshaped the art market, collecting and exhibiting institutions, arts curricula and studio practice.

"...the generation that followed the Abstract Expressionists, a group of artists who became widely recognizable as Pop artists, abandoned their moral imperative. Instead of being accountable to art history, they claimed to represent the absurdity of culture in ironic terms. This theoretical stance formed the foundation of Postmodernism, a body of concepts that still dominates the majority of art studio curricula, art historical inquiry, the art market, museum collecting and exhibition policies, and, ... seems to dictate the agendas of most contemporary practicing artists."

– Jenni Pace Presnell, *Forum paper*

The theoretical cloak of postmodernism, with its necessary rejection of history and the 'grand meta-narrative', released artists from the psychological burden of seeking truth in the face of their own absurd existence. Pace Presnell reinforces Rubinoff's insight that artists' psychological response to the horrors of the End of the Age of Agriculture marked the beginning of type of cultural atrophy he terms 'cultivated ignorance'.

"The easy view that truth is only subjective leads to cultural lethargy. This view of reality does not represent ideas but opinions. These opinions are merely a means to intellectual and moral conformity and to the avoidance of the effort required by independent thought. For some, there is just a cessation of growth, for others a deliberate security of stasis."

– Jeffrey Rubinoff, *Insights 2009*

Pace Presnell points out that this absurd culture of mutually assured destruction is defined and controlled by the "gatekeepers" of the military industrial complex. As she suggests, the Pop artists during the Fair simply mimicked the technocratic culture of the military industrial complex. Thus in an example of 'cultivated ignorance' the Pop artists became 'masters of convention,' and 'masters of the conventional.'

Rubinoff has suggested that, in times of crisis, artists have a moral imperative to remain accountable to art history in order to expand human consciousness. If artists do not meet this imperative, he has theorized, there is a great risk that the human consciousness will atrophy. With the specter of nuclear winter, there is an acute imperative for artists to develop new knowledge, particularly to understand the work of the "gatekeepers" of the military industrial complex. Artists who remain mired in the absurdist culture are unable to address the true crisis at hand.

– Jenni Pace Presnell, *Forum paper*

Pace Presnell's work thus clearly points to the importance of artists generally, but their special value of art at, what Rubinoff terms, the End of the Age of Agriculture.

Summary of highlights of the dialogue

Mix starts the dialogue by noting Pace Presnell's statement that with the introduction of pop art at the New York World Fair, audiences became reduced to consumers. Pace Presnell remarks that art education is currently all about appealing to people as consumers of art. Koernig stated that it seemed from Pace Presnell's paper that the consumers of Pop art were the butt of a joke, and as such no didactic curating was possible. Mix agrees and cites an example of one friend studying to be a curator, who has no sense of the importance of narrative in guiding the audience through an exhibit. Mix then shared a personal story about how he resolved the tension between struggling to achieve an excellent cello technique and saying something artistically. For Mix technique is a lingua franca between artists of various disciplines and cultures. Pace Presnell comments that in modern art the emphasis can be weighed regarding the conceptual in relation to technique. Mix responds that the problem is that if the concept is weak and technique is shoddy, the whole work seems false and of little value. Rubinoff states that in his work, he sought to reconnect with the evolutionary path of his artist-ancestors as a way to resolve the inner death he felt as a post-modernist artist. He realized that engagement with the art market, meant making art that catered to the needs of consumers, not to the needs of art. In order to recover the sense of the profound, he had to make art without being influenced by the objectives of the audience. He states that artists should have no expectation that what is sacred to them will also be similarly perceived by an audience. For him the question has how to dig down to the level of profundity, and that only came with the reconnection with his predecessors. He argues however that profundity is only relevant, if it can be perceived. Having dug down to the sacred and the profound in his work, he hopes this Forum can help the profound emerge as the essential value of art once again.

Key excerpts of the dialogue

On the intersection of art speaking to society

"The pop artists were borrowing that imagery and I think it's arguable either way whether it was effective or ineffective or whether it was cheap and crass and commercial, or whether it was a commentary. But, the intersection of art speaking to society seems to have been lost somewhere in there. In fact, there's a very interesting paragraph you had on page eighteen, that's just sort of what I want to jump off from. Being a musician, this interests me somewhat too.

You have said 'In his failure to include any cues to aid the public's comprehension of these installations as art, Johnson and the art world in effect abandoned the masses of the Fair. As Fedders suggested, when left to their own devices, the majority of people inevitably choose the simpler, commercialized pleasures that were so readily available'

It's very interesting to me that it seems to indicate that unless art is explained, or interpreted or made apparent, the masses, the "sheeple," everybody else, who's not an artist, will make an easy consumer choice. It strikes me that that kind of encapsulates the entire position we find ourselves in today, as a society. That we have reduced basically our entire concept of life to, 'what's my consumer choice', in all aspects." – Brian Mix

On the audience as a 'consumer'

"...the state that we're at, art education is in programming; it's all focused on the idea that we have to appeal to people as consumers. To either become artists or to attend a blockbuster museum show." – Jenni Pace Presnell

On the audience as the butt of the joke

"I think what I was going to say about the relevance and the audience being duped, in a sense is, I don't necessarily know that there was much for the curator to really actually educate or bring to the audience. I mean, it was a joke anyway, so the point was just that the art is playing a joke on the audience. So what are you really saying, there's not really much more you can do as a curator. In this case it is the audience which is the thing that you're commenting on.

Yeah, they're the butt of the joke, so there's no didactic curating if you're the art elite that's doing it. I think that's a huge part of the disconnect that people feel with contemporary art." – Karun Koernig

On the lack of curating for contemporary art

"Well, let me say, I was at a dinner party not too long ago and a woman there was doing a doctoral degree and her main focus was on curatorial subjects. And, she and I and a friend of mine, who's a high school philosophy, theory of knowledge, teacher asked her about how—and I, the philosophy teacher and the artist—the musician— were arguing with her about the current way of curating—which is well like Science World for example. I hate taking my children to Science World, I can't stand it. Because there is no curatorial process.

There is no curating, there is nobody leading you through and she was arguing that, in fact, that's the whole point. The whole point is that you are free to move from exhibit to exhibit, installation to installation, push whatever button you wish and there's no narrative. And, he and I were arguing that narrative is an imperative to understanding, which I believe would be the argument that—reading about art on a historical basis is, reading about it in a narrative.

And, we've reached a point at which even the people that are—studying how to be curators, so to speak, have no concept of the narrative. "– Brian Mix

On the development of technique and a crisis of the soul

"When I was about twenty six, I was at the Banff Centre studying. The Banff Centre, for those who don't know, is a great retreat centre for professional artists who, you work with mentors, but at that time I was struggling with a sense that my technique was not good enough. But the further I tried to develop my technique, the less I had to say in my playing. To the point that I felt like I was saying absolutely nothing at all, yet technically speaking, it was still unsatisfying. It wasn't good enough yet.

And, where did that leave me? It left me sort of just on the edge of a cliff. It was when I released the need to be good, that I began to say something again. Having said all of that, it would be completely invalid for me to try to present a concert of Bach cello suites without adequate technique. It would be an insult to the audience and to Bach and to cellists worldwide that have tried to develop a good technique.

So, for the artist to evaluate another artist's work, the technical foundation is kind of the only common vocabulary that we have, cross-culturally. "– Brian Mix

On importance of the conceptual in modern art and painting

"Well, I think in modern art painting and sculpture, the conceptual is weighed. I don't know if it's equal or, in some proportion to the technique. "– Jenni Pace Presnell

On the weakness of conceptual art that lacks both a good concept and technique

“But, the problem is conceptual right from my, completely lay person perspective, you either buy it conceptually or you don’t. And, if you don’t buy it, there is no technique there. There’s nothing left for it to stand on. It’s become completely sort of faux.” – Brian Mix

On the audience and the profound in art

“The profound in art is the sense of how the artist-ancestors speak to the artist and how the artist answers to them. When I see those cave paintings, I feel the ancestors speaking to me. When I was feeling that my soul as an artist was dying, was when I realized that I no longer had any contact with my ancestors. Having been a postmodernist and being part of it growing up, it was the disconnection from my ancestors that I felt was the death of my soul.

The question became: is the profound dialogue of an artist with his ancestors, relevant to the people who are contemporary to him? That is, not the artist answering to the audience, but the artist answering to his or her ancestors.

When I was dealing with the art market at the highest levels, their only issue was: can they sell it? As a consequence I started opening this Park to people, without having any knowledge at all whether the work— obviously profound to me—could be profound to anyone else.

I only sought the audience afterward. I couldn’t deal with the objectives of the audience first. Prior to the creation of the work, the artist must accept that what is sacred to the artist is not necessarily sacred to the audience he or she seeks. If I were going to dig to that depth I realized that my final attachment could only be to the dialogue with my ancestors.

Is the profound in art still relevant? The discussion around the table has been: what is the relevance of metaphor itself to the values of society? We are forced to ask that question by the purposeful disconnection of the last 50 years. The way that this forum was laid out, is to help the profound to emerge as the essential value of art once again.”–Jeffrey Rubinoff

Living Sculpture: Multiple Dimensions in the Six Suites for Solo Cello by J.S. Bach

BY BRIAN MIX

Biography of the presenter

Brian Mix has been active as a freelance cellist in Vancouver since 1992. He has performed with every major professional ensemble in Vancouver, including the Vancouver Symphony, the CBC Radio Orchestra, Vancouver Opera, Turning Point Ensemble, and the Pacific Baroque Orchestra. He is also the cellist of the Pacific Rim String Quartet. Alongside performing, Brian writes and gives talks about music, conducts, and teaches. Brian studied at the University of British Columbia with Eric Wilson (receiving B.Mus. and M.Mus. degrees), the National Arts Centre in Ottawa with Donald Whitton, the University of Cincinnati with Hans Jensen, and at the Banff Centre. Other musicians with whom Brian has studied include cellists Antonio Meneses and Antonio Lysy, and on baroque cello, Phoebe Carrai and Jaap ter Linden. Brian is married to a pianist, Brenda Campbell, and has two young children.

Summary of the paper

In this paper, Brian Mix provides a brief history of Bach's Six Suites for Solo Cello and summarizes their significance, provenance, and musical structure. He explores the themes presented in the works and in the act of their performance, from the perspective of both the cellist and the listener.

Mix states that Bach's *Six Suites* have a significance in our culture that outstrips the inherent importance of the works themselves. He then explains how Bach's use of counterpoint directed the creative process and how the Suites are experienced as "living sculpture". Mix concludes by speculating on why the Cello Suites resonate so deeply with modern listeners.

Key linkages with the insights of Jeffrey Rubinoff

Music is especially important in relation to Rubinoff's work as he views "sculpture as music in plastic space, and music as sculpture in elastic space." This concept was not included originally in the insights that form the subject matter for this Forum, because as Rubinoff mentions during the Forum dialogue:

"...as I have taken people through the sculptural work, I have always referred to counterpoint because so many more people, when coming around sculpture, are more aware of ...at least some of the principles of counterpoint. Generally, people are far more familiar with music than sculpture. Many have taken music lessons but sculpture has been far less accessible. So, I've shown people how to move around the sculpture in order to understand how the art in sculpture resides in counterpoint— Jeffrey Rubinoff, *Forum Dialogue on Mix's essay*

What relates Mix's essay on the music of J.S. Bach and the sculpture of Jeffrey Rubinoff is the concept of counterpoint. Counterpoint in art occurs when more than one thing is being 'said' at once, and rigorous attention is paid by both the artist and the perceiver to the relationships created between those things. It is the relationships in a contrapuntal piece that add an extra dimension, making the whole greater than the sum of its parts.

In his essay, Mix uses J.S. Bach, one of the greatest masters of counterpoint in music as an entry point for understanding and demonstrating a concept that is crucial to the perception of the work of Jeffrey Rubinoff.

As Mix's explains, the concept of counterpoint is at first most easily understood by turning to the analogues of the musical sounds themselves, the text. In Bach's text, multiple lines of melody are played simultaneously, each with its own direction and voice. It is primarily the interplay of these voices, their relationships, which form the emotional and intellectual subject matter of the artistic work. Harmony is a secondary aspect of counterpoint that occurs when notes from separate melodic lines are played simultaneously. Depending on the interval between the notes, they can sound either consonant or dissonant, a relationship that is strictly controlled and utilized. It is within the tension and resolution of dissonance and consonance that the piece gathers necessary energy to shape its artistic argument.

However, counterpoint both in the music of J.S. Bach and the work Rubinoff occur in multiple dimensions. It is not only as a technique but an approach to artistic creation:

“Counterpoint is both a technique and an approach to composition; Bach was unique in his surpassing ability to fuse both these aims into integrated, musical creations.

For Bach, however, counterpoint was both his underlying technique and his artistic cornerstone. Bach was perhaps the last great composer to employ counterpoint as a pervading, encompassing principle;”
– Brian Mix, *Forum paper*

As an approach to art, counterpoint demands the artistic command and perception of multiple layers of relationships. In his essay Mix elucidates several of these dimensions using the *Cello Suites* as an example. Firstly, there is the relationship of composer to his work, the relationship of Bach's inner imagined music to the work as it is realized in his chosen medium.

“It seems certain that Bach first heard a new musical composition in his imagination and then transcribed it later. ... The process of composition for him then was a process of paring down, of leaving out much of what he heard in his head. ... For Bach, everything is relational; all of his musical ideas exist in context. Singular melody is almost an oxymoron in Bach's musical language and conception. Yet, with the *Cello Suites* (and also the solo violin works) Bach has chosen to work with a singularity, a single cello with severe, inherent restrictions in regard to polyphonic, contrapuntal composition.”
– Brian Mix, *Forum paper*

Secondly, the relationship between the listener and the text, one which demands of the listener knowledge of the intentions of the composer, and the conventions of the musical form:

“Here we come to an interesting aspect of the *Cello Suites*. The inferred notes, those notes that Bach was obliged to leave out due to instrumental restrictions, not only exist in Bach's imagination; they also exist in the mind of the listener (it is remarkable that unwritten notes have survived nearly 300 years to be heard again internally, in the inner ear of the listener). The deferred notes have to be re-aligned in the listener's imagination as the music unfolds. Essentially, Bach is dependent on the listener to enter into a relationship with the text (the

music) in order to complete it. In this way the listener becomes an active participant in the realization of Bach's music".

– Brian Mix, *Forum paper*

But Mix divides the listener into two categories: the primary listener, which is the player, and the secondary listener, the audience. The primary listener, to be able to physically realize Bach's music, must, through a careful study of the text, perceive the relationships within and *between* what is written and what is implied.

"In the case of the *Cello Suites* there is an interesting interplay between the text, the realization of the text, and the inner realization of that which is *not* in the text. ... in the case of the *Cello Suites* [this] is an integral part of understanding the works themselves."

– Brian Mix, *Forum paper*

The art of the piece is in these relations, within which the performer becomes integral for the perception of the work as 'living sculpture', by the secondary listener (audience). The secondary listener must, as the player, also understand the text, however they are in a privileged position to perceive the relationship of the music to the movements, energy and efforts of the player.

"The physical act of playing the notes—the expenditure of energy, the movements across and around the cello that give voice to the counterpoint, even the occupation of physical space by cello and cellist becomes itself a three-dimensional counterpoint in time and space."

– Brian Mix, *Forum paper*

J.S. Bach's *Cello Suites* are an example of an approach to art that demands a perception of multiple dimensions of relationship simultaneously, as Mix summarizes:

"The result is a work of art now functioning on several levels of relationship, or put another way, on several dimensions: natural materials (mathematical counterpoint), compositional control of that material, the 'missing' (or deferred) counterpoint translated from Bach's imagination to that of the primary listener (the cellist), and the realization in time, sound, and space of all these aspects by the cello and the cellist."

– Brian Mix, *Forum paper*

More deeply counterpoint can be perceived within the relationship of the history of the artist and his artistic intentions as a composer.

"... Bach was ... likely a supremely serious thinker, in that he probably viewed the life of the mind and the exercise of the human intellect to be critical to human endeavor, integral to what it means to be a person. Above all this, Bach was supremely religious, and viewed all of his work as offerings to his Creator. What he offered was the best of his rational mind combined with the properties of the natural world, the relationship of natural laws (musical intervalic relationships) organized into meaningful and coherent, though inherently complex, structures. His music is ultimately *relational*; to its structure guided by natural musical laws, to his intellectual perception and control of his material, to his place in the cosmos."

– Brian Mix, *Forum paper*

Finally, Bach is an example of a highly complex artist, a man of mature conscience, communicating a very high order of consciousness. Bach is an example of Rubinoff's definition of artists as an 'acting in accord with a mature conscience.' As Mix elegantly states:

"...there is something about Bach himself that speaks to our modern world. Bach used the most rational, intellectual system in art—counterpoint—to produce some of the most significant artistic creations of Western culture. In Bach, the human, the rational, and the transcendent meet to produce monuments that pay homage to the natural world, the heights of human reason, the depths of human imagination, and the relationships that connect all things. Bach was, and remains, a Modern man."
– Brian Mix, *Forum paper*

Summary of highlights of the dialogue

Rubinoff begins by stating that music led the arts in the movement towards abstraction and multiple voices. In music the notes are analogues of sounds, just as written words are analogues of spoken words, in both cases if you are literate you can 'hear' them in your mind. The artist however releases the art from the analogue, and thus transforms the notes, into art. In painting and sculpture, Rubinoff comments, artists were paid to do analogues, and you mostly see metaphor in these forms when the artist was on his or her own sacred path. Mix asks the question of whether the banal can be appropriate subject matter for art, or if there are things that are off limits for profound art. Rubinoff responds that the banal can only be the subject of art in an ironic sense, or for entertainment. Entertainment, he states, is for killing time, and is 'conceived in dying time, it is viewed in dying time and its life is dead time.' For Rubinoff great art is about living time not dying time. Koernig asks Mix to explore the concept of implied melody and harmony, since he finds some parallel with the concept of negative space. For Koernig the implied notes exist in negative space, in metaphorical space, space that is touched upon but cannot be dissected by analysis; the sacred in art resides in those spaces.

Key excerpts of the dialogue

On counterpoint as the beginning of the liberation of art from the unitary voice

"I was amazed how liberated music was from the Gregorian Chant. I would have to say, as a sacred music and a complete music, the Gregorian Chant pretty much did it. So the question was: why did it ever progress beyond that? And music did a much faster jump into the sense of abstraction and began to do multiple voices (i.e. instrumental, independent of a literal narrative)—much ahead of either sculpture or painting at that time. It may have been that the painters and sculptors were paid to create analogues in order to advertise their benefactors. It's their analogical talent that allowed them to be paid.

So, the liberation of music always fascinated me. That it was able to go to multiple voices long before painting or sculpture ever could.

The liberation of painting and sculpture in the 20th century and freeing it from the boundaries that were binding them to a single voice (i.e. literal or pictorial narrative) had been done much earlier in music. And, so in looking at the progression of sculpture from the early Renaissance onward, I realized that extraordinary artistic transitions happened on different timelines in different arts as well as in their social and political cultures.

Counterpoint to me is the essence of art. Metaphor resides in counterpoint. Counterpoint is ultimately the means of liberating art from prescription.”

– Jeffrey Rubinoff

On Viewing the Written Music of a Bach Cello Suite Score

“Right, so now a magic thing happens, and so this is the magic that we have in front of us. The analogue is here, the analogue is an historical reference, it comes from two hundred and fifty years ago, and here it is. Now for those who can read music, then perhaps you can look at it and listen to it while you are looking at it. And certainly we know that Beethoven composed when he was deaf.

When Brian looks at that, the first thing that happens is, he hears that visual thing and now that analogue goes through one stage to the next, which is, he can look at that and actually hear it. Now that may seem odd—but it’s not really odd in terms of the spoken word. When the spoken word is written, we hear it when we look at it. But, what’s interesting about this particular analogue is that it is pure analogue, it was done only for this purpose. It is in and of itself and bears no individual history of metaphors as words do.

So, now it has to go through a transformation. He sees it; he hears it; he plays it. Now there are players who will never be able to move that analogue into the realm of the art that was secreted there. But Brian, in that transformation from analogue—bringing himself to it—liberates the art.

The art resides in the counterpoint.” – Jeffrey Rubinoff

Liberation of art from the analogue

“So, he then brings that alive and that is in the essence of what I see a sculptor doing and this is what I see in how we move from these analogues whose art weight is near zero. When steel comes into my studio, it brings to me grey nothing. If it's stainless steel, it's gray nothing; if it's sandblasted steel, it's gray nothing.

That was the way I wanted to start all of these works. The first shape forms the first melodic phrase. So, that you start from the analogical and you then move to the metaphorical in counterpoint to realize art. And, so I think that we’ve reached the parallel, and the most interesting part about this—which is why I’ve used a unitary statement as to what art is: that at an initial point of departure, music and sculpture share this same approach to human consciousness.” – Jeffrey Rubinoff

On the substance of art

“If pop art is an issue, if pop art is essentially devoid of meaning, does that mean that we can no longer include a picture of a Buick in a piece of art? I don’t know, is that out of bounds? If you’re going to have appropriate subjects, then you have inappropriate subjects.

So, in terms of visual or sculptural art, I just think that the, perhaps, the approach would be somewhere along the lines of the artist having an appropriateness of symbol or structure. I don’t know what that appropriateness is deeper than just Michelangelo’s Pieta is meaningful to us because it’s Christ and the Virgin. But, it’s also a mother and a child. It’s also a living and a dying.

I'm talking about the internal work: that the internal work has to have something of value to make it worth perceiving. I think that's the artist's obligation to the audience. So, for example, I don't know much about Conceptual or Pop Art, but I don't think there's much value in perceiving bags of potato chips being crushed and emptied out over the top of the Skydome. Maybe it was very beautiful. It could have been like confetti, I don't know. I mean, when Christo wraps plastic around islands, I can't decide if I think it's incredible or if I think it's absolutely stupid." – Brian Mix

On art made to kill time

"When you vegetate in front of a television set, you're really killing time. So, there's an aspect of crossing over into the killing of time from the living of time, and I think that's a very important thing. What we were listening to here was living time from the past, living time in the future.

The Buick is about dying time. It was conceived in dying time, it is viewed in dying time and its life is dead time.

Is it a valuable statement for art? Only in the ironic sense.

Art is about living time" – Jeffrey Rubinoff

On the sacred contained in the negative space of the art of Rubinoff and Bach

"One of the things I wanted to comment about is the concept of implied melodies. Brian has tried to get us to perceive where the listener's ear fills in those implied notes, as well as to understand the larger contrapuntal relationships within Bach's music; Rubinoff's sculpture also uses this approach.

So on reflecting upon counterpoint, it occurred to me that the relationship between notes, between the rational and the transcendent, between Bach's mind and the listener's mind, sets up this negative space. This negative space is implied by the relationships, and is not filled in; it is left outside the language of the art form, and exists in the minds of the artist and the perceiver.

It then struck me that, of course, metaphors are relational and that this sacred space exists within those relationships. It is a mysterious space that defies analysis, because if you dissect it you destroy by turning it into something banal. But if you come up lightly onto it, I think it might allow the viewer—or the audience a way in." – Karun Koernig