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The Mythic Reality of the Autonomous Individual: Chautauqua 2009

Ted Laurenson and John Teske

Already being touted as the "long-awaited conference on the Self," Ted and John's Excellent Adventure is already headed toward its port. Not Gosport, this time, but The Chautauqua Institution in Chautauqua, New York. In the aftermath of our 2007 cancellation, and flush with the success of our second Emergence Conference in 2008, IRAS has decided to do the experiment of trying another conference venue—and at another time to boot. We will be at Chautauqua trying a new, earlier summer time in an earlier week, June 20–27, in the hope that we can extend our appeal to those whose later summer commitments have regularly forbidden attendance, as well as those whose summer schedule can better accommodate this time.

Chautauqua has us right before the start of their regular season. The Chautauqua Institution is excited to develop a symbiosis with IRAS, the goals of which are right up the alley of the historical Chautauqua Institution, and has a visibility and prominence that can only benefit IRAS, as well. They have a professional staff that has been doing what we do for over 100 years. The

The Athenaeum Hotel, where conference sessions will be held.

Athenaeum Hotel, which will be the center of our activities, while dating to the same era as those on Star Island, is far less primitive, and offers greater support and comfort in a delightful natural lake setting in western New York State, smack dab at the intersecting lines of a number of median splits of our membership. The earlier summer time is likely to also extend our appeal to those whose later summer commitments have regularly forbidden attending, as well as those whose summer conference schedule can better accommodate this time. We shall see. The Chautauqua Institution's other facilities are more modern, extensive and sophisticated than Star's. We hope you will visit the website, www.ciweb.org.

We will see how our membership responds to the different place and different time. But for those of you who haven't been able to make it to Star Island, or haven't been to an IRAS conference before, this is a fantastic opportunity.

We are also stretching in another way. Riding the wave of The Human Dimension of Emergence, we are extending ourselves well into the Human Sciences, expanding our niche in the physical and natural sciences even further into the human sciences and philosophy than we did in 2008. As the opening paragraph of our conference statement makes clear: "Concepts of individual autonomy and responsibility underlie much of the thought, institutions and ways of living in modern societies. Yet they are shot through with complexity and contradiction, and may be problematic for a flourishing human future." In the wake of the Beijing Olympics, public attention to the differences between individualistic and collectivist cultures, and a national economic crisis likely not unrelated to what John Teske has referred to as "toxic individuality," and upon which our conference questions have direct bearing, we think we are "spot on." What is the value of our historical and cultural individualism and its relationship to on the practices of a democracy, of our ethics and, of our spirituality? How do the particular operations of capitalism or even of our specific form of rationality depend upon it? Where does it come from, how does it develop and what are the alternatives? How is it embedded within or at tension with community, or even with the broader ecological crisis? What is the relationship with human freedom, human happiness, or any of the goals and purposes long sustained by our religious traditions?

Our goals as organizers also include adaptations of many of our beloved IRAS traditions, and extension of our community to a wider world. We will keep our morning chapel traditions, optionally and comfortably engaged, as are all of our events. We are delighted to have our own (and Baton Rouge's) Michael Cavanaugh, Esq. to serve as our Chaplain. The communal meals, porch conversations (there are great verandas, even with Star-like rocking chairs), and extended engagement of our speakers with each other and with conference attendees will continue to be a central component. We'll continue with our educational and age-stratified children's program, and even use as many of the same staff as we can. Our program of music and art will not only continue but, we hope, be enhanced by the facilities at Chautauqua specifically designed for such purposes. Recreational facilities abound, including boating, bicycling, and a much wider range of facilities for things like swimming, tennis, and other exercise. OF COURSE there is ice cream, and snack bar facilities, and a bookstore, but there is also a movie theater and a library, as well as plenty of open common space, so we hope that the substantially less cramped and primitive facilities (daily showers, plenty of private bathrooms), and the views of a beautiful lake will make up for the lack of ocean vistas.

The community of Chautauqua may mean that our retreat is not as isolated, but neither is it a bustling urban center, and it is quite self-contained, with the safety of the mainland and even better support for aging members than those to which we are accustomed. It was, at least in part, the excitement and promise of the facilities and the people at Chautauqua that helped decide us, when the two of us, your own Ted and John, along with old hand Karl Peters, took a road trip to Chautauqua at the end of May. This place really is just incredible, as generations of Chautauquans will attest, and we invite you to be part of it with us. Some personnel will change; we have a new registrar for Chautauqua, Joan Hunter, who replaces our tragically departed Alton Jenkins. There will be afternoon workshops. There will be a daily newsletter. And of course there will be a happy hour, with impromptu music (we already have both some old and new folks identified). We are working on a new program to invite young scholars to present their work at "posters." And there will be dancing!

Our community will be welcoming many new participants, with whom we will share our traditions and from whom we hope to incorporate some of theirs. The molten core, as always, will be our honored group of invited speakers.

Anindita Balslev is a philosopher based in India and Denmark with a strong interest in inter-religious dialogue, whose correspondence with Richard Rorty was published as *Cultural Otherness.* She will focus her talk on the theme of I-consciousness, especially in reference to metaphysical positions from Indian philosophical literature. Aninta was recommended by Larry Fagg, spoke at Star Island in 1988, and has been working on compassion with Sol Katz.

Amy Banks is a private-practice psychiatrist and directs advanced training at the Jean Baker Miller Institute at the Wellesley Centers for Women. She is involved in Mutuality Theory and Practice, and Relational/Cultural theory, and is co-editor of *The Complete Guide to Mental Health for Women.* She will address the neurobiology of human relationship. You can also check out the website of the Jean Baker Miller Institute: www.jbmti.org. Amy's partner and her children are looking forward to joining with IRAS at Chautauqua.

Philip Cary, author of *Augustine's Invention of the Inner Self*, is a professor of philosophy and scholar in residence at Templeton Honors College, Eastern University in St. David's, PA. With a Yale doctorate, he has also taught courses on the Philosophy of Religion for The Teaching Company. Dr. Phil will be coming with his canoe.

Anne Foerst, a theologian and computer scientist at St. Bonaventure University, in Chautauqua's back yard, who has

Chautauqua Lake from the hotel

worked on COG and KISMET projects at the MIT AI labs, author of *God and the Machine: What Robots Teach Us about Humanity and God*, will address the implications of embodied intelligence, and embodied community. A real pistol, Anne has been at a number of Science/Religion venues; John faced off with her in joint talks at Union Theological in NY.

Ken Gergen, one of John's intellectual heroes since reading his "Social psychology as history" as an undergraduates, is a leader of the interdisciplinary development of social constructionism and author of a number of books, including The *Saturated Self*. He is currently emeritus at Swarthmore. John brought him to Elizabethtown College as a speaker as part of a college-wide colloquium on "individuality and community," so he was high on our list. Scheduling wouldn't have permitted him to come to our originally planned Star Island conference, so we had found a replacement. He will come to Chautauqua, and if we are lucky, will bring his wife Mary, a scholar in her own right.

Lene Arnett Jensen teaches in the Psychology Department at Clark University (John's doctoral alma mater), got her doctorate under Rick Shweder and Don Browning at the University of Chicago, and worked with Robert Bellah as a postdoctoral fellow in sociology at Berkeley. She co-authored *Immigrant Civic Engagement*, and *New Horizons in Developmental Theory and Research*, and is Editor-in-Chief of *New Directions for Child and Adolescent Development*. She does research addressing cultural identity development, takes a "cultural-developmental" approach to moral reasoning, and has addressed the role of religion and spirituality for both migration and morality. Lene will also bring her guitar-playing husband Jeff Jensen Arnett (also a researcher on "emerging adulthood"), and their twins, Paris and Miles.

Alicia Juarrero is a philosopher from Prince George Community College who was appointed to the National Council on the Humanities. She lectured and published on action theory in *The Review of Metaphysics* and *The Texas Law Review*, and is author of *Dynamics in Action*. She will look at the temporal and contextual embedding of intentionality as a complex adaptive system. She is fascinating, a good speaker, and a great human being, with whom John connected at conference on Complexity in Cancun; she jumped at the chance, having had contact in DC with, yes, Larry Fagg. She just edited a volume of historical readings with Carl Rubino on *Emergence, Complexity, and Self-Organization: Precursors and Prototypes*.

Steve Winter, the Wayne S. Gibbs Professor Constitutional Law at Wayne State University Law School, is author of *A Clearing in the Forest*, which reconsiders questions of law and legal theory with respect to developments in cognitive theory. He is currently working on the effects of consumer culture on democracy, and will address the conditions affecting democratic self-governance. Recommended by Alicia, Ted had solid contact with Steve on legal issues.

Just confirmed is Werner F. M. DeBondt, the director of the Richard Driehaus Center for Behavioral Finance at DePaul University. His research examines the psychology of investors and financial markets, and the bounded rationality of investor overreaction. He edits the *Journal of Psychology and Financial Mar-*

kets and has taught in Belgium, The Netherlands, Switzerland, and Sweden.

Finally, co-organizer Ted Laurenson, our current President and a corporate and securities lawyer with McDermott Will & Emery in New York, was co-organizer of a previous Star Island conference on Human Sexuality. He has written for *Zygon: Journal of Religion and Science* and will give an orienting overview to start our conference. John Teske, our Immediate Past President and psychologist from Elizabethtown College, is a frequent contributor to *Zygon* and to *Studies in Science and Theology,* and will talk on something like "The Mind Between Us: Extended Minds and Recoupled Individualism."

We look forward to it and hope you do too. Can you imagine what a conference we will have with speakers like these, engaging ourselves and each other. We're really doing it, on the banks of Chautauqua Lake, the end of this coming June.

Getting to Chautauqua

Chautauqua is served by the Chautauqua County Airport at Jamestown, NY (15 miles south of the Institution) via USAirways Express commuter from Pittsburgh, PA. Other nearby airports are the Buffalo (NY) Niagara international airport (70 miles northeast of Chautauqua) and the Erie (PA) international airport (40 miles southwest of Chautauqua). Privately owned transportation services for travel to and from the Chautauqua County Airport are available. IRAS will try to set up shared vans at times convenient for most conferees once their travel plans are known. Further information will be posted on the IRAS web site.

Star Island 2008

A Summary by Jeremy Sherman

How we spent our summer vacation: Productively probing the minute details of the vastness of causality with a mixed and mismatched tool bag, brutal honesty, loving gentleness and ambivalence.

Like the proverbial blind folk exploring elephant anatomy, this summer at Star Island we came together to explore the elemental anatomy of emergent causation at the phase transition to human consciousness. How does consciousness emerge and what kinds of new causality emerge with it? How does causality work differently in the conscious realm from the way it works otherwise?

This was round two, our second year discussing emergence, how changes in causal regimes occur at different hierarchical levels of phenomena from basic physics, through chemistry, to life to consciousness and perhaps beyond. In 2005, we explored the differences that emerge at the transition from non-living to living realms.

While for IRAS this was round two, a great many rounds precede us. Recent interest in the scientific topic of emergence breathes new life into age-old discussions, debates and arguments regarding where life, meaning, and purpose come from. I've been thinking about emergence with conference co-conveners Terry Deacon and Ursula Goodenough for just about one year. A few years ago I concocted an ancient folk tale about the quest:

Long ago our tribal ancestors went looking for the particles of purpose, the individual and indivisible things that drive beings like us and made us different from mere matter. They searched everywhere, dug deep holes, climbed high mountains, and explored the heavens. Finding them, they said, would be a bounty of incomparable worth. If we discovered the particles of purpose we would possess an explanation for everyone's goals and behavior. We would know the fundamental purposes of the universe and know when people were diverging from them.

For many generations now our people have searched, and while some claim to have found them there is no consensus. In fact, as the years have passed the debates and disputes among tribal factions have grown more rancorous.

Some argue that it is hopeless—there are no particles of purpose, and indeed there is no purpose. There is only matter. Others argue that of course there are particles of purpose-what else could make inert matter come alive? They say we must continue to search. Still others argue that they have found the particles of purpose. They give them various names-soul, life force, prana, DNA. They say the other factions are being pigheaded for not recognizing them. Some claim there is one grand particle of purpose that governs or pervades all that can't be seen but must exist. Many claim the exploration was a fool's errand that can only yield fool's gold. We are like alchemists looking for what will never be found.

As with alchemists though, our inconclusive search has yielded a great many discoveries on the side. Though we haven't found the particles, we've come to understand nature's processes much better. We've developed better research tools and methods. Indeed, some argue that, as with alchemy's transition to chemistry, our discoveries are worth more, and that these side discoveries are about to change the object of our search. These say it's time to get over looking for the particles of purpose because purpose is not in particles at all. Rather purpose, meaning, consciousness are emergent from processes and not indivisible things. Understanding the processes themselves—how processes happen to create systems from subsystems is the new object of the

quest. The powers of intricate coalescence give rise even to the emergence of conscious purposeful beings like us.

If we understand these processes we'll be better able to explain the purpose that emerged before us, the consequences of what emerges from us, and even to some extent the future purposes that are likely to emerge. This knowledge will be more complex and difficult to gain than simply discovering particles that do it all. But the payoff will be of even higher, inestimable practical value, and the good news would be a livelier future for life because if purpose isn't pre-established in the particles then there's more wiggle room perhaps and the story of life's purposes isn't foretold.

Emergence, though addressing ancient issues, is nonetheless a new science attractive to a diverse range of thinkers hoping to find in it answers to their diverse research questions. Our conference reflected a broad array of interpretations of emergence's promise.

I've asked the presenters to provide me with their take-home messages which I print in full as available. I also take the liberty of identifying the questions prompted in me by the presentations because at this early stage in the careful study of emergence, questions are at a premium.

Ursula Goodenough

Paradox: Our selves, our "spirits" do not feel material; we experience them as virtual realities.

Interpretation: To experience our experience without awareness of its underlying mechanism is exactly what we should expect from an emergent property.

The experience of soul or spirit as immaterial can be said to illustrate the way the process of emergence progressively distances each new level from the details below.

On Saturday night, Ursula opened the tent wide introducing the week's topic to the uninitiated and specialist alike. Her talk included a biologist's "you are here in geological time" and a framing of the concept of emergence from the ground up. She demonstrated that the field is a technically grounded yet accessible—scientifically rigorous yet spiritual. Ursula introduced some of the technical terms coined by Terrence Deacon—morphodynamics, teleodynamics, masking and redundancy, as she surveyed emergent properties all the way out to brain function, consciousness, self-awareness, and spirituality. She covered a lot of ground leaving us glad for the week ahead and opportunity to dig deeper. A nice touch—topic by topic, her slides listed speakers who would carry the various ideas deeper in their presentations later in the week.

Ursula is a cell biologist and leading religious naturalist. She finds spiritual substance in the natural world as uncovered by the scientific method. A question raised by the breadth of her presentation that stuck with me all week was how one handles what could be called the methodological phase transitions from scientific evidence to philosophical abstraction to personal meaning and spirituality. Emergence theory is dauntingly ambitious, working from limited data to loaded conclusions. We care about the outcomes and don't have anything like an airtight methodology to make sure every step in our journey to outcomes is a disciplined one. This is what makes us like the proverbially blind or at least partially sighted elephant investigators. Truth waits for eyes unclouded by desire. Truth is what persists regardless of what one believes. With emergence theory the desires are strong and there's ambiguity about what persists.

Niels Gregersen

Cognitive Evolutionary Psychology challenges both religious naturalists and intuitive theists by showing the extent to which we have strong evolutionary propensities for developing agent-based concepts. Religious naturalists seem like people having Asberger's Sydrome (autistics who can't relate personally to their environments), while theists seem be too hyperactive in their personal attachment to their environment. Is the one too cool, the other too hot?

IRAS has always represented a few different approaches to the combination of science and spirit. There are the parallelists who happen to be both scientists and spiritual or religious. There are the synthesizers—those who aim to harmonize both realms either by conforming science to religion or religion to science. There are pseudo-synthesizers who claim unity by ignoring the conflicts. Then there are those who are interested in the science of religion. Niels is a synthesizer at heart but chose to present primarily about the science of religion. He provided some context for discussion of emergence in humans by surveying and evaluating various biological, or naturalistic explanations for human culture and religion. His survey centered on the work of evolutionary psychologist Pascal Boyer, who argues that religion and the spiritual quest are natural impulses stemming from adaptive traits. Gregerson finds the argument plausible, but also expressed his hope that there is a real God, a force that would tip the balance between good and evil in the direction of good. Gregersen's presentation illustrates my questions about methodology.

Evolutionary psychology has yet to address the "just so" problem with its methodology. Human behavior is under-determined. There are too many plausible explanations for any human behavior. It is possible to come up with an evolutionary explanation for anything we do, especially if you include very indirect contributions to biological reproductive success, as evolutionary psychologists have tended to do. Finding evolutionist psychology's explanations plausible has never been a problem. Rather the problem is weighing plausibility and, indeed restoring evolutionist psychology's methodology to a falsifiability in the face of the critique of it as simply the accumulation of "just so stories." Further, it was unclear from Gregersen's presentation whether he was providing an academic critique, or a personal one. The presentation shifted into reporting on personal preference for a world with a God over a world without one.

Sue Savage Rumbaugh

From the biological roots of human culture, to the cultural features of our biological cousins, the chimps, Sue Savage Rumbaugh, in the Sunday evening session provided us with an overview of ape language research, and an emergentists antidote to Skinnerian approaches to language acquisition. During the evening tea break midway before questions Kent Koeninger commented to me that "she's the Harriet Beecher Stowe of primatology." Sue has revolutionized our understanding of apes, with implications for everything from animal rights, to pet owner's bequests to the pets to our understanding of learning in all creatures. Both Noam Chomsky and the Rumbaughs expose the limitations of Skinnerian approaches to understanding the processes of language acquisition. Their responses couldn't have been more divergent, however. Chomsky, arguing that it would be impossible to learn language by Skinnerian means, posited a language acquisition module. The Rumbaughs applied common sense, creating a more naturalistic learning environment and demonstrating unexpected symbolic and therefore human potential in apes.

Sue's passion for her work, and her deep bond with Kanzi and the other apes she has worked with was evident in video she showed of her interactions. She stirred both enthusiasm and productive controversy among us with videos that she interpreted as demonstrating that the chimps had a deep and subtle comprehension of English and the capability of producing music. Some of us found the evidence compelling and the passion contagious. Others were skeptical that the chimp could understand fully sentences that included words like "that" and "yesterday." What Peter Gabriel helped Kanzi produce was structured such that any white key would sound mellifluous. The music was quantized (in other words rounded up or down to the nearest beat) so as to stay in time. Animal tricks, or evidence of potentially unlimited human potential in apes? Here we see one of the undercurrents of emergence research at play. One definition of emergence emphasizes surprise or novelty as though emergence was akin to miracle or at least the discovery of a new means by which the surprisingly wonderful and humbling can happen. Other approaches don't expect anything more miraculous than what's already miraculously evident, and seek only to explain in greater detail and with more precision how everyday miracles come about.

Duane Rumbaugh

> *Comparative studies of learning of primates that have included prosimians, monkeys, gibbons, and all of the great ape genera make clear that there is a steady progression from just basic associative learning to the learning of rules and principles as the brain becomes relatively larger and more complex. With this progression, emergent processes bring forth the capacities to learn richly by observation, to transfer even very small amounts of learning to a leveraged advantage in the face of new challenges, to learn the meanings of symbols and to use them as words to solve problems and to communicate symbolically with us, to master the principles of syntax whereby the order of words alters meanings, and to be uniquely sensitive to the feelings and needs of others about them. The data are strongly in support of the conclusion that there are important continuities in the learning and rational processes notably of apes and humans. Differences among monkeys, apes, and humans—all primates—are principally quantitative, not qualitative. Even positive and aggressive social interactions are in principle the same.*

Whether or not emergence is a new source of miracles, it was clear from Duane's exceptionally clear and engaging presentation that emergence yields exciting research potential. On Monday morning he drew us deeper into the connection between emergentist theory and its application to breakthroughs into the symbolic realm by walking us through the innovative experiments in teaching primates language. In the quote above Duane posits both a continuity and a discontinuity in the transition from other primates to homo Sapiens. Primate learning is continuous with ours, other animals are capable of love as we are, but by Duane's account not as capable of hate, greed and cruelty. The question of course is how then does this dark side of human nature emerge?

Mark Turner in a very clear, accessible and entertaining presentation implied one explanation. Human symbolic capacity enhances our ability to put ourselves in each other's shoes. We use "conceptual blends" to juxtapose the features of two situations. The statement, "If I were you…" is an example. It enables me to imagine being part me and part you, and in the process to experience empathy beyond what we would expect from non-symbolic species. This empathy makes us potentially both more generous and more cruel however. The sociopath does not lack for empathy. Rather he or she uses conceptual blends to mind read his victim and then imposes inventive tortures with a highly empathic ability to know what would hurt.

This however was certainly not the central thrust of Turner's presentation. Rather it displayed the many delightful ways in which our unusual and under-celebrated capacity to mix and match symbolically is the source of unique human capacities for art, invention, social change, innovation, charity, spirituality. Turner's presentation brought to mind a question about the relationship between capabilities and mechanisms. Conceptual blending is a capability. It affords us special powers. Typically and intuitively researchers find some powerful capability, posit a mechanism that produces it and attempt to reverse engineer an algorithm that would produce the capability. So, for example our intuitions would tell us that conceptual blending is an added physical system. It's useful enough that if we were the engineers who designed us, we would engineer a physical system that manually blends concepts. An alternative Turner acknowledges is as plausible is that conceptual blending is not an added feature but a subtracted one. After all, we're not perfect at distinguishing identities in the first place. Maybe conceptual blends are merely the

highly powerful and capable affect of vagueness, ambiguity, and omissions of distinction rather than the imposition of blend.

Keith Sawyer

> *Everything interesting that happens in a group is emergent—unpredictable, unplanned, and better than what any one person could have thought up alone.*

Sawyer's presentation continued the theme of practical accessible treatments of emergence at the scales familiar to us all. An education, business and psychology professor by day Keith found a way to mix business with pleasure when he started playing piano in theater improvisation groups and noticed that they made a first rate lab for understanding the nature of emergent group process. He argued that emergence offers an alternative to reductionism, which he said he assumed was why we were all interested in emergence. "We're hoping that the world doesn't reduce to physics or cognitive psychology." The reductionist school in social dynamics is called methodological individualism and operates on the methodological principle that all social phenomena must be explained by reference to individuals and their interactions with each other." With examples from improv groups Sawyer promoted an alternative perspective from which to analyze group process and also implicitly an alternative way to make groups work better through emergentism.

The presentation raised useful questions for emergentists. If it's not individuals and their interactions, what is it? Is emergence something added to a group or is this another capability/mechanism conflation? Maybe as with conceptual blending it's the absence of precision in human language that makes improv skits close in effectively on narratives? How would one distinguish emergentism from non-energeticists group practices? If it's by flat structure, vs. top-down leadership as was hinted at, then is it really true that emergent, unpredictable and unplanned is always better than what any leader could have thought up? If so, why are there ever leaders? Would eliminating all leadership be better?

Like most presenters, Sawyer treats emergence as the source of everything both interesting and better that comes from intricate coalescence. A question that grew in me throughout the week was about the source of this association between emergence and good and virtue. I suspect it's our bias showing. A god or good of the gaps which I call a "White Box" which like a black box in engineering is some functional module whose mechanism is not understood. White as in white hats-a power for virtue like Gregerson's God. "Evolution" is another example: I wrote this limerick about them.

> *We all need a reason to hope.*
> *A leg up on this up-tilted slope*
> *Some words scientific*
> *Sound super-terrific*
> *Is their hope made specific? Well, nope.*

Do group emergent processes ever generate things that are more interesting but worse than what any person could have thought up alone? Was the rise of Nazism an emergent property? The blind folk and the elephant-with a phenomenon as huge as emergence, lab science won't give us all the answers. With a topic this ungainly how do we fill in the gaps without insinuating our own preferences or biases? And some might argue, why try? After all we all are advocates for social change of one sort or another. Why not use science's credibility to promote good in the world? One response is that it weakens science's credibility.

Eduardo Kohn

Though filled with many intricate details about use of language and gesture among Ecuadorian rainforest tribe, Eduardo's presentation aimed at a bold and simple claim. The semiotic process of this tribe in interaction with their environment brings about the emergence of Spirits that are in fact real, and not just fictions or figments of the imagination. A question raised by this is how we are to define real and here Terry Deacon made a useful distinction in subsequent conversation with Eduardo and I. Simply put, there are two kinds of real that over time converge upon each other asymptotically. Let me distinguish them as epistemic real and ontological real. We can take as epistemically real any idea that has causal efficacy. Rainforest spirits, Jesus, Zeus, the tooth fairy all are epistemically real in that the thought of them works on peoples' spontaneous tendencies, making them do things they wouldn't do without this ideas.

Then there's the ontologically real which is some process or habit so persistent that people converge on an intuition that it is actual hard fact about the world. The skeptical tradition in philosophy notes that we can't know what's an actual hard fact without the intermediation of our impressions. Some would therefore argue that the epistemologically real is as real as it gets and that therefore all concepts that shape behavior would be equally real. An alternative approach factors in time: The ontologically real is that which persists regardless what epistemologically realities we live by, and over time the latter therefore approximates the former. The ontologically real will out, so to speak, not perhaps in its entirety—there could be ontologically realities we never interact with enough for them to shape our epistemological realities. Eduardo seemed to be arguing the less controversial point, which is that the Rainforest people's spirit gods persistently shape people's behavior.

George Ellis

> *Emergence of physical complexity allows the human mind to come into existence; and top-down causation enables interaction of the human mind with abstract entities that are of a transcendent natur.*

As Niels Gregerson wrestled with the relationship between bottom-up biological explanation for religion and top-down intuitions and experiences of transcendent forces, so George Ellis wrestled with the relationship between the bottom up evolution of the human mind and its relationship with high moral principles. Ellis argued that the biologically evolved human mind turns

its attention to abstract truths and that these abstract truths are not figments but real. They're discovered, not created. In Platonic tradition, he drew a parallel between math and morality. Mathematical truths are universal and transcendent of all contexts. We know their transcendent nature by their resistance to our preferences. (For example, unappealing but nonetheless true, the square root of 2 is an irrational number). Ellis argues that a transcendent moral equivalent which likewise defies our preferences is "kenosis-letting go, giving up, sacrificing on behalf of the other."

Gregerson and Ellis come to similar conclusions. There is something in the fundamental nature of the universe that tips the scale in favor of love and generosity. Gregerson states simply that he hopes there is, whereas Ellis claims to have found a formal argument for it. Ellis echoes Sawyer as well. Emergence is good. It enables us to tap into the universe's core moral value.

Along with Hume I'd introduce the possibility of selective reading of nature's message. No doubt one transcendent concept is kenosis, but why then wouldn't its opposite-self-preservation, self-protection and self-enhancement be an equally transcendent concept as well? Why say the preferences that kenosis defy are any less transcendent? If it is because self-interest is less appealing then wouldn't that be an argument that its persistence is all the more transcendent despite its lack of appeal?

Along with Aristotle I'd argue that all of life lives at the balance between too open and too closed, too yin, too yang, excessive letting go and excessive holding on. Perhaps then the transcendental concept is not the moral principle of kenosis but rather the moral dilemma as to when to be open and when to be closed?

A reinterpretation of Ellis that comes to mind argues that with human consciousness we encountered the second law of thermodynamics, which is, as Boltzmann discovered, a transcendental fact of nature as universal as math. In fact it is math, the product of statistical mechanics. The second law is deep kenosis, the way everything lets go, gives up and sacrifices on behalf of the other.

Is the second law of thermodynamics a moral truth? If it is, then by itself it cannot be said to be a life-affirming dynamic, because by itself it makes life impossible. Life must outpace the second law. Generosity is generally antikenosis, giving others help in outpacing the second law. When we donate to feed the hungry we are locally countering the second law.

Here again methodological questions arise. None of us are blind, but in approaching questions larger than elephants we bring our perspectives, and they will tend to fill in where empirical evidence and formal logic leave gaps.

Mark Bikhard

Intentionality and consciousness are natural phenomena but can be understood so only within a process metaphysics that makes change the default, makes emergence possible and makes normative, intentional emergence (thermodynamically) natural. Normativity is a natural part of the natural world.

Mark addressed methodology issues in the service of an argument very similar to the one I make in response to Ellis regarding dilemmas and not principles as fundamental. Rather than taking a particular moral principle as foundational as Ellis attempts to do, Mark wants to naturalize the roots of morality itself. Ever since Hume argued that there is no natural way to get from "is" to "ought," normativity or value-good/bad, better/worse, right/wrong, ought/oughtn't—have been treated as outside of nature. Bickhard says this is largely due to a methodological commitment to a substance-based ontology we in the West made as far back as the Pre-Socratic philosopher Parmenides who argued that change and even motion cannot occur. For thing A to move to where thing B is, there must be a total void where thing B is, but Thing B can't move out of the way any more than thing A can. Empedocles responded with the argument that everything is made from mixtures of four divisible substances—earth, air, fire and water. Democritus followed arguing that the universe is comprised of indivisible atoms of these substances. This intuitive framing left us with a default assumption that static states are the norm and change is what must be explained. Treating things or substances as foundational has caused confusion over and over in science. Energy, heat, magnetism, electricity, radiowaves—thinking about their nature has always started with treating them as things. Bickhard argues that the nondynamical approach is as much of a dead end in understanding normativity as phlogiston is in understanding the nature of fire. Once one's metaphysics catches up with science's discoveries of the last 150 years, it becomes a process metaphysics and the naturalistic emergence of normativity becomes a fairly straightforward issue. There are transient phenomena-processes that are short lived. There are relatively long-lived processes producing such stable phenomena as rocks. There are what Bickhard calls "energy well stability producing processes" that generate such stable dynamics as are exhibited in the manifestation of atoms. And then there are far-from equilibrium systems that maintain their form through the constant flux of energy. Of these there are two kinds—self-maintenant and recursively self-maintenant. This latter category includes life—any process that is responsive enough to maintain its self-maintenance in the face of changes in its environment. A candle is self-maintenant-the heat generates the fuel that generates the heat. A bacterium is recursively self-maintenant for example in its ability to move toward richer sources of energy which is used to produce the ability to access more energy. Biological functionality is basic normativity which can be defined simply as "contributing to the maintenance of far from equilibrium conditions necessary for the dynamic system." By this definition, the heart beat of parasite is functional for parasite and dysfunctional for host. Normativity thus becomes not some universal standard. There is no pure good or pure evil. Rather it is always context based, a product of for-ness, the property of being in relationship to or "for" some system. The question prompted by this framing is one Bickhard addresses masterly in work he did not present-how does for-ness emerge? Is for-ness the product of a kind of synergy whereby certain kinds of systems

become “greater than the sum of their parts?” In other words is for-ness an add-on mechanism?

Terry Deacon

The whole is less than the sum of its parts.

As Terry’s long-time student I always feel for him at the beginning of presentations. It has taken me 12 years to understand what he hopes to convey in an hour or two. This time I felt for him especially because I had seen how much he hoped to get across beforehand and because he was lovingly introduced by Loyal Rue with a charming though lengthy shaggy dog story about this most extraordinary man, a man who has taken to heart and mind the Portaging and Stingers quote with which he began his talk “Nature must be described in such a way that man's very existence becomes understandable.”

Terry’s talks are always dense, filled to brimming. For many unfamiliar with his work the vat overfloweth. Terry is not trying to be difficult nor is he insensitive to his audience’s needs. As Loyal identified, Terry is about as heartfelt a guy as you’ll ever find. He just happens to also be a thorough and careful thinker who takes the methodological issues very seriously. His methodology exemplifies to me what constitutes being thorough and appropriate to emergentist approaches and topics. It is consistent. No leaps into personal preference, or casual impression-based categorization go unscrutinized or tolerated. In the service of very big questions it starts with empirically demonstrated particulars of dynamic relationships. From these it generates categories of dynamic behavior that are then worked toward a coherent overworking model for all behavior. He is highly constrained in the defining of categories but the categories don’t cut the universe at humanly intuitive joints. He is at great pains to avoid two errors made often with philosophical methodology. One is the fallacy of misplaced concreteness—categorizing as ontological fact on the basis of what is epistemologically compelling or easy. The other has been somewhat bullyingly named “greedy reductionism” by Dan Dennett, a sort of mad monism where you find a pattern at one level that is so gut-compelling that you claim it rules nearly everything.

True to this method, Terry is thorough in his presentations. You get a worldview that encompasses practically everything from a man who insists on dotting his I’s and crossing his T’s. After his presentation I was rushed by people who wanted to know what he said. They recognized accessible profoundness that was relevant to their own inquiries, they sensed that there was something about the method that made it unusually grounded and worth hearing. But for the life of them they couldn’t say they understood it.

There isn’t room here for a full Deacon for Dummies. In defiance of my master's method, I'll provide three relatively tiny talking points.

Answers come from flipping things. Instead of looking for the particle of purpose, look for the poverty of purposelessness-the ways that functional things are functional because all of their dysfunctional states are prevented. For example, a machine or body doesn't function well because it has got something beyond the parts, some magical thing that makes it do what it does. Instead it does what it does by not doing other things. It is “constrained.” It works because of the absence of dysfunction. You can tell because machines break down through de-constraint. They gain freedom as they lose function. They start doing things they're not supposed to do. Thus the whole is less than the sum of its parts.

There are three basic causal regimes. There’s thermodynamics which is entropy increasing or decorrelating (meaning that with time things get jumbled to where knowing the state of one thing tells you less and less about the state of its neighbor). There’s morphodynamics which is self-organizing in the context of “persistent far-from equilibrium conditions”—in other words systems that are not all equalized out by thermodynamics but rather in states of constant energetic throughput. A classic example is a whirlpool which only forms when energy is moving through a system like water through a riverbed. As a result of the throughput the parts of the system do work upon each other. That work imposes mutual or reciprocal constraint, where one part reduces the freedom of another part and visa versa. Much of the work is reciprocally cancelling—the turbulence in river water where molecules moving in different directions defeat each other’s work. What persists to form the whirlpool is “the least discordant remainder,” the circular current of the whirlpool which is formed by molecules working against each other in mutually reinforcing ways. With time to move the system overall toward more efficient throughput of energy by minimizing the friction, conflict, drag or work each subsystem imposes on the others. Morphodynamic systems are akin to Bickhard’s self-maintenant systems.

One can’t get to life and consciousness without a fundamental appreciation of the ways in which morphodynamic processes can themselves become spontaneously juxtaposed in such a way as to form higher level mutually reinforcing patterns that give rise to the emergent level called teleodynamics. Terry’s autocell exemplifies the simplest teleodynamic (and therefore evolvable) system possible, produced by the synergistic juxtaposition of two morphodynamic processes.

Phil Clayton

I see this week as a call to constructive religious reflection. Some do this in the context of an existing religious tradition, some want to radically transform the traditions, and some are striking out boldly in new and as yet uncharted directions. I’d like to think that we share a mutual respect for each other's integrative work in science and religion, even as we passionately pursue the particular path that makes the most sense to us.

Phil stated that he couldn’t “give a theory tonight.” Rather he aimed for an expression from the heart, an evocation of emotion, and a much welcome respite from the weeks intellectual heavy

lifting. One take away from the week was the realization that the natural world is much more complex and fascinating when seen through the lens of emergence.

Phil likes to play the role of "floodlighter"—someone who lists the logically possible positions instead of spotlighting the positions he favors, or opposes. He offered us a floodlight of the options for those of us who want to understand, but to also employ emergence as a mode of being in the world including informing our political and religious or spiritual practice. He argues, "The door is not closed to complex religious responses." His options include that emergence

1. Has no relevance to spirituality.
2. Explains spiritual experience that nonetheless doesn't reflect reality.
3. Explains our purposefulness as natural.
4. Explains the special intrinsic value of self-consciousness.
5. Need not eliminate all use of the traditional religious terms.

I'm not sure these are the logical options and I don't see why five is not already implicit in three and four. Both seem to center on the epistemically real, not the ontological. He doesn't explain what rule would make the elimination of all traditional religious terms necessary. Clayton declared himself with number five though, one who doesn't think an emergentist perspective precludes deep religious experience and belief. He does however say that "of course, some of the traditional religious language is no longer viable." But doesn't make clear by what method one could make such a decision. He gave examples of such untenable quotes including a startlingly graphic one from C. S. Lewis in which he depicts God's capacity to impose miracles upon reality in a way that paralleled a husband asserting himself upon or into his wife. The quote disturbed our sensibilities with respect to gender relations, but it did also raise questions we didn't address about the trouble with an external source of omnipotence. Most Biblical miracles benefit some and not others, and we tend to focus on God's beneficence to the beneficiaries more than the suffering he imposes. If we say the people of Sodom or the Egyptians had it coming, we're not talking about a miracle but the expected—that through his miracle God makes fairness the exception to the rule of unfairness.

Phil Clayton loves the conversation and is I suspect by temperament is deeply committed to Kenosis as Ellis defines it. He could have used his time to make a critical academic or theological contribution to controversy and debate, and perhaps did by indirect means. Explicitly however he chose instead to round out our time together with that which holds us all together. He offered a slide presentation of that which resonates with us about nature, exquisite scenes of nature and life at its most glorious.

Phil's presentation and approach in general reminded me of a question that will be with me throughout my life regarding the best way to demonstrate mutual respect in any particular situation. I've called the dilemma "truth or care," but really it's about whether to demonstrate care by stating or withholding one's perspective. We should be honest. We should be nice. Sometimes the two are incompatible. I've also called it the distinction between sooth (an old word for truth) and soothe. Should you be a sooth or a soothe sayer? We all need affirmation and we all need feedback. It's just hard to know when to deliver and receive which. Another framing of the question is with regard to emergent levels in human conversation. Constructive argument is a deep and useful oxymoron. For the argument to be constructive it has to be somewhat destructive, just as for evolution to work, its process of elimination must eliminate some forms. "United States" is a similar oxymoron. If we're united then why have states? The states are allowed to be distinct. There's something gained for the whole through the disunity of the parts. Similarly there's paradox built right into the moral sentiment that "tolerance is so valuable that one should be intolerant of intolerance." These conflicts are, to me a delightful reminder of emergence at its most foundational. We talked of bottom-up or top-down causality, but that's an oversimplification. It's not as though at some point the lower level phenomena surrenders command to the higher level and then somehow the higher level plays some command and control role imposing itself on the surrendered lower level. It's give and take, or to anthropomorphize it's a negotiation or fight between lower and upper level causality. Even with Terry's snowflake-the lower level water molecules shape imposes itself bottom up forcing the snowflakes hexagonal body plan even as simultaneously the upper-level dynamics impose the particular embellishments that mount up on the six points. Bottom up and top down may be useful abstractions but only if we remember that in real emergent systems they are in is concurrent tension not turn-taking or the permanent replacement of bottom-up by top-down with top playing some magical invisible or goodly role.

With respect to debate, we love the opportunity to argue with each other even as we are actively arguing against each other as necessary. The fight is most loveably productive when we really duke it out. Sometimes being kind in the short run by humoring people is sometimes being unkind to them in the long run. The un-kind affect of being kind is called "enabling," or "codependence." And of course sometimes being kind to someone in the long run by giving honest feedback feels unkind in the short run. Think of how niceness has been exploited by politicians lately to bully people into submission. For example how Bush used it in attempts to suppress debate over the war. "It's not nice to America to make us look internally divided. It weakens us in the eyes of our enemies so be nice to me about my policy."

IRAS is planted smack dab in the middle of this dilemma. The united states of science and religion. It's a community; it's an academic conference. It's a congregation; it's a congress. Communities and congregations emphasize unity and communion. Academic conferences and congresses are places where ideas are hashed out and conflicts are expected and welcomed as part of the hashing out process.

In writing a review of the conference I've dealt with the same dilemma. When to be me and when to be we? When to simply report what's said and when to declare my opinion about it

even if it is critical. Is it kinder to be withhold my opinion, the opinion of just another partially blind person or is it kinder to share it?

Emergence as a well organized science is new. With a lot of long run ahead of us. Tolerance of intolerance at this stage may serve us extremely well. Phil argued for mutual respect within the community of inquiry but serves us well by expressing a lesser respect for C. S. Lewis than he expresses for the emergentists. The problem for those of us who love our fellow humans is forever deciding, where to draw lines, how much love and how best to show it.

I'll close this review with a couple of poems I recited at the close of my closing presentation. The first gets to the methodological issues we struggle with as we find personal meaning in careful research across a spectrum so huge that it becomes difficult to define careful carefully.

O sweet spontaneous

O sweet spontaneous
earth how often have
the
doting
fingers of
purient philosophers pinched
and
poked
thee,
has the naughty thumb
of science prodded
thy
beauty. how
often have religions taken
thee upon their scraggy knees
squeezing and
buffeting thee that thou mightest conceive
gods
(but
true
to the incomparable
couch of death thy
rhythmic
lover
thou answerest
them only with
spring)

E. E. Cummings

And here's the poem with which I closed my closing session which identifies the emergentist me vs. we, truth vs. care, sooth vs. soothe dilemma at the emergence of a partnership.

Talking In Bed

Talking in bed ought to be easiest,
Lying together there goes back so far,
An emblem of two people being honest.
Yet more and more time passes silently.
Outside, the wind's incomplete unrest
Builds and disperses clouds in the sky,
And dark towns heap up on the horizon.
None of this cares for us. Nothing shows why
At this unique distance from isolation
It becomes still more difficult to find
Words at once true and kind,
Or not untrue and not unkind.

Philip Larkin

President's Letter

The article in this newsletter on next June's Chautauqua conference, jointly authored with my predecessor John Teske, already says most of what I might otherwise write in my first president's letter. Instead of treating that exciting and significant event here, the wrenching death of Alton Jenkins leads me to write about him, the gifts he brought to us and what his contributions exemplified for IRAS.

Those of you who subscribe to the IRASnet know that we learned of Alton's death through an emailed "final message," transmitted by his son, that Alton had first written several years ago in contemplation of the possibility of his death. I do not believe Alton had any reason to think he would depart from us soon, but in his lovely and thoughtful way he contemplated his age and decided to be prepared for the end that is never fair and is always unknowable. As it was, he died on October 10 at the age of just 67, while trying to recover from emergency heart surgery the week before.

As a sometime email correspondent whose name was in Alton's electronic address book, I received the message on the morning of October 11, just as I was departing to attend the fall meeting of the Star Island Corporation (SIC) Council of Conferences in Framingham, Massachusetts. I was staggered. Alton had volunteered to be our registrar for the Chautauqua conference and had recently become a member of the IRAS Council. Having attended his first IRAS conference in 2005, his interest in our mission immediately manifested itself, and he soon began to participate frequently, always with grace, humor and intelligence, in both our IRASRN and IRASnet listservs. We had corresponded in September about the details of his taking up his registrar responsibilities, and, having been away on a trip in Europe, I was

shortly planning to contact him to make sure he had all the background and contacts he needed to do the job. Then he was gone.

We tell others, and ourselves, that we are not a religious organization as such. We acknowledge that we come from many different perspectives and all have busy and full lives, both personally and otherwise, separate from IRAS. All of that is true. But particularly because of our all-volunteer structure, the intensity of commitment that is required to maintain an organization like this and the inevitably deeply personal nature of the matters with which we deal, we rapidly interweave with each other, exchanging and exploring our deepest thoughts and commitments. When someone like Alton joins us, so full of energy and interest and good will, he (or she) can so naturally fit into our fold that it seems astonishing that we hadn't known him (or her) for decades. His absence hurts, and we will miss him.

Alton's death reminds us that the commitment our many leaders and participants bring to IRAS is essential to our operation. We solicit your interest in working on committees, on conferences and activities at conferences, in developing new ideas and new IRAS endeavors. I am honored to be your president, and I look forward to working with both old and new colleagues to keep IRAS successful and vigorous.

I am also delighted to report that Jane Penfield has agreed to serve another term as the chair of the IRAS nominating committee, whose charter includes the nomination of new IRAS Council members. If you have thoughts or suggestions for members of the IRAS leadership, please feel free to contact either Jane or me.

As mentioned, I was on my way to the SIC Council of Conferences meeting when I learned of Alton's death. As many of you know, when we informed SIC during the summer that we would not hold our 2009 conference on Star Island, we offered to come back to Star for our 2010 conference in our traditional July/August week. The primary reason I attended the Council of Conferences meeting was to discuss the status of SIC's response to that offer, and I have put off writing this presidential letter in the hope that I could report something definitive regarding those discussions. However, the situation remains unclear, and I think it would serve no purpose to attempt to give an overview of an evolving negotiating landscape. I commit to you to keep the entire IRAS community informed as soon as we have something definite to report.

With my deepest care for all of you.

Ted Laurenson
elaurenson@mwe.com
October 20, 2008

Joint IRAS-CTNS Winter Conference: Proposal and Progress

Norm Laurendeau

At its annual meeting in Portsmouth on July 27, 2007, the IRAS Council authorized me to pursue a possible affiliation with the Center for Theology and the Natural Sciences (CTNS) with respect to co-sponsoring an annual winter conference related to science and religion. Last winter, Nate Hallanger, representing CTNS, and I, representing IRAS, developed a proposal for such an annual winter conference. If approved by both CTNS and IRAS, the conference would be held near either the first or second weekend in February of each year, presumably using the facilities of the Graduate Theological Union (GTU), located in Berkeley, California.

The primary purpose for this conference would be the creation of a venue at which young scholars might interact with established scholars in the broad areas of science and religion, including ethics and technology. In particular, young scholars (graduate students, postdocs and untenured professors) will benefit by presenting their ideas and receiving constructive feedback from established scholars while the latter will benefit by being introduced to potentially novel concepts developed by the former. The intention is that this joint conference would build the field and eventually become the premier meeting of its type in the United States. The implementation and administration of this proposed annual meeting will be governed by the following primary features, pending approval by the governing bodies of both CTNS and IRAS.

1. The conference will be called the Joint CTNS-IRAS Conference on Science, Religion and Technology in odd-numbered years and the Joint IRAS-CTNS Conference on Science, Religion and Technology in even-numbered years.
2. CTNS and IRAS will each appoint one program chairperson and one facilities chairperson. These program and facilities chairpersons will constitute a Joint IRAS-CTNS Conference Committee, which will organize and conduct the annual conferences. In particular, the two program chairpersons will be jointly responsible for the program and the two facilities chairpersons will be jointly responsible for the facilities at each conference.
3. As much as possible, the annual conferences will be self-supporting, preferably using a combination of grants and fees paid by those attending the conferences. Fees will be tiered, with a minimum fee for those graduate students and postdocs presenting papers, an intermediate fee for graduate students and post-docs not presenting papers, and a maximum fee for all remaining scholars, whether presenting or not presenting papers.

4. Each conference will occur over a two-day period. Four plenary speakers will be invited, with one plenary lecture at the beginning of each morning and afternoon session of the conference. Similarly, four major themes will be established for each conference, typically mimicking the themes established by the four plenary speakers.
5. Additional presentations at each conference will be chosen initially on the basis of 200-word abstracts submitted in response to a national call for papers. The final program established by the program chairpersons will be based on completed papers of 3000–6000 words, which must be reasonably consistent with the themes of the conference.
6. The call for papers will occur electronically via the CTNS and IRAS websites and via e-mail using listings available through CTNS and IRAS. The call for papers will also be published in our affiliated journals, *Theology and Science* and *Zygon*, plus other print media, using the most important and appropriate outlets for each conference. Finally, as much as possible, the call for papers will be shared with other organizations involved in the science and religion dialogue.
7. Extramural support for the joint meetings will be sought by IRAS through either the John Templeton Foundation or the Ford Foundation. Monies will especially be sought to reimburse invited speakers, publicize the conferences, and defray traveling costs for graduate students attending the conferences. In this way, meeting costs can be minimized, thus ensuring the viability of the conferences for many years into the future.

The above proposal was presented to the IRAS Council at Portsmouth on July 25, 2008. At that meeting, the Council approved the conceptual framework for the annual conferences and authorized me to seek suitable grant support, either from the Ford Foundation or the John Templeton Foundation. Consistent with the planning process for the proposed meetings, the Council suggested that a final time-table for paper submissions and conference registrations, as well as the conference fee structure, should be established by the Joint IRAS-CTNS Conference Committee. However, the President and Vice-president for Conferences of IRAS will act as advisers to oversee and approve any application by IRAS for foundation support. The IRAS Council also approved up to $5,000 to cover 50% of any shortfall in grants and fees as support the first annual joint conference, subject to agreement by CTNS to do the same. The Council, of course, recognized that any grant proposal to support the annual conferences would be written for a three-year to five-year period, so that further funds may be necessary from IRAS in the future.

On September 13, 2008, the same proposal approved this past summer by the IRAS Council was introduced as new business at a meeting of the CTNS Advisory Board. Because of more pressing issues related to a current period of transition at CTNS, the Board did not have time to discuss adequately the current proposal. Hence, they decided to table the proposal, pending further education and deliberation on the merits of this joint venture. The proposed CTNS-IRAS conference is now on the agenda for consideration at the CTNS Advisory Board's next meeting, scheduled for December 6, 2008.

Michael Cavanaugh, past IRAS president, center, with John Teske and Ted Lawrenson, co-chairs of IRAS Conference 2009.

IRAS Conference 2009
20–27 June, Chautauqua Institute, Chautauqua, NY.

The Mythic Reality of the Autonomous Individual

Co-Chairs: Ted Laurenson & John Teske

Concepts of individual autonomy and responsibility underlie much of the thought, institutions and ways of living in modern societies. Yet they are shot through with complexity and contradiction, and may be problematic for a flourishing human future.

This conference will address the religious, historical, social, and developmental genesis of human individuality and its consequences. Taking as given the physical emergence of our universe and the biological and social emergence of humanity explored in our last two conferences, we will delve into the historical development and current significance of the autonomous individual. We will examine: 1) the psychological and social development of individuality, 2) its historical and cultural genesis, and the contribution of religious beliefs and practices, 3) its centrality to the desirability and practice of democracy, 4) the assumptions about the rational pursuit of individual goals in capitalist economic theory, 5) the need (or not) for separate institutional sources of power to oppose governmental subjugation, 6) the personal, cultural, and religious paradoxes inherent in the nurturance and practice of autonomy, 7) the biases and illusions that inhere in the pursuit of individual happiness and 8) how the concept of self intersects with many religious doctrines, for example eternal life.

Speakers from anthropology, psychology, economics, religious history, theology and political and legal theory will help us explore questions like:

- How do modern Western concepts of the individual differ from historical concepts in Western thought and in other cultures?
- What model of individual autonomy makes sense in trying to understand ourselves as complex biosocial beings nurtured by and embedded in community, but having some independence from it?
- Does understanding the fragility of individual autonomy undercut its existence or enhance its benefits?
- What are the dangers and advantages of individuality in the practice of our ethics, our democracy and our spirituality?
- Does devotion to individual freedom produce a society so addicted to satisfying individual desires that it lacks the cohesion necessary to defend itself or deal with adverse ecological consequences?
- Is capitalism a necessary corollary of individual autonomy? Of democracy? Is it true that centralized decision-making in human society cannot work very well because of the kinds of animals we are?
- Does human rationality, and even science, depend upon particular forms of individuality?

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