# Darwin and the Human Future: New Order out of Chaos

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This is the science and the story of a nonlinear experiment in seeing if it's still possible to rev up the revolution needed to speed up the evolution of our species before it's too late.

It began back in the Cold War years, in 1984. It began during the race between the U.S. and Russia to see who could pile up the largest stack of Atom and H bombs on hair trigger alert, with our world quivering under the threat of nuclear annihilation.

Out of a secret meeting of concerned scientists from both sides behind the Iron Curtain in Budapest, systems scientist Ervin Laszlo called together the handful of us, including myself and Riane Eisler, who joined him in co-founding the General Evolution Research Group (Loye, 1998).

Widely considered the world's foremost general evolution theorist, with mesmerizing eyes Laszlo (1987) laid out before us his immensely daring plan.

Within science chaos theory was just beginning to take hold (Gleick, 1998). Laszlo's proposal was that we use the new power and popularity of scientific chaos theory to see if it could be used

to effect a crucial update for evolution theory.

We would band together to see if we could come up with something to end the long entrenched reign of the bloody, ostensibly Darwinian "survival of the fittest" mindset, then driving Russia and the United States and all the rest of us toward destruction. Our goal was to see if out of the minds and work of more of us from many fields and countries we could update evolution theory from what it wasn't to what it could, should, and now increasingly had to become.

Quietly, at first secretly and then more openly drawn together from both sides of the Iron Curtain, our group and close associates came to include scientists from both natural (i.e., physics and biology) and social science (e.g., psychology, sociology, economics and political science). From Laszlo's first gathering of a dozen of us—from Russia and Hungary on their side, from England, Finland, and the U.S. from our side— GERG, which out of much merriment became our playful acronym, rapidly expanded. Among contributors to this book, including both Fred and Ralph Abraham, Allan Combs, Ruth Richards, and Stanley Krippner, as well as Riane Eisler and myself, our advanced research group soon included prestigious members from throughout the rest of Europe clear on out to China (Loye, 1998).

For nearly a decade we had labored on this magnificent mission but seemed to be getting nowhere. Tossing about, unable to sleep, I was hounded by the feeling that something very big was missing in the great tangled mess of theory and theorizing we were wrestling with.

Here was this great man, Charles Darwin, the revered founder to whom we all paid lip service—but whose books few of us bothered to actually read any more. By our slam bang modern

expectations *Origin of Species* and *The Descent of Man* were cumbersome, wordy, quaint, sure to be old hat stuff for which none of us had the time. So literally almost all of us— not only in our group but everywhere —relied on secondary sources.

In other words, our thoughts, and discussions, and writing, and teaching was based on what others told us was Darwin, the whole truth and nothing but the truth— but only in a lonesome quote here and there were we given the context and what he himself had said.

What had Darwin really written?

I glanced at an old copy of *The Descent of Man* and found that in opening pages he specifically tells us this.

> In consequence of the views now adopted by most naturalists, and which will ultimately, as in every other case, be followed by others who are not scientific, I have been led to put together my notes, so as to see how far the general conclusions arrived at in my former works were applicable to man (Darwin, 1871: 2)

Clear enough. He was moving on from the fascination of prehuman evolution in *Origin of Species* to the world of that hypothetically more advanced creature—*homo sapiens sapiens,* that is us, our selves. But what else might lie within the rest of Darwin?

That night I couldn't sleep. I lay there hounded by the feeling that while the world was falling apart all around us, not only within our own group but everywhere, science was only nibbling at the

task of building an adequate evolution theory—and thereby a guide to the future open to our shaping.

Could there still be anything in Darwin bearing on this increasingly crucial task?

I had picked up a computer disk with a selection of Darwin's works setting still unopened on my shelves (Goldie and Ghiselin, 1997).

Goldie, P. and Ghiselin, M. (1997) Darwin second edition: CD-ROM. San Francisco: Lightbinders, Inc,

Why not take a look?

I told myself I would look further into it in the morning. But still I couldn't sleep.

At last in desperation I got up, put the disk in, clicked to *The Descent of Man,* and hit Search to see what Darwin had to say about the first thing that came to mind.

What should it be?

Survival of the fittest, of course.

What did Darwin have to say about what over 100 years has worldwide become, for millions of us, the quick answer—and *complete* answer—for what drives us in Darwin's great theory of evolution.

And so there it was—the fact that in 800 pages of fine print, of "survival of the fittest" Darwin

wrote only *twice*, once to regret ever using the damned phrase.

In shock I tried for what seemed the most fitting of likely polar opposites. And found he'd written *95 times about love*!

But what about the "selfish gene" and all the best-selling books with the booming new focus on selfishness that were adding a sharp new cutting edge to "survival of the fittest?"

Of selfishness I found that Darwin had not only written only six times. In a veritable roar out of a long ignored page in *Descent,* he called selfishness "a base principle" accounting for "the low morality of savages."(Darwin, 1871:97,98).

And what might be the polar opposite to selfishness? Certainly most logical would be the caring for others—or the driver of moral behavior we call *altruism*. And of everything to do with the word altruism—i.e., moral sensitivity, moral belief, the moral evolution of ours and preceding species— *I found Darwin had written 92 times!*

Of *competition* I found he'd written 12 times, but of *cooperation* (called mutual aid in his time) over twice as many times, with 27 entries.

In *The Descent of Man* there was this further amazement. Here was this book that for over 100 years has been routinely probed by the fierce guardians of the language, methodologies, and mindset of traditional biology—as well as all the fierce guardians of the humanities. And for the first time with full clarity I saw the split in mindset that both separates and drives us. I saw the gulf between the Gatekeepers and the Gatebreakers that for over a century has actually checked us in place or at times even helped drive us backward in evolution.

On one side was and is the quandary of the traditional Gatekeepers of evolution theory—the stand pat NeoDarwinians who, with the real world breaking apart and calling for action all around us, seem bogged down in the so-called seemingly endless "Darwin Wars" ( brown] ) over fragments of linear theory.

On the other side, in sharp contrast, were and are the free wheeling visions of the Gatebreakers. I saw that to a much greater extent than was realized Darwin had departed his peers, and his worldwide naturalist pen pals, to move on from natural science into social and systems science. So quietly that until recently it was unnoticed he had crossed the widening gap between biological into cultural evolution to in effect become the long unrecognized strange attractor of a dialectical wedding of both Gatekeeper and Gatekeeper (Loye, 2007).

He had even gone on to explore what in our time became the revolution of nonlinearity— that is, the hot, new scientific territory of chaos, complexity, and self organizing theories for our group and scores of others like us!

Here are two of the relevant passages I found emerging from the long suppression of the "higher order"rest of Darwin.

### *Darwin on Self-organizing Theory*

Besides the variations which can be grouped with more or less probability under the foregoing heads, there is a large class of variations which may be provisionally called

spontaneous, for to our ignorance they appear to arise without any exciting cause.

It can, however, be shewn that such variations, whether consisting of slight individual differences, or of strongly-marked and abrupt deviations of structure, *depend much more on the constitution of the organism than on the nature of the conditions to which it has been subjected.*[1] (Italics added) (Darwin, 1871: 131).

He has great power of adapting his habits to new conditions of life. He invents weapons, tools, and various stratagems to procure food and to defend himself (Ibid:158).

When he migrates into a colder climate he uses clothes, builds sheds, and makes fires; and by the aid of fire cooks food otherwise indigestible.

He aids his fellow-men in many ways, and anticipates future events (Ibid).

And here is Darwin on the other surprise.

### *Darwin on Chaos Theory*

The law of correlated variation, the importance of which should never be overlooked, will ensure some differences; but, as a general rule, it cannot be doubted that the continued selection of slight variations, either in the leaves, the flowers, or the

fruit, will produce races differing from each other chiefly in these character (Darwin, 1860: 33).

This is how in *Origin of Species* he first observed the glimmer of the "butterfly effect" of chaos theory at work in what he called "correlated variation."

I mean by this expression that the whole organisation is so tied together, during its growth and development, that when slight variations in any one part occur, and are accumulated through natural selection, other parts become modified.

This is a very important subject, most imperfectly understood, and no doubt wholly different classes of facts may be here easily confounded together (Darwin, 1860:143).

I came to further see how way back then he was not only well ahead of his successors. Already he was probing well beyond them.

### *The Creative Function of Gatebreaking*

As well-known by now, a vital advance for chaos theory was and is its new way of understanding literally everything in our lives as a matter of *attractors* that pull us in three directions.

First defined by Edward Lorenz' in his pioneering analysis of weather systems is the *static attractor*, which reaches out to pull in everything together within a system to keep things fixed in place (Lorenz, 1984:98-110).

Next comes the *periodic attractor*. Working like the pendulum that swings right to left, left to right, back and forth in an old clock, we see the see-saw familiar to us in politics, economics, and other areas of our lives.

Documented in history by Arthur Schlesinger, Sr. (Schlesinger, 1964), as well as in my own and the work of others in the psychology of ideology (Loye, 1977, 1980, 1990,1995, 2000, 2010; Eisler and Loye, 1983), here vividly highlighted in the roller coaster politics of our time, was an invaluable tool for tracking the force at work in the shift from liberal to conservative eras, conservative to liberal eras, back and forth, over and over again.

Then comes the *strange or chaotic attractor,* where in effect everything busts loose— or more formally, Gatebreaking rather than Gatekeeping becomes the progressive norm.

Clouds become hurricanes. Assassinations become wars. Titanics sink and bank robberies proliferate. But also Copernicus maps a new planetary arrangement. Jesus is born. Michelangelo sculpts the Pieta. New paradigms burst out of old paradigms, and we get everything else in the arts and in life that winds up being classified as good or bad for us.

It was in pursuit of a chaotic attractor, which beckoned and then firmly grabbed me, that more and more I began to see how and why the rest of Darwin was buried (Loye and Eisler, 1987). For out of the stream of events I glimpsed, then was haunted and then fired up by

realizing how the course of history could have been changed for the better had the rest of Darwin not been ignored.

Pared down to its core the situation was this. By in effect making evolution theory their exclusive property well into the 20th century biology and paleontology not only became the prototypical Gatekeepers but in effect scuttled the alternatives.

Orienting to the past, they had shut out the future. They had powerfully and clearly advanced our understanding of evolution. They had put this new understanding effectively to work in agriculture, medicine, and countless other areas advancing the health and well-being of our species and our planet.

But while on one hand they were advancing our species, on the other, though blindly and unintentionally, they were diminishing our species.

In other words, through the amazing exploits of natural science, evolution theory crept ahead. But in sharp contrast, within the revolution of linearity that seized social science the full, real world, everyday understanding of evolution had *raced* ahead. *But almost none of this was being picked up and put to use in what was identified, taught, hailed, and ostensibly advanced by the Gatekeepers of the official one and only* evolution theory.

Freud, Jung, James, Lewin, Maslow in psychology (Baker, 2012). Weber, Durkheim, Merton, Sorokin in sociology (Levine, 1995). Boas, Benedict, Mead, Montagu in anthropology (Eriksen, 2001). For these and countless other social scientists the drive of love, the moral

sense, and other vital factors, which I found Darwin had identified as bearing on human evolution, had failed to make the cut for what was universally taught and cited as the thrice-blessed evolution theory.

Ironically, here was a repeat for what had happened to Darwin. Or at least a part of what had happened. Here on a larger scale was a replay of the rejection of the "higher order" rest of Darwin. Here was the establishment of biology and the rest of natural science as criteria, bastion, guardian and primarily exclusive rightful owner of evolution theory.

Wild as this may sound to anyone who wasn't there and involved, this was roughly the situation until out of a wave of discordant insights burst the chaotic attractor, which in mid to late 20th century collapsed a world of dangling meanings into the wide surface popularity of cybernetic, chaos, complexity, and self-organizing theory (Jantsch, 1980), Kauffman, S. (1996), Bausch, 2012).

This exciting advance led me to uncover more of what was hidden behind the clues.

As a psychologist with a sub-speciality in sociology within a research group primarily of biologists, physicists, and mathematicians, I was particularly struck by what happened when you crossed over from natural to social science.

For the first time I saw clearly how after Darwin these two levels of science split further apart into two vastly different and woefully confounded working worlds. With different concepts, methodologies and languages, they operated as if they were throwbacks to the middle ages—in effect separate baronies, with separate armies, separate moats, and tottering draw

bridges.

Still more effectively separating the two were—and are—the radically different sets of references with which, on both sides, you load your books and papers to prove you know what you are writing or talking about. And then to most powerfully lock in this multi-level separation, there are the long, warm, flesh and blood strings of all the radically different teachers, cohorts, friends and contacts who have formed you into who you are, and how you earn a living.

It was out of the new multi-level understanding of systems science, which transcends differences, and bound us together within our group, von Bertalanffy(1968), Laszlo (1966, 2014) that I suddenly saw how the "strange attractor" of chaos theory, then embedded in mathematics, crossed over to impact all areas of our lives.

I saw how the "strange attractor" of chaos and self-organizing theory, then self-protectively embedded in biology as well as mathematics, was mirrored in the mysterious imperative force that drives everything from great scientists and leaders to movie stars. Driver of creativity, herald of evolution, I saw what the great founder of sociology, Max Weber, so magnificently described and called "charisma" (Weber,1949), (Bradley, 1987).

And there again, in the hot, new fascination with self organizing processes, was the crossover from natural to social science. What in mathematics and biology was called "self organizing processes" crossed over to become the "functional autonomy" of psychologist Gordon Allport (1955). Indeed I saw how the "strange attractor" of chaos and self-organizing

theory had not only shaped the whole field of psychology, but the whole of life on this planet as well.

In what became a pivotal paper in the influential journal *Behavioral Science*, (Loye, D., and Eisler, R. 1987), in our journal *World Futures: The Journal of General Evlution (*Loye, 1995*),*, and again in Laszlo's keynote volume for the work of our group, *The New Evolutionary Paradigm* (Loye, 1990) I outlined the enormous benefits for moving beyond mathematics and biology into social science for chaos theory. With Fred Abraham, Allan Combs, and Stanley Kripner, I also became a co-founder of *The Society of Chaos Theory and Life Sciences.*

### *Darwin and the Human Future*

Out of so much to mull over, discuss, argue about, and try to integrate where is all this taking us?

Here I think the long buried rest of Darwin shows us the choices we must make, the battles we must win, and the integrating vision that must hold us together. Here involved with but ranging beyond nonlinearity are the rest of the eight factors of the excluded I found in the "lost" rest of Darwin.

**Sex**: For obvious reasons, likely of most immediate interest, is the loaded word and reality of *sex*. But in a startling case of his pioneering, Darwin slips in a shot across the bow from the

feminine rather than the long prevailing masculine perspective. Here is what very much looks like Gatekeeper  exclusion of a Darwin whose sin was in threatening to upset the macho apple cart.

> "... it is not probable that the females are indifferent to the charms of the opposite sex, or that they are invariably compelled to yield to the victorious males. It is more probable that the females are excited, either before or after the conflict, by certain males, and thus unconsciously prefer them (Darwin, 1871: vol ii, 50).
>
> In the case of Tetrao umbellus, a good observer goes so far as to believe that the battles of the male "are all a sham, performed to show themselves to the greatest advantage before the admiring females who assemble around; for I have never been able to find a maimed hero, and seldom more than a broken feather (Ibid).
>
> Or she may accept, as appearances would sometimes lead us to believe, not the male which is the most attractive to her, but the one which is the least distasteful (Darwin, 1871: 273).

**Community**:  It seems a tempest in a teapot to the outsider, but it became a classic case of Gatekeepers versus Gatebreakers in the mangled world of evolution theory. With a carload of supportive findings, psychologist David Sloan Wilson asserted that the  sense of community binding us together in evolution is driven by a morally

motivated process of *group selection (*Wilson and Sober, 1994), (Wilson and Wilson, 2008). Wilson was ferociously attacked by a band of Gatekeepers, who did everything short of dynamite to try to kill the notion as only a naive delusion collapsed within the one and only principle of *natural selection* (Pinker, 2012). And what did Darwin think?

> It must not be forgotten that although a high standard of morality gives but a slight or no advantage to each individual man and his children over the other men of the same tribe, yet that an increase in the number of well-endowed men and an advancement in the standard of morality will certainly give an immense advantage to one tribe over another (Darwin, 1871: 166).

**Love:** That Darwin in *The Descent of Man* could write 95 times about love and this be ignored for over 100 years is obviously shocking. But this is only the first tremor for an earthquake. For despite the fact the word love was there trying to call attention to itself 95 times there was only a single entry for love in the index.

The index, which all of us know so well, in all books universally serves as the essential guide for scientists, teachers, students, writers, and scholars of all varieties.

*And after over 100 years of being used unchanged in by now countless millions of copies, as of this writing, this loveless index is still in use in all editions of Descent worldwide.*

Although man, as he now exists, has few special instincts, having lost any which his early progenitors may have possessed, this is no reason why he should not have retained from an extremely remote period some degree of instinctive love and sympathy for his fellows (Darwin, 1871: 85).

The social animals which stand at the bottom of thescale are guided almost exclusively, and those which stand higher in the scale are largely guided, in the aid which they give to the members of the same community, by special instincts; but they are likewise in part impelled by mutual love and sympathy, assisted apparently by some amount of reason (Ibid, 85- 86).

To capture a bit more of his long ignored case for the primacy of love he went on from *Descent* a year later to publish these observations in *The expression of the emotions in man and animals in* 1872.

A strong desire to touch the beloved person is commonly felt; and love is expressed by this means more plainly than by any other ... Hence we long to clasp in our arms those whom we tenderly love. We probably owe this desire to inherited habit, in association with the nursing and tending of our children, and with the mutual caresses of lovers (Darwin, 1872: 215).

Mr. Bartlett has described to me the behaviour of two chimpanzees, rather older animals than those generally imported into this country, when they were first brought together.

They sat opposite, touching each other with their much protruded lips; and the one put his hand on the shoulder of the other. They then mutually folded each other in their arms.

Afterwards they stood up, each with one arm on the shoulder of the other, lifted up their heads, opened their mouths, and yelled with delight (Ibid).

A man who possessed no trace of such instincts would be an unnatural monster (Darwin, 1871: 89-90).

***The Moral Sense:*** Tucked away in page after page is the astonishment of Darwin's case for the moral sense as the higher order prime driver of which he wrote 92 times in *Descent.*

Society could not go on except for the moral sense, any more than a hive of Bees without their instincts. (Gruber and Barrett, 1974: 390).

Gruber, H., and Barrett, P. (1974) Darwin On Man. New York: Dutton.

Important as the struggle for existence has been and even still is, yet as far as the highest part of man's nature is concerned there are other agencies more important. For the moral qualities are advanced, either directly or indirectly, much more through the effects of habit, the reasoning powers, instruction, religion, &c., than through natural selection (Darwin, 1871, vol ii, 403-404).

I fully subscribe to the judgment of those writers who maintain that of all the differences between man and the lower animals, the moral sense or conscience is by far the most important (Darwin, 1871: 70).

The moral faculties are generally and justly esteemed as of higher value than the intellectual powers (Darwin, 1871:vol ii,, 394).

The moral sense perhaps affords the best and highest distinction between man and the lower animals; but I need not say anything on this head, as I have so lately endeavoured to shew that the social instincts,—the prime principle of man's moral constitution—with the aid of active intellectual powers and the effects of habit, naturally lead to the golden rule, "As ye would that men should do to you, do ye to them likewise;" and

this lies at the foundation of morality (Darwin, 1871: 106)

Of which he had written 92 times in *Descent* alone, this is obviously only a very small sample of the central and indeed pivotal importance to Darwin of the moral sense. First uncovered, typically soon ignored thereafter, is the pioneering recovery of the moral rest of Darwin by award-winning science historian Robert J. Richards (1987). His magnificent *Darwin and the emergence of evolutionary theories of mind and behavior* is the great source for page after page of the moral rest of Darwin.

**Spirituality:** Darwin has long been celebrated by hard core Gatekeepers as their champion in the battle to rid our species of the persisting ignorance of Creationism, as well as God, religion, or anything else one might label as spirituality or paranormal. Darwin did reject the idea of God for himself. It was something he could respect in others, but no longer personally believe in. But here is a bit of the shock I found if one digs into *Descent* with an open mind.

No being could experience so complex an emotion until advanced in his

intellectual and moral faculties to at least a moderately high level (Darwin, 1871: 68).

As soon as the important faculties of the imagination, wonder, and curiosity, together with some power of reasoning, had become partially developed, man would naturally crave to understand what was passing around him, and would have vaguely speculated on his own existence (Darwin, 1871:65).

... a belief in all-pervading spiritual agencies seems to be universal; and apparently follows from a considerable advance in man's reason, and from a still greater advance in his faculties of imagination, curiosity and wonder (Darwin, 1871: vol ii, 394).

The ennobling belief in God is not universal with man; and the belief in active spiritual agencies naturally follows from his other mental powers (Darwin, 1871:106).

### *The Quandary of the Gatekeepers*

Including the first two exclusions on self-organizing and chaos theory, do these eight prime factors I found within the "lost" rest of Darwin look familiar?

They should, for in considering what has been missing in what for over 100 years we have known, fought over, and put to bad as well as good use as Darwin's theory, we're back over 100 years looking at Darwin's original shift from *Origin of Species'* well known first half to the second half of his theory long buried within *The Decent of Man* (Loye, 2007, 2010, 2013, 2016).

Out of all the many fields affected, within just psychology alone, in love, moral sense, and the rest of it, aren't we looking at the rise from Freud and behaviorism to Maslow and humanistic psychology and what came thereafter—particularly the branch to transpersonal psychology (Walsh and Vaughan, 1993), the enticing charisma of Ken Wilber's Integral Psychology (2000), action-oriented Integral philosophy (1995), as well as to Mihaly Csikszentmihalyi (2000) and the search for happiness with Positive psychology?

Many others were involved, of course. But if we consider what Allan Combs brought out in his classic *The Radiance of Being: Complexity, Chaos and the Evolution of Consciousness* (1996*)*— as well as a second edition with new subtitle *Understanding the Grand Integral Vision* (2002) — it is interesting to see the connection between Darwin and Wilber's globally influential case for a place for spirituality in evolution theory. Ferociously excluded by the Gatekeepers, to varying degrees the factor of spirituality has been embraced by Gatebreakers and serves as a basic differentiator between the two sides.

And so where does this take us? And what is the urgency for action?

I think the reconstruction of how Darwin originally wed the two halves of his theory into a potentially powerful integrated whole points toward where both Gatekeepers and Gatebreakers must go.

As of this writing, I'm nearing completion of *The integral Darwin: Gatebreakers versus the gatekeepers* of *evolution theory* (Loye, 2016), to include a reconstruction of what I think could have been, and indeed should have been, Darwin's theory. My hope is this venture can be used by others to help speed the way to the new "new synthesis" toward which both sides are struggling, but failing

to gain in isolation from one another.

We cannot otherwise gain the better theory to gain the better world. Much as with the snarling impasse of politics in America, we must bridge the gap that over the years has widened into a gulf. We must find a mutually respectful way for Gatekeepers and Gatebreakers to work together— or go down in whatever's left of history as the rare, awesome and wondrous experiment that failed.

### *A Look Ahead*

As if guided by some planetary urge to make up for lost time, an important part of what seems to lie ahead for nonlinear science—and if we act in time, for our nonlinear species—can be glimpsed in the juxtaposition of two radically different events in 2008.

Out of the mounting concern of the Gatekeepers, over three days in July, 2008, sixteen highly credentialed biologists met at the Konrad Lorenz Institute, in Altenberg, Austria, for a symposium impressively titled Toward an Extended Evolutionary Synthesis. Heralded in advance as the bold move that "could turn

into a major stepping stone for the entire field of evolutionary biology," its purpose, as science writer Susan Mazur (2009: v) observed, was "to begin sorting out the mess."

Rethinking evolution was to be "pushed to the political front burner in hopes that 'survival of the fittest' ideology can be replaced with a more humane explanation for our existence and stave off further wars, economic crises, and destruction of the Earth." (Ibid).

"At a time that calls for scientific vision," it was charged, "scientific inquiry's been hijacked by an industry of greed, with evolution books hyped like snake oil at a carnival."(Ibid).

Out of that meeting, and a wide range polling of other leading biologists afterward, most impressive was the lack of things that even after 100 years the Gatekeepers could agree on.

They agreed the disastrous survival of the fittest mindset must be replaced. They agreed the new focus on self-organizing processes, is a basic advance. But of the long ignored rest of all that Darwin actually wrote to complete his theory there was not a word. Nothing about the astounding number of times he wrote of the

importance of love and the moral sense. Nothing on the jolt of more surprises emerging from Darwin's move from the well-known linear biology of *Origin of Species* into the long ignored nonlinear social and systems science of *The Descent of Man*.

In sharp contrast, in the following month, in August 2008, 500 scientists and concerned others from 30 countries gathered in the John F.Kennedy University in Pleasant Hill, California, for over 100 talks, panels, and poster presentations for the first biennial nonlinear and integral theory conference.

To underline the acid test for science in the real world the full title was Integral Theory in Action: Serving Self, Others, and Kosmos (Esbjorn-Hargens, 2010). Motivated by "a desire for a vision, a synthesis, that encompasses and frames the avalanche of information now upon us,"(Walsh, 2010: xv) the avowed goal was the "global framework"for "an Integral Age" in which "every single aspect of our work, play, education, medicine, economics, and self understanding becomes profoundly transformed."(Wilber, 2010: 433).

Two events within two weeks of one another. Two events, which in the stark light of the reality that is ours, on one hand reveal the Gatekeepers present

dilemma and on the other the Gatebreaker hope for the future. And how can this mighty conflict of paradigms be resolved? How can the question our battered species has asked for countless centuries be answered?

It seems fitting to end with the passionate plea and vision of holocaust survivor and nonlinear cultural evolution theorist Riane Eisler.

> Why do we hunt and persecute each other? Why is our world so full of man's infamous inhumanity to man—and to woman? How can human beings be so brutal to their own kind? What is it that chronically tilts us toward cruelty rather than kindness, toward war rather than peace, toward destruction rather than actualisation? (Eisler, 1987: xiii).

And coining the word gylany to describe it ... *gy* from gyne for woman and *an* from andros for man ... here is the human future that, contrary to all the evidence otherwise, many feel is still open to us *if* we can speed the shift from domination to partnership ways of life.

> For above all, this gylanic world will be a world where the minds of children—both girls and boys—will no longer be fettered ... our drive for justice, equality, and freedom, our thirst for knowledge and spiritual illumination, and our yearning for love and beauty will at last be freed.
>
> And after the bloody detour of androcratic history, both women and men will at last find out what being human can mean (Ibid: 203).

TEST STRIP FOR NOTES

re editions differences:

http://darwin-online.org.uk/EditorialIntroductions/Freeman_TheDescentofMan.html

TEST NOTES

[1]. *Descent, 63* as I earlier noted in chapter two, and once again have italicized for emphasis