

FOREWORD

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Human groups rise and fall with the order generated by their world-views. From hunting tribes to nation-states and to global empires, a community needs to have a credible explanation for what life is about, and what makes life worth living. When the people lose faith in these explanations, entropy begins to unravel the ties that bind a civil society together. Selfishness, greed, and momentary pleasures become the only values that motivate action. No surplus psychic energy remains to pursue long-term goals, to invest in the future, to risk on new ideas. In short, the sources of human creativity dry up, and cultural evolution halts for the time being.

Of course the causal sequence involved is open to debate. Materialists will claim that it is the decline in economic productivity or defensive capability that triggers the loss of belief in the world-view. But it is just as likely that confusion in the ideational system has as much an effect on society as material conditions do. In any case, the two seem to be closely related, and it is likely that the two processes — the material and the ideational— mutually affect each other.

It has been a truism that Western civilizations have long benefited from a set of beliefs that helped their energies focus on a set of behaviors that can loosely be tagged as “progress.” From the Bible we have inherited the notion that as children of God we have inherited the earth and all its resources, to do with them as we pleased. A few thousand years later the evolutionary evidence has been read to mean that humankind was the final pinnacle of a process of competitive selection, which meant again that humans — or at least the more “evolved” members of the race— were entitled to whatever they could use or abuse, on their own terms. These myths of origin with their corollaries go a long way explaining why Europeans could focus with such unremitting energy on building cathedrals and factories, schools and armies. And before modern times myths of similar power, developed by Egyptians priests and Chinese

sages allowed those societies to do the same. As all the authors of *The Great Adventure* agree, the time of the organizing myths of the West is passing. Even in the wealthiest and most peaceful nations, the malaise with our ways to explain to ourselves what life means keeps growing. From Scandinavia to South Africa, from the United States to Japan, waves of surreal ideas and lifestyles wash over the populace, eroding traditional patterns of action and belief. It is a scenario so obviously reminiscent of the end of Rome, when esoteric cults and dissipation drained the citizens' purpose, that it is almost not worth mentioning.

In times like these a new world-view often arises at the margins of power, at the periphery of the action unfolding on the main stage. The followers of Jesus, the Buddha, Confucius, or Mohamed were not among the leading cadres of their respective societies. Martin Luther or Karl Marx were also toiling outside the glare of the footlights, where one can see more clearly what is happening, and what is likely to come about. Philadelphia in the 1770s was not exactly at the center of the civilized world. The recurring question of the chapters in this book is, Where is the new covenant going to emerge from?

The answers are varied and interesting, so that this book as a whole is in many ways an answer itself. Not a definitive one, of course — no book could be more than a few decades ahead of the twisting and turning march of evolution. But the themes introduced by the authors are likely to be among the central ones of any new world-view.

First of all, David Loye's central insight, which motivates this book, is in my opinion right on the money. The organizing principle of the new faith—a faith of human beings about human beings—is evolution itself. Not the traditionally taught evolutionary scenario dominated by competition and selfishness, but an understanding closer to the original Darwinian one that sees cooperation and transcendence of the self as the most exciting parts of the story. Ervin Laszlo builds on this theme by arguing that the central organizing principles of past ages— Myth, God, and Reason— will have to be replaced by Holos, or the embodied understanding that we are part of a larger system.

The mechanisms for achieving this integration are explored in subsequent chapters: they include the refinement of the powers of love, partnership, communication, and creativity. The authors suggest the exhilarating notion that these traits, so much treasured but so seldom

practiced, are in fact part of the evolutionary process all along, even at the level of atomic bonds, and certainly at pre-human biological levels. If they are right, there is more hope for the future than many of us would have dared to believe.

Like many of their predecessors, the proponents of this new dispensation are not working from an established power-base. Although they are learned and accomplished scholars, most of them do not lead large labs in famous universities. They do not work within the problematics of a single discipline. This gives their writing prophetic power, as well as an appearance of being unprofessional by the usual standards of academic specialization. This, of course, is par for the course of any paradigm revolution.

It will be interesting to see how the ideas represented in this book develop in the years to come. Will they grow into a critical commentary to mainline thought, acting as a loyal minority in the parliament of ideas? Or will they develop into a new professional realm, with its own exclusive conceptual framework, evidence, and procedures? The last chapters by David Loye suggest that at the very least a new pedagogy may emerge, one that starts with a holistic perspective and adopts a systemic approach to understanding reality. Whether or not this “fully human theory of evolution” becomes a central concept in academic thought, it is certainly a Great Adventure, one in which we are privileged to take part.

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INTRODUCTION

David Loye

If we take a careful look at what happened to our species scientifically and socially during the 20th century two rather unsettling facts become apparent. The first is that we are being shoved into a 21st century laden with immense challenges and the most serious kind of questions bearing on the human future with a scientific theory and story of evolution based almost entirely on the study of the past and the *prehuman* and the *subhuman*.

The second is that some day it will likely be recognized that the single greatest shortcoming of 20th century science was its failure to achieve a *fully human* theory and story of evolution.

By “fully human” theory and story I mean this. 20th century science did a magnificent job of probing and making both the theory and story of cosmic evolution come vividly to life for us via physics. It also probed and gave us what seemed to be a reasonably solid and gripping theory and story of biological evolution via chemistry and biology. But when it came to deal with the explosion out of nature of higher brain, mind, consciousness, and everything else that came to characterize the emergence of our species and our impact on this planet it fell so far short of what was needed as to be laughable if it weren't so tragic.

Tragic? How so? I have found the quickest way to make the point is to consider this line of thought. We live by story—on this most of us will agree. But what about the completion for this thought that logically seems to follow today from the drum beat of the daily news? We live by story—and the story we live by is driving our species to extinction.

Is this true? Isn't this increasingly the message of the futurists and environmental scientists who on the behalf of our species keep looking ahead?

If this is true, then what do we do? Could it be that if we change (i.e, update and *complete*) the theory, we can change the story, and by changing theory and story thereby we can bypass the road to extinction and go on to build the better world?

This is the question we will explore via the two historical streams within science that led to this book's papers and purpose, which is to accelerate the development of a full spectrum, action-oriented—that is, fully human— theory of evolution.

One of these historical streams was and is that of the incisive power of *systems science*. The other is the stream out of the diversity of psychology that branched into the heady originating vision of Abraham Maslow and others for *humanistic, transpersonal, and positive* psychology.

If we are to achieve the fully human theory of evolution that the situation of our species requires, more and more it looks like it must primarily involve a new working partnership between people in these fields with thereafter a widening of involvement throughout all fields of social science as well as natural science. This book— with the good news of what looks like a significant new advance in evolution theory to report— is to that end.

GERG and Evolutionary Systems Science

Among the great or “way station” names in the vision and development of evolutionary systems science were Ludwig von Bertalanffy, Kenneth Boulding, Eric Jantsch, and Ilya Prigogine.¹

The original set of papers that have been expanded into this book were the culmination of a particularly dramatic but still relatively unknown development in late 20th century science involving a fifth notable founder, systems philosopher Ervin Laszlo. This was the formation of the General Evolution Research Group, or GERG as became its acronym. The world was still shuddering under the threat of potential nuclear holocaust when in 1984, toward the close of the cold war, those of us who later formed the Group were called by Laszlo to Budapest, then still under Russian control, to see if we might help

him build what I have ever since thought was one of the great visions out of the often radically diminished horizon for the science of the 20th century.

This was Laszlo's vision of an action-oriented theory of *general* evolution that might be used by humanity to end the endemic insanity into which our species has fallen. Long range, it was the vision of an evolution theory that might go beyond the scientific stalemate of a fixation on biology and the past to incorporate the vast advances in social, systems, and futures science that for a century were almost wholly neglected in the development of mainstream evolution theory. It was the vision of an evolution theory with ourselves— we humans, *our* species— at the leading edge equipped to focus on gaining a better *future* for this earth and all living systems.

However pressing this might be, the short range prospect was of more immediate and indeed very great urgency. We were meeting in a Hungary still then ringed with a double wall of barbed wire and armed Russian guards, with in the background the thousands of tons in nuclear overkill for both sides of the cold war. What rather quickly gripped us was the vision of a theory that might be used not merely to understand but to *save* ours and all other species. Chaos theory was then just coming into vogue. The idea was immense but basically simple: why not use chaos theory to find a way of guiding our species through the social, political, and economic chaos we faced to an evolutionary stage of a higher and better order?

In other words, why not find funding for and get underway with the development of a theory of evolution that might be used by the thinking people of this earth and an enlightened social leadership to guide our species through the time of immense troubles now facing us to reach the higher plateau for humanity, long the dream of the great spiritual as well as scientific visionaries?

It was an awesome, electrifying, and at times very funny experience none of us who were there will ever forget. It was the beginning of what I am still convinced—particularly if driven by the fresh energies and vision of the *student* and *teacher* involvement I spell out in the last two chapters of this book— can become the great adventure for both the science and the everyday life of our time.

In the years after Budapest, with Laszlo acting as an impresario might in personally selecting singers for an opera or members for an orchestra, GERG expanded to include 35 scientists in all the major fields of social as well as natural science. Truly multinational as well as multidisciplinary in scope, coming from 14 nations throughout Europe as well as in Asia and from the U.S., we met in Florence, Bologna, Vienna, Finland, Germany, Sardinia, and again in Budapest to try to move toward the goal of building the better theory.²

Like thousands of other scientists worldwide who have tried to expand and update a paradigm for evolution theory that has fallen woefully, if not disastrously, behind the times, we also published an immense amount of work in this direction in our journal *World Futures: The Journal of General Evolution* and other scientific journals.³ But such have been the difficulties facing every attempt to move beyond the death grip of old scientific as well as old political and social paradigms that attaining even small gains was a frustrating and painful experience. Indeed, so little progress was made by us or by anyone else toward the originating goals for our General Evolution Research Group that by the winter of 1999-2000 I came to the conclusion that something must be done to light a new fire under the original vision.

Under the sponsorship of the International Society for Systems Sciences (ISSS) and 20 other organizations, the kickoff for 21st century systems science was to be a World Congress of the Systems Sciences drawing scientists from all regions of the planet to Toronto July 16-21, 2000. Hoping for the best, I pulled together some fellow GERGites for two panels and a general discussion on the subject of what the “full spectrum, action-oriented” theory should look like and how to build it. The precursors for most of the papers that became the chapters in this book were the result.⁴

The Fitful Courtship of Psychology and Evolution Theory

In the formation of GERG I was one of two psychologists concerned. By the time of the Toronto World Congress another with a paper in this book, Allan Combs, had joined us. A third psychologist, Ruth Richards, is a co-author here.

The history of the relation of psychology to evolution theory is pivotal to understanding where we have been and where we now must go. Looking back, as a whole it seems to me this relation may best be characterized as the prolonged courtship of a most enticing prospective mate with great hopes, but which again and again led to immense frustration and disaffected withdrawal by the “lovesick” psychologist.

As I bring out in my introductory paper in this book, this courtship began with Darwin himself in regard to cognitive and humanistic psychology. On his death he left all his papers on psychology to his disciple George Romanes, who went on not only to become a leading British psychologist. Romanes was also the first to lament what was again and again to block any chance that psychology might successfully mate with evolution theory. The problem was the “rival”—i.e., the fierce possession of evolution theory by biology and its adroit exclusion of all other suitors.

Already, only ten years after Darwin’s death, why was there a move afoot by biologists to “hide certain parts of Darwin’s teaching, and give undue prominence to others,” Romanes asks in *Darwin and After Darwin* published in 1892.⁵ Whether “the misrepresentation be due to any unfavourable bias against one side of his teaching, or to sheer carelessness in the reading of his books,” it was inexcusable that the “neoDarwinians”—for it was Romanes in this book who first coined the phrase—should “positively reverse” Darwin’s teachings. Too often chest thumping and otherwise ostensible Darwinians were “unjustifiably throwing over [their] own opinions the authority of Darwin’s name,” Romanes charged.⁶

“I myself believe that Darwin’s judgement with regard to all these points will eventually prove more sound and accurate than that of any of the recent would-be improvers upon his system,” Romanes predicted—a prediction I believe this book and one other now fulfills over 100 years later.⁷

The next attempt to court evolution theory came with no less a founding father for humanistic psychology than William James, although the ill-fated James Mark Baldwin and Romanes’ disciple Lloyd Morgan were more heavily involved. Perceiving the need for a new concept to account for evolution at the level of human emergence they

proposed— in keeping with Darwin’s own already forgotten observation and admonition— the idea of “organic selection” as the higher developmental alternative to natural selection. The concept was meant to provide a way of bringing the psychology of learning, experience, and choice by both group and individual into a theory of evolution that might then seamlessly segue from biological into cultural evolution.

But fate then intervened to further set up biology not just as the rival for the hand of evolution theory but as really the only proper suitor. Baldwin— who in pursuit of Darwin’s most important ignored emphasis on moral evolution happened to be pioneering the psychology of moral development— was discovered in a black brothel in Baltimore by a newspaper reporter (Richards, 1987). The scandal not only forced Baldwin to flee to France but also seemed to help slam the door on the whole field of psychology through guilt by association.

It also so effectively scuttled the disruptive insight of “organic selection” that it took much of a whole century for the idea to fight its way back into mainstream scientific consciousness. This came with rediscovery not only of what came to be called “the Baldwin effect” (Depew, 2000). In a touch of the irony that repeatedly overlays the underlying tragedy of this story, what had in fact been blanked out was the reality—again originally perceived by Darwin and then ignored— of what by the end of the century was to spread like wild fire throughout both natural and social science as the evolutionary relevance of “self-organizing processes.” (Jantsch, 1980; Capra, 1996).

Next out of the field of psychology along came John Dewey and Jean Piaget as suitors for the hand of evolution theory (Dewey, 1922; Piaget, 1965). Their try was especially meaningful as, in keeping with Darwin’s long ignored and Baldwin’s ill-fated passion for *moral* evolution theory, both were eminent moral theorists. Piaget was also uniquely equipped as a biologist as well as a psychologist. But as Dewey and Piaget became celebrities in the field of education, and other interests took them elsewhere, their suit was again easily deflected by the hordes of biologists who came to the courtship ready equipped with the seemingly safe and familiar tale and the proper cologne of the neoDarwinian paradigm. From grade school through graduate studies they were also

always there, by now entrenched seemingly beyond all contesting in the textbooks.

Next came the psychologist most likely headed for a major revival of interest in the 21st century. If we look at his work again today—of which Ray Bradley’s paper provides a glimpse in this book—it can be seen that Kurt Lewin was not just the so-called father of social psychology and group dynamics. It becomes increasingly apparent that here was the prime precursor genius within psychology for chaos and complexity theories and the range of implications for the needed wedding of evolutionary systems science with psychology that confronts us today (Lewin, 1951; Marrow, 1969 ; Loye, 1971).

And so via hop, skip, and jump we come to Abraham Maslow, Roberto Assagioli, and Kazimierz Dabrowski. Historically, Maslow most effectively stated both the initial and long range vision for humanistic, transpersonal, and most recently the challenge of positive psychology. In the end what do we seek? It is to develop the Good Person and the Good Society, Maslow said (1971). In other words, our evolutionary goal is not to bypass or transcend ourselves, but to *fulfill* ourselves. Assagioli and Dabrowski intensified this emphasis. Both survivors of the Nazi devastation of Europe and the global threat of fascism, to them this key 20th century event and World War II underscored the need for a new understanding and advancement of both moral evolution and spiritual evolution (Assagioli, 1965, 1973; Dabrowski, 1964).⁸

"Superficiality, vulgarity, absence of inner conflict, quick forgetting of grave experiences, became something repugnant to me," Dabrowski wrote in proclaiming a heroic stance both for humanistic psychology and for the wedding of psychology with evolution theory. "I searched for people and attitudes of a different kind, those that were authentically ideal, saturated with immutable values, those who represented 'what ought to be' against 'what is.'" (Piechowski, 1975, p.234).

"Before the threatening attitude of an unfair superior or when facing an excited mob, when personal reasons would induce us to yield," Assagioli proclaimed in reinforcing these goals, "the will gives us the power to say resolutely: 'No! At all costs I stand by my convictions; I will perform what I take to be right.'" (Assagioli, 1973, p.8).

Thereafter, as the recent *Handbook of Humanistic Psychology, Handbook of*

Positive Psychology, and sources for transpersonal psychology such as *Paths Beyond Ego* make apparent, on the surface there were advances.⁹ But talk to humanistic, transpersonal, and positive psychologists today and many will express a feeling of an earlier high point and since then an underlying decline that has brought psychology to a new make or break decision point. Since the Maslow days important contributions have been made to the fields of humanistic, transpersonal, and positive psychology, and the human potentials movement generally. James Bugental, Stan Krippner, Mihaly Csikszentmihalyi, Ken Wilber, Frans de Waal, Jean Houston, Joanna Macy, Jean Baker Miller, Ravenna Helson, and Jeanne Acterberg are among many mentioned in this regard. There is also wistful talk of a renaissance. But again, as with systems science, it seems to be the tale for science across the board of a sense of failure to live up to the visions of the founders. For what has happened to the vision of the Good Person and the Good Society?

That somehow the steam has gone from the dream came across with the fairly recent emergence of the new field of positive psychology apparently in answer to the feeling of its founders that humanistic and transpersonal psychology weren't living up to earlier hopes. But much earlier—in response to the sense of a quasi-vacuum once filled with high aspiration that one can find in talking to old hands across the board for all fields of social science—something else profoundly bearing on this situation happened that has been generally overlooked in this regard. For out of the reductionist box of neoDarwinism and sociobiology there moved to close out the century with a bang the most effective of psychology's suitors for the hand of evolution theory. Driven by the dynamics of a radical rightward shift in national politics—which seized upon the books of this “new school” to legitimize what often seemed an attempt at an across-the-board roll back for human evolution—this was the shotgun wedding of the most adroit practitioner yet of biological determinism. Swiftly moving to take over both key posts in academia and the mass impact of trade publishing with its enormous advantage of bookstore distribution, the new field called itself evolutionary psychology.¹⁰

Not since the early days of American behaviorism has a new school of psychology trashed the views of all others with such arrogance and ignorance. But behind the offputting ballyhoo there happens to lie a critique of the status quo that offers humanistic psychology and transpersonal psychology—as well as positive psychology and both systems science and social science more generally—not just food for thought. More importantly, should all parties rise to the challenge, out of what is now often acrimonious dissension loom the prospects for a re-grounding for the hoped-for renaissance.

A critique one hears of humanistic psychology is that it became too much a matter of catering to the needs of the comparatively well-off upper middle and upper class for therapy and entertainment. By contrast, in keeping with the earlier emphasis for Kurt Lewin, the brash new field of evolutionary psychology focused anew on the problems of the lower class threatening to tear society apart.¹¹ A critique one hears of transpersonal psychology is that it became too much a matter of the self-righteous celebration of a spiritual evolution devoid of the age-old essential link for spirituality with *moral* evolution. By contrast, in keeping with the basic concern for Assagioli and Dabrowski as well as Darwin originally, the new suitor focused on what drives and shapes morality as a bedrock concern for a society going, one might with justice say, to hell in a handcart.¹²

Most importantly— *recognizing this as the central structural weakness for the social science of the 20th century*— the best of the evolutionary psychologists focused on trying to link and bind together the sprawl of social science to the evolution theory from which, ironically, biology had excluded psychology for more than a century.

And here is the still greater irony the chapters of this book underline. All this new work in the needed directions by this most successful of evolution theory's suitors rests on the quicksand of a scientific half-truth for which humanistic, transpersonal, and positive psychology hold the key to the other half. But in wandering from the Maslowian high point, they have lost sight of this pivotal fact.

In the last chapter I will return to this purposely provocative statement to describe what now looms not only as enticing territory for antagonists within science to drop dead-ended disputes and band together to explore. What lies ahead here, chapter by chapter,

begins to make the case, I think, for the development of a fully human theory *and* story of human evolution as the single greatest challenge facing the science of the 21th century.

A Call to Action and a Brief Summary of Papers

And so we come to the difference for this book and what its papers have to offer toward building a full spectrum, action-oriented—i.e., fully human— theory of evolution. In the midst of all the above currents running off in contradictory directions for thinking about evolution, in 1985, along with three of his students, psychologist Stanley Krippner published a paper of historic importance. Although Krippner was at the time a former president of the Association of Humanistic Psychology, and a founding member of the AHP-launched Saybrook Graduate School, as well as a noted investigator of the paranormal phenomenon that transpersonal psychology was beginning to make respectable, typically this paper escaped the notice of all but a discerning handful in the emergent field of evolutionary systems science and psychology who were ready for it.

“At present, HP lacks a commonly-understood scientific paradigm to provide a theoretical framework with which to develop and evaluate models, methods, research, theories and therapies,” Krippner et al wrote in “Toward the application of general systems theory in humanistic psychology” in the journal *Systems Research*. “We believe that GST can perform just such a service to HP” (Krippner, Rutenber, Engelman, and Granger, 1985, p.113.).

A quote from von Bertalanffy made vivid the needed relationship. “Analysis has to proceed at two levels: that of *phenomenology*, that of direct experience, encompassing perception of outside things, feelings, thinking, willing, etc; and of *conceptual constructs*, the reconstruction of direct experience in systems of symbols, culminating in science” (Ibid).

It is from this point in our story—which I believe points to what all parties hoping for a renaissance are seeking— that this book takes the next logical step. This is to probe how in order to become fully effective and most deeply meaningful systems science and

humanistic, transpersonal, and positive psychology—as well as evolutionary psychology and psychology and all the other social sciences more generally— can join in a new and higher venturing for the *evolutionary perspective*. Working together rather than at war with one another, we can help expand the mind of our species to embrace movement through time, from past, to present, to the better future in terms of *action*. The trajectory of active agents interacting with the active natural and the active social environment can take us through and beyond the future we fear to the future that has been the dream for our species for at least 100,000 years.

In short, we'll explore what a fully human theory of evolution should look like and how to build it.

This book opens with two background statements originally written to set the stage for the discussions of the GERG members and other scientists in 2000 during the World Congress of the Systems Sciences. First is the Toronto Manifesto, which characterizes neoDarwinian biology as the first venture, then sociobiology and evolutionary psychology as the second venture in 20th century science's attempt to build a general theory of evolution that might adequately handle the prime matter to us of *human* evolution. Now the time has come for the *third venture*, of the range of evolutionary systems science beyond the inadequacies of its predecessors to provide humanity with much more of what is needed to update what in many respects still remains a “horse and buggy” level theory and story of evolution in an age of rocket speed social and environmental urgencies.

This is the first of two vital grounding perspectives for the reader to keep in mind in relation to what lies ahead. The other is the perspective of a first and a *second* Darwinian revolution.

Following the Toronto Manifesto, in “Darwin, Maslow, and the Fully Human Theory of Evolution,” is an updated report on the experience out of my own years of research into the processes and theories of evolution that woke me up and shocked me into all the ups and downs that await those forced in any way to go “up against the paradigm.” This was my discovery of what many bright and well-intentioned scientists, in all innocence aided and abetted by educators throughout the 20th century, had unwittingly

done to Charles Darwin. Misused for more than a century as an icon to legitimize an ultimately degrading vision of the nature and potential for our species, Darwin, I discovered, had actually gone on to write a lost completion for his theory that at the level of *human* evolution almost wholly contradicts the science that has claimed his name. Both the nature of the shock and the challenge is perhaps most quickly indicated by the fact that in *The Descent of Man*—and this nearly 100 years earlier, clearly anticipating the rise of humanistic psychology— Darwin actually wrote 95 times of “love,” 92 times of “the moral sense,” and 90 times of “mind,” versus only twice about “survival of the fittest.”

The purpose of this opening, prefatory chapter on Darwin and Maslow is to provide a sense of the lift of vision and the sketch for a fully human theory of human evolution that Darwin in actuality left us. In terms of the perspective of the first and second Darwinian revolutions, this can be immensely useful in the task that lies ahead.

Darwin’s theory of evolution as it originally became known brought on a wide-ranging, nonviolent revolution affecting not only science but our society at all levels. Set in motion nearly one hundred fifty years ago now, how variation and natural selection interact became the revolutionary core to the theory that is standard knowledge for practically every textbook used at all levels throughout the West as well as an increasingly large part of the educational system in the East today. But what I came to see was that in the startling, long ignored humanistic completion for his theory, in anticipating what was to become the expansion of science through the twentieth century, Darwin was writing of what in our time has become in effect a second Darwinian revolution.

That is, what Darwin wrote of extensively only to be almost wholly ignored are what have often since then become modern discoveries in practically every field of science that vastly expand our understanding of evolution beyond what the first Darwinian revolution established. All too often similarly excluded for much of a century from what is today almost universally taught as mainstream evolution theory, it is the consolidation of these discoveries of the second Darwinian revolution into the full spectrum, action oriented, or fully human theory that is both the great task and the great adventure for the science of the twenty-first century that this book explores.

Part I: The Evolutionary Base in Physics and Biology, begins with what seems to me an ideal stage-setting paper by systems philosopher and pioneering general evolution theorist *Ervin Laszlo*. In “Matter and Mind: The New Holism and the Greater Humanity” Laszlo provides the grounding for a comprehensive theory of evolution in the natural sciences, moving from there into the realm and the challenges of human emergence, which is our concern here. Laszlo’s picture of the “dynamics of society’s periodic paradigm-shifts” is especially thought-provoking. In view of the scientific complexities and difficulties that inevitably lie ahead, I would also note—particularly for the student’s benefit—the advantage of getting underway with a paper that, despite its profundities, is easy to read.

Biologist Stanley Salthe is next with “Biology and Beyond Biology: The Natural Path to the Future.” As a fortuitous play both on Salthe’s name and nature, I would say this is a “salty” mix of a critique of “hegemonic” neoDarwinism within an enormous range of knowledge of the classic theories of evolution theory, as well as the contemporary alternatives—all of which offer our species a much better platter to select from than was the prevailing fare for the 20th century.

Part II: The Cultural Base in the Brain and Systems of Love vs. Domination opens with a paper that demonstrates why cultural evolution theorist Riane Eisler was named in a book edited by the well-known Swedish humanist scholar Johan Galtung and futurist Sohail Inayatullah as one of the world’s 20 most important macrohistorians, along with such luminaries as Adam Smith, Karl Marx, Arnold Toynbee, and Pitirim Sorokin (Galtung and Inayatullah, 1998). Chapter three, “A Multilinear Model of Cultural Evolution,” shows how the broadening of systems science to encompass cutting edge research on the impact of the brain and culture of family and gender relations leads to a revolutionary new understanding of evolution. Drawing from biology, sociology, anthropology, archeology, and other disciplines, Eisler brings to life how, underlying the full range of human relationships from intimate to international are two basic social structures: the domination model and the partnership model. The chapter shows how the tension between these two models has shaped history, and how the outcome of this tension

is the key to fulfillment or extinction for our species.

Next comes a chapter that, because of its length and the difficulties of the fields it seeks to bridge and draw on, many readers may find to be the most challenging in this volume. This is chapter four, “Love, Power, Brain, Mind, and Agency” by *sociologist Raymond Bradley*. I mention the difficulty in order to encourage the reader to persist with this paper because of the rare importance of the work and the findings it reports. Working with one of the two greatest living brain scientists, Karl Pribram, their work a mix of physics and mathematics as well as sociology and psychology, Bradley has gone to the heart of what animates evolution in mother-child relations, in communes and other small groups, and thereby likely humanity as a whole.¹³

And so after a century of what has all too often been much talk with little or no action, we come to the question of what are we going to do about all this? How are we actually going to expand and update our theory of evolution to at last provide a really useful source of both scientific inspiration and scientific *guidance* for humanity?

Part III: The Higher Reaches of Creativity and Consciousness opens with chapter five “Creativity, Consciousness, and the Building of an Integral World” by *evolutionary systems scientist Sally Goerner*. Along with Eisler’s, this paper is animated by the exciting prospects for movement out of what might be characterized as the smoke-filled room of science. It is the new chutzpah dispelling the symbolic cigar smoke as more and more women move into science. A cofounder and twice president of The Society for the Study of Chaos Theory in Psychology and the Life Sciences (which gives them the ultimate acronym SSCTPLS!), Goerner’s paper is a tour de force applying a broad spectrum of the new sciences to no less than the problem of species survival.

The next paper addresses what may be the single most important technical problem facing the builders of the better theory. How out of the cacophony of countless symposia and the obscurity of countless journals do you find and forge agreements on how to move ahead? In other words, as science moves beyond the mechanistic simplicities and formulas of the old paradigm it has in effect become a Tower of Babel. Most urgent in trying to visualize and then build the greater theory is the question of how do we find a way to dig

down through the prolixity of concepts and languages to find consensus on the commonalities of perception across all fields? How do we reach any working agreement on the prime factors, the key variables and primary patterns and dynamics? In chapter six “Technology to Liberate Rather than Imprison Consciousness” *systems scientist Ken Bausch* and *Club of Rome co-founder and incoming president for ISSS Alexander Christakis* explain how this can be done using the power of a new computerized methodology.

Last among these papers is the joint effort of three thinkers well-known to most humanistic and transpersonal psychologists, “Creativity, Consciousness, and the Direction for Human Development” by *systems scientist Alfonso “Monty” Montuori* of the California Institute for Integral Studies, *psychologist Allan Combs* of the University of North Carolina and Saybrook Graduate School, and *psychologist Ruth Richards* of Saybrook and Harvard University. This paper is perhaps best described in terms of a word out of Montuori’s early years as the saxophone-playing founder of a jazz band while he worked on the side as an Italian translator for Scotland Yard in London. Covering a rather amazing range of studies including the ins and outs and relevancies of chaos theory, it is a “riff” or free-associational play for this trio on the role of creativity and consciousness in evolution.

Part IV: The Darwinian End Game opens with chapter eight “What Should It Look Like? Seventeen Foundations and Ten Guidelines for the Fully Human Theory, A Summary of Chapters One through Seven.” Here I summarize the foundations and guidelines that one may discern in this remarkable set of papers. For easy referencing these foundations and guidelines are shown close by here in Tables 1 and 2.

Table 1
Seventeen Foundations
for Building a Fully Human Theory of Evolution

What should a full spectrum, action-oriented theory of evolution look like? Chapters 1-7 indicate the following considerations and foundations are required for expanding, updating, realigning, and constructing such a theory.

1. The initiating drive and unfolding and enfolding embrace of energy.
2. The living biological base.
3. Inadequacy of the neoDarwinian hegemony.
4. The basic requirement for a developmental perspective.
5. Learning from nature.
6. The revolutionary perspective of modern brain research.
7. The revolutionary perspective of a gender-sensitized realignment of our understanding of human cultural origins and dynamics.
8. Importance of incorporating economic and political evolution within the building of adequate theory.
9. Importance of technological evolution.
10. Importance of educational evolution.
11. The feeling for evolution as story as well as theory.
12. The centrality of moral evolution.
13. The evolution of love, consciousness, and the drive of creativity in “conscious evolution.”
14. The basic requirement of a multi-level vision of the ideality of person and society.

(Table 1 continued)

15. The basic requirement of the perspective of the human agent, and all other levels for “self organizing processes,” and the action orientation in co-evolution.
16. The considerably over-due revival of the dialectical perspective in the development of evolution theory.
17. Convergence out of independent minds and works on the development of a new 21st century perspective on core theory for evolution.

In particular, I call your attention to the sequence of foundations 14, 15, 16, and 17 in Table 1. Here, with referencing to the earlier chapters by Laszlo, Salthe, Bradley, Eisler, and Goerner for substance, is briefly developed what I believe may quite possibly be the first significant advance for 21st century evolution theory involving people all of whom, as of this writing, are still living and among us.

Table 2
Ten Guidelines
for Building a Fully Human Theory of Evolution

How do we build the better theory? Chapters 1-7 indicate the following considerations and guidelines are required for expanding, updating, realigning, and constructing such a theory.

1. Break out of the prison of the “old” paradigm.
2. Break out of the dominator trance.
3. Use action research as well as basic research to shape theory.
4. Gain operational consensus on basic concepts.

(Table 2 continued)

5. Gain a new grip on the dynamics of evolution.
6. Redefine evolution in terms of all, rather than only one or two, developmental levels..
7. Explore points of evolutionary consensus as well as differences between science and spirituality.
8. Work toward consensus on unifying frameworks and imagery...
9. ...but explore the ignored, the repressed, and new visions before locking into new paradigms.
10. Replace the current scientific perspective of no meaningful direction or purpose to life or evolution with a search for the new personal and social rudder of moral direction.

Last, in chapter nine, out of my years as a psychologist, systems scientist, evolution theorist, and working research scientist— as well as out of my earlier years as a journalist plunged into the reality of all that fills the news today, that great world of human need out there that calls to us desperate for the kind of guidance that our species by now deserves from science and an adequate theory of human evolution— I venture my own conclusions. Picking up where I left off earlier in this introduction, we look at the social implications of the science of the half-truth versus the prospects for an alliance to build some reasonable approximation of the whole truth in “How Do We Build It? Of Systems Science, Psychology, Students, Teachers, and the Destruction or Liberation of Humanity.”

This book has been written and put together not just for scientists but also for everyone in the humanities, in theology, and for the general reader interested in the great adventure that life can become with the new understanding of and involvement in evolution it reports. I am particularly hopeful, however, of something coming from my proposal in the last two chapters of a new way for a new generation of *students* in collaboration with *teachers* to actually kick start the building (i.e., updating and

completing) of the theory and story that is needed. To this end: Among end documents in this book are sample course outlines for a full academic year, for teachers of any field with an interest in evolution, using this book as a basic text. A web site, www.thedarwinproject.com, will encourage, report, and interlink global efforts in this direction. I should also add that this is the plot behind the *key words* for chapters, which otherwise might seem excessive. These extended key word listings make it possible for the busy student, busy teacher, and busy professional in any field to get a sense of the coverage for each chapter from an investment of only 20 or 30 seconds per quick scan.

All in all, this could truly become the Great Adventure for our time—a collaboration of bright students fresh to the experience, unweighted by outmoded scientific doctrine or dogma; with bright teachers liberated from the past, understanding the urgency of the mission; with more generally well-wishers globally following their advance like those of us who swarm to construction sites and like to watch; all linked via the internet in the building of the fully human theory and story of evolution.

By setting in motion this process that hypothetically could rapidly spread globally to colleges engaged in distance learning, my strategy, frankly, is both to try to inspire and to shame their elders to rise above their differences, and to join those who are to live beyond us within this century either of immense opportunity or of doom if we fail, in doing what needs to be done.

THE TORONTO MANIFESTO

Within the past century two major ventures built the prevailing theory of the evolution of living systems. The first was what became the neoDarwinian paradigm during the early part of the century. The second was the sociobiological paradigm late in the century. Both made important contributions to science, but at the same time both shared the same monumental blind side. Claiming the Darwinian heritage exclusively for themselves, they rigorously excluded everything that both in Darwin earlier and throughout the 20th century in the whole of science—particularly among creative evolution theorists across the full spectrum of science; that is, in many fields linked together by a meeting ground in systems science—sought to expand evolution theory to capture the heights as well as the depths of our species' potential and human evolution.

We are meeting here in Toronto to give new focus to what is by now a huge body of work routinely excluded from what is taught worldwide in our schools, in books reaching a general as well as scientific readership, and reinforced by television and other media as the one and only mainstream theory of evolution. We meet for what we hope may become a decisive new step toward what, if our species is to attain its potential, must become the successful *third venture* in this sequence to advance the scientific theory of evolution.

We are meeting to move beyond a science overwhelmingly focused on the *foundation* for evolution and the past to a renewal of emphasis on and a new vision of the human *superstructure* and the future. This is a matter of increasing urgency because it bears on what is to happen to our species at what is by now obviously the most crucial juncture in our evolution. We are meeting at a time of crisis in evolution and crisis in the development of evolution theory. We are meeting to move beyond the cosmic world and the microbiological world into the human world of a radical expansion of brain, mind, consciousness, and, level by level upward, the escalating questions that now press upon us of personal, cultural, social, political, economic, educational, and technological evolution. Above all, as Darwin in actuality insisted, to this list must be added moral evolution, as

well as—for it is high time for science to recognize this continuing concern for billions of our species on this planet—of spiritual evolution.

We are further meeting to move beyond a science committed solely to the passive role of the so-called wholly objective observer to the active role of science as partisan on the behalf of and advocate of *humanity*.

In short, we are meeting to look at what a full spectrum, action-oriented theory of evolution should look like, and how to actually build it. We are meeting to move beyond talking about it not to discard what we already have. We meet to expand and update our theory and our story of evolution to live up to the 100,000 year investment by the life force in our species, and to fulfill the rising vision over all that time of what we both can become and should become.

— a statement of purpose for the panels and meeting of the General Evolution Research Group, Monday, July 17, and Wednesday, July 19, 2000, during the World Congress of the Systems Sciences in Toronto.

DARWIN, MASLOW, AND THE FULLY HUMAN THEORY OF EVOLUTION

David Loye

To provide the historical and transhistorical context for this exploration of what the full spectrum, action-oriented, or fully human theory of evolution should look like and how to build it, this prefatory chapter reports the startling results and implications of the discovery of a lost “top half” for Darwin’s theory of evolution. Instead of the prevailing “Darwinian” emphasis on selfishness and survival of the fittest, it examines the implications of the discovery that in actuality for Darwin moral sensitivity and love were the prime drives for human evolution. It projects the potential for student-teacher projects to build the theory and story attuned to the real Darwin and how to prevail against the entrenched power of the paradigm of PseudoDarwinian Mind that brought disaster to the 20th century and now threatens the 21st.

Key words: *altruism, biology of selfishness, blind chance, brain research, brain, caring for others, chaos theory, cognitive psychology, competition, consciousness, conservative, cooperation, cultural evolution, Descent of Man, developmental psychology, direction for evolution, economic evolution, economics, environmental and social urgencies, evolution theory, evolutionary systems science, evolutionary love, evolutionary psychology, full spectrum, action-oriented theory, fully human theory, habit, human*

potentials movement, human agent, humanistic psychology, ideal forms, imagination, learning, liberal, love, metamotivation, mind, mission of science, models, moral development, moral sensitivity, moral evolution, mutual aid, natural selection, neoDarwinism, norm, Origin of Species, paradigm, personal evolution, planetary destiny, political science, political evolution, positive psychology, power of paradigm, progressive science, progressive economics, progressive education, progressive society, progressive science, progressive politics, PseudoDarwinian Mind, reason, religion, Robber Barons, SAT, self-organizing processes, selfishness uber alles, shift in paradigm, sociobiology, sociology, spiritual evolution, spirituality, superconscious, survival of the fittest, sympathy, the power elite, the Third Factor, the human ideal, Toronto Manifesto, transpersonal psychology, will.

Among scientists today a matter many had assumed was long laid to rest is moving from the background to the foreground within the context of the grim prospects that face our species on which global leadership seems to have blanked out on or gone dead-headed. It is that what we call evolution theory requires a massive updating, integrating, and streamlining if it is to meet the needs of the 21st century if not indeed our survival itself over the long run.

On one hand here is a planet with threats to the lives of ourselves and all species everywhere on the rise. On the other hand here are the sciences, to which we look for answers on how to meet the threats, but here's the shocking fact it's time we faced. *Behind the popular assumption of a seamless storehouse of advanced computerized wisdom there, in fact, lies an abysmally widespread and chaotic disarray.*

Evolution theory— which supposedly provides the grounding for all science— is the prime example. For here behind an outdated and dangerously constricted assumption of unity, instead of any useful cohesion lies the generic bewilderment of a disparate and unfocused sprawl. How, with our feet mired in this academic swamp, are we to move toward the understanding needed to pull together science into a new clarity? And of greater and increasing urgency, how are we to build an evolution theory that can provide the practical guidance—or road map to the future— needed by our species at this time of exponentially escalating confusion?

The problem, one might say, is how are we to update a blithely parochial horse and buggy theory of evolution to meet the rocket speed global urgencies of the 21st century?

To act effectively within our dwindling time frame for action, a key strategic problem is to find an *inspirational beginning place* from which to move ahead. In the introduction to this book I propose a teacher-student driven, globally active alliance between evolutionary systems science and humanistic, transpersonal, and positive psychology to kick start what is needed. As most students as well as many of the rest of us find our greatest inspiration in the heroic human being, out of many prospects I will focus here on four who seem to me most pertinent to the challenge of this kick-start. The first three are Abraham Maslow, Roberto Assagioli, and Kazimierz Dabrowski for what became the fields of humanistic, transpersonal, and eventually positive psychology.

As their significance and that of these fields come to life in an exciting new way in relation to my fourth nominee for an inspirational beginning place, let's first look at this surprise then come back to them.

Charles Darwin and the True Theory and Story of Human Evolution

In terms of the best possible anchoring in evolutionary systems science for a newly meaningful theory of evolution it would be ideal if the logical choice could be Charles Darwin. But unfortunately history has left us with big problems with Darwin. By now to

perhaps a majority of those seeking to expand and update our understanding of evolution Darwin has come to mean everything about the “old paradigm” that both progressive science and progressive society is trying to transcend.

But what if Darwin was not the rigid exemplar for a biology of selfishness and blind chance, to which everything else about evolution must be reduced?

What if instead of being the scientific excuse for the idea of “survival of the fittest” that gave us Adolf Hitler and the Robber Barons of the 1890s and today, in actuality Darwin ranged on into the social sciences and the system science almost wholly excluded from mainstream evolution theory during the 20th century?

What if he was attuned to the brain research, similarly ignored by mainstream evolutionists, and the cognitive and developmental psychology of pivotal importance to the development of a fully human theory of evolution? What if over one hundred years ago he was already there before everybody else not only anticipating chaos theory but also uncovering the “self-organizing processes” that only in our time are being considered the completing principle for evolution theory at all levels?

What if in *Origin of Species* he set forth what we may now see was the prehuman foundation, or *first half*, of a theory for which in *The Descent of Man* and his long-unpublished private notebooks he sketched the human superstructure, or *completing half*? *And what if this completing half over 100 years earlier anticipated Maslow and humanistic, transpersonal, and positive psychology?* What if he even further ranged beyond the science of his time or ours to consider what briefly flares in the work of Assagioli and Dabrowski then fades through incomprehension and indifference—the *sine qua non* and bedrock relevance of *moral* development and a *spirituality* freed of deism and dogma to human advancement?¹

In short, rather than being the dated and rather fuzzy-minded icon for the “old paradigm”—as universally he is perceived today—what if for a highly significant but almost universally neglected period during his youth and then again in old age Darwin was actually attuned to much of the full spectrum for thoughts, fields, and data now being

explored as we begin to grope through the sprawl toward the needed updating, integrating, and streamlining for evolution theory? Wouldn't Darwin be an enticing new candidate for an inspirational beginning point for a fully human theory of evolution?

And of the greatest strategic importance would be this—for we cannot move ahead with the speed necessary as long as traditional Darwinism hangs like an albatross around the neck of science, or like a stone within the schools and minds of the world at large. Had the Darwin I have sketched existed, wouldn't he be the ideal figure here at this turn into a new century to help ring out the old and ring in the new?

That what I have sketched is in fact the case with Darwin I began to uncover nearly a decade ago.² Yes, all of the above is fact, as incredible as that may seem. Since then, in what in relation to the urgencies that face us seems an incredibly slow snail's pace, I have been working to convince the skeptics that this new picture of Darwin is indeed the whole truth behind the prevailing half-truth.

The chief problem most face is how could all this possibly have been overlooked for a whole century. The answer I provide at length elsewhere is complex, but in a large part it reduces to this being one of the most haunting cases on record of the mind-binding and blinding power of paradigm to conceal from us at an earlier point what, after a cataclysmic wrench to conventional wisdom, can become obvious at a later point in history.³

In terms of the dynamics of scientific discovery, the problem with the “new Darwin” is that he both predates and is aligned to a massive shift in paradigm now slowly and with great difficulty underway across the board in both science and society. As Kuhn (1970) first noted in the perennial reference for every book and paper attempting to accelerate this movement, such shifts for science traditionally take anywhere from two or three decades to a full century. But because of the intercorrelated environmental and social urgencies, in our time this shift must now take place within relatively few years—some give us no more than a decade, some say a bit longer (Elgin, 2000).

For the kick start for the teacher-student theory and story building project I propose—as well as the kick start for our society more generally— where can we turn for getting up to speed? I will come back to more of the case for Darwin, but first let's take a look at the other three who, without knowing they were his direct heirs, came to embody and express so much of Darwin's lost theory and vision.

Maslow, Assagioli, and Dabrowski

The first is still well-known, the second already fading from the references, the third still barely known even today.

If one had to pick a single figure, most would agree that Abraham Maslow was the pivotal initiating visionary not only for humanistic and transpersonal psychology but also beyond question for positive psychology. But why should he be of transcendent importance in the building of an adequate or fully human theory of evolution? The reason is that more than anyone else he tried to pin down what increasingly looms as the crux to the construction of the adequate theory or telling of the adequate story. This is the challenge of defining the *human ideal*— or the normative end goal we seek to evoke and nurture as parents and as teachers in our functional but largely unconscious task of shaping the future.⁴ Keying originally to his youthful worship of anthropologist Ruth Benedict and gestalt psychologist Max Wertheimer, this is the context of the larger meaning for Maslow's many years of identifying the normative characteristics of his *self-actualizers*. It is also what is newly meaningful about his life structural placement for all of us within the shift from defense, to growth, to metamotivation as the central drivers for personal, economic, political, and cultural evolution (Maslow, 1968, 1971).

We have only to stop and think for a moment about this and the purblind fumbling of what has passed for evolution theory for a century becomes horribly apparent. In constructing everything from houses and gardens to cities, our task is automatically shaped by the *models* for a range of *ideal forms* built up over thousands of years of the human discovery of what works best for the peculiar type of being we are on this particular kind

of planet. Yet ignoring the functional necessity that progressive religion and progressive philosophy recognized long ago, here we are in science after at least 600 years now still trying to construct a theory of evolution with no more sense of the practicalities of the norm and the ideal than a band of aliens newly dumped upon a strange planet. It is as though we were trying to tack together a house according to whatever the wind blew our way—with the consequence we shall see, when I get to more of the real rather than the fictional Darwin, of a basement on top and the roof underfoot.

The fading figure for this trio was the Italian humanistic psychiatrist Roberto Assagioli (1965, 1973). Not only did Assagioli have a fierce feeling for the functional relevance of evolution theory as a matter of *species* as well as personal development. But of most importance in line with where this paper is going, his concept of the *superconscious* as the higher counterpart to the concept of the unconscious embraced *moral* as well as *spiritual* evolution as the “roof” we seek to put in place for both shelter and fulfillment.

The third figure, mainly known today only to a comparative handful of psychologists and teachers concerned with the development of the gifted child, was the Polish humanistic psychiatrist Kazimierz Dabrowski (1964).⁵ Again a man for whom moral as well as spiritual evolution was a matter of passion, Dabrowski was sufficiently advanced in his commitment to and comprehension of evolution theory that years ahead of the contemporary recognition of the importance of self-organizing processes at all levels of evolution he wrote firmly of the shallowness of theory based on genes and environment as the sole shapers for evolution. He wrote of “the third factor,” which for Assagioli was the *will*—or for both the impact of the *mind* of the human agent on the shaping of our planetary destiny.

So we may see here how in retrospect one can make a strong case for the use of these three pioneers for humanistic, transpersonal, and positive psychology as exemplars in launching a new move to build a “full spectrum, *action-oriented*” theory of human evolution. I know I speak for everyone who has ever been a student in saying it is people

like this, who become larger than life in retrospect, who bring science— and more importantly the *mission* of science— to life where it can otherwise lie there not only mystifying but dead and boring on the textbook page.

But this said, with the challenge of the kick start for the better theory and the better story in mind, in all realism we must now consider what the enthusiasm and the new burst of energy required for the kick start is up against.

Up Against the Paradigm

What the move this book sets forth is up against is the double paradigm, which one only comes to see clearly if one is trying to push for anything new. Long familiar to historians, sociologists, political scientists, and the working journalist is the control of most of us by all the hang-overs from the past that go by the name of paradigm, as well as their fueling and refueling by what C.Wright Mills (1956) called “the power elite.” In the case of anything to do with evolution theory, however, to this ancient stream of control by a shifting “Establishment” is added the incredible power of what I have found may best be characterized as the paradigm of PseudoDarwinian Mind.⁶ Arising during the 20th century, this is the control of both the masses and a widespread, passive and compliant academic elite through the possession of television, publishing, and practically all other media by an economic and political power elite, which finds in old style survival-of-the fittest, selfishness *uber alles* Darwinism the legitimizing or excuse it prefers from and pays for in science.⁷

To the scientist, student, or teacher who has been “properly” indoctrinated to avoid “subjectivity” of any kind or any hint of, perish the thought, polemics in scientific writing, observations such as this and more as we proceed may at first be jarring. Is this edge necessary? It is vital to realize that for a century the supposedly sacred dictate of “cool it”

for writing about science, which arose out of and generally works for natural science, *is wholly out of place for social and systems science at a time of fundamental challenge to established paradigms*. It is vital to realize that, via the power of paradigm, stylistic inhibitions of this kind have been used to prevent the plain speaking that might otherwise expose and arouse those fresh to science and still unintimidated to rise up against all that presently imprisons the mind of our species.

It is this skillfully hidden and invariably conservative tandem power behind the scene that not only managed to either bury or hamstring the liberal social aspiration of the 1960s over the closing decades of the 20th century into now. It is this thrust that gave the PseudoDarwinism of sociobiology and then evolutionary psychology the power to help blank out of mass memory so much of the once joyful resonance to Maslow, and humanistic psychology more generally, as well as so much of the initially revolutionary hope for the human potentials movement.⁸

With a realistic sense of what this new move is up against, then, what or who can we turn for the shock and the jolt of a new source of vision and an exemplar sufficiently effective to tip the balance of power back our way— which is to say to *progressive* science with its inevitable link to progressive politics, progressive economics, and progressive education?

For a whole century now Darwin has been used by those empowered by the double paradigm as their “900 pound gorilla.” That is, they have used the Darwin of “survival of the fittest” and selfishness *uber alles* to legitimize themselves and their science and their social, economic, and political policies, and thereby intimidate, blind, and even strike dumb all who might dare question or oppose them.

Here is more of the case for why Darwin is actually a more socially enlightened, scientifically valid, and much nicer sort of 900 pounder who is actually *ours*?

Implications of the “Old” and the “New” Darwinian Theory

As we all know, throughout the 20th century a cornerstone for mainstream evolution theory (e.g., neoDarwinism, sociobiology, evolutionary psychology, see The Toronto Manifesto in this book) has been that we are basically selfish, even driven by “selfish genes.” Socially and personally the implications are that whatever we may think is altruism is actually nothing more than selfishness disguised (Hamilton, 1963; Wilson, 1975; Wright, 1994).⁹ Backed with what by now a majority of non-scientists have accepted as impregnable sophistication in experimental methodology and mathematics, for going on three decades this has been the direct claim of theorists for the self-avowed Darwinian paradigm.¹⁰ Likewise—because of the way science is used by politics and economics— not coincidentally an increasingly popular belief during the heyday of late 20th and early 21st century conservatism is that to believe otherwise is to be a foolish liberal “do gooder.”

And what did Darwin actually believe and say? Over a 30 year span from his early youthful notebooks into the time of the writing of *Descent*— drawing on a lifetime of his own as well as the observations of countless other observers over by now thousands of years— he vigorously *disagreed* with this view. Specifically addressing the point, he actually lambasts “the base principle of selfishness”(Darwin, *The Descent of Man*, 1871/1981, p.98).¹¹ Elsewhere, he further identifies “the confinement of sympathy to the same tribe” as the chief cause of “the low morality of savages.” (Ibid, p.97).

Still more basic is the “Darwinian” tenet for mainstream evolution theory that everything in our lives both is— and further *should* be —determined by the “survival of the fittest.” And what did Darwin actually write in *The Descent of Man*?

Of “survival of the fittest” he writes only *twice* in this book of more than 800 pages of fine print. The first time he does this it is to apologize for perhaps exaggerating its importance in *The Origin of Species*! And the next time it is to tell us that as far as “the

highest part of our nature is concerned there are other agencies more important." (Ibid, pp.403, 404).

And what are these “other agencies” that are more important? Before considering them, we need to pause and think about the 20th century from which we finally escaped but a short time ago and now our world today. Above all, we need to think about all the wars and the global rape of our planet by predatory business and governmental interests ostensibly legitimized by the science of “survival of the fittest” and the principle of “competition” above all (Korten, 1996). And now consider the implications for both theory and society of the fact that in *Descent* only *nine* times does Darwin write of competition, but nearly three times as often—that is 24 times— of *mutuality* or mutual aid, which was the root concept of that time for what today we call *cooperation*.

Or of the fact he writes of *sympathy* 61 times. And then this, most astounding and perhaps of the greatest long range importance. For in line with the rediscovery of the theory of the now immensely popular Charles S. Peirce— in which Pierce (1992) identifies *evolutionary love* as one of the three prime principles for evolution— in *Descent* Darwin similarly writes of *love* 95 times!

What beyond the surface novelty does this tell us about the fully human theory and the fully human story of evolution that this “new” Darwin can help animate and reinforce? Doesn’t it tell us, simply stated, that although competition and “survival of the fittest” still remain and sometimes vitally so in the picture, what mainly drives ahead evolution at *our* level of emergence is *caring for others* and *cooperation*?

“But just because Darwin said this doesn’t make it true” is the comeback I frequently encounter. That is not the point. The point is that by now thousands of scientists in a wide range of disciplines, throughout the whole of the 20th century, but increasingly in the last quarter of this century, have reaffirmed and extended what at last can be seen was Darwin’s original vision. And again, as I extensively document elsewhere (1994, 2000a, 2000b), chiefly because of the entrenched power of the “old” paradigm, most of them have been similarly ignored or have faced an uphill struggle to gain even

peripheral incorporation of their findings or insights into what is known today as the “mainstream” theory of evolution.¹²

In the introduction to this book I mentioned Romanes, James, Baldwin, Dewey, Piaget, Lewin, Maslow, Assagioli, and Dabrowski in psychology, and for systems science von Bertalanffy, Boulding, Jantsch, Prigogine, and Laszlo. And what across fields binds them together as one?

The Primacy of Mind

It is truly mind-boggling to contemplate the fact that for much of a whole century, while our species staggered from one disaster to another for lack of adequate guidance from mainstream evolution theory as to what we are and where we should be headed, Darwin was used as the excuse for remaining fixated at the gene level. Yet what I finally myself stumbled on to only fully comprehend after years of research was what emerges from a simple word count that a computer literate eight year old can perform today.

In contrast to the impression we have been given by mainstream evolution theory, here is further what Darwin in actuality writes of in *Descent*:

“Mind,” 90 times

“Intellectual qualities and powers” = 58

“Intellectual powers” = 17

Reason = 53

Imagination = 25

Learning = 18

Consciousness = 15

Curiosity = 14

Instruction = 10

Brain = 110

Habit = 108

It takes no great treatise of many pages or year long sequence of brown bag colloquia to make it apparent this is the complex for *education and learning*. Nor, after pounding away at the difference that again and again was ignored and bypassed and shoved aside, is it difficult now to see that education and learning is what chiefly drives us at all the levels of activity explored by psychology, sociology, political science, economics, and all the other fields of social science, as well as all the areas of systems science, as well as the humanities and in all the probes of what we call spirituality, as well as in every other human activity that— as it most clearly *does* involve *evolution*— calls out for a newly-inclusive definition and a vastly expanded and updated theory and story.

In *brain and mind*, isn't it by now beyond question evident we are looking at the instrument whereby in all these fields we mine meaning from the stuff of life?

In *habit* —as established by the psychology of Alexander Bain in Darwin's time, ranging forward to William James, to Clark Hull, to B.F. Skinner and the thousands of 20th century psychologists who made a lifetime of its probing— isn't it by now further evident we looking at what in all these fields and areas of human experience locks the treasure of meaning in place in mind (Atkinson, 1964).

And if we put them together along with everything else emphasized in the lost top half for Darwin's theory, isn't the social delivery system apparent? Isn't it evident we looking at what we know as a working, interacting, dynamic and structural whole, filled not with the abstractions of a relentlessly reductionist science but rather with the aspirations and drives of real flesh and blood human beings of both genders and all ages, as *education and learning*? (Noddings, 2002; Miller, 2002; Eisler, 2000).

This begins to make apparent the immensely greater mind and vision of Darwin we may turn to for inspiration in the building of the full spectrum and action-oriented, or fully human theory of evolution. But still—and this was also for Maslow, Assagioli, and Dabrowski the single most important factor— there is more to go.

The Primacy of Moral Evolution

Here I must confess that it is hard to know where to begin, for I still find this lost part of Darwin so overwhelming in what it reveals of the distortion of our past, the diminishing of our present, and the blotting or blanking out of the one thing offering our species our greatest, if not indeed our only, hope for the future. For this was the single aspect of most importance to Darwin, and yet most glaring in its absence from the theory that came to be called Darwinian, as well as from the society that to a significant degree was shaped by the original Darwinian revolution.

Again a simple word count flags the gulf between what we have been told was the Darwinian vision and this lost body of fact bearing on the prospects for our future.

Just short of 95 times for “love” are the *92 times* he writes of the operation and importance of *moral sensitivity* and *moral evolution* in *Descent*.

Indoctrinated by a “Darwinian” culture that sees schools as primarily factories for the training and survival of the fittest, we tend to think of intellect and a high IQ or SAT as both the highest goal for education and the highest aspect of human achievement. But Darwin in fact wrote that in terms of what most mattered in the evolution of our species the “moral faculties are generally and justly esteemed as of higher value than the intellectual powers” (Darwin, 1971/1981, p. 393).

Nor did he stop there. The best known tenet for mainstream Darwinism is, of course, that everything about us has been, is, and presumably ever will be determined by natural selection. But although he keeps natural selection in the picture in its foundational impact on the evolution of mind and morality at our species’ level of emergence—focusing specifically on this aspect of natural selection 23 times— in *Descent’s* pages he has something else to tell us that has now been bypassed or ignored for over 100 years. It is his insistence that the “moral qualities,” which to him are of most importance at our level of emergence, “are advanced either directly or indirectly much more through the effects of

habit, by our reasoning powers, by instruction, by religion, etc., than through natural selection" (Ibid, p.404).

Here, in a line of text undeniably written by Darwin personally and specific to the point, is further confirmation for the last word count we looked at. In view of the lambasting of the Creationists as well as the discomfort of traditional science, it is also startling to find the favorable reference to religion. Though much of what passes for religion today was anathema to Darwin, amplified by other long ignored quotes regarding the salutary effect of "spiritual agencies" on evolution, here is the lost part of Darwin that anticipates transpersonal psychology and the new scientific interest in spirituality by over 100 years.¹³

Moreover, there is this. In the sharpest possible contrast to the paradigm of blind chance and the impossibility of any meaningful direction for evolution other than increasing complexity— a supposedly iron-clad idea that shaped the educated mind of our species for much of the 20th century— Darwin in fact not only lashes out at the idea of blind chance. "The understanding," he writes with rare vehemence, "revolts at such a conclusion."¹⁴ He also goes still further in asserting that our evolution is *moral* directional. Most specifically he tells us: "Looking to future generations we may expect that virtuous habits will grow stronger...and virtue will be triumphant." (Ibid, p.104).

Is this nothing more than the delusions of late Victorian optimism? Elsewhere he again insists "the social and moral qualities" will "tend slowly to advance and diffuse throughout the world."(Ibid, p.163).

And still again—inescapably directional in regard to the billions of years of the evolution of life on this planet, and the millions of years of the direct evolutionary line leading to our own species—there is this. It is the "fact of our having thus risen, instead of having been aboriginally placed in perfection here," Darwin tells us, "that gives us hope for a still higher destiny in the distant future."(Ibid, p.405).

Toward the Great Adventure and the Greater Theory

Those coming fresh to a shift such as this in the picture for Darwin—and his theory, the story of human evolution, and the idea of hundreds of widely ignored modern studies now driving a second Darwinian revolution—generally have one or the other of two reactions. For some it is exciting news, quickly accepted. For others, however, it is at first hard to take or to believe.

“What’s specifically wrong with ‘the old paradigm’?” they may ask. “And why the pressing need for any so-called ‘new paradigm’?” These are understandable requests, but behind them lies the expectation that before we venture on we must fill the gap between the mainstream understanding and where we are now about to go by becoming mired in the popular debate between the sociobiologists and evolutionary psychologists and their critics that has become known as “the Darwin Wars.” Instead, I must point them to the list of references to this chapter for more on the “new” Darwin, to Appendix B for the Book List for “the Darwin Wars” involving Dawkins, Wilson, and Gould and other critics, to chapter eight for Foundation three and to all ten Guidelines for building the fully human theory, and to a helpful feature of the chapters that lie ahead.

For some of the authors of this book the inadequacy of the presently prevailing or mainstream theory of evolution, particularly as applied to humans, was established nearly half a century ago. As will be seen, however, they all generally briefly touch on what a book review in the flagship publication Science has called “The Corpse of a Wearisome Debate” as a take-off point. But from there on it is the excitement and the promise of this second Darwinian revolution that engages them, as it will, I believe, engage most readers.

For Darwin's, we may now see, was no mind driven to try to reduce everything to the evolutionary dynamics of the barnacle, or, as seized and blinded and wrung dry our time, the gene. This was a mind driven more perhaps than any other historically to embed the wisdom of past, present, and future in the grounding reality of the *full* wonder of nature. As both the young Darwin and the old Darwin, his was the mind that found in the ascendent wonder of the rise out of nature and the expansion of the human mind and the human capacity for love and caring what became the bannered goal for humanistic, transpersonal and positive psychology, as well as for evolutionary systems science, and for every other human endeavor at its best and highest.

It is for all these reasons that in the reality of the larger and long ignored Darwin is foreshadowed the full spectrum, action-oriented, and thereby fully human theory of evolution that it now becomes the responsibility of 21st century science to build.