TWELVE
THE BATTLE FOR MIND OVER MATTER

Earlier we met Julian Huxley and Theodosius Dobzhansky in their leadership role in the creation of the Neo-Darwinian synthesis, which securely locked in place the counter-revolution.

My argument for this revolution-counter-revolution classification comes from more new language for evolution from the fields of history, sociology, and political science. The revolution was the original liberating Darwinian vision as a whole. It was not only what became the well-known first half, but even more vitally what became the lost moral and action-oriented completing half for his theory of evolution. It was the vision for Darwin of the liberation of mind that Romanes died trying to uphold. It was the lost grounding for thousands of modern studies fighting for the same end.

The counter-revolution was what happened when first the Neos and then the Super Neos became fixated on the first half—and locked in by the thrust of the dominator attractor and the sweep of the domination paradigm could go no further.

Huxley and Dobzhansky, however, were driven by minds of a scope that refused to be constrained within the Neo-Darwinism they had played such a major role in creating. Tiring of work within the paradigm for reform, they decided to go up against it.

In 1946 Julian Huxley moved out of the world of sweet peas, fruit flies, and vampire bats into the bloody macrocosm for our troubled human world to become the first Director-General of the United Nations Educational, Scientific, and Cultural Organization (UNESCO). Soon thereafter he began to spread the discomfort that made him no longer a good choice for invitation to parties in the tidy world of biology. Although the connection to Darwin was wholly unknown to him at the time, as if suddenly possessed with Darwin's ghost, he began to assert what actually had been the fundamental structure and key points for the long ignored completing half for the founder's full theory.

The opening jolt for Huxley's heresy was his insistence on the necessity to move beyond natural selection to an exploration of *psychosocial selection.*

To some of his old associates that new word psychosocial must have sounded like something to do with insanity, hence at all costs to be avoided. But Huxley clarified. Yes, natural selection exists and massively operates, no doubt about this whatsoever, he assured everybody. But the point was that at our level of human emergence *psychosocial selection* takes over.

"Though natural selection is an ordering principle, it operates blindly," Huxley observed. It "pushes life onwards from behind." It "brings about improvement automatically, without conscious purpose or any awareness of an aim."

Psychosocial selection also "acts as an ordering principle. But it pulls [us] onwards from in front. For it always involves some awareness of an aim, some element of true purpose." In psychosocial evolution "the selective mechanism itself evolves as well as its products. It is a goal-selecting mechanism, and the goals that it selects will change with the picture of the world and of human nature provided by [our] increasing knowledge."

Within what had become the slippery world of ideas over which evolutionists were not only battling but by now floundering among themselves, Huxley set forth a clearcut vision of three distinctively different parts to evolution theory —cosmic, biological, and human.

Most striking of all in retrospect is how Huxley honed in on the primary concern that was both Darwin's and E.O.Wilson's in initiating the field of sociobiology. His humanistic vision of the centrality of moral sensitivity in human evolution is eloquently set forth in 1943 in *Evolutionary Ethics,* in 1947 in *Touchstone for Ethics 1893-1943,* and in 1964 in *Essays of a Humanist.* In these sources we encounter the fact I uncovered in the lost Darwin of a basic structure for any adequate theory of evolution consisting of two further distinct parts. That is, Huxley separates the evolution of living systems into a first half applying mainly to prehuman evolution and a second and completing half applying mainly to human evolution.

This was a departure from the security of the world of test tubes, statistics, and small animals that was hard enough by itself for his original cohorts to handle, but even worse was yet to come.

Dobzhansky and Teilhard de Chardin

Like Huxley, Dobzhansky also had misgivings about the exclusively biological embedding of Neo-Darwinism.

Particularly haunting is the following paragraph in which in 1968—with again no knowledge of the connection to Darwin—Dobzansky expressed the perspective and even prime factors I found laid out nearly 100 years earlier by Darwin. But now we can glimpse more of significance to our own lives today. For consider what might have happened had Dobzansky's focus on the critical difference in perspective, scope, scientific fields, and systems dynamics for *cultural* evolution, rather than the lock step fixation on biological evolution, prevailed.

> "The most significant product, and the paramount determining factor, of human evolution is culture. The relationships between the biological evolution and culture are frequently misunderstood, and it is important to make them clear. Culture is not transmitted biologically through some special genes; it is acquired anew in every generation by learning and instruction, in large part through the medium of the symbolic language. However, the capacity to learn and to instruct and, most essential of all, the capacity to use the symbolic language, is biologically and genetically vouchsafed to every non-pathological human being."

Had anything comparable to the focus on biological evolution been similarly supported—that is, had the social sciences bearing on cultural evolution been labeled and widely hailed as even more critical for our understanding of human evolution—might the course of history been different?

In chapters seven and eight, we saw how through systematic transvaluation, from the isolated mind space of science to the hurley-burley of politics and economics, the cumulating power of the D-attractor earlier helped lead to Hitler and World War II. If we applied the same approach to the re-emergent D-attractor underlying the later increasingly radical backward thrust, we could show why what has been generally written off as no more than the

"conservative shift" from the 1970s on into the early 21st century led to the disaster of the G.W.Bush years.

If right from the beginning the social sciences had all been granted as firm a place in evolution theory as Huxley and Dobzhansky insisted they must—as long ago both Darwin and Romanes had insisted—could we have avoided both Hitler and America's shameful entry into the 21st century?

First half, second half: it seems so obvious now. Yet as we've glimpsed, the simple recognition of all there was to be gained by a good working partnership between natural and social science in the study of evolution was not only not favored but actively diverted, undermined, or outright killed off by the hurricane in the wake of the D-attractor.

Social science has never been popular in extreme or even mildly regressive regimes. Historically all the social sciences and other fields bearing on cultural evolution arose by chopping away at the exposure of the bloody nature and dynamics of domination systems. It was, and is, and I pray may always be, the enemy. Biology, by contrast, from the beginning has been more easily manipulated to do the prevailing system's bidding.

Hence, the tragedy of how Neo-Darwinism became a systems-crafted monopoly for biology. Functionally, it was as if it through an over-riding entrancement it was shaped to serve as a Trojan horse loaded with the shock troops of "survival of the fittest" in its belly. Or in terms of a new language for evolution, as if it was to serve as an arrow point for the trajectory of the D-attractor, with the spread of the domination system in its wake.

But with Dobzhansky a glimpse into something even worse was in store. Over thousands of years the sacred rule for domination systems has been Divide and Conquer. Hence, a vital systems strategy has been to encourage the battle between science and religion in all possible ways.

In this regard, Dobzhansky occupied much the same position as a gay among straights in the days when remaining in the closet, or at least very low profile, was the tactic for survival. For among a congregation of agnostics and atheists, Dobzhansky was a devout Russian Orthodox Christian. You certainly didn't want to do anything to call attention to yourself.

Enter stage left, Teilhard de Chardin. A fascinating combination of Catholic priest and anthropologist, de Chardin had developed a theory of evolution combining science with spiritual and moral development. For this

dreadful heresy he was not only proclaimed beyond the pale by science but forbidden by the Catholic hierarchy to publish his writings throughout his lifetime.

Dobzansky had become a leading member of the American Teilhard de Chardin Association. In a 1973 article lambasting Creationism, "Nothing Makes Sense in Biology Except in the Light of Evolution," he quoted de Chardin to demonstrate why the barrier between science and religion on evolution was senseless.

Evolution, de Chardin had written, "is a general postulate to which all theories, all hypotheses, all systems must henceforward bow and which they must satisfy in order to be thinkable and true. Evolution is a light which illuminates all facts, a trajectory which all lines of thought must follow—this is what evolution is."

Still earlier, with really astonishing boldness, when you think of the kind of courage this required within the context of his position and friendships in biology at the time, Huxley was so taken with de Chardin that he wrote the foreword to de Chardin's main book *The Phenomenon of Man,* posthumously published in 1959.

Like Dobzansky, Huxley veered toward the heresy of Teilhard de Chardin because of the way it seemed to open the "higher path" that both he and Dobzhansky felt was missing from the Neo-Darwinism they helped create. Soon, however, as eminent biologist Stanley Salthe notes in *Development and Evolution,* Huxley and Dobzhansky were not only *personae non grata* to parties for the old gang. They were also the sort one began to drop from one's references.

Stephen Jay Gould, Darwin's Whipper Snapper

By 1980, ranked against the rise of the Super Neos, were two bands of adversaries. One was composed of the visigoths of Creationism, contending that anything Darwinian was ungodly balderdash. The other band was composed of the crusading anthropologist Ashley Montagu—whom we'll revisit in Book II—and paleontologist Stephen Jay Gould, genetic biologist Richard Lewontin, sociologist Steven Rose, and psychologist Leon Kamin. Their contention was that both sociobiology and its offspring, evolutionary

psychology, were unsophisticated and potentially dangerous misapplications of biology to higher levels of human emergence.

The books of Stephen Jay Gould came to be valued by many readers as among the most delightful and erudite of the time. Gould became a major factor in bringing Darwin and his works to life. Along with Ashley Montagu, Gould was not only sensitive to the political dangers, but rare for the traditional scholar bold in speaking out and writing about them.

In 1976 for Montagu with *The Nature of Human Agression* and in 1980 for Gould in *Ever Since Darwin,* they noted how beginning with late 19th century Social Darwinism emerged an eruption of books about killer apes, naked apes, books by Carleton Coon, Arthur Jensen and William Shockley about IQ differences, all either subtly or openly promoting imperialism, sexism, and racism under the guise of science.

What they all had in common, Gould cogently observed, was the "crude biological determinism" then beginning to cloud the rise of sociobiology at the time of this first critique.

In the midst of the customary courtesies and niceties of academia—which so effectively preserve the status quo— Gould was refreshingly blunt in exposing both the personal and the social functional motivations for purportedly Darwinian books of this type.

"They range, I believe, from pedestrian pursuits of high royalties for best sellers to pernicious attempts to reintroduce racism as a respectable science." Biological determinism, he observed, "has always been used to defend existing social arrangements as biologically inevitable.. .Why else would a set of ideas so devoid of factual support gain such a consistently good press from established media..."

Sociobiology purportedly was setting out to promise more this time. It was being impressively expressed by scientists of the stature of E.O.Wilson. But if we turn to the expanding new perspective on evolution now possible, we can see what Gould, and even more so Montagu, with his early allegiance to Kropotkin and identity as a Jew during Hitler's years, were beginning to pick up. Like the legendary canaries in a coal mine, they were impelled to serve as an early warning system to what could be headed our way with a new spread of the D-attractor once again throughout the late 20th century field of mind.

Both warned that one must keep a wary eye on what happened with sociobiology. Gould hoped that, rather than what he feared, "the pluralistic spirit of Darwin's own work will permeate more areas of evolutionary thought, where rigid dogmas still reign as a consequence of unquestioned preference, old habits, or social prejudice."

What then happened for the succeeding twenty years was a replay of the down side into the years that now, and unfortunately requiring vigilance for years to come, are ours.

Lewontin, Rose, Kamin, and Free Will

Following Gould's first punch at the sociobiologists in 1980, biologist Richard Lewontin, sociologist Steven Rose and psychologist Leon Kamin followed in 1984 with what many hoped might prove to be a knockout blow in the classic one-two punch technique for boxing. The intended right to the jaw was their book *Not in Our Genes*, which contained chapters of crucial importance in their exposure of the social and political consequences of unreconstructed sociobiology. In the closing chapter, in a comparison of the new biology and the old biology and the relation of ourselves and all other organisms to our environment, the authors focused on the task of joining the first half to what I found was the lost second half for Darwinian theory.

"Organisms do not simply adapt to previously existing, autonomous environments," they observed in a manifesto for the view of ourselves as active agents in the shaping of our destiny. Expressing what Darwin earlier showed in his construction of the invisibilized completion for his theory, we "create, destroy, modify, and internally transform aspects of the external world by [our] own life activities to make this environment."

Lewontin, Rose, and Kamin further showed how the concept of free will—which ever since Immanuel Kant has been central to the theory of morality—is not the illusion sociobiologists and biological determinists in general were tending to claim.

"Our brains, hands, and tongues have made us independent of many single major features of the external world," they observed of the human difference. "Our biology has made us into creatures who are constantly re-creating our own psychic and material environments, and whose individual lives are the

outcomes of an extraordinary multiplicity of intersecting causal pathways. Thus, it is our biology that makes us free."

Howard Gruber and Charles Darwin, Psychologist

The first book to begin to crack the marble of Darwin's tomb was Howard Gruber and Paul Barrett's *Darwin on Man.* Through psychologist Gruber's painstaking labor of many years, for the first time Darwin's stature as a social scientist became evident. Darwin the psychologist emerged and one could glimpse his fledgling sophistication as a systems scientist.

Particularly eye-opening was the attachment to their book of the Gruber-Barrett full text of Darwin's early notebooks. Unpublished for 132 years, this was the first time this startling new material became available to a reasonably wide readership. Jotted down by 28-year-old Darwin at the early high point for his creativity, in the white heat of thought just after he returned from the voyage of the Beagle, to most readers this has seemed no more than a jumble with a spark here and there. However, it was in Darwin's notes on moral evolution I found the key to unlock the door into the full Darwinian realm—both the ground-in-to-the-point-of-banality first half to his theory, and the invisible completing second half.

Gruber and Barrett's book did not move on to link the moral theory in the notebooks with Darwin's carefully expanded and extensive statement in *Descent*. Nor did it so much as hint that in this connection we are looking at the completion for his theory of evolution. But in retrospect can be seen two vital contributions to recovery of the rest of Darwin and liberation of the mind of our species.

One is the fact that if here, three quarters of the way through the 20th century, the rest and possibly the best of Darwin could still remain buried, the incredible power of the overriding paradigm still imprisoning all of science and all of society was starkly revealed. For despite the fact the points they made mirrored what Darwin was saying earlier, in none of these battlers for mind over matter did I find knowledge of the fact.

That is, in none of these champions for what they intuited was the significance of the real Darwinian revolution—in Huxley, Dobzansky, Montagu, Gould, Lewontin, Rose, Kamin, as well as Gruber and Barrett—did

I find evidence that any of them ever read, or if they had, that it had registered, the long bypassed sections of *Descent* I pulled together and first republished in *Darwin's Lost Theory.*

In other words, here among this group of obviously exceptionally wide read and knowledgeable scholars, is still further proof of the over-riding power of paradigm.

Gruber and Barrett's other contribution was in winning a National Book Award for their pioneering, thereby helping open the way for the first person in a century to do anything with the rest of Darwin with some chance for abiding impact.

Robert J. Richards and Darwin, Major Moral Theorist

Throughout the 20th century, in a veritable avalanche of books, it has seemed that surely scholars had probed and discovered and rediscovered everything of any importance whatsoever in Darwin—including, one is tempted to say, what kind of toothpaste or shoe polish he might have used. Yet, as I detail in Book II, in all of that century I could find only twelve books that in any way referred to Darwin's moral theory, only four of which revealed anything beyond the most superficial and peripheral recognition of it.

Other than Kropotkin's mainly out-of-print *Ethics*, in all of that century so badly in need of what Darwin labored so hard to give our species, Robert J. Richards' *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior,* first published in 1987, was the only book I could find that went into Darwin's moral theory in any depth, with fervent, real and respectful interest.

Richards was and is a psychologist and historian of science at the University of Chicago. His book was a masterwork of research exceeding even Gruber and Barrett's labors. It remains the indispensable source for understanding Darwin's moral theory in relation to the context of its times and to the evolution of evolution theory.

"Darwin expended considerable effort on a theory of moral evolution, because he judged the moral sense, or conscience, to be by far the most important distinguishing feature of human nature," Richards wrote.

"Darwin's method of approach had already been established during the

period of his great creative effort, from late summer of 1838 through spring of the next year... He now resurrected those early ideas, but altered, reformulated, and greatly refined them."

We learn of the impact on the teen-age Darwin of his long walks and talks with the Scotch moral philosopher Sir James Mackintosh. Widely overlooked, it can be seen these walks and talks with Mackintosh were of pivotal importance. For Mackintosh was the leading heir to the great heritage of the Scotch Enlightenment school of moral sense philosophers including David Hume, Francis Hutchinson, and Adam Smith.

This was the very same Adam Smith hailed as the father of capitalism today, whose *Theory of Moral Sentiments* and warning against the dangers of an amoral capitalism was doomed to be buried almost as effectively as the dangerous rest of Darwin. It was via those walks and talks with Mackintosh that the open, questing mind of the young Darwin became firmly grounded in the philosophy of the moral sense for which he was to provide the scientific grounding.

We further learn of the inspiration of the great moral philosopher Immanuel Kant on the formation of Darwin's concept of moral mind. In Richard's book, we follow the exploration of the moral sense by Darwin's friend and rival Herbert Spencer, who actually coined the disastrous phrase Darwin regretted ever using, "survival of the fittest." We see the passing of the baton from Darwin to Romanes, from the dying Romanes to his student Lloyd Morgan, and from Morgan, in crossing the Atlantic to America, to Henry Osborne, William James, and J.M.Baldwin in the first attempt to break out of the prison of a by necessity reductionist biology with a mindful measure and theory of evolution capable of transforming our world. It is a magnificent story magnificently told. But even here in Richards we find the ambiguity that rises from the difficulty of trying to see Darwin through the clean and polished lens of the old paradigm during a time of struggle with the still clouded lens of a new and better paradigm.

I will return to this problem in Book II. For an important part of the story of the exploration of evolution in the 20th century are the surprising contradictions among those who mainly filled the role of either revolutionary or counter-revolutionary.

That is, it is important to understand the ins and outs of this surrealistic

crunch point in scientific revolution where, in keeping with the dynamics for chaos and complexity theory, one must struggle to make sense of the Alice in Wonderland mind that emerges during the transition period between the old and the new.

Out of Chaos a New Home in the Universe

The new finally broke through with the hole poked into the pseudoDarwinian paradigm by chaos and complexity theory—to which I'll return in Book III. Very much aligned to the revolutionaries, a series of reports and books broke through to capture the attention of the media; then soon, considering the complexity of the subject, the interest of a surprisingly wide range of readers.

Of the break through books, publication in 1995 of biophysicist Stuart Kauffman's *At Home in the Universe* was particularly attuned to the call for change. A year earlier, similarly keying to the challenge posed by Monod and the frightful idea of being left "alone in the universe," Princeton physicist John Wheeler came out with a book with the same title.

Wheeler's book was about the older work that comes to life in retroflection—the world of the great physicists of an early time with whom he had worked as himself considered a major contributor among them. But with what by now was a long tradition of the yearning and work of others behind him, out of Kauffman's book burst a veritable rhapsody of discoveries, terms and claims for the very old becoming vividly new.

One of the most compelling insights for the new I'd found first clearly articulated in the lost Darwin. Thereafter, William James and Kropotkin had, in excitement, immediately grasped and resonated to it. It was what was uncovered and named by Ilya Prigogine, Francisco Varela, and Vilmos Csanyi, and advanced by Ralph Abraham and Karl Pribram among those I knew and worked with in our General Evolution Research Group. It was among systems scientists ecstatically and perhaps best described in 1980 by Eric Jantsch in *The Self-Organizing Universe*, then in 1988 touched on by Fritjof Capra in *Uncommon Wisdom.*

More than merely another idea or theory, it was by now the universally observable fact of the capacity within every organism, including ourselves, to

have a voice in the shaping of our future—this, rather than being solely the puppet of forces larger than ourselves. It was the variation part of Natural Selection and Variation come to life in a powerful new burst of self-recognition. It was the so-called principle of *self-organizing* at work at every level where creativity was in motion throughout the world of humanity and the universe.

To what came before him Kauffman added a rare grounding in physics, biology, and the healing orientation of medicine. In both mathematics and intensive experiments he demonstrated how in evolution, at a certain level of repetition for a seemingly random process, an inbuilt order within the system takes over and shapes the future into a reasonably intelligible path.

He also refocused attention on the critical factor for the lost Darwin of moral evolution.

"Then can a heightened consciousness bring about a global ethic?" he asked. "I believe so. I believe, I hope correctly, that what I have sketched ... is true, points to a new vision of our co-creating reality, that it invites precisely an enhancement of our sense of spirituality, reverence, wonder, and responsibility, and can form the basis of a trans-national mythic structure for an emerging global civilization.

"To ever succeed, this new view needs to be soft spoken. You see, we can say, here is reality, is it not worthy of stunned wonder? What more could we want of a God? Yes, we give up a God who intervenes on our behalf. We give up heaven and hell. But we gain ourselves, responsibility, and maturity of spirit. I know that saying that ethics derives from evolution undercuts the authority of God as its source. But do we need such a God now? I think not. Nor do we need the spiritual wasteland that post-modernism has brought us...

"Life is valuable on its own, a wonder of emergence, evolution and creativity. Reality is truly stunning. So if you find this useful, let us go forth, as was said long ago, and invite consideration by others of this new vision of reality. With it, let us recreate spiritual community and membership. Let us go forth. Civilization needs to be changed."