

Introduction

*Gregory Bateson, the Urgency of Our Ecological Crisis
and the Possibility of “Grace”*

THIS BOOK OFFERS AN ACCESSIBLE INTRODUCTION to the work of a very important but inadequately known thinker of the twentieth century: Gregory Bateson. This great anthropologist, psychologist, cybernetician, student of animal communication, and ecologist has been neglected, largely *because* of his refusal to stay within the bounds of single disciplines. Scientist, philosopher, verging on theologian in his final years, this man was one of the finest thinkers of recent times. Less positively, his published output of 228 works is not easily accessible to those who have not had the time to study and develop insight into his thinking. Bateson has crucially important advice for us all as we confront escalating environmental problems. He believes it possible that we can recover “the grace” of realizing our interrelated *membership* of the community of living organisms on this planet. The route to this realization is via personal *engagement* with the more-than-rational processes of the natural world and of human art. Poetry, painting, dance, music, humor, metaphor, “the best of religion,” and “natural history” all offer to us the possibility of renewed access to the wisdom that we, as a species, have gained during millions of years of evolution—now overlaid and rendered unavailable to us by our “self-conscious purposiveness.” This is one of Bateson’s key phrases, often repeated. By it he means that we have learned, through the centuries, to identify single goals for our purposes. We have come to think of causality as a series of straight-line, “knock-on” effects that can be managed by a single human “self,” in its own personal interests—without allowing for all the interpenetrating influences and effects flowing between each of us and the wider living world. A key aspect of Bateson’s thought is his insistence that we must actively engage with the processes of the living world and with all the forms of human art. Engagement, he claims, yields understanding that can lead to wise action. By recognizing beauty in the world we can identify sane and health-giving possibilities for action. “Fourth-generation atheist” Bateson came, in his

final years, to see the total complex of “mental” systems that *is* the living world as, itself, “the sacred.”

My task is to help you, reader, to penetrate Bateson’s unique thought and to uncover the rare beauty of his writing. This book builds on his seminal ideas, particularly on his highly original understanding of all the systems of the living natural world as being “minds” or “mental processes.” Such “minds,” claims Bateson, may not be conscious but they function as the informational drivers of the living systems that exist at every scale from the tiny components of biological “cells” to the great ecosystems and the vast processes of evolution. My hope is to extend Bateson’s thinking toward further insights, enabling wiser relationships between humans and the “more-than-human world” (Abram 1997). Note that I use the term “world” in its full sense as inclusive of all that exists in the universe.

The book is, intentionally, a project in the *application* of philosophical thinking. Bateson himself was always hesitant about recommending action. Nevertheless, our present situation of ecological imbalance requires radical changes in human attitudes and early action. It may soon be too late for us to act. Those who have the time and ability to research, study, and clarify the real situation of humanity in its environment today have a duty to take the results of that study out into the world. This book is intended to promote action.

It is now a commonplace assertion that human industrial and military activity, the growth in population, deforestation, inorganic agricultural practices, and many forms of pollution are causing damage to the biosphere that is rendering the survival of the human and many other species doubtful. I am convinced by the evidence for such a view and will assume, throughout, that the threat to biospheric sustainability is real and that our need to find wiser ways of living is urgent.

ECOLOGICAL SIN AND THE GRACE OF WISDOM

As early as the year 2000, the *Independent* newspaper ran a story (Lean 2000)¹ that summarized the then recent *State of the World Report* from the Worldwatch Institute. The headline was “The Seas Keep Rising but the World Looks Away.” The human-interest angle was that “our ancestors are emerging from the ice with a message for us: Earth is getting warmer.” Human bodies frozen into the ice twelve thousand years ago were coming to light because, all over the world, the ice was melting. In the Arctic the Greenland ice sheet (8 percent of the world’s ice) had lost thickness at three feet a year for the previous six years. The Arctic icecap

as a whole was shrinking by twenty-four thousand hectares per year. In 1970 it was an average of nine feet thick. By 2000 it was five feet thick. Forty percent of the Arctic sea ice had melted in less than thirty years. In the Antarctic the “great ice sheets”: the Larsen A, the Wordie, and the Prince Gustav shelves, no longer existed. The Larsen B and the Wilkins had lost one-seventh of their area in the previous eighteen months and would break up soon. The Pine Island glacier had retreated by 1.2 km per year for the previous four years, thinning by ten feet per year. That glacier is thought to be “the key” to the West Antarctic ice sheet, which, if melted, would raise sea levels by twenty feet worldwide. Nearly all of our nuclear power stations are sited near to present sea level.

All over the world the glaciers were smaller than at any time in the last 5000 years. Alpine and Caucasian glaciers had lost half their ice in the previous 100 to 150 years. Half of the Spanish glaciers had gone completely, as had two-thirds of those in Montana. In the Peruvian Andes the Quelccaya glacier was melting ten times as fast as it was in 1990, threatening the water supply of Lima’s ten million people. The melting of *land-based* ice is what causes sea level to rise, because floating ice fields already displace their own weight of water. Oceanic water itself expands with warming. Present sea rise is 10 cm to 25 cm over the last *one hundred* years, all over the world. Two Pacific Ocean islands have already submerged. The greater part of Bangladesh (population 138.5 million)² may go permanently underwater. The South American country of Honduras (6.7 million people) is similarly threatened. As ice melts, its heat-reflecting *albedo* effect is reduced and warming increased. It is thought that changes in ocean salinity (the ice is primarily *fresh* water) may cause the Gulf Stream to deflect, making Britain and Northwest Europe much colder. Worldwide, eight of the ten hottest years on record have occurred in the last decade. Storm damage in 1998 exceeded the whole of the 1980s.

The Kyoto Agreement about reducing greenhouse gases is still not ratified. The U.S. government refuses to ratify it because their 4 percent of the world’s people “need” to maintain their present lifestyle, producing 20 percent of the world’s carbon dioxide. A World Bank official told members of the Lancaster University Philosophy Department several years ago that climate change is expected to produce dramatically wetter weather with flooding in some areas, drought and severe water supply problems in others. Tens of millions of people will be displaced. Social, economic, and political conflicts are expected, as resources become scarce. Species extinctions may rise to fifty or one hundred times the natural rate. Impacts may produce positive feedback loops (the

“vicious-circle effect”) within twenty to forty years. Even stopping emissions now would not avert these effects. The leaders of commerce are convinced. Scientists are convinced. Industry and commerce are making plans for continuing profitability as the climate changes. Only governments are in denial and informed debate is little understood by their negotiators. A leaked report from the Organization for Economic Cooperation and Development³ states that the world has lost a further 10 percent of all forests since the 1992 Rio summit meetings. Carbon dioxide emissions are expected to rise by 18 percent in “rich” countries in the next eighteen years, and by 2020 (Wright 2002) we must expect extreme water shortages. Twenty-five billion tons of topsoil are being washed into the oceans from the American continent each year. We still have no safe method for disposing of our accumulating radioactive nuclear waste. The British are experimenting with genetically modified organisms in farm scale trials with no idea of the possible consequences. We are already seeing conflicts about oil supplies as internal American production diminishes (Berry 1999). Ervin Laszlo writes (2002, 18) that in the past fifty years humanity has used up more natural resources than were consumed in the whole of our previous history.

As early as 1992, Margaret Thatcher’s environmental adviser Sir Crispin Tickell was warning that world population was likely to reach eight billion by 2025, that conflicts over water supplies, particularly in the Nile, Jordan, Euphrates, and Ob river regions are probable, and that “vast increases in the number of refugees and widespread risks to human health” will be caused (Tickell 1992). A new report from the World Watch Institute⁴ warns of falling water tables in countries worldwide. We are pumping out the Earth’s reserves of ground water from depths exceeding half a mile in order to feed additional billions of people. The report warns of the imminent failure of supplies and urges population control as the only feasible strategy.

There are industrial hazards: Soviet scientists have recently declared nearly 1.4 million square miles of their land to be “an ecological disaster area.” The nuclear fallout from the Chernobyl accident was fifty times that of Hiroshima. Worldwide loss of species can already be compared to the great extinctions of Permian and Cretaceous times (Tickell 1992, 65–76). The World Development Movement⁵ claims that increasing injustice to humans makes wars more likely. Eight international companies earn more than half the world’s population, 1.3 billion people, 20 percent of the world’s population live on just one dollar a day. For every dollar of aid given to poor countries, multinational companies take *sixty-six cents* of profit back out. The three richest men in the world are

wealthier than the poorest forty-eight countries combined. The richest 20 percent of the world's people account for 86 percent of global consumption (Laszlo 2002, 23). *Twelve* million children die from poverty-related disease annually—*twenty-three* every minute of the day and night. The policies of Western governments and companies are perpetuating poverty and profiting from it. In spite of all this, human population is increasing at the rate of 77,000,000 per year and 97 percent of this increase is taking place in the “poor countries” (Laszlo 2002, 23). This means that *every day* there are over 210,000 more people. Every hour, nearly 8800 more people who need land, food, and water. The most recent evidence of our global emergency suggests that world conditions are changing even more rapidly that we earlier feared.

And we call ourselves intelligent.

What are we doing? How can we respond? While we discuss and theorize, our world is getting worse. We *are* in crisis. Crises imply the possibility and the need for choices to be made. We need to change societal understanding (and action) radically and soon. We need to find the *means* of making those changes.

I believe that Gregory Bateson's understanding of the underlying cause of our crisis is important. He saw ecological destruction as being caused by human linear-conscious purposefulness and by our conviction that we are somehow separate from the rest of the living world. He came to see “conscious purpose” as aberrant mind, a kind of madness. Bateson believed that we have lost the use of our wider, deeper, more-than-conscious minds. We have lost some forms of wisdom that the other animals still have. Bateson saw our present ecological situation as comparable to the cargo cults, which he and others had studied in Melanesia where people believed that great riches would be brought to them if they were trustful enough to destroy all their own tools, boats, crops, and other means of survival. We are destroying the living systems of Earth, our present means of survival, in expectation of a wonderful and magical future to be brought to us by technology and science (M. C. Bateson 1991, 71–103).

Bateson also saw religious process as providing a way by which, in the past, we have corrected our tendency toward single-minded selfish purposefulness. Completing Gregory's final unfinished book *Angels Fear* (Bateson and Bateson 1988, 200), Mary Catherine Bateson wrote that “he wants us to ‘believe in’ the sacred, the integrated fabric of mental process that envelops all our lives—and the principle way that he knows that has allowed men and women to approach this . . . has been through religious traditions, vast, interconnected metaphorical systems. Without

such metaphors for meditation, as correctives for the errors of human language and recent science, it seems that we have the capacity to be wrong in rather creative ways—so wrong that this world we cannot understand may become one in which we cannot live.”

There is much in the above paragraph that must be unpacked and discussed in the process of this book. In fact, Bateson’s core theme is encapsulated here. It will become evident that the thinking of Gregory Bateson is particularly important for us at this time. In the new introduction to the recent republication of *Steps to an Ecology of Mind*, Mary Catherine writes:

Gregory was haunted in his last years by a sense of urgency, a sense that the narrow definition of human purposes, reinforced by technology, would lead to irreversible disasters, and that only a better epistemology could save us. Certainly irreversibilities lie all around us; many, like global warming, the decay of the ozone layer, and the movement of poisons through global food chains, are set on courses it is too late to change although we have yet to suffer their full effect. . . . But the habits of mind that he described can be seen in every newspaper or newscast: the search for short-term solutions that worsen the problem over time (often by mirroring it, such as violence used to oppose violence); the focus on individual persons or organisms or even species, seen in isolation; the tendency to let technological possibility or economic indicators replace reflection; the effort to maximize single variables (like profit) rather than optimizing the relationship among a complex set of variables. The essays in this volume and in the publications that followed it suggest a trajectory. What is important is to begin to move with that trajectory, to empathize with it, in order to move beyond it, so the next step becomes obvious. Scholarly analysis of the work of Gregory Bateson is only a fraction of the task, for analysis has always been a means of control. It is more important now to respond.” (Bateson 2000, xiv).

I believe, (with Bateson in his later years) that we need an essentially “religious” response to our ecological crisis. Bateson offers us a truth about the unified nature of the living world, a truth that we can still use to enable in ourselves a response, a *responsibility*, a *capacity* to be responsible. He offers us a way of getting our epistemology right, of knowing our unity with the world. He saw, rightly, that it is *our ways of knowing* that have to be amended. If we can learn to see the sacred as no more (or

less) than the totality of the living systems of the world, worthy of respect, reverence, and love, there will be an ecological role for humans still.

For me, Bateson's understanding is transformative. I now recognize as mind-like, as *mind-full* processes, the living systems that are my family, my marriage, my friendships, my caring relationships with some nonhuman animals, my interacting with the ecosystems that sustain me, my internal processes in health and illness. I have looked at the supposedly chance processes in wider society and in the larger apparently inorganic world. I have recognized the working of purpose, the existence of supportive tendencies, the fact that I am a member of a beneficent community of minds of many scales. I know myself to be included as a member of the world, the universe. I feel I have value as a part of something greater than my "self" and as the guardian of smaller processes that are within me. I recognize that this is religious language and that I am saying something very like "In the great hand of God I stand."⁶ Like Bateson, I have come to understand that this bonding to the larger and largest processes of the physical world, this recognition that the mental nature of the world is clearly evidenced from the "going on" of process among material things, is a deeply religious matter. We should not dismiss it as bad philosophy or bad science because of that.

CHAPTER OUTLINE

Chapter 2 offers an introduction to Bateson the man: his life experience, the intellectual climate in which he developed, the influences of earlier thinkers on him, and his own interaction with thinkers in several disciplines. In chapter 3, I explain Bateson's understanding of "mind" and mental process as immanent throughout the living world, supporting his contention that this theory offers a resolution of the "mind-body problem" and many other dualities. There follows detailed examination of Bateson's criteria for such "mental" natural systems, his emphasis on a hierarchy of relationships within and between systems, his key example of evolution as an ongoing mental system and his cybernetic understanding of *information* as being the medium of the "thinking" within natural systems. I examine his claims about learning, creativity, pattern, aesthetic qualities, and metaphorical communication within such natural mental systems, and I suggest a way of understanding individuality within the complex of interdependencies.

Chapters 4 and 5 examine one possible path toward ecological wisdom. These chapters follow, chronologically and in some detail, Bateson's path of learning and insight as he came to see the aesthetic,

the beautiful, as both an indicator of ecological health and as something that we should all be engaged with. It is this engagement, he claims, which can offer us the “grace” of ecological wisdom. I support his claim that an understanding of mentality or “mind” as existing throughout the processes of the natural world enables and requires a view of this mental-material world as worthy of respect, awe, and reverence. The living world can be seen as sacred without any need for appeal to the *supernatural*. I extend Bateson’s understanding to further aspects of mental experiencing: emotions, feelings, compassion, and love.

Chapter 6 examines Bateson’s mature understanding of the links between beauty, ecosystemic health, artistic process, and the possibility of refinding the “grace” of reconnection between humanity and the rest of the living Earth. Bateson’s aesthetic insights are summarized, common aspects of our own experience are examined, and the ways in which we have become culturally separated from the daily experience of both human-produced aesthetic beauty and of the beauties of nature are noted. Bateson’s emerging conviction that natural beauty is symptomatic of systemic health is considered and the concept of “grace” is examined. There follows a consideration of the ways in which we may, through the “grace” conferred by engagement with beauty in all its forms, be reconnected to the matrix of natural relations within which we live. A section on Bateson’s understanding of wholeness, oneness, and monism (that is, of the essential unity of all living systems) follows and leads into a consideration of “engagement.” To give perspective and to situate Bateson’s thought within the context of aesthetic scholarship, an extended consideration of the work of a current aesthetician, Arnold Berleant, is offered. Bateson’s approach is contrasted and compared with Berleant’s work, and some possible criticisms of both thinkers are noted. Finally, it is suggested that Bateson produced an important and, in many ways, new ontology (that is, understanding of what is “*there*” in the world) of beauty and inclusion. This offers us a renewed awareness of interrelationship within the “sacred” world of living mental systems.

In chapter 7, it is shown that the nested and interrelated processes of the world can be seen as “the sacred,” an appropriate focus for “religious” attitudes. I assert, with Bateson, that the processes (ecosystemic, social, ideational, organic and personal) that form the seamless web of change in which we live are, indeed, “what some people mean by God” (Bateson 2000, 467). From all this I derive an ethic of “going with” the larger process and its purposes, even when such purposes are inscrutable. Such an understanding offers release from the current endemic sense of alienation and meaninglessness. It offers a sense of membership and

inclusion in what *is* a single interrelated universal process. It offers a resolution of the fact/value dichotomy and a basis for enlightened attitudes toward other natural beings and for wiser relationships between humans and their world.

Finally, in chapter 8, I suggest, from the system of ethics and the understanding of the sacred nature of our ecological relationships, some possibilities for appropriate human action.

Bateson wrote in the first chapter of *Angels Fear* (1988, 10–11), after alluding to “the vast and often beautiful mystical literature of Hinduism, Buddhism, Taoism, and Christianity”: “I claim no originality, only a certain timeliness. It cannot now be wrong to contribute to this vast literature. I claim not uniqueness but membership of a small minority who believe that there are strong and clear arguments for the *necessity* of the sacred, and that these arguments have their base in improved science and in the obvious. I believe that these arguments are important.”

The following poem (and warning) was written by Bateson in October 1978, after the completion of *Mind and Nature*.

The Manuscript

So there it is in words
 Precise
 And if you read between the lines
 You will find nothing there
 There should be nothing there
 For that is the discipline I ask
 Not more, not less

Not the world as it is
 Nor ought to be—
 Only the precision
 The skeleton of truth
 I do not dabble in emotion
 Hint at implications
 Evoke the ghosts of old forgotten creeds

All that is for the preacher
 The hypnotist, therapist and missionary
 They will come after me
 And use the little that I said

To bait more traps
 For those who cannot bear
 The lonely
 Skeleton
 of Truth⁷

In her introduction to Bateson's last book, *Angels Fear* (1988, 8–9), co-authored by Gregory and his daughter Mary Catherine Bateson, the latter wrote: "In this book he approached a set of questions that were implicit in his work over a very long period . . . the question of 'the sacred' . . . of 'the aesthetic,' and the question of 'consciousness.' This was a constellation of issues which, for Gregory, needed to be addressed in order to arrive at a theory of action in the living world, a cybernetic ethics. Imagining himself at the moment of completion, Gregory wrote, 'It was still necessary to study the resulting sequences and to state in words the nature of their music.' This is necessary still, and can in some measure be attempted, for the implicit waits to be discovered, like a still-unstated theorem in geometry, hidden within the axioms. Between the lines? Perhaps. For Gregory did not have time to make sure the words were complete."

I will heed Bateson's warning. If I must "read between the lines" I will do so with respect. Certainly, it is necessary to interpret what many of the lines actually mean. I will respect the loneliness of the "skeleton of truth" Bateson left to us. I am no therapist; though I would gladly see the healing of this planet and of the relationships between humans and the living world we increasingly endanger. I am no missionary; but I hope that my reading of Bateson may enable, for many people, a new awareness of the sacred nature of our living ecology.

Stewart Brand, meeting Bateson some seven years before his death, described his first impression (Brand 1974a, 13): "Six-foot five, disheveled . . . Bateson's presence is like that beetling Rodin sculpture of Balzac, only instead of fierce, completely benign. He looks at you critically, optimistically, as if you're going to say something good any minute now."⁸

I hope, with appropriate respect to the memory of a great man, that I am about to "say something good."