CHAPTER 14

MY GUARDIAN SPIRITS

My major social values originated with my parents, religion, and the great philosophers. Many professional mentors were and are very important to me. Ruth Patrick has been my continuing mentor for my entire professional career from 1948 to the present. Robert K. Enders of Swarthmore College encouraged an apprehensive returning veteran from World War II and continued to provide guidance throughout his life. David Wenrich chaired my MS and PhD committees and introduced me to Ruth Patrick. G. Evelyn Hutchinson introduced me to the joys of ecosystem-level thinking. Abel Wolman demonstrated the satisfaction that can be derived from combining theoretical and practical research. Otto Kinne encouraged my interest in eco-ethics and sustainability ethics, which is currently my major professional interest. I could name others, including my graduate students, who collectively comprise my guardian spirits. In life's defining moments and periods of severe stress, these people are a source of comfort and inspiration. I am well aware that my guardian spirits construct is almost certainly the result of the cumulative impact of each on my life. This realization does not diminish their value.

My spouse and companion Jean shared with me the peace that comes from association with natural (or naturalistic) systems. For over 60 years, we scheduled a daily association with nature. Even reviewers who made few comments urged that I say more about Jean. One reviewer suggested it would be especially important to give credit to those who made the careers of younger females possible, particularly since it was not typical for her to have her own career, even though, as a biochemist, she most certainly could have had one. I start with the dedication (reprinted with the kind permission of Professor Otto Kinne, Editor-in-Chief) to Jean in *Eco-Ethics and Sustainability Ethics* (Cairns 2003).

DEDICATION

This book is dedicated to Jean, the blithe spirit, who graces my life.

Jean enriched my life in so many ways that it would be difficult to enumerate them. However, one of the most important things is that she has helped me keep my sense of perspective. For 60 years she has called me 'Johnny,' but when she was about to give me an important message she prefaced it with 'Cairns.' If I happened to be complaining about the obstacles to the completion of a manuscript, she would say 'Cairns, stop whining and finish the manuscript!' When I related to her some environmental degradation that I found shocking and that perturbed me greatly, she would say 'Look at that hummingbird on that beautiful flower.'

An important help with my perspective was the continual reminder that resting on one's laurels at any age was simply not a good idea. In June 2001, our daughter Karen was telling Jean about an award that had been given to me. Even on medication to alleviate Alzheimers and Parkinsons, Jean rose to the occasion: 'Big deal,' she said. Her comments through the years were not said disparagingly, but lovingly, so that I would not be diverted from the research presently being carried out. It was acceptable to feel joy in awards and to express satisfaction that one's peers thought the work fit to receive recognition; it was not acceptable to stop or even markedly reduce the research that was a major source of joy.

In contrast, when Jean married me, and even when I was courting her, her support was unwavering, firm, and unconditional. My undergraduate grades were barely adequate, and I had no idea whatsoever of the type of career that would interest me on a sustained basis. Then WWII came, interrupted my education, and put me at some risk.

Jean's firm support and faith in me never wavered after the war when my applications to a long list of undergraduate academic institutions were rejected. When I was accepted at

Swarthmore College and had to commute to classes (usually a total of two or more hours daily), and then study until late at night, she never complained. Graduate school came next and further postponement of having our own house and the other amenities that most of our peers were enjoying. In short, when my academic prospects were dim, Jean supported me in every way.

When I became enthralled with studying ecotoxicology, and, ultimately, restoration of damaged ecosystems (which, in the middle of the last century, were both far from mainstream science), her comments were invariably supportive. Acquiring academic recognition took a long time, as it should, but Jean's stance remained constant throughout this period. When the awards and honors finally began to arrive, her stance immediately shifted so that I would not let them go to my head. Never once did I feel she was unappreciative or was neglecting any of my achievements, but, rather, she was furnishing the type of partnership I needed at each stage of my career. She never criticized or complained when some of my peers got recognition that I had not yet received, and, when recognition did come, she made sure that it did not distort my perspective.

When I thought it would be interesting to accept an unpaid summer position offered me at Rocky Mountain Biological Laboratory by my former advisor Robert Enders (food and lodging were provided), she was enthusiastic. She did not complain that the unpaid leave from the Academy of Natural Sciences reduced our annual income by nearly 20%.

In 1966 I resigned from a secure position at the Academy of Natural Sciences to venture into University teaching and research, a move which took us from family and friends in Philadelphia. Not only did Jean not complain, she encouraged me to do this. When research space failed to materialize at the University of Kansas, Jean neither reproached me for not demanding the space promised nor did she complain about leaving Pennsylvania for an unviable situation.

Another aspect of Jean's enrichment of my life deserves comparable attention. As is the case with most people who carry out research of any kind, I tended to get very intense, sometimes at what would have been unacceptable levels had Jean not diverted me. She is the one who made it attractive to exercise daily by walking in the woods, folk dancing, swimming, and the like. For 57 years, she ensured that we frequently got to classical music concerts, plays, lectures on subjects that I might easily have passed up, and a variety of other activities.

Jean enlarged my perspective on life. She connected me to the wider world and showed me its beauty. It is all too easy to become narrow in vision when one lives within academia, seeing only the geography and landscape of this specialized land, with its own culture, and speaking only its language. Jean has been my link to everything beyond this horizon: to people, other cultures, and other languages. Her interests covered a variety of topics—music, books, social and political activism, social justice issues. One of Jean’s greatest gifts was her perception of the natural world. For her, there was a language with which to converse with clouds, birds, animals, mosses, fungi, and even rocks. She shared with me her personal gift of direct experience with nature. The sense of being ‘completed’ by her is the loss I feel most deeply now.

Sometime in early 1998, I began to realize that her mental function was significantly impaired. Her memory loss had been noticeable during 1997 to our children and was cause for concern to them. However, because the changes were incremental, and possibly because of denial, I did not realize that these were more than usual for a normal aging process. When it was clear that Jean had dementia and concomitantly less energy, I naturally stayed with her all the time. For a while, I could leave her at our home on Bishop Road in Blacksburg, Virginia, where we had lived for approximately 30 years. Since the area was isolated and difficult to access, I eventually moved us to a townhouse in a retirement village. Shortly after the move, a neighbor reported that, when I went into my office on campus, Jean would wander around the parking lot looking for me. From that day on, in spring of 2000, I took her with me to the office and decreased the number of times that I went. Fortunately, my colleagues Darla Donald and Bobbie Niederlehner had worked with me for such a long time and had so much sympathy with my situation that the work flow continued unabated, although I would have sacrificed writing if Jean had needed more attention.

The writing provided peace of mind for me for a long time, because I could dictate or write while Jean dozed. Now that Jean is in the nursing home in the same retirement village, I have more time for writing. Jean and I have been together for so long (approximately 61 years) that I can accurately predict what she would say to me in almost every situation. In addition, the habits I acquired under her tutelage, such as music, plays, and the like, remain.

Writing has been a continual source of serenity. Such concentration, while not precisely the same as meditation, serves the same purpose. Writing was a solace available at all times and, together with the other forms of support, really essential to maintaining my emotional stability.

Sometimes the veil of Jean's dementia lifts fleetingly, and I glimpse the blithe spirit I love and cherish. With her eyes twinkling, Jean will deliver one sentence with her usual wry humor before the veil of dementia descends. The humor is always in context and both funny and loving. The effort that this touch with reality requires is known only to Jean. For me, seeing her as she was for most of our lives is an unexpected joy because it happens with no warning. Even when this return to me disappears completely, the bond between our spirits will be strong because it was forged over so many years. At present, for all too brief flashes, I glimpse what we shared and feel a surge of joy.

I am well aware that even the relationship we now have is temporary. But what a joy that Jean shared so much of her life with me!

I was able to give the book to Jean, although I am not clear whether she realized what it was. Jean died February 21, 2005, and six months later I am still adjusting to a world without her. For most of her life, she worked to improve the lives of others. In her eulogy for Jean, Reverend Christine Brownlie noted that, despite trappings of a husband, children, and home, Jean was definitely not the domestic type. She was an activist in many causes: civil rights, fair housing, integration, the League of Women Voters, Head Start, banning the bomb, and many others. Our houses were all small and easily cared for, and our meals were simple but nutritious. We had few material possessions, but lived almost entirely close to nature. We never took a typical vacation—how could we surpass the splendor of field stations? We took "mini-vacation" whenever the opportunity arose. We were partners in the sense that each of us encouraged the other to live a creative life. The children enjoyed the opportunities to live in small, academic communities with children their own ages, and, even when they were on their own, they often visited us at field stations.

In retrospect, the few material possessions, living for most of our lives in the woods with no grass to mow, and simple but cozy houses provided much time for creative activities that we enjoyed. Despite our personal interests, we spend much time together.

Looking at the world through Jean's eyes transformed the world into a magic place. She took delight in tiny alpine plants that one had to examine from a few inches away or using a magnifying glass. View from the tops of mountains far from most people was well worth the long strenuous hikes. I have a picture of Jean taking part in my Elderhostel class encirclement of a large tree in the mountains not far from Highlands, North Carolina—her face was alive with joy! This was not a rare occasion; this was the way Jean saw the world.

When Alzheimers had a major impact on Jean, I had looked at the world through her eyes and so I could point things out to her. Now that she is gone, I can see the world through her eyes, but not as vividly. I was blessed to have a companion and guardian spirit who filled my life with joy. Our children shared this joy. I am pained to witness the damage done to natural systems in the last half of the 20th century, which is increasing in the 21st century. I can barely control the panic I feel from humankind's assault on nature. Since humans are a part of nature and are not apart from it, severe consequences from the assault will be heaped on human society.

In the United States, the term *pro-life* invariably refers to protecting a human fetus. To me, pro-life refers to all life, not just one life of one species. Since we know that individual organisms die, it is the life force (i.e., evolutionary processes) that is sacred, although individual organisms deserve respect and compassion. Robust evidence indicates that the life force has survived five great extinctions, so it is likely to survive the sixth, although individual species (e.g., *Homo sapiens*) may not. Since anthropocentric alterations of the biosphere (e.g., greenhouse gases) are increasing at a rate unprecedented in human history, the probability is increasing that one or more ecological tipping points will be reached in the 21st century (e.g., a major shift in global climate). While humankind may aspire to live sustainably, no assurance is forthcoming that it will do so. I am confident that my guardian spirits would be saddened by the disappearance of *Homo sapiens*. I am equally confident that they would rejoice in the continuation of the life force. When I am confronted by evidence of severe human disturbance of and damage to other life forms and their habitat, my guardian spirits comfort me. Earth and its sun may last another 15 billion years, during which a diverse array of other life forms should emerge.

Not until the beginning of the 21st century did my environmental panic level increase dramatically. Many effects of anthropogenic biospheric degradation, such as melting of glaciers and ice packs, appear to be driving many systems toward ecological tipping points at a rapid pace. Gone is the comforting illusion that humankind has ample time for the transition from unsustainable to sustainable practices. A new ecological equilibrium favorable to *Homo* sapiens will probably not be reached in Earth's biospheric life support system in a time span favorable to human society. Worse yet, the new biospheric equilibrium is unlikely to be as well suited to humankind as the one in which the species evolved. The new state could even be a hostile environment with greatly reduced natural capital and the ecosystem services that it provides. Of course, both natural capital and ecosystem services will be useful to some species, but not necessarily *Homo sapiens*.

Biospheric disequilibrium may even occur in my lifetime. Still, I feel it is imperative to make a continuing personal contribution to humankind's quest for sustainable use of the planet, and I am persuaded that my guardian spirits agree.

Positive factors are present: the Internet and organizations such as Eco-Ethics International Union provide both the means for rapid information exchange and the opportunity for the development of a global set of values (e.g., eco-ethics and sustainability ethics). Neither of these entities is under substantive pressure to conform to a particular political ideology as are many of the major sources of news. Arguably, the most important step is to acknowledge that, on a finite planet, neither resource consumption nor human population can increase exponentially forever. The United States and other wealthy nations cannot continue disproportionate use of the world's resources if the world's least fortunate nation-states are to be persuaded to join the quest for sustainable use of the planet.

The assault on science by political ideology has intensified in the 21st century. One of the most virulent, and successful, efforts to denigrate science and reason by political ideologies is repetition of charges such as scientific uncertainty. No matter how much additional evidence supports a hypothesis (e.g., greenhouse gases cause global warming), the repetition and type of charges remain constant. The academic community responds by elaborating on the evidence already accepted by mainstream science. This technique worked well for Adolph Hitler in Germany and Senator Joseph McCarthy in the US. Even though this method worked quite well short term, history documents the long-term consequences.

Human history has seen many centers of science—some in locations that seem unlikely in present times. Scientific "renewal" is merely the continuation of a struggle between science and ideology that has been continuous globally. Those societies that permit ideology to dominate science will ultimately collapse, and others, which revere scientific freedom, will become ascendant. In most of the world, scientific freedom is a tenuous proposition, but it somehow manages to survive. I hope that the antiscience trend has gone as far as it can go.

To believe that humankind can achieve sustainable use of the planet requires belief in the essential goodness of the majority of humans. The present state of the world could easily discourage people from supporting this view. However, the prospect of leaving an uninhabitable planet is so appalling that the thought may bring out the best in people. At present, however, global environmental literacy is not adequate to appreciate the consequences of unsustainable practices. Only two alternatives exist: (1) do nothing and hope for the best and (2) do everything possible to avoid major ecological tipping points that will result in biospheric disequilibrium. I choose the second alternative, and I am confident that my guardian spirits support this decision.

Reference

Cairns, J., Jr. 2003. Ethics in Science and Environmental Politics, ESEPBook 2, Part 1 at http://www.esep.de/journals/esep/esepbooks/CairnsESEPBook.pdf