

Preface

Our lives are chronologically linear, but are experientially complex. As Søren Kierkegaard said, "Life must be lived forward, but can only be understood backwards." What we are and how we think are products of countless collisions with the influences of others: parents, teachers, writers, artists and colleagues. Of course, we are not like mere gas molecules entrapped in a vessel, colliding randomly with one another. Rather, our histories produce an accumulated trajectory – an intentional trajectory that is knocked about, diverted, altered in velocity and direction by encounters with new influences. As with ecological systems, initial conditions are critical, and geography and culture are constraints, but history still matters to our life courses. This book results from the interaction of two ecologists who have different starting times and geographies, as well as career trajectories pointing in different directions.

I (Reiners) was born at the end of the depression, remember WWII, comfortably surfed the front of the baby-boomer wave throughout life, was nurtured in a small liberal arts college, and followed an ecological career through plant ecology, ecosystem ecology, biogeochemistry, and spatial applications. In retrospect, my career seems to have been an evolutionary path along which ecological perspectives were continually undergoing modification. The fact that I moved around, from Illinois to New Jersey to Minnesota to New Hampshire to Wyoming, and that I worked in Alaska and Costa Rica was probably important to my continual reframing of ecological concepts in different ways. At the same time, my attitudes toward objectivity were naïve, my thoughts on motivation unfocused, and understanding of philosophy weak – possibly conventional traits of my generation. There is no way I could have contributed to a book like this without having encountered Jeff Lockwood – an extraordinarily collision of trajectories.

I (Lockwood) am a baby boomer, remember the Vietnam War, attended a small, technical institution followed by a big state university, and traced an academic career that took me from animal physiology, to insect behavior, to grasshopper ecology and management, and finally to the arts and humanities. My professional life has been spent at the University of Wyoming, but I've moved around a great deal in intellectual terms. I began with behavioral ecology, explored complexity models of insect population dynamics, and developed new methods – with dramatically fewer economic and environmental costs – for killing grasshoppers. But I always felt a pull toward the interface of the natural sciences and humanities and finally metamorphosed into my current split appointment between the department of philosophy and the MFA program in creative writing. My peripatetic scholarship is such that I lacked the ecological depth to pull off a book of this sort, which made my pleasant collision with Bill Reiners essential to what you are now holding.

How we came to write this book is described in Chapter 1. We were both having trouble rationalizing ecology as a discipline from a philosophical point of view and turned to a graduate seminar as a means to thrash things out. That seminar opened up the extent and nature of philosophical problems that were troubling us, but it took us several years to formulate the positions we present in this book.

The sequential organization of this book is represented by the chapter titles. We explain how we came to address these issues in Chapter 1. We describe our perception of the philosophical confusion that pervades ecology in Chapter 2 and explore the causes in Chapter 3. We begin to put ecology into a philosophical framework with an imaginary “walk in the park” in Chapter 4. This philosophical framework is expanded and filled-in, and a philosophy of constrained perspectivism developed in Chapters 5 through 9. Chapter 10 presents our interpretation of philosophical positions found in the practices of ecology historically and into the present, with examples from our own personal experiences. We suggest that for the most part, we ecologists don't have much of an idea of what we are about with respect to philosophy and that this has unfortunate consequences for us.

What to do about this? We individually can pull ourselves up by our bootstraps, but it is more critical to consider the philosophical implications of how and what we teach in ecology. It is our successor generations with which we should be most concerned. We address the implicit philosophies underpinning our teaching of undergraduates and graduate students in Chapter 11, making suggestions for how this might be

improved, and what implications improvement might have for those of us well along in our careers. Finally, in Chapter 12, we return to how we ecologists function as scientists with or without much concern for guiding philosophies, and how we are not, in fact, so dysfunctional for all of our confusion. We hope that readers will at least be amused, if not accepting, of our mythic image of the ecologist as not Sir Isaac Newton, but as Joe the Plumber – a resourceful handyman.

Inasmuch as we espouse a pragmatic and pluralistic constrained perspectivism, we expect and accept that readers may find this book disturbing and unacceptable. We see that as our fate, but nevertheless hope that this may be a contribution toward the maturation of our discipline, if not in this generation, in the next.