

Introduction

HISTORY HAS ITS turning points, the moments when pressures for change that have built over centuries finally burst through and reshape the world. Sometimes those moments can be sensed as they happen, but such moments of vision are rare; more often, the turning point can be traced only after the fact, when the failure of old patterns can no longer be ignored. In the gap between the coming of change and the moment of its recognition, old certainties fall to pieces and cannot be replaced, and plans for the future go awry because the future the planners have in mind fails to arrive.

A gap of this kind has become one of the most significant social facts of our time. The scale of that gap can be measured by the distance between the 21st century our society expected and the one that it got. Only a few decades ago, a galaxy of scientific pundits and media figures regaled an eager public with images of what the year 2000 would be like. There would be bases on the moon and a big wheel-shaped space station in orbit, with scheduled flights arriving there from Cape Canaveral twice a day. Undersea cities would dot the continental shelves and harvest the supposedly limitless resources of the sea. Clothing would be disposable and food would be synthesized on demand; fusion reactors would turn out limitless cheap power, geodesic domes would sprout everywhere and commuters would travel from lush suburbs to climate-controlled cities by helicopter instead of by car.

These fantasies were taken very seriously at the time — seriously enough to guide business decisions. In Seattle, where the 1962 World's Fair celebrated a 21st century full of space travel and triumphant technology as though it had already arrived, one forward-thinking builder in those years topped a new parking garage with a helipad and control tower, in hopes of getting a jump on the competition. As far as I know, no helicopter ever landed there, and the garage with its forlorn heliport was torn down during the housing boom of the late 1990s to make room for a block of singularly ugly condos. By that time, the rest of the future portrayed in the 1960s had suffered the same fate.

Behind this fact lay a simple but profound change in the foundations of the industrial world. Until the end of the 1960s, the biggest problem with energy resources in North America was how to keep the market from being drowned in too much oil. An obscure bureaucratic body, the Texas Railway Commission, had to restrict petroleum production in the United States to keep prices above production costs. Those days are gone, and not even the reckless overproduction that crashed the price of oil in the 1980s brought them back. The same sea change transformed the world's relationship to other natural resources, and to the natural cycles our civilization uses to absorb its wastes. In the 1980s and 1990s, the world's industrial nations used every economic, political and military lever they had to force down the prices of raw materials and the costs of pollution from their 1970s peaks, but the easy certainties of an earlier time had vanished.

Today the modern industrial economy seems as permanent as any human reality can be. That sense of permanence, though, is an illusion. The nonrenewable resources that went into building industrial civilization were vast, but they were never limitless. Their limits are now coming within sight, along with the equally strict limits of the Earth's ability to absorb the pollutants we dump into the skies, the seas and the land. In the aftermath of the 1960s, the industrial

world could potentially have responded to the arrival of the limits of growth by launching a transition toward a sustainable future. For intensely human reasons, though, that was not done in time to make a difference.

The consequences of that failure to act have been examined in many recent books.¹ Their message is a sobering one: what remains of the Earth's natural resources and its capacity to absorb pollution will not allow us to continue living much longer the way we live today, much less provide for the endless progress nearly all today's political and economic ideologies expect. In place of the bright new world most of us anticipate, we are headed at a breakneck pace toward a future of narrowing options, dwindling resources and faltering technology, in which many of today's fondest dreams will face foreclosure.

This is the territory that my first book on the future, *The Long Descent*, set out to explore. That book studied the histories of other civilizations that had outrun their resource base, and used the parallels to map the trajectory our own future will most likely take: a ragged process of decline and fall unfolding over one to three centuries, ending in a dark age like the ones that followed the twilight of so many other civilizations. Many of the larger questions raised by that analysis, though, were left unanswered. It is one thing to recognize that today's industrial world is headed toward that difficult destiny. It is quite another to grasp what such a future implies, and to glimpse what the world will be like in the wake of our civilization's fall.

These more ambitious and quite possibly more foolhardy themes are the focus of this book. The reasons why the industrial age is ending and the immediate steps that can be taken by individuals and communities to cushion the descent are discussed in *The Long Descent* and many other books on the same topic.² Here, I will discuss these points only where they relate to the wider project of this book. Instead, *The Ecotechnic Future* will sketch the arc of history and

human evolution in which the crisis of our time finds its context, and suggest actions that can be taken to make a better world not only for ourselves, but for our grandchildren's grandchildren.

The first section of this book, "Orientations," puts the decline and fall of the industrial age in the context of human ecology. Chapter One, "Beyond the Limits," traces out the historical arc of industrial society, explaining why the opportunity for a controlled transition to sustainability has already been missed, and what this implies for the future. Chapter Two, "The Way of Succession," shows how succession — a common ecological process — helps explain historical change, and shows that the end of the industrial age marks an early stage in a process leading in unexpected directions. Chapter Three, "A Short History of the Future," outlines the major forces already shaping the world our descendants will inherit, and Chapter Four, "Toward the Ecotechnic Age," suggests that succession may point toward the rise, centuries from now, of a new form of human civilization — an ecotechnic society — that will support a relatively complex technology while sustaining rich and sustainable relations with the rest of the biosphere.

The second section, "Resources," outlines the core elements of human society, and explores how individuals and communities can act now to help midwife a future ecotechnic age. Following a first chapter titled "Preparations," which explores potentials for constructive action and challenges some common assumptions about the future, seven thematic chapters — "Food," "Home," "Work," "Energy," "Community," "Culture," and "Science" — examine the opportunities offered by these basic elements of human life, and build a case for pursuing diversity and experimentation as central strategies for the long transition to the ecotechnic age. The third and final section, "Possibilities," contains a single chapter, "The Ecotechnic Promise," that places the emergence of the ecotechnic age in the context of human history as a whole, and explores some of the questions of meaning that give history its importance.

As always, I have benefited from the help of many minds in writing this book. Many of the ideas presented here were first aired in essays posted on my blog, “The Archdruid Report,” and the comments and criticisms received from readers of the blog have had a crucial role in shaping the argument of this book; I owe thanks to all those who participated. I would also like to thank Sharon Astyk, Rob Hopkins, Bill Kauth and Stuart Staniford for dialogues that helped me refine my ideas. In the contemporary Druid community, my spiritual home and the foundation of many of my ideas, I owe particular thanks to Philip Carr-Gomm, Gordon Cooper, Siani Overstreet, Tully Reill and all the members of the public e-mail forum of the Ancient Order of Druids in America (AODA), the Druid order I head. Last to be named, but first in her influence on my thought and my life, is my wife Sara. My gratitude goes out to all.