

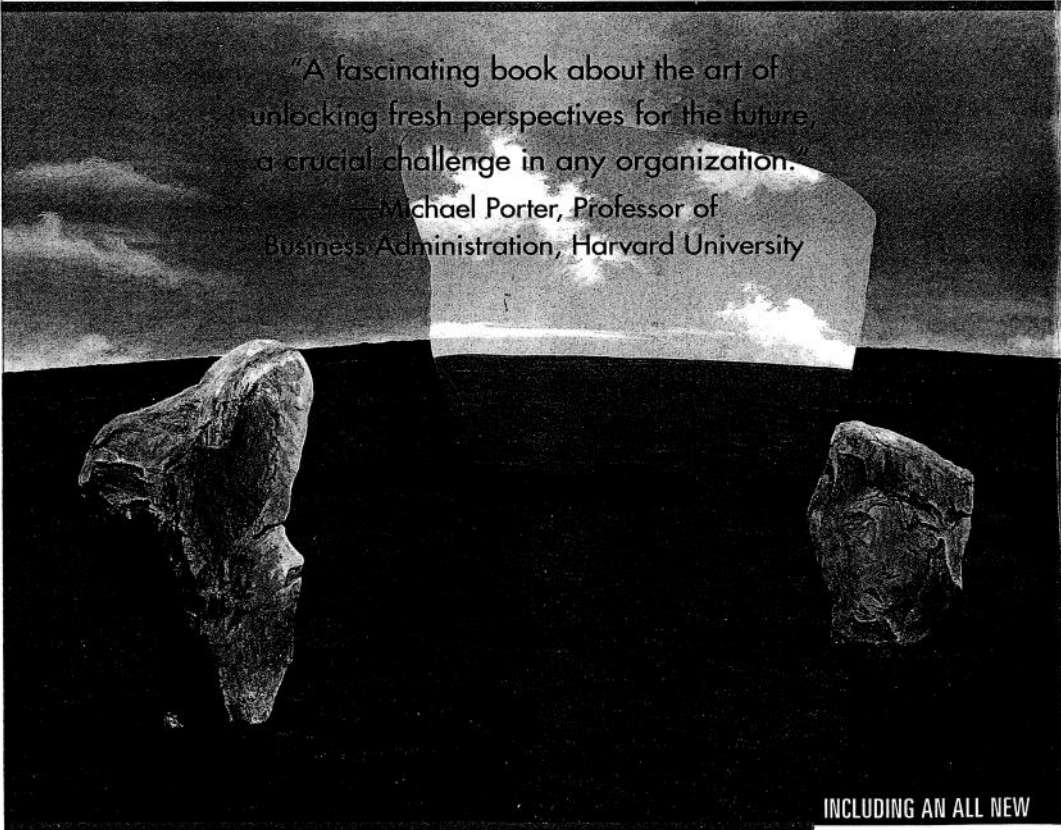
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The Art of the Long View

Planning for the Future in an Uncertain World

"A fascinating book about the art of
unlocking fresh perspectives for the future,
a crucial challenge in any organization."

—Michael Porter, Professor of
Business Administration, Harvard University



INCLUDING AN ALL NEW
USER'S GUIDE

Peter Schwartz.

PRESIDENT, GLOBAL BUSINESS NETWORK

THE PATHFINDER'S TALE

This book is about freedom. In western societies, people are ostensibly free, but they feel constrained by the unpredictability of events. Every year, every decade, we are surprised by social or technological upheavals that appear suddenly, surprisingly. How can people, businesses, and institutions plan for the future when they do not know what tomorrow will bring? A deep and realistic confidence is built on insight into the possible outcomes of our choices. In this unpredictable context, freedom is the ability to act both with confidence and a full knowledge of uncertainty.

To act with confidence, one must be willing to look ahead and consider uncertainties: "What challenges could the world present me? How might others respond to my actions?" Rather than asking such questions, too many people react to uncertainty with denial. They take an unconsciously deterministic view of events. They take it for granted that some things just can't and won't happen; for example, "oil prices won't collapse," or "the Cold War can't ever end." Not having tried to foresee surprising events, they are at a loss for ways to act when upheaval continues. They create blind spots for themselves.

Scenarios are a tool for helping us to take a long view in a world of great uncertainty. The name comes from the theatrical term "scenario"—the script for a film or play. Scenarios are stories about the way the world might turn out tomorrow, stories that can help us recognize and adapt to changing aspects of our present environment. They form a method for articulating the different pathways that might exist for you tomorrow.

row, and finding your appropriate movements down each of those possible paths. Scenario planning is about making choices *today* with an understanding of how they might turn out.

In this context the precise definition of "scenario" is: a tool for ordering one's perceptions about alternative future environments in which one's decisions might be played out. Alternatively: a set of organized ways for us to dream effectively about our own future. Concretely, they resemble a set of stories, either written out or often spoken. However, these stories are built around carefully constructed "plots" that make the significant elements of the world scene stand out boldly. This approach is more a disciplined way of thinking than a formal methodology.

I've used scenarios with some of the world's largest businesses and government institutions, in starting a small business, and I've used them to make personal decisions about my diet and health. You could use scenarios to plan a small business, to choose an education, to look for a job, to judge an investment, or even to contemplate marriage. Often, scenarios can help people make better decisions—usually difficult decisions—that they would otherwise miss or deny.

Consider, for example, the crisis overtaking the advertising industry. Beginning in the early 1980s, anyone could have looked ahead and seen the growing popularity of new communication technologies: cable TV, videocassettes, and computer-based media such as electronic mail and the Internet. This technological change was an irrevocable force, certain to shock the media industries by draining audiences—and then ad revenues—from traditional network television. No one could say exactly when the shock would come, or how it would play out, but it was clear that, within a matter of years, ad agencies would find their business either

radically changed, or severely diminished—as had the U.S. steel industry in the early eighties, for example.

While the changes were certain, their exact form was unclear. How strong would be the influence of companies such as Disney, which refused to allow advertising on prerecorded video tapes? Which consumers would be most willing to use new forms of media first? What regulatory pressures would prevent telephone companies from entering the business of distributing film and television by wire? What forms could advertising take ten years hence, and how could agencies make money at it? What would be the effect of suddenly popular new communications media, such as fax machines? A set of scenarios would have described the range of worlds that might emerge by looking carefully at important elements of the world in the early 1980s.

In 1987, the shock began to hit. Ad agency profits began to decline, people found themselves laid off, and more and more agencies had to haggle over fees with their clients. Most ad people assumed the crisis was temporary; that it would be followed by a new status quo. Today, ad agencies are in yet deeper economic trouble, still hoping for a turnaround, and still refusing to look at the opportunities—as well as the pitfalls—in the rise of new technology. I know this because, along with several other people, I began work in the late 1980s on a set of scenarios about the effects of new technologies on the media business. We found clients from every conceivable segment: a broadcast network, a telephone company, a movie production studio, and a consumer products company that places major advertisements. All but one of the advertising agencies we invited to join us in this study of its own future weren't interested. To judge from our conversations with them, they are afraid of what they might learn, as if the cost of ignorance were smaller.

Scenarios are *not* predictions. It is simply not possible to predict the future with certainty. An old Arab proverb says that, "he who predicts the future lies even if he tells the truth." Rather, scenarios are vehicles for helping people learn. Unlike traditional business forecasting or market research, they present alternative images of the future; they do not merely extrapolate the trends of the present. One common trend, for instance, is the U.S. birthrate. In the early 1970s, it hovered around 3 million births per year; forecasters at the U.S. Census Bureau projected that this "trend" would continue forever. Schools, which had been rushed into construction during the baby boom of the fifties and early sixties, were now closed down and sold. Policymakers did not consider that the birthrate might rise again suddenly. But a scenario might have considered the likelihood that original baby boom children, reaching their late thirties, would suddenly have children of their own. In 1979, the U.S. birthrate began to rise; it is now over the 4 million per annum of the fifties. Demographers also failed to anticipate that immigration would accelerate. To keep up with demand, the state of California (which had been closing schools in the late 1970s) must build a classroom every day for the next seven years.

Often, managers prefer the illusion of certainty to understanding risks and realities. If the forecaster fails in his task, how can the manager be blamed? But in the long run, this denial of uncertainty sets the stage for surprises, shattering the manager's confidence in his or her ability to look ahead. Scenarios allow a manager to say, "I am prepared for whatever happens." *It is this ability to act with a knowledgeable sense of risk and reward that separates both the business executive and the wise individual from a bureaucrat or a gambler.*

The Explorations of Pierre Wack

Scenarios first emerged following World War II, as a method for military planning. The U.S. Air Force tried to imagine what its opponents might do, and to prepare alternative strategies. In the 1960s, Herman Kahn, who had been part of the Air Force effort, refined scenarios as a tool for business prognostication. He became America's top futurist, predicting the inevitability of growth and prosperity. But scenarios reached a new dimension in the early 1970s, with the work of Pierre Wack, who was a planner in the London offices of Royal Dutch/Shell, the international oil enterprise, in a newly formed department called Group Planning.

Pierre and other planners at Royal Dutch/Shell (notably his colleague Ted Newland) were looking for events that might affect the price of oil, which had been more or less steady since World War II. Oil was, in fact, seen as a strategic commodity; consuming nations would do what they could to keep the price low, since the prosperity of their economies depended on oil. But there were several significant events in the air. First, the United States was beginning to exhaust its oil reserves. Meanwhile, American demand for oil was steadily rising. And the emerging Organization of Petroleum Exporting Countries was showing signs of flexing its political muscle. Most of these countries were Islamic, and they bitterly resented Western support of Israel after the 1967 six-day Arab-Israeli war.

Looking closely at the situation, Pierre and Ted realized that Arabs *could* demand much higher prices for their oil. There was every reason that they *would*. The only uncertainty was when. One could not know for

sure, but it seemed likely to happen before 1975, when old oil price agreements were due to be renegotiated. They wrote up two sets of scenarios—each a complete set of stories about the future, with tables of projected price figures. One story presented the conventional wisdom at Royal Dutch/Shell: somehow, the oil price would stay stable. In order for that to happen, a miracle would have to occur; new oil fields, for instance, might have to appear in non-Arab countries. The second scenario looked at the more plausible future—an oil price crisis sparked by OPEC. Shell's directors listened carefully as Pierre presented these two scenarios. The directors understood the implications: they realized that they might have to change their business drastically.

Pierre waited for a change in behavior at Royal Dutch/Shell; but no change in behavior came. That's when he developed his breakthrough: scenarios, as he later put it, should be "more than water on a stone." To be truly effective, they had to "change our managers' view of reality."

In this new type of scenario, there were no more simple tales of possible futures. Instead, Pierre described the full ramifications of possible oil price shocks. He tried to make people feel those shocks. "Prepare!" he told oil refiners and marketers. "You are about to become a low-growth industry." He warned the drillers and explorers who sought new oil to get ready for the possibility that OPEC countries would take over their oil fields. Most importantly, Pierre vividly pointed to the forces in the world, and what sorts of influences those forces had to have. He helped managers imagine the decisions they might have to make as a result.

And he was just in time. In October 1973, after the "Yom Kippur" war in the Middle East, there was an oil price shock. The "energy crisis" burst upon the world. Of the major oil companies, only Shell was prepared

emotionally for the change. The company's executives responded quickly. During the following years, Shell's fortunes rose. From one of the weaker of the "Seven Sisters," the seven largest global oil companies, it became one of the two largest and, arguably, the most profitable. Pierre was no longer concerned with prognosis; his concern was the mind-set of decision-makers. It was no accident that his 1985 articles on scenarios in the *Harvard Business Review* were titled, "The Gentle Art of Reperceiving," rather than "How to Predict the Future." To operate in an uncertain world, people needed to be able to *reperceive*—to question their assumptions about the way the world works, so that they could see the world more clearly. The purpose of scenarios is to help yourself change your view of reality—to match it up more closely with reality as it is, and reality as it is going to be.

The end result, however, is not an accurate picture of tomorrow, but better decisions about the future. The planner and the executive are partners in taking a long view. Thus, while Pierre Wack's seminal role is at the heart of this story, it is thoughtful and farsighted Shell executives who invited him into that role in the first place, provided him with the resources he needed, and paid him the compliment of listening to him and taking him seriously. Surrounding Pierre was an exceptionally able team, including Ted Newland and Napier Collins, who were critical to the success of the scenario process. In this book I will focus more on the role of those whose day-to-day activities lead them to spend time taking a long view. The real value comes from the interaction with those who must decide and act.

Pierre Wack was not interested in predicting the future. His goal was the liberation of people's insights. His methods were the inspiration for the art of the long view.

The Personal Future

I have been a professional builder and user of scenarios since the early 1970s, when I began working as a futurist for a California think tank called Stanford Research Institute (now called SRI International). When Pierre Wack first came to visit SRI in 1975, I was a practitioner of the "Herman Kahn" school. I had not yet thought about changing mind-sets or perceiving the world. Nonetheless, I knew Pierre by reputation: he was the man who had anticipated the oil price crisis, when apparently nobody else had. He was in charge of thinking about the future at one of the largest companies in the world.

At Shell, Pierre had come to believe that if you wanted to see the future you could not go to conventional sources of information. Everyone else would know them as well and thus you would have no unique advantage. You had to seek out truly unusual people who had their finger on the pulse of change, who could see significant but surprising forces for change. These people would be found in very different walks of life, all over the world. He had come to SRI at the invitation of two such "remarkable" people—Willis Harman, who had started the futures group at SRI and had been pioneering more intuitive approaches to thinking ahead, and Arnold Mitchell, who was in the process of developing the SRI Values and Lifestyles Program, a project for classifying segments of the public according to deeper characteristics than simply age and location.

Pierre came into my office after Willis mentioned a study we had done for the Environmental Protection Agency—on the future of environmental issues. Pierre was a mysterious, elusive Frenchman, almost oriental

in appearance. I talked with him for about twenty minutes, describing my work with scenarios; we were still just describing possible futures and had not made the leap to influencing decision-makers' mind-sets. Nonetheless, a few days later, I received a telex from London: "Would you leave SRI for two years and join our team at Shell?" I demurred—one of the few decisions in my life that I've regretted. But I gradually began to work with him, performing studies for Shell, learning the art and method of Pierre's approach.

In 1982, I was offered another opportunity to join Royal Dutch/Shell's Group Planning—this time, as Pierre's replacement. He was retiring. I would be working instead with Arie de Geus, the coordinator of Group Planning, who was pursuing his own set of ideas about organizational learning. I spent five years at Shell; then, in 1987, I took the plunge as an entrepreneur starting, with a few friends, a new style of organization called Global Business Network, which brings together people from many different fields to help companies gain insight into the future. This book is based upon what I learned along the way about how to take the long view.

In the early 1970s, the most significant question a futurist could answer (I felt) involved a political vision: "What is a realistic goal for a better future?" The conventional political answers to this question when I first asked it, in the early 1970s, seemed implausible or undesirable. The right offered wealth at a high social price; a small proportion of the population could live at a very high standard, while the rest of the world's environment deteriorated. The left promised a future of forced equality, planned and managed by "experts." But even before communism collapsed in Eastern Europe, it was possible to see that central planning would

fail to meet human spiritual and psychological needs, let alone physical needs.

There is a hunger for another set of visions of a possible society. We know that prosperity is not inevitable: the economic mistakes of the late sixties and seventies led to the slow growth and volatility that followed. Moreover, as environmental problems have grown in seriousness, people have also become increasingly aware of the long-term costs of short-term wealth. Concerns about drugs and crime are the inevitable outcome of failing to meet the needs of society's most desperate people. The celebrated collapse of communism and the end of the post-war political order have left a void which could be filled, perhaps, by a major war.

I know many people who are deeply pessimistic about the future; even people who are well known and financially secure, people with loving families, people who live in the wealthiest countries in the world. To them, the future of the world has taken the image of Manila, a truly unlivable city today: crowded, poor, rife with crime and abandoned hope. But I am personally optimistic: I believe that a better political vision is emerging. Scenarios help make that possible; for one thing, they help people keep their visions of the future realistic. For another, they permit everyone to envision his or her own. I will not describe my future to you in this book; I will show you how to see yours.

For in the end, every scenario is personal. I have been mulling over the findings about a "human growth hormone"—a drug which, as reported in the *New York Times* on July 7, 1990, appears to reverse the effects of aging in people past middle age. The following day, the *Times* ran an editorial: "This is not the fountain of youth," it said, in effect. "It's not that big a deal." The *Times* had written a similar editorial back in October 1903, criticizing early efforts to build heavier-than-air

flying machines. The technology, they said, was theoretically impossible. Two months later, the Wright Brothers launched their plane at Kitty Hawk.

If this growth hormone works without major side effects, it could have dramatic global effects. Consider, for instance, the demographic effect: suppose the average United States life span changes from 72 to 100. We have already seen that amount of life span increase—30 years—since the turn of the twentieth century. Now the life span ceiling might rise to 150. There would be large numbers of people at 110, fewer at 120, and an equivalent number of 100-year-olds to those who are 70 today.

It sounds like science fiction, but I take the idea of the growth hormone seriously because I have followed news about genetic engineering since the early 1980s; this news report fits well with early intimations I saw that such a hormone could exist. Nonetheless, I do not say, even to myself, that such a hormone *will* exist. I am willing to admit only that it *could*—and that it would be wise to think about its ramifications in advance. The implications are profound. Population forecasts would be immediately made wrong; demographic projections depend on the birthrate and on average life spans (the death rate). If those assumptions are off by 30 percent, it could mean a population growth curve rising exponentially from previous projections. If the hormone extends the childbearing age for women, it could dramatically increase the birthrate as well.

If the hormone appears first in wealthy countries, those that use more natural resources, it could accelerate environmental disaster. Conversely, it could increase pressure for environmental quality. The long-term consequences of the greenhouse effect would be a problem not just for the next generation, but for ourselves. We would be our own posterity. People will want better health, because the hormone does not elim-

inate vulnerability to disease, and they will now care about making their livers, their lungs, and their hearts last longer. Few will want to spend their last fifty years in a wheelchair. Pressure to cure Alzheimer's disease will increase. The existence of the growth hormone will spur some people to investigate long-term health insurance; they'll need to know where to get it if the drug becomes available.

But the most important effects of the growth hormone, for me, concern my own life. My wife Cathleen and I, both in our forties, recently had our first child. Amid our joy, there's a small sadness: "When my son is 15, I'll be 59; when he's 20, I'll be 64." But if I knew I would live to 120, being 60 would seem comparatively young. "When my son's 60, I'll be 104. Big deal!"

Many policymakers would dismiss the growth hormone as a source of idle speculation. They could easily be caught unawares by its effects, as they were by the danger of global warming, which was first brought to public attention in the early 1970s. Global warming is another issue that takes its meaning from the context of your own life. If you're the president of an automobile or energy company, it might mean dramatic extra expenses, and equally dramatic marketing and research opportunities. If you're a student, it could mean different choices in what form of education to pursue. If you're starting a family, it could mean choosing a different community to live in.

I don't mean to suggest that you spend all your waking hours considering arcane possibilities. The trick is finding those possibilities to consider which are significant. As Paul Valéry suggested (in a 1944 essay), the unpredictability of the world has made this sort of practice an imperative, even in daily life:

Unpredictability in every field is the result of the conquest of the whole of the present world by scien-

tific power. This invasion by active knowledge tends to transform man's environment and man himself—to what extent, with what risks, what deviations from the basic conditions of existence and of the preservation of life we simply do not know. Life has become, in short, the object of an experiment of which we can say only one thing—that it tends to estrange us more and more from what we were, or what we think we are, and that it is leading us . . . we do not know, and can by no means imagine, where.

Not just our livelihoods, but our souls are endangered—unless we learn to distinguish the significant aspects of the future. The scenario method works in this respect. It is specifically based on our own personal urgencies (or on a company's institutional urgencies). It uses our individual needs as a filter. But unlike Valéry my experience says that it is possible to study and imagine where we may be headed. By imagining where we are going, we reduce this complexity, this unpredictability which (as Valéry saw) encroaches upon our lives.

THE SMITH & HAWKEN STORY: THE PROCESS OF SCENARIO-BUILDING

Starting a small business, particularly an innovative one, involves most of the same critical long-term questions as starting a new venture in a large company. Though scenarios have been used mostly by huge companies such as Shell and AT&T, small businesses are even more vulnerable to the kinds of surprises and uncertainties that often overwhelm the plans of giants. What will future customers want? What will happen to costs, to technology, to distribution systems, and so on. Beginning in 1977 I was involved with a few friends who were starting a small business. Working together as a team we used scenarios to think about how the business environment might develop for a fledgling mail-order garden tool company such as Smith & Hawken.

The business began with a real need: better garden tools. The company actually had its roots in a nonprofit organization, Ecology Action, led by John Jeavons. In the United States, they were actively promoting an old European method of organic gardening called the French Intensive Method. This method involved deep and hard digging, but poorly made American tools tended to break easily under the stress. Fortunately, Allen Chadwicke, the Englishman who had introduced the method to Ecology Action, also knew that in his home country, a land of serious gardeners, you could find good tools from a well-established toolmaker known as Bulldog Tools. But how should they make them available in the United States? Ecology Action, as a nonprofit organization, was not set up to become a garden tool importer and retailer. An earlier commer-

THE SMITH & HAWKEN STORY

cial venture in Ohio with Bulldog Tools had already failed.

Fortunately, a close friend, Paul Hawken, was on the board of Ecology Action. He agreed, somewhat reluctantly, to start a business to import and sell the tools in the United States. Paul quickly drew in our friend Dave Smith, the manager of a local food cooperative in Menlo Park, California. Paul had a varied background: he had founded the Erewhon natural foods distribution company, and subsequently written a best-selling book, *The Magic of Findhorn*, about a remarkable commune in the north of Scotland. Paul and I were on the board of the Portola Institute together, where he had helped another nonprofit with a successful business. Paul had also worked with us at SRI International, helping to write scenarios.

A small group of us added our money to the money Paul invested and I went off to England with a \$25,000 check. Claringdon Forge, which made tools for Bulldog, is located in Wigan, one of the old British industrial centers. I toured the place. The fellow who made the forks was working on the same forge his father had worked, as had his grandfather before him, during the Industrial Revolution. The fellow who selected the wood for the handles hit the white American ash rods on a block of wood and listened to the sound. He had been doing that for nearly fifty years. He had been breaking in his successor for the past ten years. I went to the head of their export business, put our check on the table, and said we were willing to pay in advance and that if we could sell the first shipment, we wanted the North American rights. He told me that two other people had tried the same scheme and failed because they did not know how to market such high-priced products in the United States, but neither of them had offered to pay in advance. So he took us up on the offer.

Smith & Hawken received the first container of tools, drew up a modest catalogue, and sold most everything. The second catalogue was bigger and more beautiful; the third won design awards. And the company took off. Smith & Hawken sold two hundred thousand dollars the first year, reached a million dollars in annual sales within three years, and grew to 10 million dollars annually within five years.

During the formative stages of Smith & Hawken, Paul and I were engaged in an intensive discussion on what the scenarios we were developing might tell us about the future of a small mail-order high-quality garden tool business. In the late seventies, a time of great economic turbulence, we were seeing a very high level of uncertainty. What would make sense for Smith & Hawken in any of the wide range of possibilities five or ten years in the future? Having begun the business it now became incumbent upon us to think more deeply about where we were really headed.

We had one main thing to investigate: the likeliest human needs during the 1980s and 1990s. Just gathering the background data for such a question would have required exhaustive amounts of reading: everything from economic market projections to daily newspaper reports. Fortunately, I had asked some of the same questions a few years earlier, in scenarios for the Weyerhaeuser Lumber company. They, too, were thinking about entering potential new businesses. We had noticed several intriguing trends: for one thing, more consumers were demanding higher-quality goods and services. Products with planned obsolescence built in—American-made appliances, for instance—were suffering from rapidly dropping sales.

These new customers were, by and large, baby boom customers—Americans who had come of age in the late 1960s and early 1970s. In the mid-seventies Paul and I could be sure of their numbers because all

the adults of the eighties and nineties had already been born (allowing for some uncertainty due to immigration). We, of course, were members of the same group. We had an intuitive feel for their needs and desires. We assumed that the uniqueness of that group's tastes would remain, only grow and mature. It would be the major factor behind the success of any business we started. But there were many things we couldn't know for sure. For instance, we did not know what policies a Republican presidential administration would institute. Nor did we know the future of the global economy.

The Smith & Hawken Scenarios

Scenarios often (but not always) seem to fall into three groups: more of the same, but better; worse (decay and depression); and different but better (fundamental change). The Weyerhaeuser scenarios had fit that pattern. There were three very different possible images of the American economy in the 1980s:

- One image was a world of high economic growth and increasing wealth, in which young people (the maturing baby boom) made a lot of money, bought houses, and spent money on those houses. It was a world in which consumption and materialism were driving forces. Social problems would emerge, but governments and businesses would always be able to hire experts with the right technologies to solve them; meanwhile, individuals would act primarily for themselves. We called this the "Official Future." Instinctively, we felt it was unlikely. Back then, our friends assumed that some form of collapse was imminent. They saw Volkswagen Beetles as the cars of the imme-

diate future—not BMWs. Nonetheless, we considered this future carefully, because one always has to ask the question: “What if the mainstream assumptions and plans turn out to be correct?”

- In the depression scenarios, the economy went down instead of up. This world would be marked by a continuation of the serious economic troubles of the 1970s—and worse. We imagined an underlying plot in which the 1970s were symptomatic of a far greater period of decay. Prosperity would gradually decline, evolving into poverty. Growth would be very low or negative. Famine would develop in the Third World. Environmental crises would loom. Oil prices would rise endlessly. Natural resources, such as minerals and forests, would become scarce as the planet reached and surpassed its natural limits to human population and consumption. Thus, we used the depression scenario as a tool for thinking about surviving in hard times.

- The third scenario was built around the idea of a fundamental social change—a shift in values that would amount to a profound transformation of Western culture. Ideas had begun to circulate about living more simply and environmentally benignly, about holistic medicine and natural foods, about pursuing inner growth rather than material possessions, and about striving for some kind of planetary consciousness. Although what we called the “inner-directed” portion of the population was small, its values appeared to have potential for spreading quickly through the wider public—especially the second half of the baby boom, which was just then coming of age. In this scenario, economic growth would not be as dynamic as that of the Official Future, but it would not matter. Quality of life, not quantity of goods, would be emphasized. “Right livelihood” would be more important than status symbols.

It was essential to look at the hypothetical worlds described by these scenarios from as many angles as possible. If the BMW was the car of the Official Future, and VW bugs (or old Chevy vans) represented depression transportation, then the transformation car would be a Honda. A Honda isn't cheap; it's even luxurious in some ways. But it is small, benign, efficient, and affordable, especially if you plan on keeping the car for a decade or more. In the depression scenario, used-car lots and do-it-yourself car repair would be good businesses. In the official scenario, it would be wise to invest in Mercedes dealerships. In the transformation scenario, for which Berkeley and Cambridge were more accurate models than Wall Street, high-quality car maintenance was a logical thing to sell. So was the kind of top-notch backpacking and mountaineering equipment made by North Face and Patagonia.

We also saw that the differences between the scenarios made it very easy to pick the wrong business. In the prosperity scenario, the market for inexpensive, durable sandals would expand far less rapidly than in the transformation scenario. Macy's—the high middle—would be hurt in the depression scenario, but Nordstrom, Neiman-Marcus, and Wal-Mart would do well. (There would still be enough rich people to support a select group of high-end stores.) In the transformation scenario, traditional marketing and distribution services might find themselves pinched as people (and businesses) sought alternatives. For instance, a bank that required people to shuffle through its bureaucratic forms too much would suffer.

In those days, you could go into a local hardware store and buy a shovel or garden fork for ten or fifteen dollars. Bulldog Tools, when you factored in shipping and retailing costs, would have to sell for two or three times as much. They would, however, last much longer under heavy use than an ordinary implement. Another

critical question to ask was whether there would be a large enough number of people willing to pay that much for a product that was not a fancy power tool.

It was clear right away that in all three scenarios the baby boom was more of a factor than ever. A large number of people were entering the right age group to buy homes and set up households. Many would become amateur gardeners. We also began to realize that the other significant age group, those people reaching retirement age, would be natural customers for such a product, because gardening has traditionally been a popular retirement activity. Their numbers, like those of the baby boom members, were predetermined. We knew they would be plentiful.

In the first scenario—a prosperous economy—many people in the baby boom would indeed have the money. But would they buy houses? We guessed that life in the city would become increasingly difficult, businesses might leave urban areas, a second wave of babies would begin, and many people would be likely to buy suburban, semi-urban, or small-town property—the kinds of places where people have gardens. Even if the prosperity remained urban, its beneficiaries would be able to afford second homes in the country. All of which suggested a substantial increase in gardening, especially status gardening—having a beautiful garden to go along with a beautiful home. This phenomenon resonated with a trend we had been tracking, and which Paul would later describe in his book *The Next Economy*: the Europeanization of the American consumer. Paul meant that as the American economy developed and became more affluent the tastes of consumers would become more sophisticated and demanding. Indeed the economy as a whole was moving from a grounding in massive industry and energy to a basis in information, skills, and efficiency; people would buy fewer things, but of higher quality.

In the depression scenario, in a world where there were a lot of potential customers who were not making much money, it was reasonable to expect many of them to practice a more serious kind of gardening. They would garden to escape from a dreary world. If they used Jeavons's double-digging methods, they could produce very high yields in their backyards. Their gardens would recall Depression homesteads and the Victory gardens of World War II. Flannel shirts, overalls, and workboots rather than designer jeans characterized the market in this world.

But why would people buy expensive tools in hard times? We reached the conclusion that they could not afford the luxury of bad tools. A carpenter can't afford a shoddy hammer; a high-quality drill is no longer a luxury, but a necessity. If you are trying to bring a crop in, you don't want to go out and buy a new shovel every couple of months when the old one breaks. The imported garden tool business, while it would not do as well as it would under a prosperity scenario, was robust enough to survive even in a depression.

In the social transformation scenario, the society would not be fabulously wealthy, but a large number of people would be fairly well off. It would become important to find pastimes which were pleasant and contributed to a better world. People would literally seek to "cultivate their gardens," as Voltaire's *Candide* had put it. In this more contemplative world, gardening would again be an important activity. It would be an act of contemplation and healing. The garden would be a place for meditation, and a potential source of healthy food. Many people would grow their own produce because of concern about pesticides and they would use such organic methods as French Intensive. Again, good tools would be in order.

The new business would prosper the most, we felt, in the Official Future scenario. But in all the scenarios

we could think of, it was likely to survive and even succeed. And it fit other important criteria. Smith & Hawken should be a socially responsible business, one that contributed something useful and valuable to the world as well as generating profits. At the worst, it was clear that there wasn't much harm in it.

But there were more useful questions. The importance of one factor emerged from our scenario process: the U.S. balance of payments. Because we were contemplating an import business, the strength of the dollar was crucial. It was, in fact, directly linked to our profit margins. We looked at our scenarios again and asked whether a three- or four-dollar pound, which would wipe out our profits, was likely in any of them. We concluded that even a depression scenario would affect the United Kingdom, most likely, as much as the United States. An extremely weak dollar was unlikely; when the world is in trouble the dollar seems more secure to most countries than their own currency.

The next key question concerned the approach for selling the tools. Retail and direct mail were the only two serious options. When we looked at the retail business through the lens of the scenarios, we saw that it could mean serious problems. If oil prices went up even more (as we thought they would in the Official Future), it would affect the suburbs. Shopping malls would be awkward places. Overhead would be killing. In the depression scenario, the deterioration of cities could turn out to be a problem. And selling garden tools in the city didn't make a lot of sense. Though retail was seriously considered, the most important concern was the earlier failures in selling expensive garden tools, which led Smith & Hawken to believe that the ability to target possible customers via mail order was an important advantage.

But in all three scenarios, there were good reasons why mail order would do well. In the prosperous

world, people would be very busy and under enormous time pressure; mail order is a quick and easy way to shop. In the depression scenario, capital- and inventory-intensive retail operations would have a hard time surviving. And in the social transformation model, mail order makes more sense for the *Whole Earth Catalogue* community.

The Results

Reality turned out to be a combination of all three scenarios. On the surface, the 1980s played out fairly close to our prosperity future. The lifestyles of growth and wealth we imagined were very similar to the "yuppies" lifestyle of the 1980s. However, the Reagan era was also a time of large-scale homelessness, a deteriorating natural environment, and widespread social problems. Although the quest for financial security and material possessions became a dominant value, the quest for meaning did not disappear—and the need for some constraints on industrial excesses in response to ever-worsening environmental crises seemed to be growing. There were three scenarios because there were, in effect, three Americas. Smith & Hawken sold little to the depression America (if it had been more dominant, we might have sold more to it), but sold very well to the other two cultures.

As it turned out, over-the-counter retail business has done better than expected (though the experiences of such companies as The Sharper Image and Banana Republic suggest the serious pitfalls on that path). Smith & Hawken now has a small retail business which does very well in northern California. However, the company was not hurt by the mail-order decision; indeed, focusing on mail order allowed Smith & Hawken

to grow in a coherent fashion. The future of the dollar, on the other hand, did follow the expected path; during the 1980s, it strengthened substantially. Even now, the “weak” dollar is still stronger than most global currencies. Had we been wrong about the dollar, it *would* have hurt the business dramatically—but the scenario process had provided the means for testing our assumptions about it.

The Process of Scenarios

There is a wonderful book by novelist John Gardner called *The Art of Fiction*, in which he never describes exactly how to write a story. Rather, he says, here are some of the techniques you can use, some of the helpful things you can think about while writing, and some of the methods by which you can practice writing. But there is no prescription for an effective story. Scenarios are much the same.

Nonetheless, a scenario has a recognizable process. For the origins of Smith & Hawken the process went something like the following: we started by isolating the decision we wanted to make: “There was a clear need to meet, but what would lead to a successful business, where others had failed?” To investigate that issue required an investment in time and research, revisiting our earlier work, and our on-going scenario development work. As thinking and exploration continued, the questions were constantly refined. “What might happen to future customers and suppliers? How much could they afford and what would tools cost?”

In the meantime, we thought about the key factors that would affect decisions. Some of these were what scenario-planners call “predetermined elements,” factors we could count on. The size of the baby boom

population was certain. Much more uncertain was their range of economic opportunity: whether they could afford to buy houses and what kinds of homes they would want. Paul and I spent most of our time thinking about such factors, and trying to decide which factors were critical. Consumers’ values were deeply important, for example. While potential crime rates would have mattered more if we were considering careers in law enforcement, as prospective garden tool retailers, Smith & Hawken could afford mostly to ignore them except as they affected the quality of urban life.

Most significant was the future of the economy, so the focus was on that. And it was clear, from experience studying history, that several types of “plots” were possible. (Chapter 8 of this book describes those plot lines in detail, and how to apply them to specific situations.) Three emerged—the Official Future, the Depression, and the Transformative Economy.

All that, in a sense, was preparation. The true work took place in the last step, rehearsing the implications. How would such a business fare in each of the three worlds? That is also the most interesting part of the scenario process, the part that yields the most surprises. Is the balance of payments a real worry? Were there other aspects to the decision which, for one reason or another, had not been seen until now? Often, this step reveals interconnections that were not apparent before. Questions about the relative strength of the dollar and the pound are typical. You start looking at a small garden tool business and realize you have to care about what is happening in the global economy.

Scenario thinking is an art, not a science. But the basic steps are the same—whether for a small business, an individual, or a large corporation. Typically, you will find yourself moving through the scenario process several times—refining a decision, performing more re-