
THE ART OF THE LONG VIEW

PATHS TO STRATEGIC INSIGHT
FOR YOURSELF AND YOUR COMPANY

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CURRENCY



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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 tomor-

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

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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.

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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. Policy-makers 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

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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 prognostication; 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 Collyns, 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 re-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

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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

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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

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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-

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-

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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.