
Foreword: Preparing for the future

Wendell Bell

As we begin a new century we are being told that the human community faces many threats to its future survival and well-being. The possible problems are well known: a polluted environment; climate change; dwindling resources (including the coming scarcity of potable water); deadly local conflicts; religious fanaticism and intolerance; terrorism and violent aggression; continuing illiteracy (there are a billion illiterate people in the world today); unnecessary deaths of people from diseases we could prevent or cure (if we were to deliver modern methods of sanitation and health care to them); the production of weapons of terrible destructive capacity; the violation of human rights in many parts of the world (including the continuing subjugation of women); and increasing inequalities between the affluent and the poor both within and between countries. If we believe these problems are likely to occur, we can easily foresee a future of despair.

Yet that is not the whole story. For the human community is at the same time being told that it faces a dazzling array of opportunities. Such developments include: advances in technologies such as genetic engineering; nanotechnology that may usher in a new post-industrial revolution on a chip, allowing the manufacture of self-replicating 'knowbots' designed to produce goods and services and eliminate many scarcities; the development of new materials, smarter and more durable than those now available; fusion, solar and other energy technologies that will be nearly pollution free and that will be abundant; and information technologies that will transform human communication and make knowledge more accessible to all.

Other possible developments include greater worldwide cooperation, the guarantee of personal security and human rights, and the further spread of democratic participation in collective decision making. They include the suppression of local conflicts, the prevention of violence as a means of resolving disagreements, agreement on global ethics, global systems of governance whilst respecting autonomies of local groups, and a world court of justice. They include opportunities for education and meaningful work regardless of gender, age, race, ethnicity or nationality. And they include, among other things, accelerating exploration of space and, eventually, establishing human settlements on the moon, Mars and elsewhere. Considering these things, we can foresee a sustainable future of hope, individual satisfaction and social harmony.

What will the actual human future turn out to be? Will it be a living chaos of innumerable people consumed with fear and hate, intent on doing violent harm to others and heading toward an apocalyptic end? Or will it be, to the contrary, a win-win world of human cooperation and mutual achievement in which people are forgiving, compassionate, generous, competent and responsible, and in which people will enjoy long and peaceful lives? Or will the human future be something else? Of course, we do not know. But we do know this: whatever the future will be depends importantly on what we humans do. Human life is a series of decisions, the outcome of which will shape our future. Within limits, we create our own individual and collective futures by our acts of commission and omission.

Moreover, we also know that what humans do importantly depends on their images of the future. Such images shape and guide human decisions to act. They contain the world-views that people have, their definitions of the situation and the goals of human endeavor. Images of the future are among the causes of present behavior, as people either try to adapt to what they see coming (such as evacuating an area in advance of a forecast hurricane) or to act in ways that will construct the future that they want (like working to get good grades in secondary school in order to be admitted to a university of their choice). In fact, the fate of entire civilizations – as Frederik Polak has shown in his two-volume work *The Image of the Future* – may rest on whether or not dominant images of the future in a society are, on the one hand, positive and idealistic or, on the other, negative and pessimistic.

Also, what humans decide to do depends on their beliefs about what is possible. Possibilities for the future are real and exist in the present. Alternative possibilities for the future are often unseen or ignored by people as they go through the routines of their everyday lives. As a result, their future may turn out to be considerably less than it might otherwise have been because they fail to ferret out many of the real possibilities and choices that they have. People often limit their own futures, seldom trying anything new, or different, or better. Closing off many of their options, they condemn themselves to the limitations of the present. What the future will be, then, is partly conditional on people thinking creatively, on their ability to seek out and to make visible present possibilities for the future.

Additionally, how people decide to act depends not only on their beliefs about what is possible, but also on their beliefs about what is probable under different conditions. If there were no order and predictability in the world, then it would be impossible to plan and pursue projects to achieve goals. All would be chaos. But despite many random processes, the natural and social worlds are largely ordered in complex and detailed, but often knowable, ways. There are laws and rules, social conventions, cultural customs, habitual routines, and cause and effect. There are schedules for trains and planes, appointments with doctors and dentists, opening and closing times of businesses and institutions, announcements of concerts and elections, and daily and weekly cycles of repetitive events such as commuting between home and work. We know when and where a football game is scheduled to start, even if we do not know which team will win. Although results do not always

correspond to expectations, customs and schedules usually give us good guesses about future events. Time moves inexorably on and, under ordinary circumstances, the social order is a more or less stable network of expectations, social coordination and intersecting time trajectories of people, actions and events.

To behave responsibly, intelligently and competently, people need to know with some accuracy the likely future consequences of their own actions and those of others. Otherwise, how can they decide what to do to make their way in the world and achieve their goals? Put more generally, people need to know what the likely future will be, *if* things continue as they are. Or *if* conditions change in particular ways. Or *if* they or others behave in this way or in some other way.

Finally, the future depends on people's ability to judge preferable futures, to understand the human values and goals that define conceptions of the good society. Knowing what is possible and probable helps to guide our actions, but we need to know more. We also need to know what is desirable. Which futures should we want to achieve? Which futures should we try to avoid? To choose to act one way or another involves an evaluation of the desirability of alternative futures. Of all that is possible, what do we want? We may know that we can do X and that doing so will probably achieve Y. But do we really want to achieve Y? If not, then do not do X. In other words, we must ask what kind of future we want.

To find an answer requires moral analysis. In discourse with others, we must judge what is good and what is bad, for ourselves as individuals, for our families and the communities within which we live, for our nations and, indeed, for the entire human community. Some visions of the future, as we saw above, are totally undesirable. By contrast, others are highly desirable and lead to meaningful and satisfying lives. Moral judgments about preferable futures merge with beliefs about possibilities and probabilities and become part of our images of the future. Such images can become the foci of critical discourse, decision making and social action. When they do, they are powerful drivers of social change.

Possible, probable and preferable futures – these are among the important elements of futures thinking. They are what we need to know in order to design effective actions to create the future. We cannot make a conscious decision to act (or not to act) without futures thinking, because the consequences of any contemplated action (or inaction) occur in the future. How well people carry out the tasks of futures thinking largely determines the kind of future that they will have. Futures thinking that is competently done tends to produce beneficial results, while incompetent futures thinking tends to produce undesirable futures.

The interaction of the possible, probable and preferable makes the process of forecasting complicated, because, as people act on their predictions, they may influence events, making the predictions self-altering – either self-fulfilling or self-negating. Thus, many useful predictions are presumptively true at the time they are made, but turn out to be terminally false when the time of the prediction comes about, precisely because the prediction itself led to appropriate action that changed the predicted outcome. For example, the doctor tells you that you will probably develop lung cancer unless you stop smoking. You believe his prognosis and do not

want to have lung cancer. Thus, you stop smoking. As a result, you live on without ever getting the disease.

Sophisticated decision makers, of course, take into account this reflexive aspect of people's anticipations, just as they try to foresee the unintended and otherwise unanticipated consequences of all social action. Thus, it is much too simple to evaluate a prediction or a forecast by whether or not it turns out to be true or false in the end. A prediction, once made, can itself become a causal factor in any situation. If people use it as a basis for taking action that negates it, or that fulfills it, a presumptively true prediction may turn out to be terminally false, or a presumptively false prediction may turn out to be terminally true (for example, the classic case of the spread of *false* rumors that a bank will fail resulting in so many people withdrawing their money that it does fail).

Futures thinking, both among ordinary people and even among top government and business leaders as they decide great issues of the day, is often done poorly. The future, thus, is often strewn with shattered hopes and broken dreams. When confronted with complicated life choices, people tend to follow past routines blindly, to fall back on habitual reactions. They are often reluctant to step into the unknown and to explore alternative possibilities, a range of contingent probable outcomes, and their own values about what is really desirable. Even when they do give the future some detailed and conscious thought, they may process information inaccurately and may not reach valid interpretations. Clearly, people need better cognitive maps of the future and guidance about how to use them in order to navigate to the destinations of their choice.

Fortunately, during the last half century, futurists have constructed such maps and provided such guidance, which today are important parts of the field of futures studies. Futurists propose to help people manage the future so as to achieve the futures that they want. They do this by prospective thinking, by attempting to discover or invent, examine and evaluate, and propose possible, probable and preferable futures. They have created a theory of knowledge, a variety of research methods, and a body of systematic principles and empirical research findings to help people make more informed decisions and take more responsible and effective actions to achieve desirable futures.

Long before this new century began futurists felt that the year 2000 could be the marker of a coming sea change. Such works include Daniel Bell's *Toward the Year 2000*, Robert Jungk and Johan Galtung's *Mankind 2000*, and Herman Kahn and Anthony Wiener's *The Year 2000*, all published in the late 1960s. They followed earlier works by pioneering futurists such as Harrison Brown's *The Challenge of Man's Future*, Dennis Gabor's *Inventing the Future*, Bertrand de Jouvenel's *The Art of Conjecture*, and Frederik Polak's *The Image of the Future*.

By the 1970s, futures studies was up and running, the seventies being, perhaps, one of the most significant decades in their development to date. Alvin Toffler published his best-selling *Future Shock* in 1970, spreading the message of accelerating social changes engulfing the world and the need for futures thinking to deal with them. The Club of Rome brought forth *The Limits to Growth* by Donella

Meadows *et al.* in 1972, which, incredibly for a statistical report of computer simulations, sold more than 9 million copies in twenty-nine languages. Although *Limits* was as widely condemned as it was acclaimed, its environmentalist message was heard. Humans, concluded Meadows *et al.*, cannot go on indefinitely using the Earth's limited resources, dumping wastes in the Earth's air, land and oceans, and adding billions more people to the Earth's population without overshoot and collapse.

Daniel Bell, in 1973, produced *The Coming of Post-industrial Society: A Venture in Social Forecasting*, which became one of the most widely cited scholarly books of all time. In it, Bell describes the coming of a service economy, the transition to an information society and to a future-orientated time perspective, and the rise of universities, research organizations, and intellectual institutions as central to the coming society of the future.

Since the 1970s, tens of thousands of articles and books on the future have been published. Futures thinking has become a routine part of the activities of some government agencies, military planning groups and corporate departments. Centers and institutes of futures studies have flourished. Many countries of the world now have a professional national association of futurists, and global organizations also exist, such as the World Future Society and the World Futures Studies Federation. Established journals of futures studies and foresight continue to exist and new ones arrive on the scene.

By the end of the 1990s, futurists were consolidating their past work, building foundations and agenda-setting for new advances in the future. Today, although its boundaries are wide and permeable, futures studies is a distinct discipline. It has its own publications, organizations, theories and methodologies. Its practitioners, increasingly, share conceptual and theoretical commitments, purposes, ethical principles, empirical research and scholarship, professional ideals, a sense of community as futurists, and a growing body of substantive principles and knowledge that can be taught to others, and that can be put to practical use. See, for example, Richard Slaughter's three-volume *The Knowledge Base of Futures Studies*, my two-volume *Foundations of Futures Studies*, Kurian and Molitor's two-volume *Encyclopedia of the Future*, and Schwartz, Leyden and Hyatt's *The Long Boom: A Vision for the Coming Age of Prosperity*.

Despite several hundreds of futures courses now being taught throughout the world and despite a handful of university programs in which students can receive formal degrees in futures studies, there is a glaring imbalance in educational institutions at every stage of learning and in every country. Educational institutions now devote many resources to recovering and preserving the past by studying history, as indeed they should. But they devote relatively few resources to the study of the future.

This imbalance is increasingly dangerous as we enter a century of increasingly rapid change. If we wish to prepare the next generation to deal with the future, if we wish to arm them with the intellectual tools to create desirable futures both for themselves and for their societies, then we ought to establish and expand the

systematic study of the future in our schools. Additionally, as complements to existing Departments of History, in all the world's universities we ought to establish Departments of Futures Studies. In them, scholars and scientists of foresight could expand their study of the fan of alternative futures and teach students the purposes, principles, procedures and practices of futures thinking. In the twenty-first century, no one's education should be adequate without a clear futures studies component. We desperately need a future-orientated curriculum at all levels of education.

This is why I am enthusiastic about the publication of *Lessons for the Future: The Missing Dimension in Education* by Professor Hicks. First, David Hicks is the ideal author of such a book. He has been active in the futures community and concerned with education for the future for many years. He has created a body of futures work himself that is well known and highly respected among futurists on several continents. David Hicks is a master of his chosen topic; there are few scholars anywhere in the world as qualified as he is to teach us about 'education for tomorrow'.

Second, *Lessons for the Future* is a work of exceptional quality, a brilliant exemplar and synthesis of futures studies as it bears on education. Selectively focusing on what teachers and students need to know about the study of the future, David Hicks brings together in a clear, accessible and graceful way much of what futurists have learned during the last fifty years. For educators, the book provides a set of concepts and principles that will help them convey to their students the importance of futures thinking to their lives. For students, the book reveals how to explore possible, probable and preferable futures so that they can act now to benefit their future selves. It shows students how to take action that will empower them, now and throughout their lives, to better achieve their life goals and to participate effectively in the processes of community and national decision making.

Readers of *Lessons for the Future* will learn how to deal with the threats to their future, both those they face in their individual lives and those that they confront as members of the global human family. They will learn, too, how to identify and seize the opportunities that exist to create a flourishing personal future for themselves, while at the same time responsibly contributing to a future of freedom and well-being for all humanity.

Wendell Bell
Professor Emeritus of Sociology
Yale University

Lessons for the Future

The Missing Dimension in
Education

David Hicks



London and New York

2002