MAKING PEOPLE RESPONSIBLE: The Possible, the Probable, and the Preferable

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ABSTRACT

Relying only on explanations based on impersonal social forces and cultural imperatives that are viewed as inevitably leading to particular human behaviors is, at best, incomplete social analysis. Any adequate theory of modern society must include people as active, purposeful, and innovative beings whose future-oriented behavior helps create not only their own future but also the social order itself. Social research directed at the investigation of such human agency contributes to our knowledge of futures thinking and accountability. Although people produce consequences for which they ought to be held accountable, they often do so only more or less competently. Their competence can be improved by teaching them the principles of futures thinking. They can become more responsible actors by learning to search more fully for possible futures, to forecast probable futures more accurately, and to make judgments of preferable futures more objectively. In today's world of rapid social change, no college education is adequate if it fails to include some systematic study of the principles of the futures field.

INTRODUCTION

I could write a book or two—and probably already did (Bell, 1997)—in response to the five questions posed by James A. Dator, the editor of this special issue. There is far too much that can be said to fit into this short paper. Thus, I will limit my answers to a brief account of only a few points, focusing mostly on three of the assumptions underlying futures studies:

(1) Humans by their behavior constantly shape their natural and social environments and, in so doing, shape their own future, although not always in ways that they intend or understand.

(2) Disciplined and valid prospective thinking can help people shape their environments and their future effectively and responsibly.

And (3) explicit and objective moral analysis can help people responsibly create desirable futures.

As prologue, let me say that I began teaching a course in futures studies at Yale with some form of "future" in the title (e.g., "futuristics," "futures research," "social change and the future") in 1967. Moreover, I confess that during the last three decades in all the courses that I taught on whatever topic—from "Introductory Sociology" to "Class, Race, and Nation in the Caribbean," and even to "The Logic of Social Research"—I always included some of the principles of futures thinking.

I did so at the risk of appearing to be yet another academic imperialist pushing his or her latest intellectual infatuation, because I believed that, despite the existence of a social forecasting industry and the general acceptance of prediction as an indicator of valid scientific knowledge, competent futures thinking was largely missing from the

mainstreams of the various social sciences (Bell, 1974). No social science, I believed, could be fully acceptable without a healthy dose of futures thinking.

Have I mellowed over the years and softened this view? Definitely not. To the contrary, I would go further today and make a stronger assertion: *no college education is adequate unless it includes some systematic study of the concepts and principles of the futures field*.

One reason is that self-conscious futures thinking helps people become more responsible for their actions. Another reason is that any understanding of contemporary social change, the nature of the modern social world, and key features of the coming future is dangerously incomplete without the insights provided by futures studies. In this paper, I try to give a few explanations of why this is so.

THE INDIVIDUAL AND SOCIETY

During my first year in graduate school at UCLA in 1949, I read that it "has been the contention of sociologists from Auguste Comte and Lester F. Ward to [Pitirim A.] Sorokin that the chief justification of sociology is the guidance it can furnish to public officials and private citizens relative to building a better social order" (Barnes, 1948, p.xi). As an aspiring sociologist, I was challenged by these words, imagining a future professional career providing such guidance.

But I was also puzzled. Only two pages earlier in the same book, I had read that different sociologists had "highly contrasting conceptions as to the possibilities of social planning"; that Comte, Morgan, and Ward believed "that the main purpose of sociology is to facilitate planned progress," while "Spencer, Sumner, and Gumplowicz" held an opposite view and that, for them, the great practical service of sociology is to warn about the "danger of the notion that man can facilitate and hasten social progress through deliberate action" (Barnes, 1948, p. ix).

Although this account, I soon learned, is an oversimplification, it nonetheless points to contradictory views, sometimes unacknowledged and even denied, that still exist among sociologists today. Some sociologists—probably the vast majority—view society as shaping the individual, providing him or her with the illusion of having autonomous choices, while, in fact, being a system of social control and cultural forces that more or less inevitably determines his or her beliefs, attitudes, and behaviors.

Other sociologists, to the contrary, view society as a product of individual and collective choice and decision. For them, the actions and interactions of purposive individual actors importantly shape and construct the social order itself. Although admitting that there are often unintended and unanticipated consequences that require constant correction, they see social change largely as the result of deliberate action or inaction. They view society, as it actually is at any given time, as problematic, merely one of many possible outcomes that could have resulted from what individuals, separately and together, might have decided to do.

As stated, of course, these are extreme views. Most sociological works fall somewhere between them, rightly acknowledging some truth in each. Yet even in the most sophisticated writings we can find a preference for one or the other perspective.

For example, Vaughan (1996) highlights the causal influences of organizational structures and culture in her explanations of the events that led to the explosion of the space shuttle, Challenger. As we all know from the extensive media coverage at the time, 73 seconds after launch at Cape Canaveral, FL on January 28, 1986, the Challenger disappeared in a fireball and huge cloud of smoke, then dropped into the Atlantic, killing all seven crew members (Vaughan, 1996, p. 7).

Vaughan (1996, p. xv) directs our attention to "the relentless inevitability of mistake in organizations," to how social determinants systematically shaped the behavior of the individuals involved in the fatal decision to launch. She does acknowledge that at the very top levels of management some individuals could have behaved differently and, thus, could have acted to avoid the disaster. Yet she sees no merit in searching for individual moral responsibility as an explanation of the catastrophe and the deaths that occurred. Even though she recognizes how the work culture had been produced at NASA before the launch decision, in her analysis of the decision itself she views culture as fixed and determinant. For example, she speaks of "cultural scripts" and views people as simply playing roles that have been scripted in advance by social and cultural imperatives. Thus, individuals, in her view, can no more be held accountable for their acts than can puppets.

Others have contested this view. Allinson (1997) in his review of Vaughan's book points out that things could have happened differently. The explosion resulted because the giant rubber gaskets designed to keep combustible hot gases from leaking out during liftoff, known as O-rings, failed after exposure to the cold weather. But other, better, technology than the 0-rings could have been employed in the original design and, in fact, had been proposed. Given the O-ring technology, the engineers' who knew it best recommended against launching, but the flight managers failed to heed their advice. Additionally, the flight managers could have informed the senior management of the engineers' opposition to launching, but they did not. If the senior managers had been informed, they could have vetoed the decision to launch, as, indeed, they later said they would have. The lives of the astronauts could have been saved, if the Challenger had been equipped, as it could have been, with an abort system and parachute descent package.

Also, Vaughan takes great pains to show that the decision to launch was not a deviant act given the cultural setting of NASA within which it took place. The tragic decision to launch, she contends, was not the result of anyone violating any rules. To the contrary it was the result of rule-abiding behavior. People were simply doing their jobs as they were supposed to. It was conformity, not deviance, that led to the decision. Therefore, she concludes managers were behaving morally.

Her conclusion is debatable. At least since the Nuremberg trials of Nazi war criminals, we have known that following rules, behaving as ordered, doing what we are supposed to do according to organizational expectations can produce evil consequences. This analogy is invited by Vaughan (1996, p. 407) herself when she likens some of her findings of the banality of organizational life to Arendt's Eichmann in Jerusalem (1964). Contrary to Vaughan's view, all of us ought to be held personally accountable for our

acts even if we are conforming to organizational rules and common belief systems. It is our moral duty to question such rules and belief systems and to disobey them if obeying would lead to seriously wrongful consequences.

As Allinson (1997, p. 101) makes clear, specific individuals all along the decision stream made decisions "in the light of full knowledge of both the dangerous risk and the horrifying consequences." Such decision makers were not helpless victims of social organization or culture. The Challenger disaster was avoidable. It was the direct result of purposive human action and irresponsible moral choice, even though, as in this case, the action conformed to the rules. The wrongful acts of particular, identifiable people caused the explosion.

Let's look at another example of sociological inquiry, but one whose emphasis is placed on planful action, policy design and implementation. Moskos and Butler (1996) examine how the U. S. Army has dealt with race relations. They describe how Army top decision makers responded to the order to desegregate the Army and the various programs and policies they invented to do so. In a nutshell, they show that Army leaders have been largely successful in achieving racial equality of opportunity by making race relations everyone's responsibility while holding particular people accountable. Army leaders made an absolute commitment to nondiscrimination, while maintaining uncompromising standards of performance at every level and for every person.

At the same time, Army managers took compensatory action aimed at disadvantaged groups by creating paths of opportunity through education, training, and mentoring for both pre- and post-inductees into the Army. The goal of the compensatory action was to remedy educational or skill deficiencies so members of such groups would have a chance to meet the standards of competition based only on the merit of their performance. No quotas were set and no promotions were made because of the color of a person's skin. Importantly, Army personnel view good race relations not an as end in itself, but as "a means to readiness and combat effectiveness," factors that contribute to the success of the Army's most central mission (Moskos and Butler, 1996, p. 53).

In the final chapter of each book, the respective authors attempt to describe the implications of their research. In "Lessons learned," Vaughan gives no practical advice whatsoever, no "Do this" or "Do not do that" if you want to avoid disastrous decisions in organizational settings. Instead, for example, she conveys a "message about the influence of these preconscious schema on the production, exchange, and interpretation of information in organizations" (p. 405). She shows how this relates to some theory, affirms that, gives a vivid example of the other, demonstrates something else, etc., but gives no advice about how people could have been or can become more responsible actors.

Why is she of no help? Apparently, because the "effect of unacknowledged and invisible social forces on information, interpretation, knowledge, and—ultimately—action are very difficult to identify and to control" (Vaughan, 1996, p. 416). We are left with the thought that the "scope and interconnectedness of this causal system make

mistakes inevitable" (p. 418).

Contrast that with Moskos and Butler (1996). In a chapter on "Army lessons for American society," they give a primer on overcoming racial discrimination. They offer guidance, as Comte, Ward, and Sorokin might have done, telling the American people what can and ought to be done to create equal opportunity and racial harmony in twelve assumptions and behavioral maxims that they draw from their research. For example, they recommend: "Focus on black opportunity, not on prohibiting racist expression" (p. 132). "Be ruthless against discrimination" (p. 133). "Affirmative action must be linked to standards and pools of qualified candidates" (p. 136). "Recognize Afro-Anglo culture as the core American culture" (p. 140).

Although both of these works are examples of serious sociological inquiry, the difference between them is striking. Vaughan's ambitious study of the Challenger disaster leaves us facing the future with a sense of futility. Her interpretation focuses on the essential helplessness of people in the face of the powerful imperatives of social and cultural forces and the seemingly inevitable destiny they force upon them. The Moskos and Butler study, to the contrary, leaves us facing the future armed with suggestions for possible actions. We are empowered and, although we are clearly informed of our embeddedness in organizations and cultures, we are made to understand how we individuals can—and probably ought to—act to change those organizations and cultures themselves for the better.

In my judgment, any adequate theory of society and social change—certainly of large-scale, modern society in which change is the norm—must include people, as Moskos and Butler do, as active, purposeful, responsible, and creative beings whose future-oriented behavior has consequences for their own lives and for social structures and cultures. Such people may be only partially informed, often misinformed, calculating but sometimes wrong in their calculations, occasionally having fuzzy goals that are only partially consistent with each other, subject to social and cultural pressures, and often too fixated on the short range. Nonetheless, they are accountable for their actions. All of which is precisely why, whether they are top leaders or ordinary people, they often need help in making right choices and taking effective actions. Such help can sometimes be provided by properly designed, future-oriented social research (Bell and Mau, 1971; Etzioni, 1968).

POSSIBLE AND PROBABLE FUTURES

This is not to say, of course, that society and culture have no effect on individuals and their behavior. Of course they do. We are all shaped to some degree by the social capital and cultural traditions available to us and, as we grow and develop, by our personal histories, habits, and obligations. Yes, certainly, we learn the customs of our tribes, but we do not learn or practice them precisely. We deviate, we innovate, we rebel, we cheat, we under-conform, and we over-achieve, and, thus, we make changes and help to create a future different from the past. Moreover, people invent new technologies, including social technologies, which in turn drive change as people put them into use, producing new products, new occupations, new styles of life, new

patterns of social interaction, and new personal trajectories through time and space.

The determinants of present behavior in modern societies, then, are only partly found in social and cultural backgrounds and present locations of social actors. They are also found—perhaps most importantly found—in anticipation, because people address their behavior to the future. As they travel through time, people orient and guide themselves, more or less self-consciously, using their cognitive maps of the future, their hopes and fears. Thus, understanding those maps, even though they are sometimes wildly inaccurate, is essential to explaining people's behavior. Such maps, or images of the future, include not only people's intentions, but also their beliefs about what will happen, what might happen, and what ought to happen. Thus, no theory of society and social change is complete if it does not incorporate the idea of the "image of the future."

The image of the future, of course, is a central concept of futures studies. Although the terminology may vary, it can be found in most futurist works, such as, to mention a few examples, D. Bell's The coming of post-industrial society (1973), Boldt's Surviving as Indians (1993), Boulding's The image (1956), Dator and Rodgers's Alternative futures for the state courts of 2020 (1991), Jouvenel's The art of conjecture (1964), Kahn's On thermonuclear war (1960), Kahn and Wiener's The year 2000 (1967), Mau's Social change and images of the future (1968), Polak's The image of the future (1955), and Toffler's The Third Wave (1981).

Futurists not only study images of the future held by various people in an effort to understand and explain their behavior, they also investigate the process of image making itself, encourage people to rigorously explore alternative images of the future, and construct images of the future themselves. In so doing, futurists aim to help people become more competent, effective, and responsible actors, both in their personal lives and in their organizational and societal roles.

Among other things, futurists work to expand the alternative possibilities that people consider before they decide to act one way or another. Present possibilities for the future are real, but many are often ignored as people go through their daily lives blindly following past routines of behavior. Futurists encourage people to look beyond the familiar and to search for opportunities for themselves and their organizations; to add medium- and long-term visions to their decision making; to use their imaginations to consider things, including social arrangements, that do not now exist; and to plan deliberate actions—solely or cooperatively with others—to achieve more desirable futures. Thus, futurists aim to expand the conscious choices people have so that they can act more intelligently.

Futurists also attempt to forecast the most probable futures given specific situations, sets of circumstances, and particular alternative courses of action. People cannot become competent, effective, and responsible actors unless they know what the consequences of their acts will be. But such consequences, obviously, will occur in the future; and the future, until it becomes the present, is nonevidential and unobservable. Thus, because the future does not yet exist, people face an apparent obstacle in making warranted assertions about probable futures, i.e., assertions that they can demonstrate

are reliable and valid.

Futurists have written too much about how to make such warranted assertions for me to do justice to their views here. Let me simply say that futurists have appropriated or created many social scientific tools, both methodological and conceptual, to expand the range and to increase the accuracy of people's cognitive maps of the future. Generally, although they focus on the future, futurists use logical deduction and known facts just as other social scientists do (Bishop, 1994). Specifically, the theory of knowledge known as critical realism, that is based importantly on Karl Popper's fallibilism, can be used to warrant assertions about the past, present, *and* future, as I have explained elsewhere (Bell, 1997).

Futurist methods include extrapolation of time series, cohort-component analysis, standard survey research, the Delphi method, cross-impact analysis, simulation and computer modeling, gaming, monitoring and scanning, content analysis, technology assessment, issues management, relevance trees, contextual mapping, participatory futures praxis including future workshops, social experiments, ethnographic futures research, and, most important, writing scenarios (Bell, 1997, vol. 1, chap. 6).

Impressed with the uncertainty and openness of the future, futurists also have developed a variety of strategies, perspectives, and concepts to improve people's futures thinking. They include preparing for improbable as well as probable future events, especially if the improbable possibilities would be of great moment if they occurred, just as pilot training incorporates rehearsals of all kinds of emergency situations that will probably never occur. They include, also, increasing the chances of surprise-free futures by systematic efforts to uncover the unintended consequences of proposed actions and otherwise hidden or unanticipated consequences. And they include constant monitoring, updating of forecasts, reviewing of policy choices in the light of new information, and making responsive policy corrections.

Additionally, they include the concept of self-altering predictions (Bell, 1997; Henshel, 1978). Because a prediction about the future, once made, may enter into the situation as a causal factor itself, predictions may turn out to be self-fulfilling or self-denying. For example, if supporters of candidate Y learn of a major network news prediction that candidate X will win the coming election in a landslide, then they may decide that it is a waste of time for them to vote; if enough of them fail to vote, then candidate X may indeed win in a landslide, precisely because so many supporters of candidate Y did not vote. In this case, the reactions to the prediction reinforce it and tend to make it self-fulfilling. The classic case of the self-fulfilling prophecy, of course, is the example of a presumptively false rumor that a (perfectly sound) bank will fail which leads people to rush to the bank to withdraw their money, which, in turn, leads to the actual failure of the bank and the terminal truth of the initially false rumor.

An example of a self-denying prediction can be seen in a situation in which members of a school board learn from a study that they have commissioned that their city schools will be unable to accommodate all of the students expected five years from now. But, as a result of the prediction, the school board convinces the city council to build more schools. Thus, five years later there are ample school places to

accommodate all of the eligible children.

The conceptual distinction between *presumptively-true* and *terminally-true* assertions about the future is important in evaluating both the utility and truth of predictions. For example, the prediction that in five years the schools will be unable to accommodate all the students, if based on reliable and valid population projections, is presumptively-true at the time it is made. It is useful in making a decision and designing appropriate social action. Because the city council does decide to build more schools, the original prediction turns out to be self-denying and terminally false.

Thus, it is much too simple to evaluate a prediction by whether or not the prediction turns out to be true or false in the end. Predictions can be useful precisely because they lead to action that negates them.

Almost all predictions contain a variety of contingencies and assumptions. Such contingencies and assumptions, futurists have learned, need to be made explicit and examined for their cogency. "If current demographic trends continue as they are. . ." or "if we do not build more schools. . ." or "if we do not do thus and so. . . ," then the schools will be unable to accommodate all the future students. Anticipation includes taking such contingencies and assumptions into account. Doing so, people become more effective in shaping the future.

Differences of opinion about probable futures ("What will happen if we do—or do not do—this or that, or thus and so? ") are often the focus of intense debate and acrimonious social conflict. Will government regulations that reduce the emission of carbon dioxide and other greenhouse gases result in the loss of American jobs and damage the American economy or not? Will such regulations slow global warming and the disastrous consequences that have been predicted if nothing is done? Will the decriminalization of marijuana result in more drug addicts, more deaths, higher healthcare costs, and a further breakdown of control over illegal drugs? Or will it result in alleviation of pain among some ill people, reduce the caseloads of police departments so they can focus on more serious crimes, relieve prison crowding, and permit more adequately funded anti-drug educational programs?

Questions about future outcomes go on and on. Reliable and valid answers to them are crucial to making wise decisions, some of which are important and far-reaching enough to affect all of our future lives and those of our children and grandchildren. Yet public debates about many such questions are often filled with outrageous, self-serving, biased, partisan, venomous, emotional, and groundless assertions. Thus, one turns to members of the social science community to join more fully into public discourse and, thus, to raise both its civility and its intellectual content. More social scientists are needed to make a professional commitment, as have their futurist cousins, to improving the theories and methods of making sound assertions about the future.

PREFERABLE FUTURES

To become competent, effective, and responsible, then, people need to know what alternative actions they can possibly take and what the probable consequences of

their particular acts will be. But they need to know more. They also need some reasonably accurate way of judging the *desirability* of those probable consequences, both intended and unintended. They need some set of values that can be used as a standard of judgment to help them decide what they ought to do.

It was not desirable, for example, to act in ways that led to the explosion of the Challenger and the death of its crew. It is desirable to act in ways that lead to equal opportunity, racial harmony, high morale, and combat readiness in the Army. Although most of us take such value judgments for granted, how do we really know if they are the ones that we ought to make? What reasons can we give to convince ourselves and skeptics that our judgments are morally right? How can we justify judgments about what we ought to do in an objective and scientific way?

Unfortunately, neither the futurist nor the social science literature provides fully satisfactory answers to such questions. The futurist literature dealing with the subject rests in part on studies of the preferences of some set of respondents. For example, in Delphi studies respondents are often asked whether or not some possible or probable development would be good or bad (Linstone & Turoff, 1975). Thus, preferable futures can be constructed, based on an analysis of the value judgments of the respondents. Also, it rests in part on little else than an explicit statement of the author's values without any serious effort to justify them, even in some of the most sophisticated futures research (Meadows et al., 1992).

Additionally, because a considerable number of futurists work as consultants, it rests in part on the goals and values of the clients who hire them. Such goals and values may deal with almost anything conceivable. To take just a few examples from my own work, they include wanting to sell a new toy (six, later twelve, understuffed, soft baby animals designed for both girls and boys that are inherently high touch and nonviolent as opposed to high tech, violent toys); trying to improve the global awareness of American college students; evaluating the future probable environmental and other costs and benefits of supersonic commercial air transportation and if it ought to be subsidized by the U. S. government (which it was not); attempting to reform American prisons in the next decade and beyond; planning how to safely store military radioactive wastes for the next 10,000 years; evaluating efforts to increase culturally-appropriate dispute resolutions in the Hawaiian Judiciary; helping to prepare U. S. foreign service officers for their future Caribbean assignments; lecturing to a variety of groups on the uses of futures thinking (such as to midcareer officers at the Air Command and Staff College at Maxwell Air Force Base and Air University, "Force 2025"); and serving as a gubernatorial appointee of the Commission on Connecticut's Future that included reviewing future plans of state government agencies ranging from agriculture and transportation to prisons and education.

Beneficially, consulting futurists generally encourage their clients to re-examine their own goals and values as part of any consulting arrangement. And, sometimes, clients are willing to do so. Thus, goals and values can be clarified, explicitly examined, consciously re-evaluated, and changed if desired.

Although the study of respondents' preferences, explicit statements of the

researchers' values as they bear on the issues under investigation, and clarifying and re-evaluating clients' goals are useful steps in giving direction both to futures research and decision making, they fail as adequate assessments of the relevant values and goals themselves. Wise and moral decisions about what the future ought to be need to be informed not only by what people *believe* is right and what is clear and explicit, they depend also on knowing what really *is* right.

Turning to the social science literature, we find some help. The applied and policy-oriented side of all the social sciences has some definitions of the good and desirable, such as nearly full employment and real growth in GNP in economics or democratic governance and the protection of public liberties in political science. All have codes of ethics that define morally proper professional behavior. All contain some research whose empirical results support behavioral maxims of right and wrong, such things, to mention only a few, as altruism (Batson, 1991; Collard, 1978; Eisenberg, 1986), cooperation (Axelrod, 1984), educational innovation (Clark, 1970), justice (Walster et al., 1978), mental health (Myers and Bean, 1968), and trust (Barber, 1983).

Also, we know from the work of social scientists that near-universal human values exist and that they are not arbitrary (Brown, 1991); that cultural and ethical relativism, however beneficial they may have been in combating ethnocentric bias, have been discredited (Edgerton, 1992; Washburn, 1997); and that the recent academic fad of post-modernism, despite its beneficial corrections of the arrogant certitudes of positivism, ultimately leads to the dead-end of nihilism (Rosenau, 1992). Moreover, Edgerton's (1992) evaluation of the anthropological literature shows the way to an objective analysis of human values and culture by asking whether or not they contribute to the survival and flourishing of a society's population, to the physical and mental health of its members by satisfying their needs, and to their life satisfaction and happiness. Societies differ in how well they meet these basic, universal criteria: there are good societies that pass these objective tests to one degree or another and sick societies that do not.

Although there remains much that we do not yet understand, these and other examples of social research suggest that there are core human values that are widely shared. They derive from the nature of human beings (e.g., if humans were immortal, there would be no need to have an injunction against murder), the preconditions of social life (e.g., values such as honesty and trust are necessary for much learning from others to take place), and the nature of the containing physical environment (e.g., gravity, the nature of air, fire and water, and mundane things as objects sharing length, weight, volume, etc.) that limits the number of possible solutions to similar problems faced by basically similar beings.

Some values and practices contribute to the surviving and thriving of human beings and some do not. Generally, what is moral makes social life possible and contributes to the well-being of human societies; what is immoral does not. Standards of morality appear to be long lasting, nonarbitrary, and amenable to objective test regarding their contribution to human well-being. But some values and practices that made a positive contribution to human well-being in the past may no longer do so in the

future (e.g., values supporting high rates of human reproduction). Thus, to find the right values, i.e., our criteria for deciding what we ought to do, for the changed conditions of the coming future is a challenge not only to futurists but also to all social scientists.

Many social scientists do not respond to such a challenge, because they remain in the grip of the widespread belief that making value judgments objectively is impossible. It remains the current orthodoxy among scientists generally that moral propositions, unlike factual statements, cannot be shown to be true or false by scientific methods. Thus, assertions about what is good or what is bad regarding society and culture have largely been banned from mainstream social science.

There is, however, agreement that, *as scientists*, we can use a means-ends model (if given an end or a goal, we can find efficient and effective means of achieving it) or a commitment-deducibility model (if we make a commitment to some value statement, then we can deduce what acts would be consistent or inconsistent with it). But in the last analysis these approaches are unsatisfactory, because they are limited. Scientists, the argument goes, cannot objectively assess the worth of either the end or the commitment themselves. Thus, they must be accepted on extrascientific grounds.

Although it has not proceeded very far as yet, I believe that this view has been eroding among social scientists (Boulding, 1985; Habermas, 1973; Phillips, 1986). We may yet see the day when the tools of social science are routinely used to answer questions about the good, including what is a good future, just as they are today to answer questions about what is true.

Although some philosophers are as prone to accept the dogma that value judgments cannot be objectively shown to be true or false as are some social scientists, other philosophers have demonstrated ways of doing so (Baumeister, 1991; Gert, 1988; Gewirth, 1978; Midgley, 1991; Sprigge, 1988). Particularly useful is Lombardi (1988) and Lee (1985). Lombardi justifies two sets of criteria by which to objectively evaluate human behavior and societies, human welfare and freedom. What is good contributes to welfare and freedom. What is bad does not. Lombardi's analysis provides philosophical support for Edgerton's empirical research on sick societies.

Lee (1985) gives a method that she calls "epistemic implication." It is based on Popper's fallibilism and is compatible with the critical realist theory of knowledge. Using epistemic implication, one can develop a consistent, coherent, rational, and objective morality. Moreover, it is well adapted to answering questions of how people ought to behave and what is a good society.

The underlying logic is straightforward. It is simply that prescriptive statements contain or rest upon some descriptive contents that can be tested. Thus, if such descriptive contents can be shown to be false, then they provide no grounds for belief in the prescriptive statement. Contrariwise, it is reasonable to believe in prescriptive statements whose grounds have been put to test and were not falsified.

Lee gives five criteria that have to be met for the grounds or evidence supporting a value proposition to be accepted. The evidence must be *serious* (not mere personal preference or supernatural belief, but public external features of the situation referred to in the value assertion); *referentially relevant*, *causally relevant*, *causally independent*,

and *empirically true*. I won't try to explain or illustrate these criteria here, but I refer the reader to Lee's (1985) work and to my discussion in Bell (1997, vol. 2). I have made a few elaborations of epistemic implication, mostly to explicitly take into account the prospective aspect of assessing values as they are used in decision making and taking action, and explored it in relation to religion, law, and a variety of other approaches to deciding what is the right thing to do.

TEACHING, RESEARCH, AND ACTION

Of course, I use the principles of futures thinking in my teaching, research, and participation in decision and policy making. When I first started teaching, though, I did not know what I now know about such principles. Nor did I know much then about the nature of morality and the values that ought to be used to define and evaluate a meaningful life. I wish I had. I could have done a much better job.

It is a tragic irony that so many young people who have health, nearly a lifetime ahead of them, and endless choices for their own futures so often fail to take advantage of them. They are occasionally blind to what is truly possible for themselves, show little genuine concern for the well-being of their own future selves and much less for that of future generations, do not engage in effective planful action or do not persist in it when they do, and understand only too late what is truly valuable in life and worth striving for. Sometimes, they squander their chances to fulfill their potential and to live satisfying and purposeful lives.

This might be understandable among, for example, some inner-city Afro-American children exposed to a subculture that self-destructively condemns achievement, even trying to do well in school, as "acting white" and being traitorous to one's race. But even at a place like Yale, where students are highly selected and among the most motivated and talented in the country, many students desperately need instruction in making good life choices. Over the years, I found that, among other things, I could help undergraduates by emphasizing three things in my teaching:

(1) Showing them how to search for possible and probable futures, their own as well as those of groups, societies, and the entire human community, and why it is important to do so; teaching them how to more accurately forecast the future outcomes of their own actions and inactions.

(2) Showing them how to select preferable futures; teaching them the importance of moral judgments and how to put them to objective test.

(3) Demonstrating the importance of critical discourse, of open and free discussion and exchange of views, emphasizing the use of reason and a willingness to change one's mind when warranted by the evidence.

Teaching graduate students is quite another matter, although the above three considerations still ought to be honored in mentoring relationships. As a teacher of graduate students, I accepted the obvious commitment to help prepare students to become professionals and, thus, to teach about professional ethics, history, theories, methods, and the substantive content of their field, to help prepare them to add to knowledge and, thereby, to contribute to human freedom and welfare, and, of course, to

help them get a job.

For nearly four decades, I made the additional commitment to trying to improve sociology itself by adding more futures thinking and objective moral discourse to the field. This commitment largely came down to two things. The first was to encourage students to select topics for investigation, especially for their doctoral dissertations, that were socially significant, so that their findings would bear on the design and implementation of social policy. Such topics, which pretty much describe the subjects of my personal research projects, included studies of democracy, social participation, public leadership, decision making, nation-building, the nature of futures thinking, the causes and consequences of images of the future, perceptions of inequality, attitudes toward social justice, racial segregation, alienation, the achievement of life goals, changing cultural identities, and human values. Of course, throughout, I invited students with whom I worked, although not always successfully, to look at people as future-oriented and value-driven decisional systems and to look at society as a product of their behavior.

The second was to encourage students to do their work in societies other than their own, which during my first fulltime teaching job at Stanford University meant getting students off the campus and into some of the wealthiest and poorest neighborhoods in San Francisco. After that, it mostly meant getting American students to go abroad to do their research.

Such field experience, often of a year or two working in another country, helped to expand students' visions of the range and possibilities of the human condition and their understanding of both the differences and similarities of people and their societies. Also, whether working among Haitian market women, Jamaican leaders or slum dwellers, Antiguan managers and workers, Canadian Indians, residents of London neighborhoods, Swedish socialists, Mexican decision makers, international black intellectuals, or white South African elites, students helped to elaborate a decisional theory of human behavior and social change, to explain how people act to try to control their own future, and to show how people can act to do so more effectively.

Happily, today, American sociology is less parochial than it was several decades ago and has become more cosmopolitan, incorporating more of the totality of world experience. Unhappily, sociology today has not yet adequately incorporated those other "foreign countries," futures thinking and objective moral discourse.

In my own small efforts to change the world along these lines, I organized and directed training programs for graduate students that took them abroad, the West Indies Study Program at UCLA and the Comparative Sociological Training Program at Yale. Moreover, at Yale I worked closely with the Yale Center for International and Area Studies, and, among other things, served several terms on the Council on Latin American Studies. As chairman of the Yale Department of Sociology, I focused much of my departmental-building efforts on expanding departmental expertise in comparative sociology, foreign and international studies, and in political and social change. Also, I supported the pre-existing medical sociology-training program at Yale, which was addressed to an important human value, health, and at least partly dealt with

the future by investigating how to improve health delivery services.

Yale itself was in transition. When I first joined the Yale faculty in 1963, Yale College students were all male (and in most other ways social were unrepresentative of the American youth population of the day). During the next several decades, the campus was in turmoil, besieged by conflict and political struggles, the protest against the Vietnam War being only one of many issues. Various members of the Yale faculty and administration sought to transform Yale to include women and minority undergraduates; to add members of minority groups to the Yale faculty through an affirmative action program; to establish a new business school and an Institute for Social and Policy Studies; to create new programs in Afro-American Studies and, eventually, Women's Studies; and to set up many other interdisciplinary centers and programs—from studies of the environment to AIDs. Furthermore, despite the existence of a variety of area studies programs, including the historic Yale-in-China program, Yale at the start of the 1960s was largely a national university; by the 1990s it had been transformed into an international university.

I should add, given the topic of this special issue, that in the late 1960s Harold D. Lasswell and I co-founded the Yale Collegium on the Future, which, unfortunately, no longer exists. Lasswell was a pioneering futurist at least a generation ahead of his time who greatly influenced me. He moved much of his own futures thinking into defining and developing the policy sciences, that are, at least through the Lasswell connection, first cousins of futures studies (Lasswell, 1971; Lerner and Lasswell, 1951).

At the time some members of the Yale community opposed almost all of these changes. In addition to advocating new courses in futures studies, I was personally deeply involved in several of them, e.g., bringing women to Yale College, and, especially, starting the Afro-American Studies Program and making affirmative action work for both students and faculty. Of course, during the struggles to control Yale's future, one could observe the usual political ploys. Past favors and obligations were called in to get support, deals were made (e.g., "you support X and I'll support Y"), friendships imposed upon, some timid souls always agreed with the powerful while a few perennial rebels always pushed a verbal clenched fist into a Dean's face, and a few faculty members revealed hidden talents for demagoguery. In the end, although it was sometimes entertaining, I doubt if any of this mattered very much.

What mattered was something quite different. In addition to patience, persistence, and polite diplomacy, the usually effective means in such situations, what worked was constant explanation, over and over again, and yet again and still again, explain! Moreover, constant listening to people with different views was also necessary—over and over again, and yet again and still again, listen! There were, of course, some exceptions (like the meeting dealing with the status of the Yale R.O.T.C. unit during the Vietnam War) when emotions raged out of control, wrong decisions were made, and right decisions had to await another day. But, generally, the system of faculty governance worked just about as it was supposed to.

Generally, one had to discuss what would happen *if* the proposed change was—or was not—made. ("Oh my God," one Yale historian wailed, "if women are admitted to

Yale College, then instead of graduating a thousand potential national leaders a year we will only graduate five hundred! What a loss to the country!" The thought that women, too, could become national leaders was apparently inconceivable to him.)

And one had to discuss why supporting the proposed change was a better moral choice ("For God, for country, and for Yale") than opposing it. And both, the prediction of the consequences *and* the moral judgment, had to be justified by giving reasons for which one could plausibly claim objective truth and logical correctness. Usually, it was only then that a decision for—or against—a proposed change might be certified by a faculty majority as being "responsible."

CONCLUSION

In this paper, I look at how social scientists understand the nature of social order and change and how they can help people become more effective and more knowingly responsible for the future outcomes of their actions and inactions. The most useful—and the most accurate—understanding of modern societies comes from investigating the effects of deliberate social action on the part of individuals and groups, asking how people create their own social worlds and how their actions are causes of social change. Some variables that ought to be taken into account are people's images of the future, their possible choices, their decision-making processes, and their moral judgments. In such a social analysis, people are held accountable for their behavior and its consequences, both intended and unintended. They can be shown to be liable for the things that they do.

Theoretical explanations using concepts of impersonal social forces or cultural imperatives that are viewed as inevitably compelling people to behave in certain ways, as in Vaughan's analysis of the Challenger disaster, ought to be considered incomplete social analysis. They are shorthand ways of describing social situations, but, if accepted as full and complete understandings, they tend to obscure more than they reveal about who is doing what to whom for what purpose and with what consequences.

Also, because they tend to absolve people of being conscious and controlling agents of their own actions (and inactions), such explanations encourage irresponsible behavior ("The social system made me do it"). Moreover, they give little help to people who try to improve human performances in the future.

An example of social scientists profitably bringing people into their depictions of social realities as active, purposeful, future-oriented, and creative policy makers is the Moskos and Butler study of combating racial discrimination in the Army. Such a study contributes both to holding people accountable and to giving guidance to improve the effectiveness and morality of future behavior.

People can be taught to become more effective and responsible by their knowing and following some of the principles of futures thinking, for example, by more fully investigating present possibilities for the future, by rejecting the idea that "what is" must be as it is and is all that can be or could be, by more accurately forecasting probable futures (especially the future outcomes of their own acts), by preparing for improbable as well as probable future events, by creating surprise-free futures through exploring the

unintended and otherwise unanticipated consequences of particular actions and inactions (including their own), by understanding the functions and utility of self-altering prophecies, and by making a distinction between presumptively true (or false) and terminally true (or false) predictions as conceptual tools in decision making.

Of course, knowing what futures are preferable is as essential for making competent, effective, and responsible decisions as is knowing what futures are possible and probable. But what is a preferable future? How do we know? Both futurists and social scientists deal with making judgments of what is desirable—e.g., surveys of the attitudes of various respondents, clarification of goals, using the means-ends and commitment-deducibility models, etc. But these methods are ultimately inadequate, because in the end they depend on unfalsifiable beliefs about what is good.

Recently, some promising progress has been made toward constructing methods for making objective tests of value judgments, both in social science and in moral philosophy. Alternative possibilities for the future, different choices of courses of action, even entire societies can be judged as good or bad by using criteria derived from considerations of human freedom and welfare. Particularly useful is the method of epistemic implication proposed by Lee (1985), by which even ends such as human freedom and welfare can be justified. Clearly, we have reached a point where social scientists should open-mindedly reconsider the possibility of objective methods of testing value judgments and of enlarging their concerns to encompass an empirically grounded moral discourse.

In conclusion, I realize that I have not been able in this brief paper to adequately answer all of the questions posed by Jim Dator, especially his question concerning my vision of a plausible, preferred future. Elsewhere (Bell, 1997, vol. 2), I have given a detailed image of the future and I won't attempt to summarize it here. But I would like to say something specifically related to this paper.

My positive, ideal image of the future for the 21st century includes the spread of futures studies into colleges and universities, not only as centers and institutes but also as new, mainstream Departments of Futures Studies, composed mostly of interdisciplinary faculty appointments with other university departments. It includes, further, the spread of futures thinking into other departments, bringing a prospective component to most social research on whatever topic it is focused. And it includes bringing objective moral discourse into the social sciences as a legitimate and rigorous concern.

Thus, the systematic and rigorous study of the possible, the probable, and the preferable would be joined to create a growing and widely followed science of social action to help people become more responsible. It would help people participate as informed, effective, and moral beings in the critical discourse about how they ought to act to create a desirable future, both for themselves and others, for presently living people and for as yet unborn future generations.

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