Rules for Using Forecasts and Forecasters

by Amitai Etzioni

A nation's ability to control its destiny depends crucially on the way it uses its experts on the future, says a noted sociologist. For one thing it should evaluate them more systematically, perhaps by grading them like bonds (AAA, AA, etc.) on their reliability.

How to bridge the gap between the separate worlds of knowledge makers and policy makers is a problem at least as ancient as Plato, who sought to resolve it by integrating the two in a single individual: the philosopher-king. Yet even in the simpler and comparatively unchanging, hierarchical social order of the ancient Athenian city-state, Plato's proposed solution represented a "utopia" in the modern sense of something naively unworkable as well as in the sense of an ideal in which he used the term. In our complex advanced industrial society, the problems of providing for knowledge makers, in sufficient number and with the necessary expertise and other prerequisites, as well as for appropriate articulation between knowledge makers and policy makers, are much more serious than those Plato faced, and more consequential as well.

Indeed, the treatment that a modern society accords its experts on the future—that is, the extent to which it solicits and attends to their forecasts and takes care to differentiate and reward those seers whose forecasts prove reliable as opposed to those whom future developments show to be faulty—deeply affects the society's capacity to exercise control over its own fate via deliberate guidance of societal processes.

Unhappily our society's treatment of its seers, by and large, takes the form of malignant—as opposed to benign—neglect, a frequent reliance on experts chosen for irrelevant reasons rather than because of their proven wisdom. The result is chronic myopia of much policy making, seeing the nearby trees, but not the turns of the road.

Sound future-orientation requires:

1. Futurology should be integrated rather than segregated from other forms of knowledge making.

The best exploration of the future draws heavily on understanding the existing societal processes and their dynamics. Thus in seeking to anticipate, for example, the extent to which Americans might be likely or willing to adjust to future energy shortages and price rises by shifting to less energy-intensive lifestyles, the responsible seer takes into account the conditions under which life-styles changed in the past, the extent to which previous life-styles adapted to new conditions, as well as changes which already occurred in the last two years, etc.

The trends discerned in these data are then interpreted in the light of some assumptions, such as, for example, an estimate of the likely persuasive power of a major public education campaign, in order to arrive at a projection concerning the potential willingness of the American public to become more energy conserving. In contrast, the segregated futurologist is more likely to rely on projections founded on logic rather than experience, "models" which are often mathematically neat but poor in reality-testing.
2. Deviation from data should be explicited.

Future-studies almost invariably require mixing into data distilled from past trends some hypothetical assumptions about what might happen in the future, drawing both on reasonable assumptions and on value preferences. Futurologists must be free to insert these add-ons because they provide projections with their horizon-broadening power. However, whenever they deviate from existing data, they should (a) explicitly state this fact, and (b) explicate the grounds for the deviation from straight-line projections of the past into the future. It is not that straight-line projections (i.e., assuming the future will mirror the past) are sensible, but that unaccounted modifications open the door to wishful thinking. Accountable modifications are thus the responsible course.

Thus one may make a forecast based on the premise that the OPEC cartel will soon fall apart, despite the fact that many previous cartels, particularly in the oil field, survived for decades, but in doing so one ought to indicate clearly that one is deviating from expectations derived from past experience, and explain one's reasons for believing past patterns are unlikely to be maintained.

3. Heuristic futures and forecasts are to be carefully separated.

Heuristic futures are intellectual games or exercises offering insights into what might happen if a given set of circumstances were to come about, without necessarily making any claim that there are highly persuasive, let alone compelling, reasons for believing these circumstances will indeed come about. Heuristic futures serve to stimulate policy review and renovation in the sense that they tend to encourage those open to them to explore alternatives they would not have considered otherwise. Thus, a downtown area wholly closed to vehicular traffic might be contemplated, or a zero population growth United States, or lunar settlements, to see, for instance, if the benefits might justify the costs, without predicting that either of these is on its way.

Similarly, forecasts which are highly unspecified tend to be actually of primarily heuristic value. Thus, to say that the United States population by the year 2000 will either rise by 75 million or fall by 25 million, or be somewhere in between, provides an opportunity to contemplate alternative futures, rather than a forecast of sufficient specificity to be of interest for most purposes.

In contrast, forecasts ought to be relatively specific, i.e., provide narrow ranges. In most areas, very specific forecasts cannot be expected because the world is too complex and the dynamics of most of its parts are still poorly understood. (Lunar eclipses are one of the exceptions.) However, unless the range is relatively narrow, it will not help much in preparing for the future. Thus, it is more helpful to be told that there is good reason to forecast that no major new breakthrough of new sources of energy can be expected to be available on a mass basis up to eight to ten years from now, than to be told that a major breakthrough is basically unpredictable and could be with us in the "near future."


While both heuristic futures and forecasts are useful, the extent to which we should promote one as against the other depends on our assumption as to how knowable and malleable the world is, that is, the extent to which it is subject to our guidance. To put it first in extreme terms for illustrative purposes, if we assume we can know the world fully and mold it to our design, we can rely chiefly on heuristic futures because they tell us what it would be like if this or that "future" were to be brought about, in line with our preferences.

If on the other hand we believe the world to be relatively difficult to comprehend and to mold, we must rely more on forecasts as to what will happen. I hold that while the world—especially the social realm from crime to alcoholism, from education to welfare—is becoming more knowable and malleable, it is still, by and large, largely unknown and above all very resistant to our efforts. Hence, we should rely more on forecasts and less on heuristic futures. (I have detailed the reasons for my position in my book The Active Society: A Theory of Societal and Political Processes, Free Press, New York, 1968.)


In some areas it is possible to forecast the relatively remote future (more than 10 years) and do so responsibly. Thus, for instance, the size of the 1986 fourth-grade cohort can be quite well projected for the entire United States on the basis of the current birth rate, childhood mortality rates, and school attendance data. In many matters, however, experience suggests we cannot forecast with sufficient specificity to be useful beyond five to ten years. It is not just that we cannot correctly forecast the "readings" on the appropriate variable—and, thus, they go down where we expected increases (e.g. in population) or up where we expected declines (e.g. prices)—but major vectors often appear that were unanticipated (e.g. the energy crisis).

In any event, forecasters who wish policy makers to attend to what they have to say concerning the remote future, say the year 2000, might wish to use as a testing ground the next three to six years as a means of validating their forecasting techniques.

Indeed, the short-term future is problematic enough to predict and such predictions are often woefully wrong. In 1965 Thomas S. Power, Chief of the Strategic Air Command, wrote a book entitled Design for Survival in which he used the example of bombing North Vietnam as a hypothetical situation in which air strikes could deter a war. The aim would be to get the Communists out of South Vietnam, so the United States would warn the North of an air attack, giving the enemy time to evacuate civilians, and then bomb. This should be done until the enemy agreed to remove its influence from the South. It would only take a few days, Power wrote; no ground troops or air reinforce-
6. Forecasting would benefit from systematic evaluation.

Reliability ratings for bonds (that is, predictions concerning the likelihood that these securities will pay future dividends and return their principals) are regularly issued in terms of AAA, AA, and so on. Restaurant guides award stars according to the excellence of the cuisine and the likelihood that future diners will be served comparable meals. But the forecasts used by government agencies, the business community and the public, are rarely rated. Since this field has its share of shamans, it is not surprising that one often sees the fakers at the head tables, while the true prophets roam the streets. Thus, a leading designer of the war in Vietnam, author of a report which caused universities to shift billions from the bond to the stock market just before the latter collapsed, and an advocate of a school decentralization plan which led to substantial anarchy, is still one of America's respected seers, while the editor of a major science magazine who correctly prophesied the energy crisis in great detail in 1971 is rarely invited to address the inner sanctum of policy making.

A computer retrieval system of forecasts and predictions made in the past, combined with information on the events which followed, would help the forecasters to improve their work and their clients to evaluate the advice they rely upon—or ignore. Too often we oscillate between blind faith and cynical contempt for futurologists. It might help to realize that like other professionals, their qualities vary, and the more reputable ones are inevitably better than no help at all, but no one owns a clear crystal ball.

7. Policy makers' criteria for selection of forecasters.

Particular seers come to be favored by policy makers for many reasons: in some instances because they favor a position the policy maker has already chosen; in others, because the seers chosen are dramatic and will "bring out the press and television," or simply because they are witty, charming, or pleasant company. Naturally, our capacity to deal with the future improves the more seers are listened to on the basis of the proven validity of their forecasts and disregarding their partisan, or media, or "social" characteristics.

In Conclusion

All in all, it cannot be stressed enough that to the extent that policy makers draw on futurology, the nation's business will improve. The extent of the improvement depends on using more forecasting, less heuristic futures; more near-term, less long-run, forecasts; and drawing more on proven forecasters than on those whose forecasts are reassuring, convenient or dramatic.

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