THE PHILOSOPHICAL ANTHROPOLOGY OF FORECASTING

SYNOPSIS

(1) Prediction is a risky business where it is easy to go wrong. (2) Many believe that—largely owing to the resources of science—the future is substantially predictable; others regard the matter with extensive skepticism. The truth—as is usual with such oppositions—lies somewhere between. From the predictive point of view we occupy what is very much a halfway house.

THE INDISPENSABILITY OF FORECASTERS

The future is, for us, an object both of curiosity and of intense practical concern, and prediction is our only access to it. Nevertheless, forecasting is a domain where common sense seems to elude even the most rigorous of observers. The introduction of one futuristic book tells us: "It is impossible to predict the future, and all attempts to do so in any detail appear ludicrous within a very few years." This sounds sensible. Yet only two paragraphs later we read: "Politics and economics will cease to be as important in the future as they have been in the past; the time will come when most of our present controversies on those matters will seem as trivial, or as meaningless, as the theological debate . . . of the Middle Ages." Fat chance!

We need all the help we can get with becoming informed about the future. For unfortunately or otherwise, our prospects here are drastically limited and imperfect. Our lives are lived in a world whose eventuations all too often lie outside the range of our predictive foresight—a world

where chance and chaos, volatility and whim are pervasively present. Our aims and goals, our "best laid plans," and indeed our very lives are at the mercy of the chance, accident, and unmanageable contingency which the ancient Greeks called *tuchê*. In such a world, whose future lineaments we cannot presently foresee, haphazard and its offspring, luck, is destined to play a leading role in the human drama—collective and individual alike. It too is an integral feature of the human condition—precisely because of the imperfection of our predictive powers.

Knowledge is power. And the fact that virtually all action is in some way future oriented endows our predictive knowledge with special practical potency. It is thus only natural that a reliance on predictive expertise—actual or presumed—has been everpresent with those responsible for the conduct of large enterprises. In all times and places, decision makers have looked to predictive counselors of some sort putative experts, be they religious or secular, to guide them regarding the auguries of the gods, the stars, or the inexorable decrees of fate or of nature. What ruler or people has there ever been (so Cicero asked) who did not make use of divination.7 From classical antiquity to the Renaissance, and well beyond, kings and commanders frequently arranged their demarches subject to the advice of seers, soothsayers, haruspeces, and, above all, astrologers.8 Only if the auguries were propitious did they set out on journeys, invasions, and battles. And ordinary people, for whom access to expert guidance for interpreting the stars was too expensive, had recourse to less expensive advisors such as readers of tea leaves or the palms of hands or crystal balls.

It is not for psychics and economists alone that prediction pays off. The newsstands of this world are well stocked with predictive information. So are almanacs that present tables for phases of the moon or for the timing of sunrise and sunset, tidal tables and navigation handbooks for sailors, business journals that predict the course of economic developments, horserace tip sheets, schedules for artistic performance, horoscopes, and the list goes on and on. On New Year's Day, American newspapers annually carry elaborate "human interest" stories regarding predictions for the coming year issued by astrologers, psychics, and predictors of all sorts, financial prognostications included. And since the days of H. G. Wells, 10 there has been a steady outpouring of books that purport to portray the world of the future. 11 The poor record of predictive pundits has actually done very little to discourage interest in their efforts; their occasional successes may betoken no more than random luck but nevertheless suffice to assure them an ongoing audience. Plutarch wrote a treatise to explain why the Delphic oracle ended. His explanation was that the mephitic vapors that supposedly inspired the

Pythia gave out and no longer rose through the cleft in the rock. The oracle literally ran out of gas. This is unlikely to happen to present-day prophets.

Successful performance has never been the paramount rationale for a reliance on predictors—as the long history of dismal failures from ancient divination to contemporary economics amply attests. Where the developments of the future are at once obscure and very important, political and managerial decision makers will clutch at any straw. The deflection of responsibility is a cardinal principle here. Reluctant to make potentially hazardous decisions strictly on their own judgment and responsibility, it is somewhere between essential and convenient for such "decision makers" to have "expert advisers" whose contributions to the decision process can be blamed when things go wrong. The convenient stance is: "I have decided in the light of the best available predictive indications"—and it matters little whether such prognostications are provided by the seers of Homer's time, the Delphic oracle in Plato's, the astrologers in those of general Wallenstein, or the President's Council of Economic Advisers in our own day. The burden of responsible decision making under conditions of radical uncertainty weighs heavily on the human mind and spirit. And anything that manages to shift responsibility onto the shoulders of another is welcome. Then, too, convenient oriented predictions are extremely useful to decision makers for validating as inevitable and "in the cards" something they wish to do for other reasons of their own. Predictive experts are thus indispensably useful to decision makers. Yet whether they are prepared to acknowledge it or not, politicians themselves are among the worst of prognosticators. They are forever projecting for public consumption (no doubt with varying degrees of cynicism) grandiose visions of a New Deal, a New World Order, a Thousand-Year Reich, the Age of the Victorious Proletariat, or whatever. But the new era, however grandly inaugurated, is generally shortlived. (Proverbial wisdom is right: in politics a week is a long time, a decade an eternity.)

ATTITUDES TOWARD FOREKNOWLEDGE: PREDICTABILITY BELIEVERS AND SKEPTICS

Afflicted by a futurophilia of sorts, some people have use for the present only insofar as it is the theater of operations for future-oriented plans and projects. Others have the reverse affliction of futurophobia. To plan, to think ahead, to worry about the next day's meal or the next year's war is totally antipathetic to their minds. For them, *carpe diem* is

a matter of seizing not the opportunities of the day but its enjoyments alone. Here, as elsewhere, the course to wisdom lies in the middle.

Philosophers sometimes say—and even more often imply—that the be-all and end-all of human satisfaction is the realization of the subjective immediacies of the present moment—the things we enjoy at the moment of enjoyment, the present possession of intrinsically satisfying experience. But this is very questionable, seeing that few pleasures are more keen than (or even quite as keen as) their anticipation. The sensible attitude to the future is clearly that of a balanced—substantial but not inflated—level of concern. But, of course, this is achievable only on a basis that itself involves a predictive stance. (When the near future threatens a palpable danger, we had best "drop everything" and bestir ourselves about it.) People's predictive stance crucially shapes their attitudes toward the future, and thereby comes to constitute one of the characteristic and informative features of a human personality.

The question of the future's amenability to rational foresight by us humans divides theorists into various schools of thought. Basically there are three modes of response: (1) the YES of the *predictability believers* who envision a pervasive, close-up predictivism throughout a wide range of issues of substantial human concern, (2) the NO of the *predictability skeptics* who see reliable prediction in most matters of human interest as being in principle infeasible, and (3) the *partly* YES/*partly* NO of the middle-of-the-road *predictability cautionists* who view prediction as an occasional prospect. These positions deserve at least brief scrutiny.

Let us begin with the predictability believers. Devotees of astrology represent one of the longest-lived and historically most influential school of this persuasion. From the notables of classical antiquity to the newspaper readers of today, people beyond number have thought that the fate and future of human individuals can be read in the skies—in the motions of the stars and the sun, moon, and planets. The works of historians as well as the fictions of many authors—Chaucer or Shakespeare included—illustrate this long-lived and pervasive dedication to astrology.

Eventually, to be sure, science pushed astrology into the background among thinking people. And here it is clear that the "laws of nature," which (presumably) hold always and everywhere, will involve substantial element of predictability. If "all elms are deciduous" is indeed a law, then we can infer that whenever an elm is encountered—be it in the past or present or future—that tree will shed its leaves next winter. All statements of natural law thus clearly involve commitments regarding the future. What is true always and everywhere must hold in the future as well. On just this basis, the ancient Stoics, who held that all

events in nature arise through the operations of natural laws, saw the future as *totally* determined. And scientifically minded thinkers from the time of Lucretius onwards have accordingly often maintained that the future is in principle completely preprogrammed through the operation of discoverable natural laws, and that once we have secured sufficient information about the past-&-present, then it is a mere matter of calculation to work out in comprehensive detail what is going to happen in the future.

The French mathematician-astronomer Pierre Simon de Laplace (1749–1827) was the prime modern exponent of this sort of position. As he saw it, if one could obtain accurate information about the existing conditions of nature as a mechanical system, then all its later states could be deduced in precise detail and with absolute certainty. Viewing the universe as such a deterministic system, Laplace envisaged a superhuman intelligence capable of grasping for every particle in the universe both its position at a particular time and all the forces acting upon it: "Nothing would be uncertain [for such an intelligence] and the future, as the past, would be present to its eyes. The human mind offers, in the perfection which it has been able to give to astronomy, a feeble idea of this intelligence."12 If such a conception is right and the world's events and occurrences unfold subject to all-determinative laws of natural causality, then the future must in principle be fully foreseeable though we may, to be sure, in practice lack the capacity to gather the data or perform the requisite calculations. As theorists of this persuasion see it, natural science—not necessarily as we currently have it, but as it will ultimately come to be improved—provides for a pervasive predeterminism by constituting a theoretical model of nature by whose means a sufficiently powerful megacomputer can in principle precalculate (at least the main features of) the entire course of future events. In the heyday of classical Newtonian physics, many scientists inclined to this point of view.

Arather different species of predictivists is represented by those who are social rather than physical determinists. Here we encounter what might be called the "manifest destiny theorists" of the type typified by Hegel and Marx. On their approach, the social and political arrangements of the future are already clearly preordained in the past-&present. Hegel, envisioning an unstopable march of the world spirit towards a rational social order, exemplified this tendency of thought. And in substituting for the Darwinian struggle among biotypical varieties for survival a political struggle among economic classes for mastery, Karl Marx took a similar stance. As he saw it, a materialist dialectic was moving affairs inexorably towards the victory of the proletariat

through the realization of a communist society. Human history, so he taught, has always been a scene of class struggle, and since modern industrialization renders its workers more numerous and their condition of labor increasingly mechanical, they are ultimately bound to rebel against and prevail over their capitalist oppressors. (The conception of a technology-driven increase in productivity that would enable the capitalists to propitiate their workers in the setting of a democratic populism that would enable them to embed their own interests within a framework of accepted legality did not penetrate the reading room of the British Museum.) On any such view, the future's general lineaments can be foreseen precisely because it involves the inexorable unfolding of predetermined historical tendencies. But while traditional Marxists represent an optimistic school of predictability believers, there also exists the apocalyptic school of doomsayers, ranging across recorded history from the manifestos of the Old Testament prophets to the Club of Rome's forecasts of environment of catastrophe in our own time. These theorists too assessed the prospects of prediction with unalloyed confidence that the course of things to come is destined to bear out their gloomy vision of humanity's destiny.

However, predictability believers do not have it all their own way. For there are also predictability skeptics who question, on grounds of fundamental principle, whether rationally cogent predictions can be made at all. Throughout the history of inquiry, there has never been an absence of those who deny the prospect of effective prediction regarding the domain of *Homo sapiens* and the world we live in. Such exponents of future-oriented skepticism stress the inadequacy of the human mind to encompass the complexities of nature—a position that can be developed in two different ways, according to whether primary emphasis is placed on the first factor (the limitations of mind) or the second (the world's complexities).

The Skeptics of classical antiquity generally focused on the inadequacy of the human mind. As they saw it, we humans are but insignificant specks in the world's vast and endlessly complex scheme of things. Our possession of (some degree of) reason and intelligence notwithstanding, people are more closely akin to animals than to gods. We flatter ourselves beyond our merits if we think that our feeble intelligence can penetrate beyond the level of appearances to discern the real springs by which things move in nature. Foreseeing the shape of the future demands an insight into how things actually work in the world—something for which the superficialities that we can discern provide only the most inconclusive and imperfect indications. (Modern evolutionary skeptics hold much the same position, but give it a biological

turn: the human mind is designed by evolution to handle the short-range, immediately practical issues involved in matters of actual survival; theoretical issues of long-range prediction lie beyond its scope.)¹³

By contrast, there are also those not uncommon skeptics who see the infeasibility of the predictive project primarily as lying in the nature of the world rather than in that of us imperfect inquirers. This idea that nature is too intricate and complex for predictability has a long history. For example, Renaissance skeptics such as Montaigne, largely inspired by theological considerations, saw the future as unpredictable because the complexity and profundity of God's plan for the world render it intrinsically unfathomable by any finite being. The long history of failed forecasts on matters ranging from the outcome of wars to the end of the world brings ever-renewed grist to the mill of the predictability skeptics.

All the same, as of classical antiquity it has transpired that between the predictability believers (such as the ancient Stoics) and the predictability doubters (such as the Skeptics) there have always stood those (such as the Epicureans) who view the matter in the intermediate manner of a mixed bag of opportunities and incapacities. And this middle-of-the road, cautionist position appears to be the most plausible line, its comparative paucity of vociferous advocates notwithstanding. For one thing, it best squares with the lessons of everyday-life experience. For another, it is clear that all-out predictive skepticism is a theoretical position that we cannot implement in practice. If we could not predict with at least moderate confidence that planting those seeds will engender carrots rather than rocks or that eating those carrots will nourish us rather than turn us into turtles, then human life as we know it would have become infeasible. Accordingly, between the extremes of predictive hybris and supine skepticism there lies another view—a more sensible predictive realism that harmonizes smoothly with the mixed situation which, to all appearances, actually confronts us.

As the present deliberations unfold, it will become clearer that—and why—we humans do in fact occupy such a predictive halfway house. For while prediction is an endeavor of critical importance for us, it is one in which we can expect at best a very limited success. Such a commonsensical position may be too prosaic to attract fervent devotees. And since it occupies the middle of the road, it is doubtless in danger of collision with vehicles coming from either of those diametrically opposed directions. But it nevertheless promises to afford what will, in the end, prove to offer the most sensible and defensible view of the matter. The most critical fact in the theory of prediction is accordingly that while there is much that we can successfully foresee, our powers in this direction, though real, are unavoidably and substantially limited.