

## FUTURE PERFECT®

Predicting The Future, Edited by Leo Howe and Alan Wain, Cambridge University Press, 1993, Pounds 18.95. (Distributed by Foundation Books)

An almost obsessive urge to know the future is a trait which is common to most cultures. From shamans to oracles, from royal astrologers to computer programs, the human desire to predict the future has found different mediums in different ages. Perhaps in the hope of controlling the future or a response to some primal insecurity, human beings have been as a rule always very vulnerable to predictions of their future.

"Predicting the Future" is a collection of essays by some of our foremost intellectuals to understand this very human trait. The essays are the sixth Annual Darwin College Lectures which were delivered on this theme in 1991 and have now been collected in this volume. The introduction by Leo Howe is an excellent overview of the scope of the topic in its various dimensions. He puts the issue in perspective by pointing out that, ".why we predict, who the predictors are and what we expect of them: all to an extent depend, not just on the ideological and pragmatic concerns...but also on the kind of society we live in".

The future of the universe is the subject of the first essay by the distinguished cosmologist and current media favourite, Stephen Hawking. In an extremely lucid piece, Prof. Hawking describes the current theories regarding the future of the universe and the uncertainties in predicting the fate of our universe. It is fascinating to read about this extremely abstruse topic in such a clear way. This is followed by another very well written piece by Ian Stewart on "Chaos". One of the most remarkable developments in science has been in the field of chaos. Scientists have realized that many systems exhibit chaotic behaviour, which as the name suggests is a highly complex, irregular, almost random behaviour. The range of systems which show chaos is mind boggling. From stock markets to planetary atmospheres, from heart rhythms to fish populations, chaos seems to be the rule rather than the exception. This being the case, the nature of prediction in natural as well as man-made systems is of course fundamentally altered.

After a somewhat esoteric piece on "Comets and the World's End" by Simon Schaffer, there is an extraordinary piece on "Predicting the Economy" by Frank Hahn. He contends that economic prediction presents some special problems which are not faced in other fields. He also explains the distinction between understanding and predicting, a seemingly trivial issue but one which causes a lot of confusion. The discipline of economics, according to Prof. Hahn, seems to be much better equipped to understand the world than to predict the future course of it. According to him, this is linked to the fundamental difference between the natural and social sciences. The predictive powers of natural and social sciences are inherently different. The reason is related to the size of the system, the number of variables which are important in a given problem and the reliability of data. Economic prediction, as

is the case in biology, in a typical problem involves so many variables that any meaningful prediction is mathematically intractable.

With revolutionary changes in medicine, there have emerged and continue to emerge, new legal and moral dilemmas in our society. How the concept of prediction and future changes in this context is analysed ably by Ian Kennedy in an insightful essay on "The Medical Frontier". The rest of the essays are in the broad category of religious studies. Averil Cameron explores "Divine Providence in late Antiquity", while Richard Gombrich discusses the nature of prediction in Buddhism and Don Cuppitt talks about the Last Judgement and linear time. All of these are somewhat less lucid for the non-specialist, (though certainly very well researched and scholarly) than the previous ones.

These are difficult times; "the end of history "is being proclaimed and our notions of past and future are in danger of being radically transformed, indeed being abolished. At such a time, this book is a timely reminder that not only is the future not dead but could be so different from our present conceptions to be scarcely recognizable.

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