

THE USES AND ABUSES OF FORECASTING

**EDITED BY
TOM WHISTON**

A Science Policy Research Unit book

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Science Policy Research Unit, Sussex

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Tom Whiston



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THE USES AND ABUSES OF FORECASTING

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THINKING ABOUT THE FUTURE a Critique of *Limits to Growth*
(Eds. H. S. D. Cole, C. Freeman, M. Jahoda and K. L. R. Pavitt)

THE ART OF ANTICIPATION: Values and Methods in Forecasting
(Eds. S. Encel, P. R. Marstrand and W. Page)

WORLD FUTURES: the Great Debate
(Eds. C. Freeman and M. Jahoda)

GLOBAL SIMULATION MODELS: a Comparative Study
(J. Clark and H. S. D. Cole)

THE POVERTY OF PREDICTION
(Ian Miles)

Preface

The members of the STAFF team (Social and Technological Forecasting for the Future) have over the course of the last few years produced a wide range of books and articles devoted to a critique of 'futures forecasting', both at the level of methodology and also in relation to planning and policy-making.

The forecasting programme of the Science Policy Research Unit (SPRU) at the University of Sussex receives its central support from the Social Science Research Council and the majority of contributors to this book are members of, or associated with, this programme. As will be seen from the list of contributors, however, there are a few additional names in the present volume. This was thought to be necessary in view of the wide range of topics (and requisite knowledge) which are considered.

There is also another reason. SPRU, and in particular the STAFF programme, has through the course of its research articles and major publications¹ derived both a flavour and a methodology of its own (isolating the dangers of 'trend forecasting' and emphasising the role that scenario-structures and 'normative' forecasting have to play). It was therefore thought that a consideration of such a topic as 'The Uses and Abuses of Forecasting', which emphasises the policy dimension, then a range of opinions by specialists in the field, would not only provide a balanced programme but would also serve to present to the reader a divergence of views, and emphasis, which is essential if he is to gain full critical insight into the relationship of forecasting and policy-making.

One man's meat is another man's poison, and in this sense the reader will no doubt find a range of approaches and points of view – some authors placing much weight upon the 'theoretical side' of their topic, whilst others prefer to consider the pragmatic turn of events. There are, however, certain common points. Probably all contributors would agree that you cannot foresee the future – there is no crystal ball. At best one can consider the implications of certain policies if continued into the future; the restrictive nature of many forecasts (either with respect to explicit or implicit assumptions); and the always present dangers of

complicity in relation to the policy-making body on the one hand and the forecaster on the other. Over and above this common ground, emphasis varies according to the preferential selection of the contributors.

As to contributors, two names do not appear, but they should. Namely Chris Freeman, Director of SPRU and Marie Jahoda, Director of the STAFF programme. Theirs is the hidden hand.

December 1978

T. W.

NOTE

- 1 E.g. *Thinking about the Future: a Critique of Limits to Growth* (ed. H. S. D. Cole *et al.*); *The Art of Anticipation* (ed. S. Encel, P. R. Marstrand and W. Page); *World Futures: the Great Debate* (ed. C. Freeman and M. Jahoda).

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Introduction

Concern with the future is as old as mankind; but only within the recent past has this concern developed into systematic exploration of the possibilities that lie ahead. Forecasting is today a standard procedure in government departments, in industry, in the agencies of the United Nations and in many research units all over the world. Most of these efforts have a practical purpose: to help policy-makers in their difficult decisions. The consequences of these decisions may affect not only the present generation, but our children, grandchildren and beyond. Because forecasting thus exercises some influence, however indirect, on all our lives, everyone who thinks about the future, in hope or fear, should have access to appraising for himself the nature of the influence that forecasting has. The purpose of this book is to provide such access.

Forecasting can be undertaken for short- or for long-time perspectives; it can deal with minor or with major issues; with relatively isolated or with global matters; restrict itself to the examination of the likely consequences of current policies or examine the implications of alternative policies; it can use one or more of the available forecasting techniques from simple extrapolation of current trends to the imaginative construction of scenarios; it can rely on theories or proceed on *ad hoc* empirical data; appear quantitatively precise or qualitatively vague; it can be based on conservative, reformist or radical views about social change; it can be available only to its sponsors or be made public; and finally – from the point of view of this book – it can be so bedevilled with technicalities of a high order that even full publication provides only spurious access to all but a handful of experts; or it can deliberately be directed to a wider audience.

Keeping this vast diversity in mind I have tried to collect in this text as wide a range as possible of forecasting exercises and comments on their assets and liabilities. As a result the chapter titles may at first glance appear to lack a common theme. But this is deceptive; they have more in common than the titles suggest. While each contributor no doubt expresses, to some degree, a differing focus of interest, they all comment on the uses of forecasting in relation to policy-making. For all

contributors are intensely concerned with the central questions of the way in which a particular forecasting procedure compromises or attempts to control the future in relation to some particular political or ideological bias rather than presenting for consideration a range of possibilities from which a more rational or equitable selection might be made.

In so doing the various authors have attempted, where possible, to address themselves to the motivation, financing and institutional factors which controlled the forecast; to assess the relationship between forecasting and policy-maker; to assess the effects (if any) and effectiveness of the forecast; and finally to comment upon any bias which may have become apparent through critical analysis – in particular whether or not this was of an ideological, organisational, methodological or personal nature. Only through such an analysis is it then possible to comment on how such forecasts might be better performed. The extent to which these matters are applicable to the areas examined varies a great deal. But the aggregate insight gained provides, I hope, a useful critical review of the experience of forecasting in relation to policy-making in a variety of contexts.

It might be pointed out here – even though the reader of the following chapters will quickly become aware of it anyhow – that there is no uniformity in the political outlook of the various contributors. Some operate within the current system; others criticise and attack it. This is, I believe, as it ought to be if one wishes to convey an impression of the range of assumptions and attitudes current in the forecasting field.

The book begins with an historical and socio-political perspective on forecasting as an intellectual enterprise. The importance of Miles' chapter lies in his insistence that forecasts are socially embedded and that we may be too close to present-day events to throw off our somewhat time-dependent perceptual lenses, even when our vision is directed to the future. Other forecasters may not share his point of view, but it is one that needs to be taken seriously.

This chapter is followed by a series of sectoral forecasting issues. Blackaby, concerned with the problems of economic forecasting (i.e. the limitations of econometric modelling), describes current British practices in this most important field and examines their degree of success. From the macro-problems of economic forecasting the text moves to the micro-problems of satisfactorily understanding changing value-systems of individuals. This provides an interesting juxtaposition of arguments, which in essence reflects a dilemma of all forecasting: both macro-studies and insight into an individual's behaviour and the problem of

individual differences are required. Forecasters have not yet learned to combine them.

The chapters which then follow deal with transport and urban development; education and manpower; resources; and socio-technological systems.

Gershuny's chapter, sub-titled 'Fixing the Future', emphasises the way in which a particular forecast may effectively foreclose any further examination and become a self-fulfilling prophecy. Gershuny makes a strong plea for a 'rational' approach to policy-making, in order to ensure adequate discussion of an appropriate range of alternatives and thereby to overcome unduly restrictive and deterministic thinking. In short to impose a 'what if' philosophy into forecasting and policy-making.

Public inquiries are intended to function as safeguards against such self-fulfilment. Turner and Cole in their chapter lay a fair degree of criticism at the door of public inquiries, both with respect to their limited terms of reference (close to Gershuny's point) and in relation to the nature of so-called 'experts' who may serve a tribunal or inquiry.

The next two chapters, McCormick's and Whiston's, are concerned with the way in which education policy may be adversely affected by comparatively narrow forecasting techniques; or at least how support and rationalisation of policy is provided by restrictive forecasting techniques. Current concerns with unemployment, with manpower forecasts and with respect to the education-industry link serve in these chapters to introduce a wider range of debate.

There then follow three chapters (Marstrand and Rush; Page and Rush; Gribbin) which deal, respectively, with food and agriculture policy, materials forecasting, and climatic forecasting. These three chapters demonstrate that forecasting in areas which have a high 'physical' component is just as dependent on assumptions as forecasting in social areas. Superficially it might be thought that systems modelling, quantification and other precise techniques are more easily undertaken in these areas. This is patently not the case.

Encel is concerned with technological innovation and, further, serves to emphasise the valuative nature and social implications of technological developments and the need for thorough analysis prior to policy formulation in these areas. What all these chapters have shown implicitly is explicitly the focus of Wittrock's, Wenk's and Cole's chapters: the assets and dangers of attaching forecasting directly to the political realm.

Wittrock deals with a successful arrangement in describing the

formation and progress of a group in Sweden (the Swedish Futures Secretariat, formed as an outcome of Myrdal's *To Choose a Future* report) which is attached to the Swedish Cabinet Office. He emphasises the ability of the Secretariat to cut across government departments and immediate vested interest groups and thereby widen the policy debate.

This seemingly healthy development is, however, countered by Edward Wenk's chapter. Wenk has previously been a senior science adviser to several US Presidents; his experience has made him sceptical about the use of long-term forecasts in policy formation; the political process, being what it is, must give priority to short-term interests, even where a long-term strategy exists.

Cole in his overview of the function of global forecasting outlines the importance of individual future-entrepreneurs and the nature of their mutual recriminations. He suggests caution with respect to the value we place on global forecasts, but nevertheless recognises their 'catalytic' function.

In the last short chapter I abandon editorial neutrality, and argue the case for the possibility of influencing policy through a particular type of forecasting.