

A History of the Future

Prophets of Progress from H. G. Wells to Isaac Asimov

In this wide-ranging survey, Peter J. Bowler explores the phenomenon of futurology: predictions about the future development and impact of science and technology on society and culture in the twentieth century. Utilizing science fiction, popular science literature and the novels of the literary elite, Bowler highlights contested responses to the potential for revolutionary social change brought about by real and imagined scientific innovations. Charting the effect of social and military developments on attitudes toward innovation in Europe and America, Bowler shows how conflict between the enthusiasm of technocrats and the pessimism of their critics was presented to the public in books, magazines and exhibitions, and on the radio and television. A series of case studies reveals the impact of technologies such as radio, aviation, space exploration and genetics, exploring rivalries between innovators and the often unexpected outcome of their efforts to produce mechanisms and machines that could change the world.

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*Prophets of Progress from H. G. Wells
to Isaac Asimov*

Peter J. Bowler

Queen's University Belfast



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Preface

I have occasionally been asked why – having built my career researching the history of Darwinism – I have ended up writing a book about futurology. There are several mutually compatible explanations for the transition. One is that anyone interested in the origins of evolutionism knows that the theory was at first strongly linked to the idea of progress, and predicting the future progress of science is an obvious extension of that link. Another explanation emerges from the fact that I have steadily moved away from Darwinism by a series of steps, each of which seemed to make sense at the time. Studying the early evolution debates involved me with the whole question of science and religion, and I became increasingly frustrated by the fact that – for Britain at least – historians seemed to lose interest in that relationship at the point when the Victorian era came to an end. A study of the relationship between science and religion in early twentieth-century Britain led toward another area, that of popular science writing, again sadly neglected after the Victorian period. (I should add that neither of these lacunae are present for the situation in the United States.) This book emerges in part from my work on the British popular science literature of the early twentieth century, where I began to notice that predicting future developments seemed to become increasingly prevalent. Having always had an amateur interest in science fiction, it seemed natural for me to link the two areas of prediction and look for generalizations. The fact that both Wells and Asimov wrote popular science as well as science fiction illustrates the kind of synergy that interests me.

I have confined myself to the first two-thirds of the twentieth century partly because that seems to represent a reasonably coherent period for this topic (and also because I feel uncomfortable treating events I can remember as past history). As far as I know, there is no other book that seeks to survey predictions of the future on as broad a scale as that attempted here. We have many studies of science fiction and of the predictive novels written by literary figures such as Aldous Huxley. There are also many surveys of futurological speculation about particular areas of technical development and their implications. The use of such studies to throw light on cultural history is especially strong for America and a few other areas such as the Soviet Union. These studies make extensive

use of popular science literature as well as science fiction and I have mined them shamelessly for information in what follows. One country for which the popular science literature does not seem to have been exploited is Britain, and here I have made use of my own detailed research. Since I read French, I have also made brief forays into the popular science literature in that language. I am acutely aware that even so, this is very much a survey based on the English-language literature, both primary and secondary. My only excuse is that at the age of 72 I don't feel up to trying to extend myself further.

I hope that this book will be of interest to a wide range of readers and I have been given to understand that it might prove useful as a text for a number of university-level courses. This has created something of a problem when it comes to providing documentation for the information and assertions contained in the text. Academic readers and students need references to the material from which evidence is derived, but ordinary readers may be put off by too obvious a display of erudition. The situation is compounded by the fact that in some areas I can appeal to reliable secondary sources to back up what I say, whereas for the British and French literature I need to provide detailed references to books, magazines and newspapers which have remained little researched up until now. Many of my references thus consist of an uncomfortable mix of secondary and primary sources, and of both academic and popular literature. To avoid littering the text with superscripts, I have in general provided all the documentation for each paragraph in a single note, and I apologize if these are sometimes rather complex. The bibliography is huge, reflecting both the breadth of the primary sources that bear on this topic and the richness of the secondary literature available in some areas. To keep the bibliography from getting really out of hand, references to newspaper and popular magazine articles are given only in the notes.

I'd like to end by recording the encouragement of several colleagues, including Amanda Rees, James Secord, Simon Schaffer and Charlotte Sleight and the help of the editors at Cambridge University Press, Lucy Rhymer and Melissa Shivers.