

DJ Bartholomew



**OF
CHANCE**

God of Chance

Electronic Version

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The immediately preceding paragraph is, unfortunately, a legal necessity and it may give an incorrect impression. I do hope you will enjoy this Book and will not be deterred by the need to forestall persons misusing this Book.

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AUTHOR'S NOTE

A book which spans so many disciplines requires the reader's indulgence on two counts. First, although it is the peculiar attraction of statistical science that it gains entry for its practitioners to so many fields this does not guarantee expertise. It is inevitable that my excursions into the territory of others will betray incomplete and, perhaps, inaccurate understanding but I am optimistic that such blemishes will not seriously detract from the main thesis. Secondly, for those not trained in quantitative matters, the resort to a formal style of argument, principally in Chapter 3, may cause difficulty. The matter has been kept as simple as possible and the treatment is self-contained but the reader unfamiliar with this mode of reasoning must expect to take things very slowly. As we shall see, one can easily go astray by trying to avoid the precision which mathematical reasoning imposes. But even if these passages are skipped I believe the general thrust of the argument will be clear.

All biblical references are to the New English Bible, unless otherwise stated.

ACKNOWLEDGMENTS

It is all too easy to imagine that the ideas of others, absorbed long ago, are one's own. My own interest in the relationship between science and religion goes back to hearing the late Professor C. A. Coulson speak on various occasions in the 1950s, though as far as I can remember he never dealt directly with the role of chance. It has been nourished since by the writings of many of those referred to in the following pages whose influence and stimulation I am glad to acknowledge.

My wife, Marian, has added to her other roles that of typist and general assistant and to her my thanks cannot be better expressed than in the words of Proverbs 19.14 (NEB).

PREFACE

God of Chance was published by the SCM Press in 1984. It was written partly in response to the claims of scientists like Jacques Monod, made in his book *Chance and Necessity*, that the whole of the evolutionary process could be accounted for by those two things; chance and necessity. Although his was a scientific book written by a scientist its tone was distinctly anti-theistic. In opposition to such scientists there were also theologians who argued fiercely that to allow chance into the description of the world was tantamount to embracing atheism.

My book was well received and since it went out of print I have had numerous enquiries about how copies could be obtained or about whether I was planning a second edition. So much has happened in the 20 and more years since publication that something more than a new edition would be required now. I am, in fact, working on a new book on the same theme which will take full account of the great deal of progress that has been made since 1984. However, much in the original book has a continuing value and I was therefore pleased to respond positively to the suggestion of Burke Brown that the text be made freely available on the Web.

The central message of *God of Chance* is, I believe, still as valid today as it was in 1984. This is that chance has to be seen as *within* the Providence of God. It is not something which requires the abolition of theism nor is it an illusion. We increasingly use chance as a tool in scientific work and it would surely be surprising if God had not got there before us.

Much of the historical and biblical material in the book remains of continuing interest as and I do not intend repeat it in any new book.

The chief developments have been on the scientific front. William Dembski, for example, has published an enormous amount on the theme of *intelligent design*. He proposes a programme for eliminating chance as an explanation of the created world. In doing so he uses ideas which are essentially those of statistical inference which were discussed at some length in *God of Chance*. Stuart Kauffman has also published extensively on complexity and has explored the extent to which order might arise out of chaos. Both of these developments, among others, will need to be taken account of in future work. For example, if natural selection is so effective in nature we might expect it to be equally useful to us and this has given rise to genetic algorithms where, by mimicking nature, we can hope to produce new designs of some complexity.

Some related themes have been developed in my book *Uncertain Belief*, published by the Oxford University Press (hbk 1996, pbk 2000) details of which may be obtained via this Web site. Probability ideas are still relatively unfamiliar to the general public and this fact somewhat confuses the debate which ought to take place on issues raised in these books. I hope that readers will still find *God of Chance* interesting and useful after a quarter of a century.

David Bartholomew

August 2005

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That human life history and indeed the universe may be ultimately meaningless, the product of chance and ruled by chance, without any goal or purpose is the greatest threat of all to theology and religious belief. It is a view which was argued compellingly above all by Jacques Monod, in his *Chance and Necessity*. In this book, the author, a professor of statistics and a practising Christian, makes the fullest study yet of the whole question.

He begins by focusing on evolutionary biology, where the questions have been raised so clearly by Monod and others, considering not only these positions and the replies made to them, but also the validity of arguments which purport to use the apparent randomness in nature to establish, rather than demolish, belief in God. At the core of the book, the perspective shifts from science to theology. Rather than accepting the common view that chance is inimical to order and purpose, Professor Bartholomew shows that it is actually conducive to the kind of world one would expect a God whom Christians believe in to create.

But how can God act in a world of chance? The difficulties raised by theologians and philosophers are considered in a subsequent chapter, and the book ends by considering the implications for other Christian doctrines: the character of God and the nature of man; incarnation and redemption, the Holy Spirit, suffering and evil, prayer and the last things.

J. Bartholomew is Professor of Statistical and Mathematical Science at the London School of Economics.

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