

Book Review

Labyrinths of Reason Paradox, Puzzles and the Frailty of Knowledge

By **William Poundstone**

Penguin Books, London (1988/91)

274 pp, ISBN 0-14-013136-1. £5 99

It was a genuine pleasure to read through this slim paperback without getting lost in a labyrinth of abstruse argumentation. The book deals with a vast number of logical paradoxes, some of them wellknown, in a lucid style suitable for the general reader.

The author starts with explaining what a paradox is. A paradox is a situation which arises when, from a number of premises all generally accepted as true, a conclusion is reached by valid deductive with other generally accepted beliefs. Examples are Zeno's paradoxes, the liar's paradox, paradox of the knower (the unexpected hanging). These and many others are treated in the book. The three examples quoted arise from (1) assumption of infinite divisibility of space and time, (2) self-defence and (3) problem of genuine knowledge or validity of an assertion. In fact, these and a few other paradoxes discussed by the author are so philosophically profound that philosophers still rack their brains on them. Mr Poundstone summarises alternative arguments in a simple style.

Problems related to modern physics which might appear paradoxical outwardly such as the twin paradox in relativity, black holes, beginning

of time, nature of quarks (quarks are counterfactuals), are touched upon by Mr Poundstone. Within the limits of a popular book, the author succeeds in introducing the topics to a layman. Similarly, basic problems of philosophy are patiently introduced. The topic ranges over knowledge (justified true belief which is also indefensible after Gettier), induction versus deduction, hypotheses, theories and proofs, belief, meaning, understanding, counterfactuals, determinism etc. These problems are the staple of much of academic philosophy and the author treats them on an understandably elementary level, particularly as far as they relate to the appearance of paradoxes. Discussion of the mind/brain problem, consciousness, Searle's Chinese Room problem (a machine cannot experience consciousness) as well as of purely mathematical problems like NP-completeness, find a place in the book. Should a continuous reading of the book tire somebody, there is a 12-page interlude describing five interesting puzzles set by Dr Watson for solution by Sherlock Holmes, which are found very enjoyable.

Dr D R Hofstadter really said, "A sparkling and highly original approach to the deep mysteries of common sense, evidence, knowledge and truth."

Poundstone is superb at converting philosophical debates into wonderfully clear and stimulating mind-benders. Anyone interested in how minds reflect reality—from beginners to professionals—will get a big kick out of this book.

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