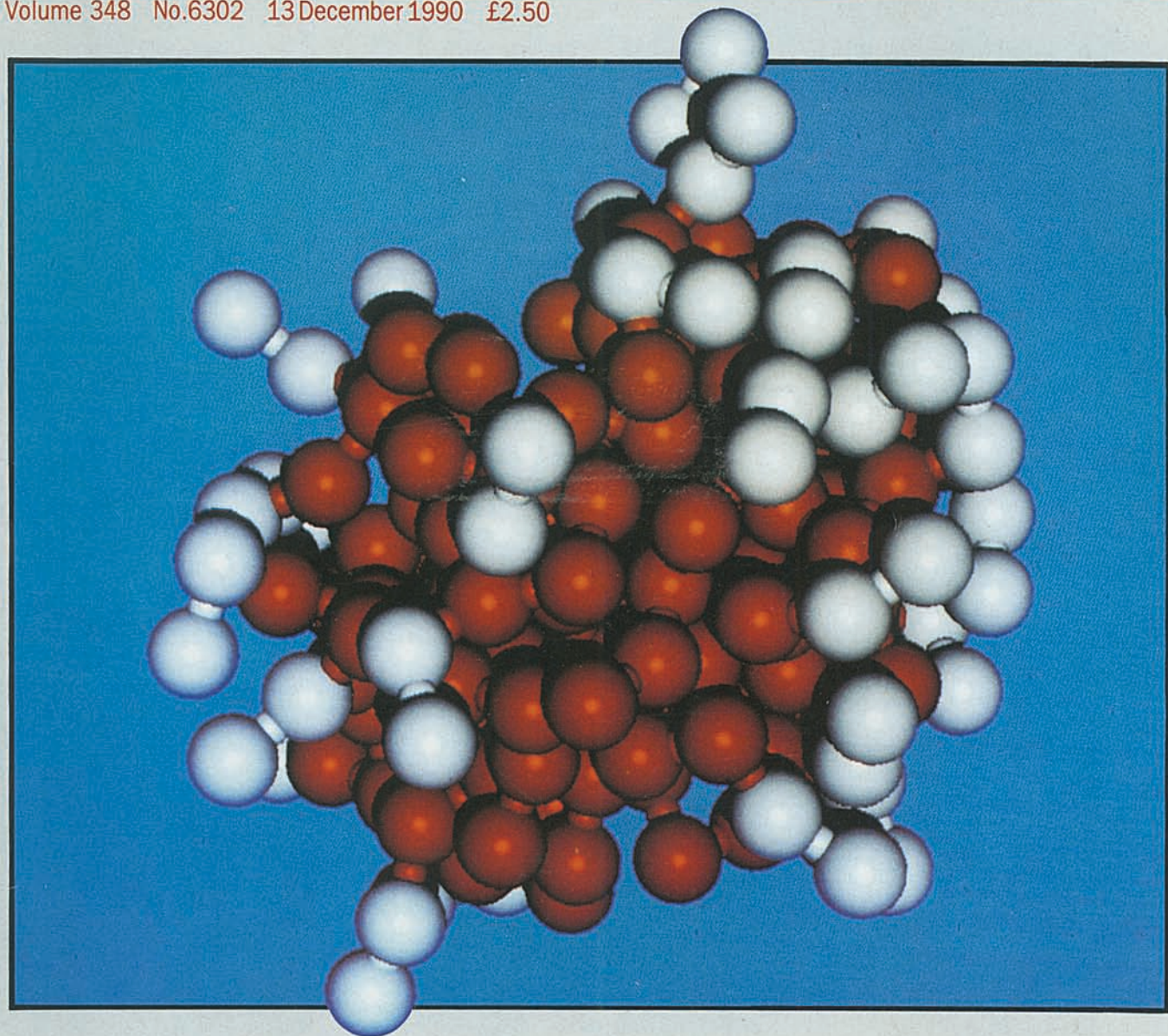


# nature

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# All in his head

Robert Temple

**Essays on Science: Felicitation Volume in Honour of Dr. Joseph Needham.** Edited by Hakim Mohammed Said. *Hamdard Foundation Pakistan, Karachi, Pakistan: 1990.* £20, \$40, Rs 400.

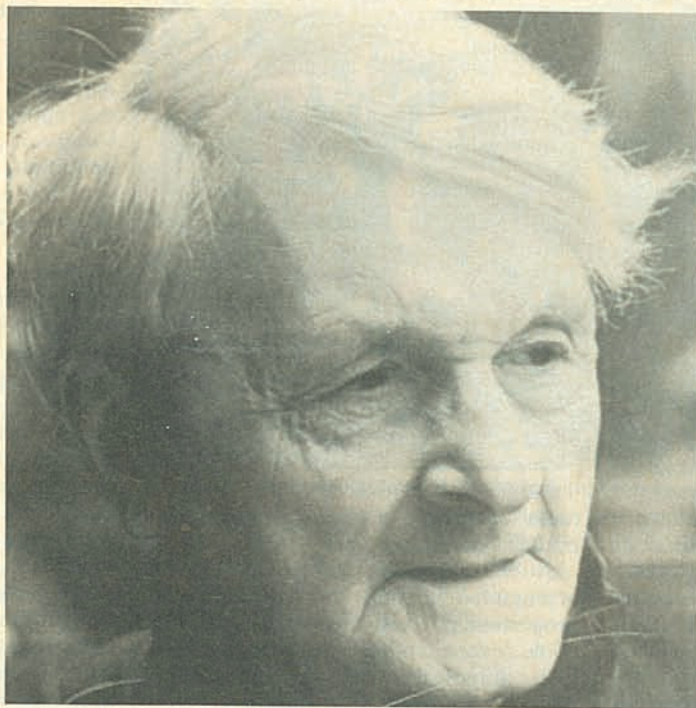
**A Selection from the Writings of Joseph Needham.** Edited by Mansel Davies. *The Book Guild Ltd., (Lewes, Sussex, England).* Hbk £25.

JOSEPH Needham is probably the world's greatest living scholar, and on the occasion of his ninetieth birthday in December it is fitting that these volumes should appear. The interesting volume of *Essays* from Pakistan is well worth acquiring, if one can bear the maddening refusal by the Indian and Pakistani contributors to use the definite article or to have correct English grammar.

Only one contribution is in French, and that a brief one; all else is in English, or some semblance of English. Needham's collaborators, Kenneth Robinson, Dieter Kuhn and Gregory Blue, contribute respectively an advance section of *Science and Civilization in China* on literary Chinese as a language for science, on a side-avenue of the history of textiles, and a foretaste of H. T. Huang's study of the history of noodles and spaghetti. Important articles are included by Debiprasad Chattopadhyaya on the early Indian empirical scientist Uddālaka, who predated the Greek Thales and has a stronger claim to being the 'earliest scientist' outside of China; by Pan Jixing on the invention of the rocket, in which he adduces additional support for Needham's position; by Georges Métaillé on the botanical terminology of Li Shihchen, China's greatest natural scientist (seventeenth-century); an extraordinary account of the Harappan unicorn by B. V. Subbarayappa; a survey of Indian science by S. N. Sen; a surprising study of the origins of Japanese managerial reform by Tetsuro Nakaoka; and an excellent survey and appreciation of Needham's work by the editor. The book is a fascinating collection of diverse subjects in the history of science of India, China and the Arabs, much of it relating to Needham's work. It should be on the shelf of all students of these subjects.

The selection of excerpts from Needham's voluminous writings represents his work other than the gigantic *Science and Civilization in China* series, from which excerpts have not been taken. Not every book of his, much less every article, is

actually represented. For instance, his *Man a Machine* of 1927, which was his first monograph, is not even mentioned; the book has no bibliography of Needham's writings other than to list the fifteen works consulted for extracts. The editor did persuade Needham to allow one of his sermons to be published for the first time,



Needham — a genius almost without parallel in our time.

this one delivered at Caius College in 1976. Over many decades Needham has been a lay preacher at an Anglican church at Thaxted in Essex, and there are mountains of his sermons in existence. I once asked him if he ever intended to have them published, and he said "Only after I am dead, if anyone wants to." This is therefore the first appearance in print of this side of Needham's multivarious persona. Extraordinarily useful also is Needham's autobiographical essay "The Making of an Honorary Taoist", which has appeared on previous occasions but is most welcome here, as it is a humorous attempt at self-analysis by a kind of alter-ego of Needham's christened Henry Hollerenshaw, a fictitious Derbyshire name which he first used to write a pseudonymous book entitled *The Levelers and the English Revolution* (1939). Needham told me once he did not dare use

his own name on the book because he imagined it might endanger his becoming a fellow of the Royal Society, as "the Royal Society do not like people having too broad interests and might take against me for it so that I might not get in." Long extracts from this book are given, although Needham is not infallible on this subject, failing to draw sufficient distinction between the tiny Digger movement and the larger Leveller movement, and wrongly imagining that the latter were precursors of socialism, which was only true of the former. (But there are many who agree with him, and I once had an earnest lecture on this subject from Tony Benn, which could have come straight from the pages of Needham, and possibly did.)

The weak point in Needham's writings is certainly political. In *The Grand Titration* he speaks of "the inevitable transition from capitalism to some such economy as that of the Soviet Union, where . . . each man's . . . participation in the government of the . . . state is acknowledged." This was silly at the time (1944, during the oppressive regime of Stalin), but today it is a monstrous aberration in an otherwise great intellect. Needham has told me he was "never a communist" and defines himself today as an "international socialist". There certainly are not very many of those left east of the River Neisse today! For a man otherwise a genius almost without parallel in our time, Needham has been curiously misguided in his political philosophy.

The magnitude of Needham's intellectual achievements is so gargantuan that, having read 8.5 million words of his at least, I still find that he has surprises to spring. It is as well to remember that he is fluent in at least eight languages, three of them ancient, and once gave a speech in Polish. Perhaps the best anecdote is what his first wife Dorothy said to my friend Peter Mitchell many years ago in Cambridge. Referring to Needham's photographic memory, and the proofs of an early volume of *Science and Civilization in China*, 'Doffy' said: "Joseph has a new game. He used to lie in bed correcting his proofs in his head. But he got bored with that. So now he translates them into French first." (In his head, of course.) And it is this head of Joseph Needham that gives us hope for the future of the human brain. □

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