

to be said for modern neurobiological approaches. It is in this section, particularly, that the author's reticence regarding illustrations from his own and related research leads to a feeling of incompleteness. Although the stated aim of the book is to formulate problems in behavioural modelling, it would be nice to see these problems expressed through descriptions of actual research studies.

The remainder of the book is a bit uneven. There is a briefly foray into sociology, and a couple of transcripts of interviews and discussions, and then a summary chapter. A recurring theme in all of these is interdisciplinarity. Indeed, the discussion on interdisciplinarity (from 1971) could well have been a transcript of similar discussions held down the years till today.

If there were a core message I were to abstract from the book, that too would be the importance of interdisciplinary research in understanding intelligence. The message is implicit throughout the text. While the author perceives AI as being the theoretical counterpart to an array of experimental methods, I would suggest that the mix is richer still. AI is one among several theoretical strands that come together with many experimental approaches in modern neurobiology.

UPINDER S. BHALLA

*National Centre for Biological Sciences,  
GKVK Campus,  
Bangalore 560 065, India  
e-mail: bhalla@ncbs.res.in*

---

**Eight Preposterous Propositions.** Robert Ehrlich. Princeton University Press, 41 William Street, Princeton, New Jersey 08540, USA. 2003. 342 pp. Price: US\$ 27.95.

---

In the 1930s, Theobald Lang, a German geneticist, claimed that male homosexuality could be an inherited trait. His conjecture was based on his observation that sisters of homosexual men displayed masculine characters. This startling asser-

tion generated two drastically opposing views; Nazis declared that homosexuals 'are not poor, sick people to be treated; they are enemies of the state to be eliminated'. A contrary and definitely a humane view – that this trait being inborn, such people have no 'control' over their behaviour and hence laws against homosexuality should be abolished, was advanced by the Socialist medical association (then in exile)<sup>1</sup>. More than half-a-century later, the question of homosexuality remains as strongly an emotive issue as it was in the 30s. Thus, when in the last decade of the last century, Dean Hamer, a prominent researcher at the National Institutes of Health, USA proposed to study this problem, a number of eminent biologists like Evan Balaban, Richard Lewontin and Ruth Hubbard, 'ganged up' to stop his study, claiming that 'behaviour was very, very far from genes'<sup>2</sup>. But is really 'homosexuality primarily innate'? In the book under review, Robert Ehrlich, a physicist at the George Mason University in Washington D. C., USA has examined in detail the evidence for and against this in a dispassionate and objective manner and has placed it all before the reader to let him draw his own conclusions.

In this highly readable and wonderful book (the subliminal aim of which, I suspect, is to teach lay public and perhaps some scientists also, how to examine an 'evidence' with an open mind and then draw appropriate conclusions), Ehrlich has taken up eight 'preposterous' ideas like 'Is homosexuality primarily innate?', 'Are people getting smarter or dumber?', 'Should you worry about your cholesterol?' and so on. He has examined the evidence in support of or against each of these ideas and then proceeded to rate them on a 'flakiness' scale devised by him. Zero flakiness means that there is a reasonable degree of confidence that the idea is based on good evidence. A rating of 'four' in this scale means that there exists no credible evidence to support the idea. Having done that, Ehrlich then calls upon his readers to score each of the eight ideas presented in the book, based on the reader's own analysis of the evidence presented. The eight ideas he has chosen

are controversial ones and as the example on homosexuality shows, some have public policy implications. The book also contains an interesting 'epilogue', which examines, though briefly, how conventional wisdom (particularly in the field of medicine), often gets reversed based on factors which ultimately relate to the commercial stakes involved in such studies. Ehrlich advises the reader not to score the ideas presented in this book on his 'flakiness' scale, immediately after reading a chapter. Rather, he suggests that the reader should ponder over the contents and then see if he agrees with Ehrlich's evaluation. I tried this over the past couple of weeks, but in the end found it hard to disagree with him. As I have already stated above, this is a superb book which could be made compulsory reading in college-level science courses in India to help students learn to think. This could perhaps be an effective antidote to the 'teaching shop' approach to science education (the hardbound edition is quite expensive for an average Indian student's pocket – a paperback edition, may be by the Universities Press, would be most welcome). Finally, after reading the chapter entitled 'Can we influence matter by thought alone?', which attracted a 'four' from Ehrlich in his flakiness scale (remember a score of four means that there exists no credible evidence for this idea), I could not but help wondering how, many scientists who firmly believe that their gurus can make things appear out of nowhere or levitate at will, would react to Ehrlich's evaluation.

- 
1. Jones, S., *The Language of the Genes*, Flamingo, London, 2000.
  2. Wright, W., *Born that Way*, Routledge, New York, 1999.
- 

AMIT GHOSH

*Institute of Microbial Technology,  
Sector 39A,  
Chandigarh 160 036, India  
e-mail: director@imtech.res.in*