

in the neurosciences whatever kind of answer is possible. To quote the author: "How does mathematics come about, in a daily, down-to-earth sense? That question belongs to psychology, to the history of thought, and to other disciplines of empirical science. It can't be answered with philosophy."

So what does the author do? He presents his own philosophy of mathematics, which is now a fairly easy thing, considering all the questions he has decided such a philosophy should not answer. This philosophy he calls "humanism". The basic principle is: "A world of ideas exists, created by human beings, existing in their shared consciousness. These ideas have objective properties, in the same sense that material objects have objective properties. The construction of proof and counterexample is the method of discovering the properties of these ideas. This branch of knowledge is called mathematics."

I find it hard to understand what is meant by "shared consciousness" and to see how ideas could have "objective properties" in the "same sense" that material objects do. If I ventured such views in public, I would certainly try to clarify them, referring to such sciences as linguistics (after all, shared consciousness, whatever it is, must be mediated through language, and Chomsky has gone a long way towards a scientific analysis of the phenomenon) or to history (does a historical fact share the same objective properties as an experimental fact in physics?). Here, of course, such preoccupations are dismissed as "futile", so the author can take his "philosophy" for granted and proceed without further ado.

In the first part of the book, the author develops the ideas that "mathematics is human. It's part of and fits into human culture" and that "mathematics knowledge isn't infallible. Like science, mathematics can advance by making mistakes, correcting and recorrecting them." He contrasts these (very reasonable) ideas with a Platonist approach, which would take the stand that mathematics already 'exists' somewhere (written down in God's great book), so that theorems are discovered (unveiled), and not created, by humans. Mathematicians are then divided into humanists and Platonists, and the second part of the book is devoted to a review of prominent mathematicians through the ages, classified according to the stand they have taken on this question. At the end, their political opinions are reviewed as well, and, not surprisingly, even with the help of some elementary statistics, Platonists are found to be mostly conservative-righties whereas humanists are mostly democrat-lefties.

As a source of information about mathematics in general, the book is a failure. There remains scattered information, mostly in the form of quotations, about the foundations debate in mathematics. And the author does give unexpected entertainment at times. It is difficult to keep a straight face while reading

that Pythagoras, for instance, for whom no biographical data are available, except the facts that he lived in the sixth century BC and that none of his writings survive, was a 'rightie'. There is also some humour in seeing that the author, presumably wishing to spare the critics time and trouble, concludes his book with a "self-graded report card". The result: "Could be worse." Of course. □

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O brave new world that has Prozac in't!

Britain on the Couch: Why We're Unhappier Compared With 1950 Despite Being Richer – A Treatment for the Low-Serotonin Society

by Oliver James
Century: 1997. Pp. 402. £16.99

Chris McManus

Two subtitles maketh a reviewer's job easier. And should one miss the quasi-eighteenth-century prolixity of the title page, the opening lines also summarize the argument: "The premise of this book is that we are unhappier compared with 1950... that people who are unhappy tend to have low levels of serotonin and that levels thereof are largely caused by our social psychological environment."

Then follows a rambling mishmash of reviews of published research (always with hundreds of studies, thousands of subjects and unanimity of scientific interpretation), supplemented by case-histories from the author's experience, or his television documentaries, or secondary analysis of dysfunctionality in the British royal family. Only the latter, coupled with refreshing references to British rather than US television, justifies "Britain" in the title. As worldwide sales must be reduced, and the scientific evidence is international, I wondered about parallel editions for other countries — say, *Albania on the Couch*, detailing dysfunctionality in King Zog's descendants?

James's main argument is that we ("This book is about... people like us") are now more

depressed (as well as anxious, phobic, obsessive, anorectic, bulimic, gambling-addicted, violent, paranoid, alcoholic, drug-hooked and sexually promiscuous) than in 1950, the common denominator being reduced brain serotonin (present mainly as metaphor rather than molecule). Society has changed since 1950, becoming more competitive, less certain and less predictable. We know more about other people, and compare ourselves more, often with high-profile media-inflated role models, and find ourselves wanting. And a war between the sexes ("gender rancour" in James's quaint phrase), with less well-defined roles, increases divorce and disrupts childhood. This potent mixture makes naked apes, recently out of Africa, more depressed (and anxious, and so on). Is this plausible?

The book's argument depends critically on depression being more common now than half a century ago. Two other current controversies indicate the methodological problems. Is childhood asthma truly increasing, or is there just increased willingness to report symptoms or make diagnoses? Has intelligence really increased this century (scores on identical tests are certainly higher), or is there just increased impulsivity, test-wiseness, guessing or visual literacy?

For psychiatry the problems are much greater. Standardized instruments such as the General Health Questionnaire now routinely use higher cut-offs for 'caseness', as people more willingly acknowledge problems. Historical studies of depression have not used equivalent criteria. James's brief appendix on "the scientific evidence" depends almost entirely on retrospective self-diagnoses in Klerman's controversial study of subjects of different ages. Even if depression has increased, proving causation is even more problematic; we see what we want to see, particularly when social and political factors are involved.

The final chapters give James's prescriptions for raising our low serotonin levels. Twenty million of the UK population would benefit from that contemporary soma Prozac (despite the claimed low libido, erectile failure or anorgasmia in 30–70 per cent of users). Psychotherapy and a more collectivist, communitarian "advanced capitalism" would also help.

Neither is diet neglected, with a serotonin-boosting recipe reminiscent of George Bernard Shaw's crankiness: "One approach is to consume only the juice extracted from pears, sweet beetroot... and carrots, from a juice extractor for a period of three days every month, consuming as many apples as are required if hungry in the interim." Surprisingly, James — unlike G. B. S. — doesn't tell us to stimulate the phagocytes. □

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