

food and drink, to the small universe of an apartment, and to the recollection of a night of mutual comfort. There are petulant, uncharitable judgements along with naive self-deprecation. *Einstein in Love* reveals Einstein's sadness at his personal failings alongside his elation at the prospect of a tryst. We are a long way from John Donne's "Extasie", in which mutual attraction leads to transcendence.

To hear Einstein's physicist friends speak about him is to imagine a figure of great strength and sensitivity. Einstein's portrait in Leopold Infeld's 1941 autobiography *Quest* (Chelsea, 1980), for example, radiates humility, honesty and charity. In Infeld's account, and in many others, the man behind the intellectual revolution produced by the energy quantum and relativity has the face of a kindly, absent-minded sage whose own historical account of what happened (written with Infeld) has the comforting English title, *The Evolution of Physics*. It is hard to overestimate the impact of such an image.

In his account, Overbye juxtaposes Einstein's emotional state and his scientific research. Einstein's love affairs and his thoughts about physics appear serially without connecting commentary. (The physics receives unnecessary and sometimes confusing explanation, while there is little attempt to analyse matters of the heart.) The disjointed style reinforces the reader's sense that the qualities of kindness and humanity, as represented in the larger-than-life statue of Einstein on the Mall in Washington, are social constructions.

Einstein in Love ends abruptly with Einstein's triumph in predicting the deflection of starlight during the solar eclipse of 1919. The story carries a disturbing moral: repelled by the flawed genius of Wagner and Nietzsche, scientists in the twentieth century have portrayed this man as a personification of his great work. ■

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An excavation of the drug myth

Intoxicating Minds

by Ciaran Regan
*Weidenfeld & Nicolson: 2001. 164 pp.
 £14.99*

Leslie Iversen

At first sight, Ciaran Regan seems to have attempted the impossible — a summary of the whole of psychopharmacology in less than 50,000 words aimed at a general readership. But he has been remarkably successful and has written an entertaining and informative account of mind-altering drugs, with a minimum of technical jargon or chemical structures.

The book covers essentially all of the drugs that are used recreationally — both the legal ones (caffeine, nicotine and alcohol) and the illegal ones (amphetamines, ecstasy, cocaine, cannabis, heroin and the hallucino-

gens). For all of these he manages to convey up-to-date information about how they work, at the same time giving the reader basic information about the brain and neurotransmitter mechanisms involved. The book gives a very good basic overview of brain function, including a digression into the mechanisms involved in memory.

The author takes a non-judgemental approach to his subject matter. As he puts it: "What is needed is an excavation of the drug myth. This [book] does not extol or condemn drug use; it simply invites reflection." This refusal to demonize drug-taking is refreshing.

Another large section of the book describes the drugs used to treat mental disorders — the anti-anxiety agents, antidepressants, antipsychotics and lithium. There are accurate and insightful descriptions of the illnesses themselves, with plenty of up-to-date information. The discussion of antidepressants, for example, accurately points out the irony that the pharmaceutical industry has now come full circle. The early antidepressant drugs imipramine and amitriptyline inhibited the reuptake by neurons of the two neurotransmitters noradrenaline and serotonin. The Prozac generation of serotonin-selective reuptake inhibitors replaced these. But the latest antidepressants are again combined noradrenaline- and serotonin-reuptake inhibitors — albeit with fewer side effects than imipramine and amitriptyline. Similarly, in the development of new drugs to treat schizophrenia there has been little success in breaking away from dopamine-receptor blockade as the universal mechanism of action.

The author writes in a lively and engaging style, and the text is full of anecdotes about how drugs were discovered or how their use originated, in many cases early in human history. I could find little to criticize in terms of the scientific accuracy of any part of the book, although the description of significant alcohol abuse as requiring the consumption of "at least a bottle of whisky a day for a period of several weeks" did seem to smack a little of Irish hyperbole!

Professional neuroscientists and pharmacologists will find little here that they do not already know — although they may find many of the historical anecdotes interesting and amusing. Did you know, for example, that the first antidepressant drug, the hydrazine derivative iproniazid, originated in part because Germany was left with a large stock of unused hydrazine rocket fuel at the end of the Second World War? The book can certainly be recommended to non-experts who want to know more about mind-altering drugs. ■

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Whether we approve or disapprove, mind-altering drugs are central to the human experience.

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