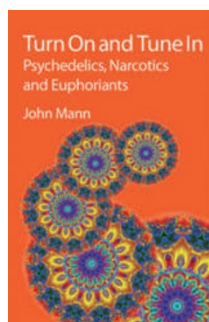


Highs and lows



Turn On and Tune In: Psychedelics, Narcotics and Euphorants

By John Mann

ROYAL SOCIETY OF CHEMISTRY: 2009. 163 PP. £24.95

They say that most races are lost at the very end. That may be an apt analogy for my perspective on this book, where the topic is psychoactive drugs. The author states in the preface that the book “attempts to provide a history of their discovery and use, with an emphasis on the social and anthropological aspects of this use and also abuse.” He gets that part mostly right. He also notes that a description of the basic chemistry and pharmacology is provided, and that “this is a key feature of the book.” This aspect is, unfortunately, relatively absent, although there is a glossary at the end with chemical structures and brief notations on where and why the drugs are popular.

For one not intimately familiar with these substances, the book may be an interesting read. Certainly from a social and anthropological viewpoint it has a lot of good information. It covers in some detail many of the larger-than-life characters who have been involved in using, promoting and proselytizing these drugs (and there are many); it talks about the opium wars, international drug smuggling, and even touches on the purported role of the CIA in drug trafficking. The social and anthropological threads in the book can be quite interesting, and give the reader insight into some of the reasons why these drugs rose into the public consciousness and became so popular. We see how many of them began their histories being used by artists, musicians, writers and ‘fringe’ elements, but ultimately became attractive to millions of ordinary people who too often became entrapped in the pharmacological snare of addiction.

Where the book falls short, however, is in a number of small details where the author seems to have been needlessly careless in simple fact-checking. For the non-

specialist, most of these errors will largely go unnoticed, but for me they detracted from the authority of the book and raised questions as to whether other statements made about some of the individuals and situations would bear up to close scrutiny by one more well versed in the historical aspects of drug culture.

My very first stumble occurred nine pages in, where the author propagates the myth that the first total synthesis of lysergic acid was accomplished by R. B. Woodward, with further comments about the elegance of the synthesis. Perhaps the author can be forgiven this one, because this erroneous factoid has often been repeated in print. But the fact remains that the first synthesis of lysergic acid was carried out by Ed Kornfeld and his co-workers at the Eli Lilly laboratories in Indianapolis. Although it is true that he had trained with Woodward, it was Kornfeld who in fact designed and executed the synthesis. Woodward was an Eli Lilly consultant, and evidently made an important intellectual contribution because he is listed as a co-author on the publication. Yet apparently, because of Woodward’s stellar reputation, it has been assumed that if his name was on the paper, it was his work.

There are other little slips that caught my attention. For example, the author states that “it is now generally accepted that painting while inebriated with LSD was not possible, since the rush of images was too great to be captured.” Although a single image might be something one could never capture while on LSD, it is certainly possible to paint while intoxicated on LSD, and lots of people have. I am not sure who has “generally accepted” the notion of it being impossible to paint while on LSD.

Many of the pharmacological points are also erroneous, or are presented in very confusing ways. With reference to discussing the mechanism of action of LSD, the author states “In particular, it [LSD] competes with serotonin for 5-HT receptors, especially in the hypothalamus and brain stem, though this competition is far from uniform in different parts of the brain.” The current consensus is that LSD activates or partially activates serotonin 5-HT_{2A} receptors, and there is certainly no evidence that the hypothalamus is particularly important, or the brainstem for that matter, unless the author is referring to the raphe nuclei.

And the author really missed a great opportunity to explore in more detail the roles of, and the relationship between, Harry Anslinger and William Randolph Hearst, key figures in pushing the Marihuana Tax Act of 1937. Both had huge roles in initiating the whole saga of how a relatively innocuous weed such as marijuana has become the focus of hysteria and misunderstanding for nearly 75 years. Talk about a cultural and sociological phenomenon! We are paying the price today for their ignorance and complicity, yet their role in making marijuana illegal is relegated to a mere nine lines of text.

The sociological and cultural aspects of the major drugs that are presented in this book are fascinating and interesting.

Rather than writing a paragraph on each specific problem, perhaps a few more short examples will suffice. Why did the appearance of amphetamines have an effect on marijuana use? Δ^9 -tetrahydrocannabinolic acid does not decarboxylate after eating cannabis products, but only after the application of heat during cooking or smoking. And it is my understanding that British soldiers ate a salad made of Datura leaves in 1676 because they were ignorant of its toxicity, rather than being “drugged by the settlers in Virginia to prevent them from apprehending some local renegades.” These are only a few of many such problems that I found.

This review is not particularly positive because I have focused on relatively minor (in most cases) errors that could have been easily checked before printing. Overall, I must confess that the sociological and cultural aspects of the major drugs that are presented in this book are fascinating and interesting. The non-expert will find these stories very readable; the errors that I stumbled on will be mostly invisible. But darn it, I just wish the author had taken the time to get all of the little details right. □

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