

Liberated by Librium

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David Healy

THE ANTIDEPRESSANT ERA
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The last quarter of the twentieth century has witnessed an explosion of knowledge about the genetics, chemistry and physiology of the brain, an explosion powerful enough to be compared by some observers to the Darwinian and Newtonian revolutions. The neuroscientific renaissance of our time has not only illuminated normal human function but has opened up the possibility of studying the biological, specifically neurochemical, bases of psychopathology. Anglo-American psychiatry in particular, which commands ever more attention throughout the mental-health world, has veered sharply towards biomedical models of mind.

Biological psychiatry views mental illnesses as brain disorders with physical causes, such as heredity, foetal milieu, hormonal environment, or brain physiology and chemistry. It brings with it a new cast of scientific experts, new models of mind-body interaction, new diagnostic technologies (CAT, PET and MRI scanning), and a new scientific language. It also reconfigures the doctor-patient relationship: probing "the psyche", Freud, Jung and their psychodynamic brethren practised therapies based on the verbal exploration and interpretation of an individual's emotional past. In contrast, today's descriptive biopsychiatrists record the medical histories of relatives, compile symptom profiles, read lab results, and - above all - prescribe pills and monitor side effects.

Buttressed by new knowledge about the neurochemistry of several pathologies, the rise of psychiatric pharmacotherapy is among the most prominent features of Western medicine in the second half of the 1900s. Neuropsychopharmacology has altered the mental-health profession almost beyond recognition. Since the 1970s, biopsychiatrists have replaced psychodynamically oriented physicians as university professors, departmental chairs, journal editors and organization leaders. The number of psychiatric residents specializing in psychoanalysis has plummeted, and psychiatric residents today receive far fewer hours of training in psychotherapy than half a century ago. Instead, they are expected to master the latest neurosciences and to train in specialized drug treatment. Similarly, since the 1950s, the "psychopharmacology revolution" has transformed the treatment of schizophrenia, bipolar-affective disorder and severe depression. Drugs have alleviated the suffering of hundreds of thousands of individuals, and for the first time in history many victims of cruel and crippling mental illnesses are able to hope for real improvement from medicine. Furthermore, during the past fifteen years, new medications such as Prozac and Zoloft have been available for treating the so-called minor affective disorders. Despite these benefits, many observers of the current psychopharmacological scene have warned of dangers: addiction, overprescription, unknown long-term side effects, the greed of drug companies, the chemical engineering of personalities, and social over-reliance on powerful, mood-altering medications.

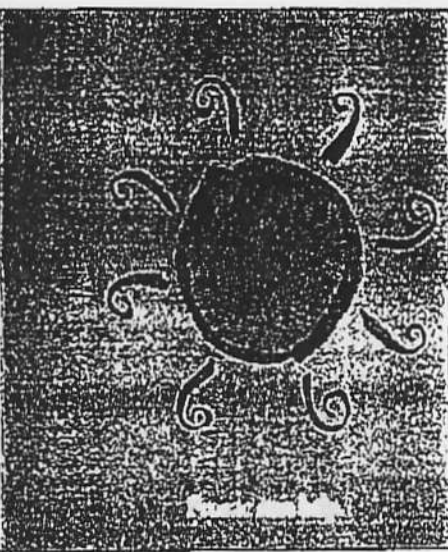
The past few years have seen the first attempts to write the history of these changes. These early efforts have revealed conflicting visions of the history of biological psychiatry. Some commentators have been content with a factual record of doctors and discoveries. Other historians have made the story a value-laden narrative of hard medical science supplanting abstract philosophy in studying the life of the mind. Still others have offered alleged medical horror

Era represents something quite different. Healy directs the Department of Psychological Medicine at the University of Wales College of Medicine, and in the past five years has emerged as the leading international authority on the history of psychopharmacology. (His two-volume study *The Psychopharmacologists* appeared in 1996.) Healy's modest endnotes reveal that he has participated in numerous key events, and that he knows personally many of the main actors in the story.

The body of Healy's book is a clear, detailed and highly informative reconstruction of the major lines of clinical and laboratory research that have produced modern psychiatric pharmacotherapy. The first and biggest breakthrough came in 1952 with the discovery, in France, that

mind; the search for the physiological mechanism of action of these drugs; the discovery of chemical transmission in the central nervous system; the emergence of nerve cell receptor theory; the formulation of new clinical-trial methodology and standardized scales for measuring depression; the synthesizing of "tranquillizers", such as Valium and Librium, dispensable by office-based psychiatrists; the arrival between 1982 and 1993 of a new generation of antidepressants, including Zoloft, Paxil, Luvox and Prozac, for mild or moderate depression; and the cultural popularization of Prozac. Healy is well-informed about these matters; without slighting the science, he manages to describe these episodes in an admirably readable narrative.

Strikingly, Healy's account diverges sharply from the standard picture of discoveries in science history. *The Antidepressant Era* is not the story of theorists of genius or gifted researchers working in painful isolation and announcing paradigm-breaking ideas to an incredulous world. Modern psychopharmacology, rather, is a collective, international undertaking. Mind-drug research has required multicentre studies in several nations over many years. It involves international research teams - composed of chemists,



the phenothiazine derivative chlorpromazine (Thorazine) calmed schizophrenic patients without sedating them. The development of reserpine and lithium carbonate soon followed. Healy discusses the excitement among asylum doctors at the arrival of the first medicines to alleviate psychotic suffering, particularly against the background of generations of therapeutic resignation and an accumulation of severe cases in hospitals. Early antipsychotic medications were used to treat schizophrenics and to stabilize manic patients. The possibility of chemotherapy for depressive disorders came into view by the end of the 1950s. Imipramine was the first of the tricyclic antidepressants (so called because of their three-ring chemical structure), which came to dominate mental therapeutics in the 1960s.

The curative and commercial potential of psychiatric drugs quickly became apparent, and by 1960 psychopharmacology was a dynamic international research enterprise that was expanding exponentially. Healy chronicles its major developments during the next thirty-five years: the growth of the large pharmaceutical houses (Geigy, Ciba, Roche, Sandoz, Rhône-Poulenc, Merck, Upjohn); the increasing role of the United

molecular biologists, laboratory pharmacologists, animal behaviourists, clinical-trial physicians and psychiatric nurses - and the funding decisions are taken by government bureaucrats and drug-company executives.

Equally noteworthy, the discovery of many psychiatric drugs has been entirely serendipitous: chlorpromazine, for instance, was being studied as a treatment for burns, cardiac disturbances and morning sickness when its antipsychotic effects emerged. Imipramine was first synthesized as a centrally acting antihistaminic agent. The haphazard nature of these discoveries underscores one of Healy's main points. Beginning with the age of Pasteur in the later nineteenth century, medical scientists adopted a bacteriological model of disease in which a specific, anatomically or physiologically localizable cause (and cure) was believed to exist for every pathology. In psychiatry, this line of thinking was bolstered during the 1970s by advances in molecular biology that made it possible to link particular neurotransmitting molecules and nerve cell receptors with specific psychiatric disorders. This led to the belief that depression, anxiety, dementia and schizophrenia were each disorders of some

target the specific neurochemical problem at the root of each disorder.

Healy considers this idea the chemist's vision of psychiatry. What are currently called antidepressants, he argues, are seriously mislabelled. Antipsychotics and antidepressants, unlike antibiotics, are not magic bullets. They at best have antidepressant "effects" and "properties". They deploy different mechanisms of action. They cause symptoms to remit, not pathologies to disappear. They are active across a range of symptoms and syndromes, some psychiatric and some non-psychiatric. They don't work for everyone, and their effect is greatly influenced by external factors in the patient's life. Healy hypothesizes that the depressions - which most likely are not a single, homogeneous entity - involve a number of physiological systems that act differently from person to person. In a prescriptive postscript, he urges doctors and patients to pursue a combination of treatments, including psychotherapy, in which "the role of drug treatments would be to facilitate the resolution of a disorder rather than specifically to cure it".

Healy's biggest contribution is to illuminate the role of "the medico-pharmaceutical and regulatory complex". Healy is sceptical of conspiracy theories about evil multinational corporations producing toxic chemicals for exorbitant profits; nor is he much interested in Peter Kramer's memorable formulation in *Listening to Prozac* (1993) that the latest medications amount to "cosmetic psychopharmacology", a form of emotional plastic surgery. Rather, he sees our current antidepressant culture as the result of a complicated matrix of actions and interests among the public, the psychiatric profession, private drug companies and government agencies.

By 1960, the potential size of the psychopharmaceutical market and its immense financial promise were becoming apparent. (In 1955, its first year of proven clinical efficacy, chlorpromazine made 75 million dollars for its manufacturer.) Only drug companies have the capacity to create and market these artificial compounds on a mass scale. Increasingly, these companies have aimed to register their products in the large American market, which compels them to adopt American rating scales and the American diagnostic system. It also means that their products must conform to the methods and standards of the Food and Drug Administration. Furthermore, many American medical plans reimburse psychiatrists only for prescribing medications.

In tones alternately critical and apologetic, Healy notes that pure scientific discovery has rarely led to change in modern psychopharmacology. Over the years, many drug-development programmes have been abandoned and many interesting lines of investigation discontinued. Rather, he shows that to come to the fore, clinical and laboratory findings must coincide with powerful vested interests. Specifically, only substances that can be claimed to target a specific disorder, that fill a new or empty market niche, that can quickly meet US regulatory requirements, and that can be packaged attractively in the eyes of an increasingly demanding and knowledgeable medical public are pursued. By isolating the factors that texture and at times determine what gets accepted today as "biomedical knowledge", Healy has written a first-rate study in the contemporary and historical sociology of science.

The most provocative section of Healy's book is his suggestion that drug companies foster the formulation of new psychiatric diagnoses. Healy is struck by the relative rarity of diagnosed depressive disease before the middle of the

Recognizing the Depressed Patient (1961), which claimed that many cases of depression were going undiagnosed and untreated in the community. Merck bought 50,000 copies of Ayd's book and distributed them to private-practice psychiatrists and general practitioners.

Likewise, Healy observes that behavioural conditions such as panic disorder, social phobia and obsessive-compulsive disorder were virtually unrecognized a generation ago. He tracks the emergence of these new categories in Anglo-American psychiatry and their appearance during the 1980s in diagnostic manuals, which more and more were compiled by psychopharmacologically oriented practitioners. During these same years, he points out, Roche, Upjohn and Ciba-Geigy, respectively, developed phenelzine (Nardil) to treat "social phobia", alprazolam (Xanax) for "panic disorder" and clomipramine (Anafranil) for "obsessive-compulsive disorder". These companies, furthermore, funded epidemiological studies of these new conditions, underwrote the research of sympathetic scientists, sponsored medical conferences on these topics, ran advertisements in psychiatric journals, supported patient self-help groups and encouraged media coverage. By convincing doctors and lay people that these conditions are discrete neuroses with specific chemical treatments, the drug companies stand to make a great deal of money.

Is psychopharmacology, then, the disease it purports to cure? Healy responsibly acknowledges that many factors go into the creation of new diagnostic language. Nevertheless, he establishes beyond doubt the investment of the pharmaceutical industry in the drive to chemicalize mental illness and, more generally, its role in the vast expansion of the mental-health industry during the past half-century.

The title of Healy's book suggests that psychopharmacology past and present is not just the story of one medical speciality, but part of the general history of our time. I very much agree. Unfortunately, Healy is much less probing with the social and cultural aspects of his subject: what, finally, is the significance of the neuroscientific revolution for psychiatric theory and practice? Is the key to the age-old quest for human happiness really selective serotonin reuptake inhibition? Should all our moods be construed medically, and what are the risks of pathologizing an ever wider range of our actions? Does the drive towards "scientific psychiatry" ignore the crucial subjectivities of psychological suffering? More specifically, is depression a disease, illness, syndrome, or symptom? If depression is caused by an event or circumstance, should we seek to deaden it with a drug? And couldn't many cases equally be regarded as common unhappiness, spiritual angst, existential brooding, the winter doldrums, a bad case of the blues? Should we expect psychiatry to cure the human condition?

It is to Healy's credit that he at least glimpses these larger humanistic implications of the psychopharmacology story. Since the publication of *The Antidepressant Era*, a craze for St John's Wort - the poor man's Prozac - has been sweeping Britain and Europe. Pharmaceutical stock is part of the current bull market in America. New pills for the management of obesity, as well as new anti-ageing compounds, have been announced. The era of Viagra has begun. These events are only likely to fuel further Western society's obsession with health and its chemical maintenance. The best remedies of all, however, may be a historically informed medical profession and a biomedically enlightened public. David Healy's impressive and fascinating book is a means to these ends.