In the days and weeks after the horrific dual mass shootings in El Paso, Texas, and Dayton, Ohio, in early August 2019, the national conversation focused once again—how disturbing that phrase, “once again”—on two dominant themes: the need for legislative action on gun control, and the inadequacies of the mental health care system. There are myriad factors contributing in complex ways to why an individual chooses the violent, despicable crimes of a mass shooting. But because I had just finished reading Anne Harrington’s masterful history of psychiatry, *Mind Fixers*, I found myself drawn to the op-eds and essays grappling with these tragic events that focused on the inadequacies inherent in the identification, diagnosis, and treatment of individuals with psychiatric illnesses.

In an August 5, 2019, *Wall Street Journal* opinion piece about the shootings, E. Fuller Torrey, the author of *American Psychosis* and founder of the Treatment Advocacy Center, noted that “there are now some one million people with serious mental illness living among the general population.... At any given time between 40% and 50% of them are receiving no treatment for their mental illness. With the best of intentions and the worst of planning, America has emptied out its public psychiatric hospitals without ensuring that the released patients would receive the necessary treatment to control their symptoms. What did we think would happen?”

It is not clear, even after one hundred years of basic neuroscience research and clinical studies, what the words “receive the necessary treatment” mean and whether “necessary” could be considered sufficient. The decline of custodial care and the reliance on psychopharmacology (the latter to some extent enabling the former) means that for too many individuals suffering with severe and complex diseases, such as schizophrenia and major depression, effective treatment remains elusive. The existence of mental illness does not indicate that individuals will turn to violence (the majority of those with severe mental illness are not violent), but it should be disturbing that the nation’s mental health system fails to address the needs of the many who are suffering.

The reasons for this present reality, in the hands of as skilled a writer and as adept a scholar as Anne Harrington, emerge clearly from her historian’s perspective on the field of psychiatry. *Mind Fixers*’s subtitle, *Psychiatry’s Troubled Search for the Biology of Mental Illness*, gives advance warning that Harrington’s tale is not a celebratory one of science offering salvation. The use of the word “troubled” is especially apt, capturing the dogged attempts by generations of practitioners to “biomedicalize” psychiatry.

More than two decades have elapsed since Edward Shorter’s *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac* provided a comprehensive analysis of the changes in the medical treatment of mental illnesses. His narrative covered the rise of asylums, the ascendancy of psychoanalysis, the search for biological explanations, and the hunt for effective psychopharmaceuticals. The transition from the last decade of the twentieth century into the twenty-first witnessed a resurgence of biological psychiatry—fueled by
advances in the molecular biology of neurotransmitter systems, the promises of genomics, and powerful imaging tools that visualized brain function at multiple scales. An up-to-date analysis of the field, interpreted through a historian’s long view, was overdue and much needed.

Harrington’s Mind Fixers is thus the right book at the right time. It is an extraordinary work of scholarship; it is also eminently readable. The elegance of its prose, however, does not make it an easy book to read. It is deeply unsettling to be reminded that the needs of patients have often been secondary to the egos of psychiatry’s founding fathers (and yes, most of the domineering personalities in Harrington’s account are men) and the interests of pharmaceutical marketing.

Harrington meticulously reconstructs the history of the psychoanalytical and psychopharmacological traditions, and their intertwining within the practice of modern psychiatry. This affords her the opportunity to weave together the scientific, clinical, and sociological forces that contribute to the medical community’s ongoing struggle with managing major psychiatric conditions. The division of the book’s chapters into three parts (“Doctors’ Stories,” “Disease Stories,” and “Unfinished Stories”) provides a useful narrative organization for the wealth of facts and details she provides.

“Doctors’ Stories” covers similar ground to Shorter’s history. Harrington traces the history of the asylum and the philosophy of treatment in custodial care, the waxing and waning of the quests for biological basis of mental illness, and the horrors of crude treatments such as electric and insulin shock and lobotomies. The influence of the early twentieth-century eugenics movement and the fear of inherited “degeneracy” ushered in the dark days of forced sterilizations, which continued in some states into the 1960s and 70s. The history of psychiatry, as is also true of surgery and rehabilitation, is intertwined with the traumas of war. Harrington deftly introduces how the suffering of those who have survived battlefield traumas, be it the shell shock of World War I or the post-traumatic stress disorder of recent conflicts, underscores how limited the understanding of the mind and the body truly is. Visible physical wounds are one thing; wounds to the psyche remain something else.

In the book’s second part, “Disease Stories,” Harrington describes the evolution of the major psychiatric illnesses—schizophrenia, depression, and manic-depression—and the challenges these illnesses continue to pose for individuals, families, and societies. As a biochemist with an interest in brain disorders, I read with despair the “wash, rinse, repeat” cycle that influences brain research into mental illness: a new “cause” or mechanism for an illness is proposed, all work leads to disappointment, and the field moves on to the next new idea.

By pursuing this cycle, the history of psychiatry mirrors the history of neuroscience’s dependence on the tool of the moment (gross brain dissections, microscopic analysis, electrical recording, brain imaging) and the chemical of the year (acetylcholine, serotonin, dopamine, glutamate, GABA). When effective for some patients, the drugs developed to target these neurotransmitters are often heralded as “a new electroshock therapy”—that is, a seemingly effective, targeted drug treatment that might actually work via a massive perturbation of brain networks.

For example, Thorazine, one of the first widely used and still very effective antipsychotics, has broad effects on neurotransmitter systems, which accounts for both its wanted and unwanted effects. Ketamine, though showing some promise for treating depression, is also used as an anesthetic and is a dangerous recreational drug. Considering the massively connected and interactive structure of the brain, there is little that should be considered “targeted” about the effects of these drugs.

Harrington’s account of using hallucinogens (with their widespread perturbations on cognition and consciousness) to better understand what goes awry in schizophrenia only reinforces the point that the continued search for the pinpointable biological cause of severe mental illness fails to recognize the complex intertwining and interdependence of biology, experience, and environment that contribute to the dysfunction.

Unfortunately, the search for the “biology” of mental illness has often led scientists to seek observable anatomical brain lesions or simplified notions of neurochemical imbalances. Brain function is organized on many levels of analysis besides those of cells and molecules. I am holding out hope that the new focus on brain circuitry and network function will offer novel frameworks for the design of interventions. But only time will tell if these frameworks can account for why there are always individuals who are forced to live their lives in the dysfunctional tails of the distribution of all possible brain states.

In the final chapters of Mind Fixers, “Unfinished Stories,” Harrington offers a moving vision of the changes that could be made in the way the research and therapeutic communities conceptualize, study, and treat mental illnesses, potentially resulting in a truly compassionate and humanistic science of psychiatry. I interpreted Harrington as arguing that psychiatry needed to be simultaneously both bolder and humbler: bolder in its embrace
of new ways of conceptualizing mental illness, and humbler about what medicine can truly offer those suffering from psychiatric disorders. Psychiatry should not be faulted for striving to be scientific, but it requires a science that eschews reductionism and embraces complexity at all levels from the cellular-molecular to the psychosocial.

While reading, I was both captivated and horrified by the extent to which the history of psychiatry serves as a case study for chronicling the all-too-human frailties that impinge and shape disciplinary knowledge—and can push medical specialties to extremes, as happened with psychiatry’s dalliance with eugenics. Harrington’s narrative lens also offers a cautionary tale of how an overreliance on reductionist biology fails in the face of complex multifactored disorders. The history of psychiatry, as it unfolds in Mind Fixers, helps to explain why severe psychiatric diseases continue to devastate the lives of so many and why cures remain elusive. As the identities of the etiologies of severe mental illnesses continue to elude researchers, so the effectiveness of treatments for individual remains highly uncertain.

If taken seriously (and it should be), Mind Fixers should launch a national conversation among medical policymakers and mental health advocates about what could be done differently so that the research and treatment communities don’t repeat the mistakes of the past. Looking forward, the field cannot afford to continue the trends characterizing the transition from the twentieth into the twenty-first century—a period when, to quote Harrington, psychiatry "overreached, overpromised, overdosed, overmedicated, and compromised its principles.” It is a moral imperative that the field do better.

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Critical Rejection

ERIC TRUMP

Desirable Body

In her 1930 essay “On Being Ill,” Virginia Woolf laments the absence of a literature of illness. “Considering how common illness is,” she writes, “how tremendous the spiritual change that it brings, how astonishing … the undiscovered countries that are then disclosed,” it is regrettable that illness “has not taken its place with love and battle and jealousy among the prime themes of literature.” Since then, writers have taken up her call, filling bookshelves as they turn illness—often their own—into metaphor. This despite the writer Susan Sontag’s 1978 warning that “the most truthful way of regarding illness … is one most purified of, most resistant to, metaphoric thinking.”

One strain of this pathographic literature is the transplant narrative, which explores the metaphors unleashed when the flesh of one body is transferred to another. Most real-life transplants today are routine enough to have a tripartite structure. The experience begins in separation from the world and one’s self—separation through illness or accident for the recipient, and through excision surgery for the living donor (or death for the cadaveric donor). Then comes the transformation in the operating theater, as one body loses an organ to another body, and a new way of being unfolds. Finally, recipient and donor (if alive) are reincorporated into the world they had left, their bodies scarred with the evidence of their respective journeys, the recipient “reborn” and coming to terms with a new organ in but not of his or her body.

These three stages, with their arc of crisis, death, and rebirth into something rich and strange, lend themselves to storytelling. The bodies-into-other-bodies genre in English began, plausibly, with Mary Shelley’s Frankenstein; or, The Modern Prometheus, in which an entire creature is stitched together from bits of anatomy harvested from the charnel houses of Europe. By now, stories that handle modern organ transplantation, with its bureaucracy and technology, its gore and wonder, have entered the cultural bloodstream. Transplanted kidneys, hands, eyes, hearts, faces, livers—all have been translated into art and given various trajectories, from healing to haunting, in novels, urban myths, poems, memoirs, and films.

Hubert Haddad’s Desirable Body was published in 2015 in French and translated into English by Alyson Waters for Yale University’s Margellos World Republic of Letters series. This is a novel that takes seriously Woolf’s call to place bodily (mal)function in the same arena as jealousy and love. Haddad tries to deploy his protagonist’s travails as a vehicle with which to explore the possible meanings and realities of whole-body transplantation, specifically as they relate to the question of what constitutes the self—if such a thing exists—and how that