

Therapeutic revolutions

Pharmaceuticals and social change
in the twentieth century

Reviewed by Cristina Moreno Lozano

Jeremy A. Greene, Flurin Condrau, and Elizabeth Siegel Watkins, eds., *Therapeutic Revolutions: Pharmaceuticals and Social Change in the Twentieth Century*. Chicago: University of Chicago Press, 2016. Paperback, 320 pp., \$40.00. ISBN: 978-0226390871.

Therapeutic Revolutions presents the reader a collection of essays that seek to re-evaluate the explanatory power of ‘narratives of revolutionary change in biomedical therapeutics’ (p. 2). In this volume, editors Jeremy A. Greene, Flurin Condrau, and Elizabeth Siegel Watkins assemble a thought-provoking debate on the widely known notion of therapeutic revolution, discussed since Charles Rosenberg initiated the conversation in 1977. The argument is driven by a dialogue both across and within the contributors’ fields of the history of medicine, medical anthropology, and social studies of medicine. Ultimately, the question they pose is: ‘What is revolutionary about therapeutics?’ (p. 2). Together, these chapters form a convincing argument, of which only a few points will be highlighted here.

And so, the story goes: ‘*back then* we had few effective remedies, *now* we have more (and more powerful) tools to fight disease’ (p. 1, emphasis added). Narratives of medical modernity generally assume that dramatic social changes were driven by the introduction of pharmaceuticals into the practice of biomedicine. Through the authors’ descriptions and analyses of therapeutic transformations in relation to the use of antibiotics, contraceptives, psychiatric drugs, cardiovascular drugs, and chemotherapies, the authors collectively challenge the linearity of this historical narrative, which might often function to obscure the actual sociocultural and political dimensions of social change (p. 3).

A therapeutic revolution, the editors argue, is a particular actor's narrative of the past, not an objective event in itself. Claims to revolution often differentiate a modern, elegant, and scientific future from a superstitious, irrational, and ignorant past. But who are the heroes of these revolutions? Who tells these revolutionary tales? To whom are they delivered? Some stakeholders may have had something else at stake than others. Almost by travelling in time, the editors of and contributors to this volume show us how thinking about the tales of revolutions also requires asking about timeframes, continuity, and change, and how 'medicine changes, for whom, where, and with what consequences' (p. 13).

The editors' ambition to challenge the linearity of the tale of therapeutic revolution becomes evident in the first chapter. Scott H. Podolsky and Anne K. Lie provide an outstanding starting point for this volume's argument, as they discuss the use of historical futures in the context of the so-called antibiotic revolution. Past futures often tend to be forgotten, they argue, but such 'expectations of the future tell us a great deal about both the scientific and cultural contexts of their origins' (p. 20). The antibiotic revolution is a valuable example of how evidence, policy, the imagined future – be it utopian or dystopian – and our expectations of it may play intricate roles in shaping antibiotic therapies, as well as how they are developed, administered, and used. Condrau and Janina Kehr go further in their chapter on antibiotic treatments and the 'return' of tuberculosis, as they consider the recurrence of antibiotic revolutions, 'in which tropes of emergency and threat, urgency and fear, hope and progress have been repeatedly employed, albeit by shifting actors' (p. 143). There is not just one revolution, but many, this book shows, continually being employed in different contexts.

Elizabeth Siegel Watkins and Nicolas Henckes go on to consider the revolutionary aspects of the contraceptive pill and psychotropic drugs. These two drugs, together with antibiotics and in the name of a therapeutic revolution, became known as the wonder drugs of the twentieth century. Their chapters show how these medicines may have paved the way for the normalisation of a routine practice of pharmaceutical spending for millions of people around the world, whilst accounting for a highly profitable market of daily drug consumption.

Most descriptions of the therapeutic revolution include a cumulative history of pharmaceutical invention, where more and more potent drugs have replaced less effective previous ones. While these three pharmaceutical drugs – antibiotics, contraceptives, and psychotropics – have been the central figures of therapeutic revolution rhetoric, the list of other pharmaceuticals developed during the second half of the twentieth century is long, including cardiovascular drugs, sedatives, and analgesics, among others. Nils Kessel and Christian Bonah's archival market analysis shows how different drugs coexist, despite being more or less clinically effective. This coexistence of drug treatments and the notion of efficacy are further discussed by Julie Livingston, in a remarkable analysis of Botswana's

ambiguous provision of care with chemotherapy and antiretroviral drugs during the early 2000s.

One of the volume's embedded arguments – that some actors may have benefited more than others from this revolution – follows on from Jeremy Greene's emphasis that not all people have had equal access to the powerful new therapies becoming available in the pharmaceutical market over the past decades, a market mostly led by North American private industry. Geographic boundaries and pharmaceutical access in the developing world, but also in European or North American contexts, have been a frequent topic in international public health circles, along with debates on transference, patents, and commercial tracks that could resolve these geographic limitations. Continuing with this topic, Kristin Peterson offers an ethnographic case study of the complexities of drug-market making in Nigeria.

Some of the final contributions to this volume are more theoretical. Paul Farmer and colleagues revisit Thomas McKeown's theory on global mortality declines, and inquire about the role of biomedicine in improving and delivering health. David S. Jones presents a discussion of the metaphors of revolution and evolution, and reflects on the consequences of their uses in medicine and history. For those familiar with biomedical science, like myself, Jones's adaptation of evolutionary biology concepts, such as niche, fitness, and the Red Queen hypothesis, to historical analysis might come across as controversial, although as he notes, 'used carefully. . . the language of evolution can be a valuable tool for historians to *think with*' (p. 273, emphasis added). Indeed, such language would need to be borrowed with care.

A broad audience of readers will take pleasure in this volume, and especially in how the cross-talk among anthropology, history of medicine, and social studies of science engenders compelling questions, most yet to be answered. Due to the editors' choice to have Charles Rosenberg's brief revision of his own work on the idea of therapeutic revolution as the book's closing, the book does not offer a conclusive argument on what is actually revolutionary about pharmaceutical molecules, leaving many questions open and making the experience of a journey through such different drug histories and disciplines slightly disorienting.

About the author

Cristina Moreno Lozano is the conference and digital development officer at the Network of Iberoamerican Anthropologists (AIBR). She holds a MSc degree in medical anthropology and global health (Universitat Rovira i Virgili, Tarragona, Spain, 2017) and a BSc degree in

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