

profitable in the world for decades. How does it do this? In part, through exaggerating rather than dismissing claims of its own financial difficulties.

Here is where Light's collection might have helped to better nuance existent sociological work on pharmaceuticals. His main point is a good one: for an industry that manages to fail as blatantly as the pharmaceutical sector often does – such as failing to develop innovative drugs, or failing to disclose that drugs purported to be safe and effective are less clinically useful and more risky than claimed – the industry has had years of spectacular financial success. Rather than simply pointing out that pharmaceutical failures continue to take place, Light's collection might have benefitted from examining the financial profitability of those failures in more depth.

'Drug firms face billions in losses in '11 as patents ends', the *New York Times* announced in a recent article outlining a pending crisis long recognised by players inside the pharmaceutical industry. The sector's profitability is at risk as patent pipelines dry up, and as federal governments move to implement new price controls on pharmaceuticals through health technology assessments exercises and other cost vetting schemes.

The question is, are the fears today over the sector's financial vulnerability themselves a political tactic? On the one hand, claims of financial loss are incontestable: drug companies cut 53,000 jobs in 2010, and 61,000 in 2009. On the other hand, proclamations of failure can help ensure political success, rallying governments into supporting ailing firms and implementing strong patent protections. By purposefully inflating and exploiting the financial risks facing them, are pharmaceutical companies helping to ensure their own financial survival? This question remains largely implicit within Light's valuable new collection. Addressing it could prove groundbreaking.

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## Reference

- Angell, M. (2010) FDA: This Agency Can be Dangerous, *The New York Review of Books*, 30 September.
- Lock, M. and Nguyen, V.K. *An Anthropology of Biomedicine*. Wiley-Blackwell, 2010 520pp £24.99 (pbk) ISBN: 978-1-4051-1071-6
- Margaret Lock and Vinh-Kim Nguyen's collaboration distils a scholarly anthropological account of global biomedicine from a pool of ethnographies, histories and social theories. The reader is offered narratives of the origins of biomedical science, the plurality of human biologies, the birth of population-focussed medicine, the experimental basis of biomedical claims, the 'social life of organs', the changing nature of reproduction and the explosion of gene-centred discourse, to name but a few. In 520 pages, the authors achieve a thought-provoking synthesis of three centuries of thought, practice and conjecture.
- The book tackles its sprawling subject matter through the lens of three overlapping themes. The first of these probes the 'dominant orientation in biomedicine ... that considers the human body, despite its outward differences, as everywhere essentially the same' (p.1). The second concerns the entanglement of 'culture, history, politics, and biology', and persuasively presents the case for the mutually constitutive nature of biological and social life. Finally, the authors defend a 'resolute belief in the importance of ethnography for assessing the impact of biomedical technologies' (p.2). Together, these analytical vectors take the reader on a stimulating journey through territories as diverse as the former Belgian Congo and contemporary Japan, unpicking the complex relationships between culture, body and medical practice.
- A useful illustration of the first theme can be drawn from the second chapter, which traces the emergence of 'the normal body' as the foundation of biomedical thought. A careful route is plotted through the history of human inquiry into the nature of the body and its diseases. This starts with an account of Dr. John Snow's renowned work on cholera in nineteenth-century Britain as a snapshot of Enlightenment thought in action. During this period, the authors summarise, 'vast taxonomies for classifying nature were constructed, and as a result, at the same time an ethic emerged that valued objectivity above all else' (p.37). Drawing on thinkers such as Georges Canguilhem, Michel Foucault and Roy Porter, Lock and Nguyen then describe how such classificatory schemes were grounded in emerging

statistical sciences, institutionalised in hospitals and applied to bodies to render them 'normal' or 'pathological'. This triad of technologies form the basis of biomedicine's universalised human body.

Later on in the book, the authors use the example of antibiotics and resistant microbes to explicate their second theme: the interdependence of the social and biological. Tuberculosis has afflicted humanity since at least antiquity, and its microbacterial form has been found in bison remains from over 17,000 years ago. Yet over the course of the twentieth century, human interventions into the world of microbacteria have nudged the disease into new evolutionary trajectories. Treatment for TB requires the use of multiple antibiotics over a period of at least six months, and therefore needs systematic and reliable administration to be effective; 'breakdowns in public health services mean that there can be interruptions in drug supplies to patients, who must turn to other means to treat their disease' (p.102). When such interruptions occur, so too do epidemics of multi-drug resistant tuberculosis (MDRTB), an evolutionary response of *mycobacterium tuberculosis* to an environment which includes antibiotics administered by humans. This, claim Lock and Nguyen, renders visible the way in which 'culture, politics, and economics, by structuring human activity and by altering human biology, can fundamentally transform micro-organisms' (p.103).

The authors draw upon interesting examples in order to explicate and discuss the issues they raise. This can be seen in the chapter discussing 'kinship, infertility and assisted reproduction' where reference is made to the ethnographic work of Susan Kahn. Kahn examines the cultural contours of new reproductive technologies in Israel. Since the 1950s, Israeli state policies have encouraged Jewish women to reproduce. The emergence of assisted reproductive technologies (ARTs) has added new dimensions to the state's encouragement of procreation and the establishment of the largest number of fertility

clinics per capita in the world. A particularly interesting dimension to this phenomenon is the popularity of such services amongst unmarried Jewish women, who seek to play a part in the collective reproduction of the Jewish people. For a religious tradition that conventionally speaks against adultery, such practices have instigated fresh moral debate and conceptualisation. Some rabbis have responded by drawing on the myth of a woman who becomes pregnant after bathing in water in which a man has ejaculated. Much Jewish convention holds this woman to remain a virgin, and by analogical extension, the use of ART by unmarried Jewish women is considered morally sound. Through ethnographic accounts such as these, the book demonstrates the myriad ways in which biomedicine creates new cultural problematics and practices, hybridising itself with local forms to create new paths for bio-sociality to follow.

Throughout the book, Lock and Nguyen carefully assemble evidence from across the globe and the annals of history to back an important claim that, to this reader at least, should shape the future of interdisciplinary, (post-)biomedical enquiries: that we must pursue 'local biologies ... phenomena that are incessantly malleable and unstable, that are produced and transformed over evolutionary and historical time and as a result of human activities for better or worse' (p.358).

In sum, *An Anthropology of Biomedicine* contains between its covers a rich blend of materials which represent the diversity of contemporary trends in anthropological thought, far richer than such a short review can do justice to. It will be of enormous use to students and researchers concerned with the sociality of biomedicine for years to come, offering both an impressive coverage of subject matter and moments of original argumentation.

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