

**BOOK REVIEW: AN ANTHROPOLOGY OF BIOMEDICINE
BY MARGARET LOCK AND VINH-KIM NGUYEN (Wiley-Blackwell,
2010, 520 p., pbk, ISBN: 978-1-4051-1071-6)**

An Anthropology of Biomedicine by Margaret Lock and Vinh-Kim Nguyen is a comprehensive work on historical, cultural, and political foundations of biomedicine. Shortly after the publication in 2010, the book easily secured a place on the shelf of an American medical anthropologist. However, it remains largely unknown to a Russian-speaking audience, partly due to the absence of a Russian translation. Besides, while there are at least four reviews of the book available in English (Baer 2012, Bunn 2011; Prasad 2012; Traphagan 2011), in Russian, as far as I know, there is none. These reasons have motivated me to commence a current review that has turned out to be a fairly long summary of the book which I hope would be useful.

Through the engagement with the current trends in anthropological thought, Lock and Nguyen offer a critical analysis of biomedicine, starting from the origins of systematic knowledge about the body and health to its most recent achievements. By biomedicine, the authors mean an area of medical knowledge and associated with it clinical practice, which began to crystallize in Europe and North America in the 19th century (p. 365). Consistent with the North American medical anthropological terminology, Lock and Nguyen use the concept of biomedicine as a preferable alternative to the terms ‘modern’, ‘western’ or ‘cosmopolitan’ medicine.

It is important to note that, following Marilyn Strathern, the authors extrapolate a concept of culture to all areas of knowledge, including Western science and medicine (p. 7), which suggests that science is also a product of culture. Thus, Lock and Nguyen emphasize that biomedicine is also culturally specific medical knowledge, i.e. knowledge, which took shape in a particular culture (the West) under

the influence of unique historical conditions. In this regard, one of the authors' objectives is to show that biomedicine is not neutral/objective knowledge, as is commonly believed, but an institution, shaped and driven by certain ideologies, cultural values, economic factors and configurations of power (pp. 32, 35).

A significant portion of the book is devoted to the analysis of modern medical biotechnologies and their impact on conceptions of human nature. Biotechnologies are "technologies developed in association with biomedical research and practice" (p.365). Lock and Nguyen use this concept in a broad sense, including not only medical equipment but also procedures such as blood tests, vaccinations, artificial insemination, contraception, organ transplantation, and medication, among others. However, the authors are concerned not so much with the development or marketing of these technologies, as with the analysis of why biotechnology is often taken for granted, how various practices and technologies acquire legitimacy and what value judgments accompany these processes (p. 5).

These and other questions are given detailed attention on almost 450 pages. Structurally, the book consists of an introduction, four parts (in 14 chapters) and an epilog. In the introduction, Lock and Nguyen indicate two points of departure for the following discussions. First, the authors strongly remind readers that the human body is a product of evolutionary, historical, and current social transformations, but not a standard and universal object, as implied in the ontology of biomedicine (p.1)¹. Lock and Nguyen express frustration that even anthropologists, who have jealously advocated for fundamentally different conceptions of a 'person' in different societies, continue to treat the human body as something "invariant" (p. 301). Second, the authors emphasize that development and application of biotechnologies are directly related to factors such as economic inequality, culturally specific values, restrictions, as well as competing medical, social and political interests, which often carry important practical and moral implications (p. 5). Therefore, it is a serious mistake to

assume that biotechnologies are neutral, autonomous entities, independent of local and global institutions of power.

In their analysis, the authors draw on works of prominent social scientists, including Michel Foucault. However, while using his concepts of 'biopower', 'governmentality' and 'technologies of self', Lock and Nguyen significantly depart from his theoretical point of view. They criticize Foucault for underestimating the complexity of relationships between individuals and government institutions, as well as for virtually overlooking non-state actors. According to the authors, in the contemporary world a considerable role in the promotion of biotechnologies is played by various foundations, private capital, NGOs, religious institutions, as well as a host of other non-governmental sources of social and political power (pp. 18-19, 28).

Therefore, Lock and Nguyen highlight a critical role of anthropology and ethnography in the analysis of biomedicine, since ethnographic methods are particularly suitable to uncover human agency in the dynamics of biomedicine. Far from being "passive recipients of new technologies" (p. 10), people develop their own interpretations and judgments about medicine; hence they may either accept or resist the imposed technologies of cure, family planning, and other biotechnologies. Moreover, not only do human actions and decisions depend on public policy but also they do on personal interests, family pressure, advertising, religious and other ideologies. These and other issues, raised in the introduction, are subject to rigorous analysis in the following chapters.

In the first part of the book, Lock and Nguyen discuss various characteristics of technology. The authors argue that biotechnologies are not ethically and morally neutral (p. 17). Biomedical technologies are not mere machines and devices, such as X-rays and pacemakers, but are technologies that have their own history and are shaped by the current political factors, funding, and social demands. Biotechnologies are standardized for universal application, but, at the same time, they are easily adaptable for specific needs and, most importantly, capable of bringing about

significant changes in a society. From this perspective, “the enterprise of biomedicine” is “itself a technology” (p. 22).

With special attention Lock and Nguyen ponder the notion of ‘normal’, which emerged in the 19th century as a special conceptual category with the first statistical data on population. Shortly afterward, any biological variation began to be seen as “deviation from a statistical norm” (p. 32), which became one of the cornerstones of biomedicine. The authors also examine the origins of the “anatomical method” and suggest that the first experiments on dissection have gradually led to the objectification of the body and reinforcement of Cartesian mind-body dualism. This was a crucial moment in the development of the Western medical thought, without which many contemporary practices of biomedicine would have been impossible. For instance, it would have been impossible to recognize brain death as a legitimate criterion of actual death. Delineation of the category of brain death has allowed declaring a person—whose body continues to physiologically function—as “good as dead” in order to legally procure his organs for subsequent transplantation (p. 42). Lock and Nguyen draw attention to the fact that ventilation technology, which supports the functioning of the body of a ‘deceased person’, actually “creates a hybrid entity that is both dead and alive” (ibid.).

The authors also reflect on the topic of medical pluralism. They emphasize that even today a great number of people resort to various healing traditions rather than biomedicine, or consult different types of healers. Lock and Nguyen rightly point out that medical pluralism is a complex phenomenon, linked to structural, politico-economic, ideological, cultural, and personal factors (p. 62). Having briefly discussed the differences between biomedicine and other medical traditions, the authors turn to another critical aspect of modern biomedicine, i.e. medicalization of society (pp. 67-78). Then, using ethnographic data, Lock and Nguyen advocate for the recognition of ‘local biologies’, i.e. local conceptions of body and health. For example, they contrast ideas about menopause in different medical traditions. Thus, research in North

America and Japan demonstrate that local biology shape radically different experiences of menstruation and menopause by American and Japanese women (p. 86).

The second part of the book describes and analyzes various methods of government control over both individual bodies and whole populations: from Thomas Malthus' eugenics to current projects of population control and family planning. The authors scrutinize the term 'population' itself and show how, from the beginning of the 20th century, attempts were made to "create populations of the right size and composition" (p.114). In terms of composition, it is not uncommon when in a multicultural society the reproduction of some 'ethnic' and 'racial' groups is welcomed, while reproduction of others is not. For example, 'interracial' unions and the natural growth of ethnic minorities may be perceived as immoral or dangerous (as is the case with the growth of the Palestinian population in Israel). As for size, modern states often develop clear ideologies that determine what population size is ideal and what is threatening (as in China's and India's efforts to regulate "excess fertility" (p. 117)). Obviously, such biotechnologies and biopolitical measures can lead to dramatic consequences for both an individual and the entire population. It will suffice to recall the infamous case of China's One Child policy, which has led to dramatic gender imbalance and social problems concerning the care of the elderly.

An Anthropology of Biomedicine is characterized by ethnographic and historical depth as evident in the following analysis of biomedicine's role in colonial projects. The authors trace the impact of biomedicine on critical historical events, such as epidemics of hunger and infectious diseases, especially in the 19th century colonial Africa. Based on these data, Lock and Nguyen argue that biomedicine was a "tool of empire", being "the key to preserving the health of imperial armies and settlers in the face of the onslaught of tropical diseases..." (p. 148). Moreover, data on the colonial population and diseases have played a great role in the development of the biomedicine's conceptual apparatus. The concepts of infertility, malnutrition, hunger,

and epidemics became subjected to “biological standardization” and “biologization” (p. 174), which means that the above conditions have come to be understood in purely biological terms, with no account for social and structural factors.

In the authors’ view, human populations in different parts of the world often served as “laboratories” for the production of biomedical knowledge, which was based on the assumption of the universality of the human body. But this continues to be so. Lock and Nguyen provide numerous examples of “biological experiments” not only in colonial times, but also in the 20th-21st centuries, such as the infamous Tuskegee study (p. 179), Japanese and Nazi experiments during the World War II (p. 180), as well as contemporary and “offshored clinical trials” (p. 190).

The third part of the book is devoted to the so-called techno/biologicals, such as cultured cells, tissues, and organs, manufactured for the purpose of research or practical use. According to Lock and Nguyen, the global commodification of human bodies and organs, the production of artificial biologicals and their subsequent transplantation—all challenge the traditional distinction between the social and the natural, as well as blur the line between the ‘self’ and ‘other’. Above all, these phenomena have significant social and ethical consequences, as can be easily noticed with regard to the above-mentioned category of “brain death” or with the technological involvement in biological processes of fertilization and reproduction. Drawing on studies in the United States, Egypt, and Israel, the authors highlight the tremendous transformative role of artificial insemination, sperm donation and other biotechnologies on people's lives, including their understanding of kinship relations and ideas about normative reproduction.

In the final part of the book, Lock and Nguyen examine the impact of biotechnology and biomedical knowledge on social differentiation and the construction of personal identity. For half a century, anthropologists have been ardent opponents of racism, trying to demonstrate that the races are not clearly defined biological groups but social constructs. However, as Lock and Nguyen notice, despite

the fact that many geneticists also strongly oppose racial classifications, the advances in genetics and molecular biology threaten to revive and strengthen the racist reasoning and lead to “molecularization” of race (p. 353).

Another source of the authors’ deep concern is neo-eugenics. Based on the numerous ethnographic studies of Huntington's, Alzheimer's, Tay-Sachs or other genetic diseases, Lock and Nguyen show that the impact of technologies of the self (such as genetic screening of an individual for the presence of a ‘hazardous’ gene or genetic testing of a fetus) is quite ambiguous. On the one hand, some people, such as individuals negatively tested for Huntington's disease, may welcome such biotechnology because it gives them a sense of certainty and the ability to plan future (pp. 318-319). On the other hand, there are grounded anxieties that such measures can lead to stigmatization of certain groups, as was the case with Tay-Sachs disease, which was stereotyped as a “Jewish disease” (p. 321).

Technologies of the self can generate new forms of biosociality, genetic citizenship and group membership based on the (partial) knowledge of genetics, genomics and molecular biology. Additionally, technologies of the self enable people to create new identities and may result in various forms of political activism. For example, communities formed on the basis of personal experience with a rare disease can influence policies, lobbying for certain laws and demanding funding for certain medical research ². Similarly, sex determination of a prospective child or ‘reconstruction’ of ‘ethnic’/‘racial’ heritage based on one’s DNA can lead to radical changes in the lives of individuals and society as a whole, including changes in demographic structure and naturalization of the idea of race (pp. 356-357).

The book ends with an epilog in which Lock and Nguyen once again remind the readers that the development of biotechnologies should not be taken as value-free or unambiguously positive. Despite breathtaking biotechnological achievements, especially the development of antiretroviral therapy for HIV-infected people, “men, women, and children continue to die of other common conditions that are easy to

prevent and treat” (p. 360). The authors believe that an unreasonable emphasis on “a top-down technological fix” ignores the “political, economic, and social conditions contributing to disease prevalence and incidence” such as “poverty and worsening lifestyles, driven by exploitative global economic practices” (p. 361). In this regard, anthropological studies of health, disease, local health traditions, and various aspects of biomedicine are highly important.

It should be noted that the work of Lock and Nguyen touches upon many critical issues of contemporary life. A vast amount of cross-cultural material taken from numerous ethnographic studies largely supports the authors’ arguments. The book offers a fascinating read, despite its substantial size and an astronomical number of facts and details (which are sometimes repetitive). One of the problematic aspects of the book is that it creates a monolithic image of biomedicine, i.e. an image of a homogeneous and well-defined area of knowledge. Even though in the introduction, the authors acknowledge the existence of “specific local forms” of biomedicine (p. 6), they continue to use the term ‘biomedicine’ in singular, which may lead to a false notion that biomedicine in the U.S., for example, is identical to biomedicine in India or biomedicine in Russia.

Nevertheless, *An Anthropology of Biomedicine* is an exceptional guide to contemporary North American medical anthropology that contains references to almost a thousand scholarly works. Certainly, this book will be of interest not only to medical anthropologists and medical professionals but also to anyone who is interested in the history of Western thought, ethics, globalization, and those who closely follow the unprecedented development of medical technology. Lock and Nguyen skillfully challenge the conventional ideas and classifications and make us think about trajectories of modern life and transformation of the very concept of human nature.

¹ It should be noted that Vinh-Kim Nguyen is a practicing doctor. Therefore, of course, the authors do not doubt the fact that biomedical practitioners are well aware that “human bodies are not all the same”. However, the authors believe that the standard biomedical procedures of diagnosis and treatment, as well as “the need to meet the requirements of standardization”, practically reduce formal recognition of biological diversity to none (p. 365).

² Such forms of activism are common in North America, West Europe, but are not yet typical in the Russian society or in some other parts of the world, which the authors do always not acknowledge.

References

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