

**Review of *Social Macroevolution: Genesis and Transformation of the World System*
by Leonid Grinin and Andrey Korotayev**

Sergey Malkov

Lomonosov Moscow State University

The monograph by Leonid Grinin and Andrey Korotayev is devoted to the study of social macroevolution that is understood by the authors as a special dimension of social evolution that includes a series of major evolutionary transformations that have resulted in the formation and development of the World System.

It appears appropriate to recollect here how the authors define the notion of ‘the World System’ (ascending to Andre Gunder Frank [1990, 1993]), and how they distinguish it from the one of the ‘world-system’ (ascending in its turn to Immanuel Wallerstein [1974, 1987, 2004]).

The notion of ‘world-system’ is defined by Grinin and Korotayev

as a maximum set of human societies that has systemic characteristics, a maximum set of societies that are significantly connected with each other in direct and indirect ways. It is important that there are no significant contacts and interactions beyond borders of this set, there are no significant contacts and interactions between societies belonging to the given world-system and societies belonging to other world-systems. If still some contacts beyond occur those borders, then those contacts are insignificant, that is, even after a long period of time they do not lead to any significant changes within the world-system – for example, the early Scandinavians' voyages to the New World and even their settlement there did not result in any significant change either in the New World, or in Europe’ (Grinin and Korotayev 2009b: 482¹).

On the other hand, (together with A. Gunder Frank) they denote the 'central', Afro-Eurasian world-system as 'the World System' on the basis of the following formal criteria: 'throughout the whole of its history this world-system encompassed more territory and population than any other contemporary world-system; what is more, for the last few millennia it encompassed more than a half of the world population and this appears to be a sufficient criterion permitting to denote this world-system as the World System. Another point that appears of no less importance, is that the modern World System that actually encompasses the whole world was formed as a result of the expansion of that very system which, after A. Gunder Frank,² is denoted as the World System (and that up to the late 15th century was identical with the Afro-Eurasian world-system)' (Grinin and Korotayev 2009b: 482).

According to Grinin and Korotayev, the World System formation was not only a major result of all the preceding social evolution; in some respect it became an important landmark, beyond which it turns out to be possible to distinguish macroevolution as a special suprasocietal component of social evolution that does not refer to the level of any particular society.

Currently studies in social and cultural evolution lack such a classification of evolutionary changes. However, the theory of biological macroevolution has been developed for quite a long time, which makes it possible for the authors of the monograph under review to use important theoretical insights of the biological macroevolutionary theory. In particular, the monograph introduces the notion of *social aromorphosis*, which is defined by the authors 'as a universal / widely diffused social innovation that raises social systems' complexity, adaptability, integrity, and interconnectedness' (see, *e.g.*, *Ibid.*).⁴

The monograph consists of two main parts comprising six chapters. It also contains the third part that includes seven essays dedicated to a few special subjects tightly connected with the subjects of the chapters of the first two main parts. The first part of the monograph offers a fundamental study of the processes of social macroevolution on the basis of their comparison with the processes of biological macroevolution. In particular, the authors study the unevenness of macroevolution rates, as well as the pulsations of macroevolutionary processes; they demonstrate validity

of the law of adaptive radiation for the study of social systems evolution. A special attention is paid to the analysis of the second order positive feedback loops. The authors also offer their periodization of historical processes that allows identifying its major landmarks and phase transitions that resulted in major social macroevolutionary aromorphoses, which included the World System's formation and its main transformations. The Introduction and the first chapter constitute a theoretical and methodological foundation of the book. Here the authors analyze the historiography of the issue, they identify key problems and consider main relevant notions. The second chapter presents a generalized study of the historical process periodization.

The second part of the monograph consists of four chapters, each analyzes a certain aspect of the World System development in the course of the last millennia. In addition to major theoretical generalizations, it contains a lot of concrete statistical data, as well as its analysis that corroborates major conclusions of the first part of the monograph under review. In some cases this analysis is performed with rather simple but effective mathematical models. The third and fourth chapters offer a rather profound conceptual analysis of the most important World System transformations. These are the chapters that contain the core of the authors' theory of sociocultural evolution. The fifth chapter considers the evolution of political systems. This chapter is based on a rather well-known theory of the statehood evolution by Leonid Grinin. The sixth chapter ('Urbanization and Political Evolution of the World System: A Comparative Analysis') is of special interest due both to the novelty of data that it introduces and to important conclusions regarding the correlation between the evolution of political systems and the city growth dynamics. The authors detect important correlations that allow suggesting a historical process periodization that appears to be more profound than the one presented in the second chapter.³

The third part of the monograph considers in more detail some important particular aspects of the World System macroevolution, which makes this study more stereoscopic and profound. The essays that constitute this part are based on rich empirical data; they offer a few novel results. I would like to emphasize a fundamental significance of Essay 1 that presents a rather interesting mathe-

mathematical model of the interaction between the civilization center and the 'barbarian' periphery. On the other hand, Essay 7 has a salient applied significance as its results of modeling presented in it can be used to working out recommendations regarding developmental policies.

The reviewed study can well be regarded as truly seminal. The book presents an attempt to comprehend the whole course of social evolution and historical process on the basis of the most promising modern theoretical approaches. In particular, it is one of the first really productive attempts of application of modern biological macroevolutionary methods to the field of historical sociology. The book shows in a rather convincing way that the main trends of macroevolution are tightly connected with the World System transformations, whereas the most important properties of the World System affect in a rather significant way the course of social evolution. The scale of the undertaken project is well reflected in the monograph's bibliography that contains a few hundreds of references.

NOTES

¹ Note that in general this article in the *World Futures* journal can be regarded as a rather helpful summary of the main findings reported by Grinin and Korotayev in the reviewed monograph

² On the other hand, note that Frank (1990, 1993; Frank and Gills 1993) dated the start of the World System formation to the 3rd millennium BCE, whereas Grinin and Korotayev maintain that its formation began in the 10th – 8th millennia BCE; that is, according to Grinin and Korotayev, the World System is much older than according to Frank.

³ This subject was further developed by the authors in subsequent publications (see, e.g., Grinin, Markov, and Korotayev 2009, 2011).

⁴ The theme of the World System urbanization was developed by the authors in a number of important articles in English (Korotayev and Grinin 2006; Korotayev 2006; Grinin and Korotayev 2009).

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