

Contributors

Yuri E. Berezkin is the Head of the Americas Department of the Peter the Great Museum of Anthropology and Ethnography (Kunstkammer) of the Russian Academy of Sciences (St. Petersburg, Russia). He is an author and co-author of over 300 publications in the field of comparative mythology, prehistory, archaeology, and political anthropology.

Svetlana A. Borinskaya is Senior Research Professor at the Vavilov Institute for General Genetics of the Russian Academy of Sciences (Moscow). He is an author and co-author of over 200 publications in the field of human genetics, gene-culture coevolution, and cultural evolution.

Albert I. Davletshin is a research fellow in the Centre for Comparative Studies of the Institute for Oriental and Classical Studies at the Russian State University for the Humanities (Moscow). He works on Polynesian languages and anthropology, Aztec, Epi-Olmec, Harrapan, Mayan and Zapotec scripts, typology of logo-syllabic writing systems, iconography and Mesoamerican historical linguistics. Davletshin is the founder of the projects on proto-Totonacan (University of Mexico) and on Aztec script (Bonn University). He carried out linguistic and ethnographic fieldwork with Nukeria (Papua New Guinea), Rapanui (Easter Island), Tepehua de Pisaflores (Mexico), Sym Evenki and Kellog Ket (Siberia).

Leonid E. Grinin is Senior Research Professor at the Institute for Oriental Studies of the Russian Academy of Sciences in Moscow and Senior Research Professor at the Laboratory for Destabilization Risk Monitoring at the National Research University Higher School of Economics. He is the Editor-in-Chief of the journal *Age of Globalization* (in Russian), as well as a co-editor of the international journals *Social Evolution & History* and the *Journal of Globalization Studies*. Dr. Grinin is the author of over 500 scholarly publications in Russian and English, including 31 monographs. These monographs include *Philosophy, Sociology, and the Theory of History* (2007, in Russian); *Productive Forces and Historical Process* (2006, in Russian); *State and Historical Process* (3 vols, 2009–2010, in Russian); *Social Macroevolution: World System Transformations* (2009, in Russian, with A. Korotayev); *Macroevolution in Biological and Social Systems* (2008, in Russian, with A. Markov and A. Korotayev); *Global Crisis in Retrospective: A Brief History of Upswings and Crises* (2010, in Russian, with A. Korotayev); *The Evolution of Statehood: From Early State to Global Society* (2011); *The Cycles of Development of Modern World System* (2011, in Russian, with A. Korotayev and S. Tsirel); *From Confucius to Comte: The Formation of the Theory, Methodology and Philosophy of History* (2012, in Russian); *Macrohistory and Globalization* (2012); *Cycles, Crises, and Traps of the Modern World-System* (2012, in Russian, with A. Korotayev); *Great Divergence and Great Convergence* (2015, with A. Korotayev) and *Economic Cycles, Crises, and the Global Periphery* (2016, with Arno Tausch and A. Korotayev).

History & Mathematics: Economy, Demography, Culture, and Cosmic Civilizations 2017 237–239

Antony Harper, a researcher in the general area of applied mathematics to human historical processes, also understood as quantitative history and more appropriately, using Peter Turchin's term, as cliodynamics. He is currently associated with both New Trier College and Benedictine University. His primary research interests are modeling the pattern of urbanization over recorded history, *i.e.*, from approximately 3000 BCE to the present. More currently these interests include understanding the consequences of this urbanization pattern, applying the model of punctuated equilibrium, originally propounded by Eldridge and Gould, to the pattern of urbanization, understanding why complex systems in general should exhibit the PE pattern of growth, and within the constraints of punctuated equilibrium beginning to understand the context and mechanisms that bring about punctuated change, *i.e.*, quite frankly, understanding what causes historic tipping points.

Daria A. Khaltourina is the Head of Health Risk Prevention Department of the Federal Research Institute for Health Organization and Informatics of Ministry of Health of the Russian Federation (Moscow). She is an author and co-author of nine books and over 100 research articles on crisis management of social processes, public health and demography.

Andrey V. Korotayev is Senior Research Professor at the International Laboratory for Political Demography and Social Macrodynamics at the Russian Presidential Academy of National Economy and Public Administration, Head of the Laboratory for Destabilization Risk Monitoring at the National Research University Higher School of Economics, Senior Research Professor of the Oriental Institute and Institute for African Studies, Russian Academy of Sciences, as well as a Professor at the Faculty of Global Studies of the Moscow State University. He is the author of over 450 scholarly publications, including such monographs as *Ancient Yemen* (1995), *World Religions and Social Evolution of the Old World Oikumene Civilizations: A Cross-Cultural Perspective* (2004), *Introduction to Social Macrodynamics: Compact Macromodels of the World System Growth* (2006), *Introduction to Social Macrodynamics: Secular Cycles and Millennial Trends* (2006), *Great Divergence and Great Convergence* (2015, with Leonid Grinin), and *Economic Cycles, Crises, and the Global Periphery* (2016, with Arno Tausch and Leonid E. Grinin). At present, together with Askar Akaev and Sergey Malkov, he coordinates the Russian Academy of Sciences Presidium Project 'Complex System Analysis and Mathematical Modeling of Global Dynamics'. He is a laureate of the Russian Science Support Foundation in 'The Best Economists of the Russian Academy of Sciences' Nomination (2006).

Alexander D. Panov graduated from Moscow State University, Department of Physics. At present, he is a senior researcher at the Moscow State University Skobeltsyn Institute of Nuclear Physics (MSU SINP), and is DSc (Physics and Mathematics). His major works are devoted to nuclear physics, surface physics, quantum theory of measurement, cosmic rays physics, and problems of universal evolution and Big History. He is the author of about 140 articles in the Russian and international academic press, as well as the author of the monograph *Universal Evolution and Problems of the Search for Extraterrestrial Intelligence* (SETI).

Arno Tausch is Adjunct Professor of Political Science at Innsbruck University, Department of Political Science. Currently he is also Associate Professor of Economics, Corvinus University, Budapest, and Lecturer of International Development, Vienna University. He also served as an Austrian diplomat abroad and was Counselor for Labor and Migration at the Austrian Embassy in Warsaw, 1992–1999. He authored or co-authored over 90 articles in peer-reviewed journals and 18 books in English, 2 in French, and 8 books in German. His research program is focused on world systems studies, development and dependency studies, European studies, and quantitative world values and peace research. His publications include a number of essays for leading economic and foreign policy think tanks in nine countries, and for the Jean Monnet Institutes of the European Union in three European Union countries.