## **REVIEWS AND NOTES**

Proceedings of the Conference
'Teaching and Researching Big History:
Exploring a New Scholarly Field'
(edited by Leonid Grinin, David Baker,
Esther Quaedackers, and Andrey Korotayev)

## David Baker

## The Conference

In August 2012, the International Big History Association held its very first conference at Grand Valley State University in Grand Rapids Michigan. The conference was on 'Teaching and Researching Big History: Exploring a New Scholarly Field'. The IBHA members hailing from the United States, Australia, the Netherlands, Russia, Canada, the United Kingdom, Korea, China, India, Egypt, and many others, converged on Grand Rapids to explore every facet of this discipline, which by its very nature extends across the sum total of human knowledge.

The International Big History Association was founded in Coldigioco, Italy in August 2010. Its membership now spans nearly 300 researchers, scientists, historians, and educators worldwide. Its mission is to explore the broad trends within the grand narrative of 13.8 billion years, to investigate the unity that extends across what C. P. Snow called the 'two cultures' of the sciences and humanities, and to extend the fruits of knowledge of this investigation to generations of students. Currently, there are approximately 50 Big History-style courses being taught at universities all over the world, with lengthy comprehensive undergraduate programs like at Dominican University of California and Erasmus University in Rotterdam. In addition, there are hundreds of Big History classes being taught in secondary schools all over the world, thanks to the tireless work of the people at the Big History Project. We also see the first glimmer of higher level Big History courses, both for undergrads and master students, as well as Big History PhD research at the University of Amsterdam and Macquarie University in Sydney. Numerous research articles and scholarly books have already been published on Big History. There are still more to come as a new generation of scholars develops. Big History has opened up a vast array of new niches in scholarship waiting to be filled.

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In August 2012, scholars and students from all over the world came to Grand Rapids to discuss and celebrate the new period of knowledge, research, and investigation that is opening up for us. We were privileged to attend planetarium explorations of the Universe and artistic displays of the grand narrative. We conferred on the idea of complexity in the Universe: one of the broad trends that seems to underpin all 13.8 billion years of the grand narrative in a rising crescendo of energy flows and intricately composed biological and technological forms. We explored the idea of Little Big Histories, brainchild of Esther Quaedackers, and the use of Big History thinking to contemplate small things from a universal perspective. We discussed the interdisciplinarity and transdisciplinarity that form the core of the nature of Big History. Our intrepid graduate students, blazing a trail with many academic risks and career pitfalls, weighed up the future of research in Big History.

Scholars informed us of the evolutionary epic and the evolution of hominids that underpins humanity's common past. We discussed the role of Big History in the ancient world, the silk roads, and the development of a global network and greater human complexity in the era of agrarian civilisations. David Christian and his PhD students held a panel on the key Big History concept of 'collective learning' and the role it plays in human history, generating more and more cultural complexity from our humble days as hunter-gatherers, through the Agricultural Revolution, right up to modern day. We explored the idea of the 'Anthropocene' or the period that is presently opening up in the history of our planet where humans have developed the power to influence much of the workings of the biosphere: with all the potential threats that entails.

We contemplated the deep future of the Universe, the potential for human development (if we do not wipe ourselves out), and the role cultural evolution could one day play in the wider cosmos. Ecologists, environmentalists, and world historians discussed the ecosystem at all stages of Big History: the distant past, the present, and the dangers it will face in the future. We considered the role Big History might play as a modern secular scientific 'creation myth' that binds together all mankind and informs us about global ethics. We explored the role mathematics can play in history, by discovering and calculating broad trends in the biological and cultural phases of the grand narrative.

We were treated to presentations on the Big History Project, funded by philanthropist Bill Gates, which will hopefully revolutionise the way in which our young people and future leaders are taught about the Universe around them. Similarly we got to experience firsthand the power of Chronozoom and its ability to display knowledge from all the disciplines and all timescales for anyone who would care to explore the timeline of the grand narrative — or even create and develop a timeline of their own. And let us not forget the many panels held on education and pedagogy, tackling the titanic challenge of teaching the vast story of the Universe to students in elementary and high school.

## The Proceedings

Nevertheless the degree of scholarship and research on Big History questions and teaching was exemplary and innovative in many ways. There is something in the nature of the transdisciplinary scholarship of Big History that breeds new ideas and fosters new forms of genius. It is those works which we shall feature in the upcoming IBHA Conference Proceedings, *Teaching & Researching Big History: Exploring a New Scholarly Field*, published out of 'Uchitel' Publishing House. The decision to publish these Proceedings was made by the International Big History Association Publication Committee.

The proceedings shall feature roughly 20–25 articles, encompassing works on cosmology, biology, geology, and human history. The works are contributed by scholars from every corner of the globe. The proceedings articles are written by some of the established members of the field, but also by new and promising scholars who are trying their hands at this genre for the first time.

The structure of the proceedings will feature articles about 'Understanding and Explaining Big History', including works by David Christian on collective learning, Sun Yue on the Chinese application of Big History, Esther Quaedackers's work on Little Big Histories, Lowell Gustafson's study of the relationship between Big History and political science, and Bradley Layton and Richard Coren on the nature of entropy and complexity in Big History.

The second section will involve 'Big History's Phases, Regularities, and Dimensions'. Articles here include an inventive new work by Leonid Grinin on the application of evolutionary principles to the star-galaxy phase of the grand narrative. Andrey Korotayev has constructed a mathematical model of the commonalities between the biological and social phases of the story, with many dynamics of the tale being intricately explained. Ken Baskin investigates the punctuated nature of many phases of the cosmological, biological, and historical. Christian Jennings investigates Big History trends in knowledge accumulation in the time of Aristotle. Abel Alves applies a Big History framework to the history of the Spanish Empire. And Joseph Voros takes a thrilling and insightful look at the potential for the rise of complexity in the deep future.

Our third section on 'Big History Teaching' includes a brilliant hands-on account of pedagogy and teaching experience by Big History veteran Cynthia Brown. Similarly, Tracy Sullivan has produced an extremely thorough work on Big History and the 21<sup>st</sup> century classroom. Michael and D'Neil Duffy and also John Fowler have composed works on how Big History can operate in elementary Montessori classrooms, and John Cleland Host has devised an intriguing but practical method of enhancing the Big History experience of students.

With the danger of falling into cliché, I can promise 'all these and many more' to be featured in the upcoming conference proceedings, many of which, I wager, will pleasantly surprise you for their innovation in the world of education and scholarship. Consider the proceedings a sample of the works big historians will produce in the coming years. This is only the beginning.