

ORIGINS

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International
Big History
Association

Big History as an On-line Course

by Doug Karo

Durham, NH

I completed a six week Big History introduction provided by Macquarie University and presented on-line and for free using the Coursera internet platform. David Christian and David Baker led the course and enlisted other experts to present many of the segments. As a retired scientist trained in condensed matter physics (solid state physics when I studied it) and with subsequent experience in analyzing, developing, and applying information technologies, I had heard just a little about Big History, was not yet interested enough ‘to buy the book’, but was interested in learning more. My training probably helps with framing problems, identifying critical factors and assumptions, performing and assessing analysis and modeling, and assessing confidence in findings. And I was doubtful whether addressing events and extracting organizing themes from the Big Bang through the present and even speculating about the future both could be comprehensible for a wide audience from varying backgrounds and could synthesize a whole greater than the sum of its parts.

First, several comments for those who might not yet have familiarity about the mechanics of on-line courses for the masses or the particular features of this one. Anyone with access to a computer and an internet connection may register for the course and participate during a six-week window when an offering of the course is open. For my session, approximately 2000 people from sixty-four different countries registered. (It is common for only a small fraction of registrants to persevere and complete all the course content and requirements – but perhaps those who do not at first complete a course continue with it the next time it is offered.)

A typical week’s content in the Big History offering would combine a short video introduction with video segments building on each other and culminating with a ‘Why does this matter?’ synthesis and conclusion video. There was the opportunity with each video segment for every student to post or to respond to questions or comments. Each segment had extensive suggested additional resources ranging from the elementary to rather advanced (papers, books, other on-line video resources, and references to web sites with more extensive collections of relevant materials), a timeline for the events discussed in the segment, and a glossary of the key terms. The additional resources were far greater than I have found in other on-line courses. Each week’s content would conclude with a short multiple choice quiz and an exercise designed to stimulate thought

about whether and how one uses intuition, authority, logic, and evidence to accept or reject a proposition relevant to that week's content.

I found four fundamental assertions driven home by the course's content:

- history achieves greater clarity and comprehensibility when it draws and synthesizes from all knowledge,
- we find a sequence of very different lengthy periods of essential continuity consistent with gradual change that are separated from each other by the emergence and subsequent expression of a higher level of complexity,
- we have explanations for the conditions leading to the local emergence of greater complexity,
- and the assertions of history, as for assertions in other areas of knowledge, should be evaluated and tested for credibility.

I believe the expected result are a greater recognition, consideration, and appreciation in students of the contingent position of human beings and of whether another increase in complexity can be achieved in the face of severe short-term challenges and more severe mid-term challenges before complexity gives way to simplicity and disorder everywhere as the universe ages. I found the story and the evidence compelling. I found the celebration of the unity and power of knowledge inspiring.

Now, what about the physical science content?

While I am neither a former astrophysicist nor a former molecular biologist, I do try to follow major developments in these and other areas of science. I found the science content to be unexpectedly current and rich and well-presented. A key idea is that energy gradients, at first natural results but later due to life, cause or make it possible to preserve and increase local complexity (in the common meaning of the word) against the inexorable long-term processes favoring disorder. The cosmology is up to date and evidence and conclusions are clearly presented: a big bang, modest inhomogeneities surviving inflation and subsequent continued expansion, cooling that allows atoms and molecules to persist, gravitational attraction increasing mass inhomogeneities and driving star formation and nucleosynthesis and large scale structure, and planet formation. The transition in the observable universe to a dark energy dominant era with accelerating rates of expansion is not yet a featured

part of the story but will provide even stronger support to its conclusions. The story of the evolution of life seemed credible to me: enough time and appropriate conditions for pre-life structures and then the emergence of life compatible with the requirements of evolution for further development, enough time and changing conditions for emergence of more complex life, and then emergence of life with brains able to support collective and accumulative learning. Contingency everywhere and outcomes dependent upon specific conditions.

What about the social science content?

That is not my field but I am inclined to believe that same high standards apply to the content. Perspectives from anthropology, geography, linguistics, paleontology, economics, and other disciplines extended the theme of growing complexity during the time of human beings and their durable collective learning.

I judge that a course providing some high level familiarity with key concepts and, as importantly, with the nature of the evidence in support of them is a positive contribution. I don't know if the content is too difficult to be appreciated by those without any or much background in the sciences. But conscientiously providing supporting evidence for every major step in the development must be a good lesson. Surveying the students could provide an answer and the course is constructed so elements might be revised or added or removed.

For those interested in how this short course addressed the period of recorded human history, I found one lesson to be that of larger and larger scale interconnection and integration of populations and of world zones made possible by increasing available useful energy (when shifting from foraging to agriculture and then from agrarian to industrial cultures and finally when shifting to exploiting concentrated underground fossil fuel sources). Along with this came huge increases in population. Another lesson is that language and writing enabled collective and remembered learning leading to an unprecedented period of dominance over competitors and to technology for large scale modification of the environment. A third lesson is that we exist now at the highest level of complexity yet achieved (that we are aware of) but local regions of highest complexity may not persist for long on the cosmic time scale.

What about the future? We have plausible models of the way our observable universe might evolve toward disorder as energy gradients become weaker and complexity is diminished. These expectations are independent of the human beings who happen to exist for a short time in a small part of the universe. What about those human beings? The recent and continuing large scale modification of the environment is now a key threat to human beings in the immediate future and if that threat and others are overcome the very processes of continuing evolution may be the key threat later on. Great natural disasters also must be expected from time to time. It is not known if another level of complexity can be achieved or if it might be achieved while our species persists.

In conclusion, I found the course to be an enticing and engaging introduction with reliable information and clearly organized content. The perspectives from various disciplines were combined in a collaborative and constructive fashion. The nature

and strength of the evidence were fairly considered. If our existence is as contingent and precarious as the evidence suggests, then what? Perhaps that is the challenge that we should hope more of the younger generations take to heart and, perhaps, they may make a difference where my generation for all its apparent successes largely has failed. Education may be the best chance we and they have.

Doug Karo
Durham, NH

Doug Karo earned his B.S. at Stanford, with a major in physics. He went on to earn his Ph.D. in physics at MIT and then worked in R&D labs for the U.S. Army, Avco Corporation, GE, Textron Corporation, and Draper Laboratory. He has also worked for programs at MIT, Tufts University, and George Washington University.

The screenshot shows a Coursera course page for 'Big History: Connecting Knowledge' offered by Macquarie University. The page includes the Coursera logo, the Macquarie University logo, and a banner featuring a colorful abstract background. The course title is prominently displayed, along with the university's name. A sidebar on the left provides navigation links for the course, including Home, Assignments, Course Content, and Discussions. The main content area features an 'About this Course' section with a detailed description of the course's purpose and content, mentioning the Big Bang, global challenges, and the Big History Framework. A yellow call-to-action box on the right encourages users to sign up for the free course.

Coursera

 MACQUARIE University SYDNEY AUSTRALIA

Big History: Connecting Knowledge

by Macquarie University

 Home

 Assignments

 Course Content

 Discussions

About this Course

We currently face unprecedented challenges on a global scale. These problems do not neatly fall into disciplines. They are complicated, complex, and connected. Join us on this epic journey of 13.8 billion years starting at the Big Bang and travelling through time all the way to the future. Discover the connections in our world, the power of collective learning, how our universe and our world has evolved from incredible simplicity to ever-increasing complexity. Experience our modern scientific origin story through Big History and discover the important links between past, current, and future events. You will find two different types of lectures. 'Zooming In' lectures from multiple specialists enable you to understand key concepts through the lens of different disciplines, whilst David Christian's 'Big History Framework'

MACQUARIE UNIVERSITY

Big History: Connecting Knowledge

Sign up to take the free [Coursera Big History course](#) from David Christian and David Baker from Macquarie University.

Applying Big History: Nature, War and Peace

by Osamu Nakanishi
(chief editor)

Institute for Global and Cosmic Peace,
Yokohama, Japan

Japanese Title

中西治・責任編集『ビッグ・ヒストリーの実用:自然・
戦争・平和』地球宇宙平和研究所, 2016年.

Chinese Title

中西治 - 主编:《实用大历史: 自然 - 战争 - 和
平》, 横滨: 地球宇宙平和研究所, 2016年.

This book, just published this year, is the first outcome of the international joint study of Big History between scholars in Japan, China and the United States, and also our first multi-language publication.

The axis of the book consists of articles by Barry Rodrigue and Osamu Nakanishi. They argue that Big History is a study of all existence, as well as how its approaches can be applied to goals for the future. They argue that we need to apply Big History to save ourselves and our planet, and to make a new peaceful, balanced and fair society.

Nakanishi is especially concerned that the Abe Administration may enable Japan to fight a war overseas in order to defend the Senkaku Islands from China. Overviewing Chinese, Korean and Japanese studies on prehistoric East Asia, he shows how modern Japanese people were formed by immigrants mainly from Siberia, Indonesia (Sundaland), China and Korea. This means that no one originally owned these lands and seas.

Then he contrasts this with the fact that the Japanese empire forcibly incorporated the Senkaku Islands and Takeshima into its territory in an effort to colonize China and Korea. So he concretely develops Rodrigue's "telescoping method" moving between macro and micro views. They call such actual studies based on Big/Universal History as Universal Studies.

- Nobuo Tsujimura

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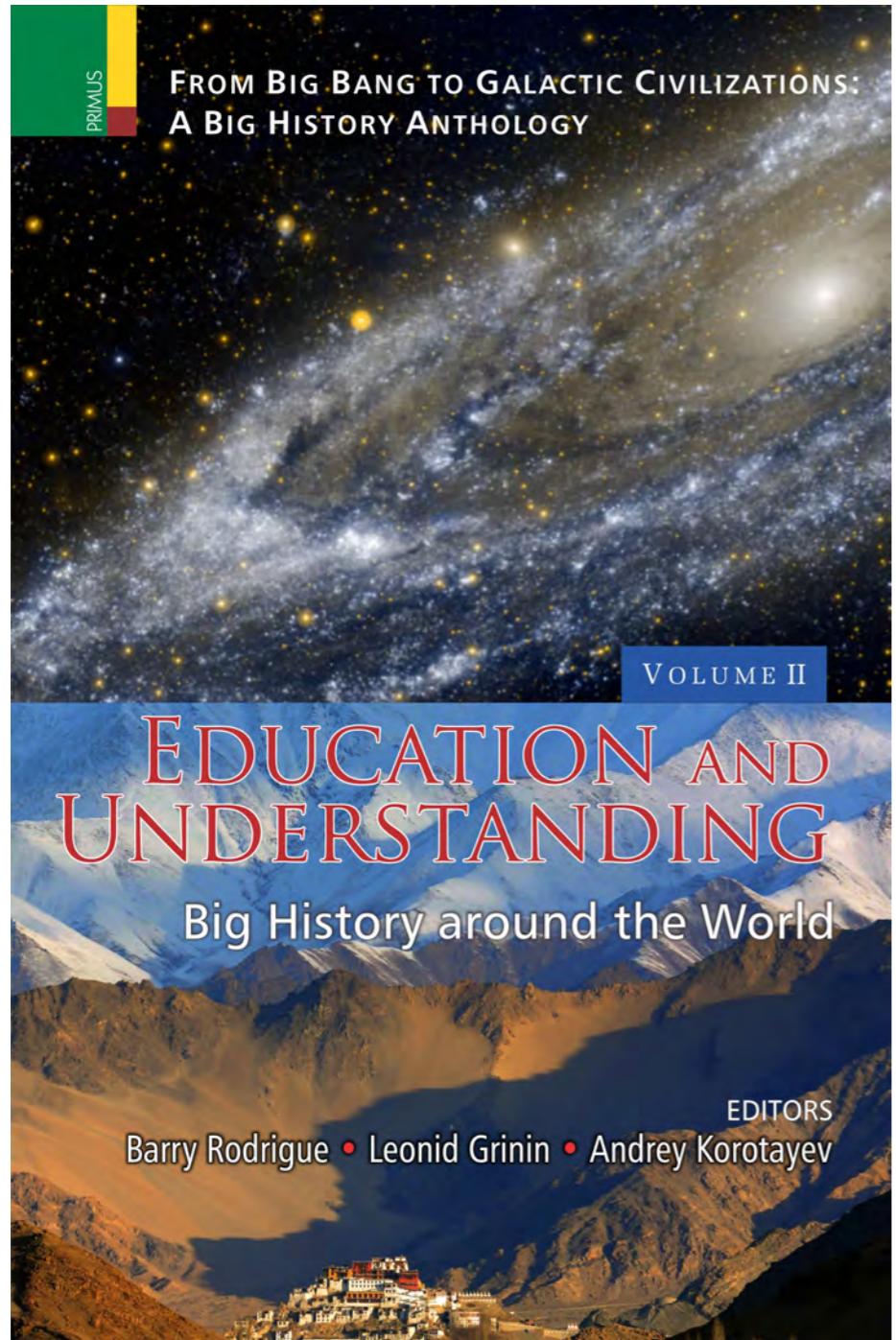
Universal Studies and Big History in Japan

Osamu Nakanishi and Nobuo Tsujimura

Sample chapter from

[From Big Bang to Galactic Civilizations: A Big History Anthology](#)

Volume II



F

rom Big Bang to Galactic Civilizations: A Big History Anthology, Volume I

Our Place in the Universe

An Introduction to Big History

Edited by Barry Rodrigue, Leonid Grinin and Andrey Korotayev, 2016

is soon to be followed by Volume II. Chapter 28 of this forthcoming book is by two of the scholars who also led the production of *Applying Big History: Nature, War and Peace*, (see above).

This chapter relates how cosmic, global and peace studies came together in Japan to form the new field of universal studies. Its origins are somewhat different from those studies that Westerners call cosmic evolution and big history, but it includes them and has much in common with them. The story began almost a century ago and involves three generations of Japanese scholars, professors and students who worked together to understand our place in the universe.

For many of the generation who came of age in Japan during the Second World War, we learned first-hand the cost of political vanity. There had been Japanese activists who had opposed the war, and so some of these young people identified with their struggles. The wartime dissidents had genuine conviction, since their resistance had often meant death. Among these pacifists were Kyūichi Tokuda (1894–1953) and Yoshio Shiga (1901–1989), who lived to write their celebrated memoir, *Eighteen Years in Prison*.¹

As a result of the war, some Japanese students of world studies chose to major in international relations instead of political science in the late 1940s and 1950s. This might seem to be a small distinction, but there is a big historical significance to it in Japan. Many political scientists had supported and justified Japan's policy of foreign expansion by military force. In contrast, international relations was a new study, which only began after 1945 in Japan, and its scholars sought world peace, not just national peace on one country's terms.

One of the most famous historians in Japan during the post-war era was Bokurō Eguchi, who specialized in studies of the contemporary world. He and his colleagues

established international relations as a comprehensive discipline. Influenced by Marxist historical theory, which was in the mainstream of Japanese historiography at that time, they worked under the pledge of ‘No war ever again’.

The comparative study of civilizations and their long chronology, as set out by historian Arnold Toynbee, also gave us a chance to reconsider the traditional timescale of international history, which had usually dealt with just the last 500 years.² An especially influential text was *International Politics*, by social scientist Frederick Schuman, a study that placed international relations in the context of not just human evolution but the universe.³ As a result of such views, we realized the need to consider humans in a more universal context, one reinforced by contemporary events like the launching of *Sputnik 1* in 1957 and the *Apollo 11* moon-landing in 1969.

It was against this backdrop that Soka University was founded in Tokyo in 1971, as a humanist institution of higher learning. Its founder, Daisaku Ikeda, soon afterwards entered into conversations with Arnold Toynbee about history and peace, which were published in book form, as *Choose Life: A Dialogue*.⁴ Thus, Soka University became a strong supporter of this new vision of international relations.

The discussions of Toynbee and Ikeda had specifically focused on the dangerous threat of nuclear war. So, when the United States announced their ‘Star Wars’ or Strategic Defense Initiative in 1983, it gave us a sense of escalating crisis, since it proposed establishing weapon launch platforms in orbit around Earth. In response, three years later, we established what evolved into the Institute for Global and Cosmic Peace (IGCP), so as to work towards preventing wars on the Earth from expanding into space.⁵

cosmonization	globalization	human life zone		scientific and technological revolution		great revolution		great war	
The First Period of Cosmonization	The First Period of Globalization	The Cosmos emerged and began to expand.	The Birth and Growth of the Cosmos and Earth (Pre-Human) Age	The Human Age	The Gathering-Hunting Era	The (Pre-Modern) Period of Transition from the Agricultural Society to the Industrial Society	The First (Bourgeois Revolution) Period of the Modern Age	The Great War I, 1914–1918: The European and Asian War	
		The Earth emerged and expanded.			The Agricultural Revolution began ca. 10,000 years ago.				
		Humans emerged and began to spread all over parts on the Earth.			The Farming-Breeding Era				
	The Second Period of Globalization	Columbus reached the Americas in 1492, beginning the unification of humans who had spread all over the Earth.			The Industrial Revolution began when Watt invented the steam engine.	The Industrial Manufacturing Era	The American Revolution: The Independent Revolution began. The French Revolution: The Democratic Revolution began. The Russian February Revolution	The Second (Proletarian Revolution) Period of the Modern Age	
	The Second Period of Cosmonization	The Soviet Union launched the first artificial satellite, <i>Sputnik</i> in 1957.			The Information Technology Revolution began in latter part of the 20th century and advanced rapidly in the 1970s.	The Knowledge-Information Era	The Chinese Revolution: The Independent Revolution continued. The Civil Rights Revolution in the USA	The Yalta-Potsdam System → The 21st Century's Global Order	
	The Third Period of Globalization				The Collapse of the Soviet Union	The Third (People's Revolution) Period of the Modern Age	The Great War III, 1950–1989: The Korean War, the Vietnam War and the Soviet–Afghanistan War	The Great War IV (Tentative), 1990—the present: Wars in the Persian Gulf, 9/11 and other attacks, the U.S.–Afghanistan War	

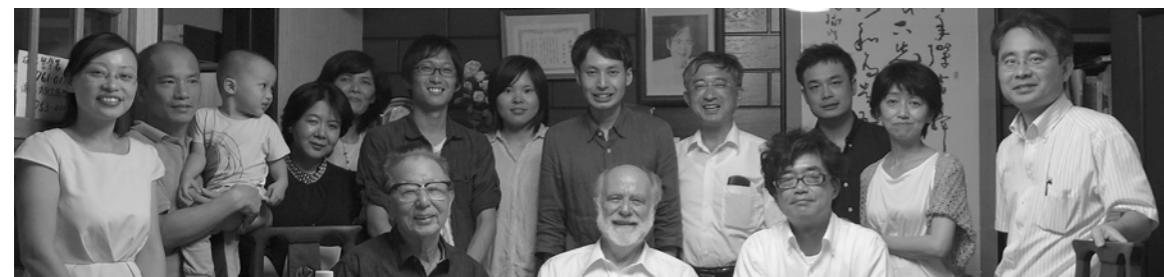
Osamu Nakanishi's periods of universal history, refined with Nobuo Tsujimura.

Source: Osamu Nakanishi and Nobuo Tsujimura.

We became interested in how former Soviet intellectuals coped with the collapse of the Soviet Union in the 1990s, especially in the way that Russian philosopher Alexander Chumakov put globalization into a holistic process over the long term, considering Earth as an open (geo, bio and socio) system in the cosmos. David Christian's book, *Maps of Time*, made us see connections between our work and Big History. And we employed the cosmic perspectives of planetary scientist Takafumi Matsui to achieve a new and holistic framework of human history placed into global and cosmic interactions.⁸ One of the manifestations of this reconceptualization of existence resulted in our developing a new periodization, shown in the table above.

A common goal of historians is to identify stages of development. The periods that we came to outline nest inside of each other like matrushka dolls, cutting across the natural and human worlds.⁹ This periodization does not relate to any traditional Japanese model; it is a blend of international relations, global history, and cosmic history.

All these influences led us to configure a new interdisciplinary field that we call ‘universal studies’.¹⁰ Of course, theories in each discipline should be first argued within their respective domains, but the question of how to combine such theories into an overall picture should be formulated in the larger domain as well. In one case, an astrophysicist will do it, while in another, an archaeologist. Different scholars will weave together diverse stories from different specialties. This is how various scholars will fertilize universal studies. Both collaborative and general



Meeting of the Institute for Global and Cosmic Peace, 5 September 2015, Yokohama City, Kanagawa Prefecture, Japan. At the centre are Osamu Nakanishi, Barry Rodrigue, Hirofumi Katayama (the first row) and Nobuo Tsujimura (the second row). The rightmost is Hideki Iwaki. Source: Photograph by Kazuko Ohta.

studies of history will go far beyond the domain of literally recorded history and extend into a cosmic expansion of historiography.

As with the inauguration of big history and cosmic evolution elsewhere in the world, universal studies developed in the context of the last World War, the Cold War and the Space Race. Although it evolved from a different discipline in Japan, it has begun to merge with aspects of these Western efforts. The first course on universal studies and big history is presently being designed by economics professor Hirofumi Katayama for offering at the J.F. Oberlin University in Tokyo in 2016.

As we see it, the primary human challenge of the 21st century will be to solve contradictions that have been traditionally solved by violence. We need to learn from the past and create new ideas, movements and systems appropriate for the new century, ones in which environments, economies, societies, politics and cultures are better unified.¹¹

Endnotes

- 1 Kyūichi Tokuda and Yoshio Shiga, *Eighteen Years in Prison*, Tokyo: Jiji Tsūshinsha, 1947 (Japanese publication).
- 2 Arnold Toynbee, *A Study of History: The New One Volume Edition Illustrated*, Oxford: Oxford University Press/London: Thames & Hudson, 1972 (Japanese publication).
- 3 Although first published in 1933, Frederick Schuman produced several updated editions of *International Politics* that had much new content. The last edition came out in 1969. Frederick Schuman, *International Politics: Anarchy and Order in the World Society*, New York: McGraw-Hill, 1969. The Japanese edition was based on this edition and came out in 1973.
- 4 Arnold Toynbee and Daisaku Ikeda, *Choose Life: A Dialogue*, Oxford: Oxford University Press, 1976.
- 5 The IGCP is an association in which our universities, colleagues and graduates can apply their learning. We maintain a membership of over hundred people, primarily throughout East Asia, and publish a newsletter and books, as well as organize special

presentations on the internet. The activities of the IGCP became a vehicle for our international relations efforts at the university to connect with not only other scholars but also with the general public.

- 6 This concept of Earth as a global archipelago was conceived by economic historian Heita Kawakatsu, ‘From Land-Centered World History to Sea-Based Global History’, in the *Weekly Diamond*, vol. 87, no. 36, 1999, pp. 116–7; idem ‘The Prelude to Global History’, in *Reading Braudel’s ‘The Mediterranean’*, Tokyo, Fujiwara Shoten, 1999, pp. 27–30; Fernand Braudel, *La Méditerranée et le monde méditerranéen à l'époque de Philippe II* (The Mediterranean and the Mediterranean World in the Epoque of Phillip II), 2 vols., Paris: Armand Colin, 1966, transl. 2004 (Japanese publication).
- 7 This holistic view of existence can be seen as a merger of world system theory and natural history, a process detailed by systems theorist Graeme Snooks in ‘Constructing a General Theory of Life: The Dynamics of Human and Non-Human Systems’, in *Evolution: Cosmic, Biological and Social*, ed. Leonid Grinin et al., Volgograd, Uchitel Publishing, 2011, pp. 84–100. Osamu Nakanishi, ‘Global Commune and Global History: Global Studies in Russia’, *Sociologica*, vol. 30, no. 1, Special Issue: *Globalization*, Tokyo: Soka University Sociological Society, 2005, pp. 8–31 (Japanese publication).
- 8 Alexander Chumakov, *Globalization: Outline of the Holistic World*, Moscow: Prospect, 2005 (Russian publication); David Christian, *Maps of Time: An Introduction to ‘Big History’*. Berkeley: University of California Press, 2004; Takafumi Matsui, *The Living Way of Cosmic Being: An Invitation to Astrobiology*, Tokyo: Iwanami Shoten, 2005, pp. 26, 179–81 (Japanese publication).
- 9 In our new periodization, ‘cosmonization’ describes the emergence of the cosmos and Earth and the human life zone. Therefore, the First Period of Cosmonization begins with the Big Bang and runs to the launch of *Sputnik* in 1957, while the Second Period lasts from then until today. Likewise, ‘globalization’ refers to the emergence of humans and the expansion of the human life zone. So the First Period of Globalization starts with the formation of Earth and lasts until the arrival of Columbus in the Americas in 1492, while the Second Period proceeds from 1492 to *Sputnik* in 1957, and the Third Period from 1957 until today, e.g., Osamu Nakanishi, ‘An Introduction to Universal History [Cosmic and Global History]: On the Periodization of Universal History’, *Journal of the Institute*

for Global and Cosmic Peace, vol. 6, 2011, pp. 65–71. Nobuo Tsujimura, ‘An Excursus on Osamu Nakanishi’s “An Introduction to Universal History [Cosmic and Global History]”, No. 1”: On Revised Periodization’, *Journal of the Institute for Global and Cosmic Peace*, vol. 6, 2011, p. 78 (Japanese publications).

- 10 Prior to 2013, we had called this study global and cosmic history, universal science, etc., before finally settling on universal studies. Osamu Nakanishi, et al., *An Introduction to Big History*, Yokohama: Institute for Global and Cosmic Peace, 2014; idem, *Applying Big History: Nature, War and Peace*, Yokohama: Institute for Global and Cosmic Peace, 2016.

- 11 A more detailed version of this historiography of universal studies can be read at Universal Studies, Archive, <bighistorycenter.org>.



New and Returning IBHA Members

One of the key purposes of the IBHA is for those of us who are interested in Big History to have a place to associate. It is a place to learn of other members' Big History activities and thoughts. So we are delighted to welcome new members to the IBHA – and by the vote of confidence and recognition of the value of our association by those who have renewed their membership. It is a pleasure to have each of you with us.



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Brazil

Canada

Chile

China

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Germany

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Third IBHA Conference

July 14 - 17, 2016

Amsterdam

INTERNATIONAL BIG HISTORY ASSOCIATION CONFERENCE

July 14-17, 2016

The University of Amsterdam
The Netherlands

Building Big History: Research and Teaching

The International Big History Association (IBHA) defines its purpose as “to promote, support and sponsor the diffusion and improvement of the academic and scholarly knowledge of the scientific field of endeavor commonly known as “Big History” by means of teaching and research and to engage in activities related thereto.”

Article 2 of the IBHA Articles of Incorporation.

The theme for the 2016 conference is “Building Big History: Research and Teaching.” The conference seeks to present the latest and the best in Big History research and teaching, while creating a forum for the articulation and discussion of questions that are central to Big History. Among the topics that are to be addressed at the conference through a series of panels, roundtables, and discussions, are: Approaches to Big History; Big History research agenda; Scholarship contributing to Big History; Big History teaching at universities, secondary, and primary schools: achievements and challenges; Little Big Histories; Reactions to Big History.

All presenters at the conference must be members of IBHA. Presenters may become members at www.ibhanet.org and will need to do so prior to registration for the conference.

The IBHA Conference will convene on premises of the University of Amsterdam, The Netherlands, located in the center of this beautiful European city. Attendees will have the option of selecting from one of several hotels in Amsterdam and the surrounding area with whom special conference arrangements have been made.

For all things Amsterdam, you can go to <http://www.iamsterdam.com/en/>. For a complete guide to the Netherlands and its many attractions, you can visit <http://www.holland.com/us/tourism.htm>. If you have more time to explore the larger area, similar websites exist for nearby Belgium, France, Germany, and Great Britain. Please find more details on the conference at www.ibhanet.org. We very much hope that you can join us at the 3rd IBHA conference.

Program Committee: Jonathan Markley (chair), Cynthia Brown, David Christian, Lowell Gustafson, Andrey Korotayev, Esther Quaedackers, Fred Spier, Sun Yue.

The conference will take place at the Oudemanhuispoort (Old Man's Home Gate). Part of it was built, as the name implies, as a home for poor old people in the early 17th century. In the late

19th century the University of Amsterdam started to use the building. Around that the same time book traders also moved into the little shops that line the main hallway of the building. The book traders are



Oudemanhuispoort (Old Man's Home Gate)

still there. Fred Spier started teaching a Big History course in Oudemanhuispoort 20 years ago. It ran there for 10 years.

We have retained two hotels – [IBIS Amsterdam Centre Stopera](#) within a 15 minute walk to the University of Amsterdam, and the [Volkshotel](#) (<https://www.volkshotel.nl/>, use code “IBHA” for discounted rate) within a 15 minute metro ride to the University. The two hotels are totally different types of hotels; Check the great reviews of these hotels on [tripadvisor](#) (<http://www.tripadvisor.com/>). Please start planning to join us in Amsterdam in July of 2016!

For more information, please contact Donna Tew at tewd@gvsu.edu. IBHA Office Coordinator.

Before and / or after the conference

Since you'll be in one of the world's great cities for the IBHA conference, you'll want to take advantage of its museums, quirky festivals, theatre, live music, laid-back bars and delightful restaurants. A few of the most popular museums are located together on Museumplein, such as the [Rijksmuseum](#), [Van Gogh Museum](#) and [Stedelijk Museum](#). Equally unmissable are the [Anne Frank House](#), [Hermitage Amsterdam](#), [EYE Filmmuseum](#) and [Foam](#).



You may wish to take a [canal boat tour](#) of the city. With its sense of style, Amsterdam inspires [shopping](#). You'll want to enjoy the city's [cuisine](#) and [nightlife](#).

What a great location for our conference!



Big History (and the IBHA Conference) at the University of Amsterdam

The next and third IBHA conference will be held from July 14th to July 17th 2016 at the University of Amsterdam.

The University of Amsterdam has a long history. It was founded as the Atheneum Illustre in 1632, during the Dutch Golden Age. The prosperous city of Amsterdam wanted and needed a university to educate its citizens about the riches of the world. Yet the central government did not allow it to have one, since a university had already been established in nearby Leiden in 1575, possibly as a reward for that city's successful resistance against the Spanish. Amsterdam, however, was not discouraged and simply established an educational institution under a different name. It subsequently hired a number of internationally renowned scientists and scholars and started teaching from the Agnietenkapel, a former nunnery. This chapel, which currently houses the university museum, is right around the corner from the IBHA conference location.

The university's slightly anarchistic nature never quite disappeared. After almost 400 years and numerous upheavals, some of which led to major university reforms, the institution still identifies with its somewhat rebellious roots. Even today, one of its three core values is a form of determination, described on the university's website as "inherent to any Amsterdam citizen who looks at the world from an independent, critical and self conscious perspective. University of Amsterdam researchers, teachers and students are competent rebels who, boldly yet responsibly, choose their own paths and set trends."

Partly because of its history and identity, the University of Amsterdam was one of the first in the world to adopt the groundbreaking and unconventional approach to history that was being pioneered by David Christian at Macquarie University in Sydney in the early 1990s. After visiting David in 1992, University of Amsterdam professor Johan Goudsblom brought the syllabus of the big history course that was being taught in Sydney home and decided to set up a similar course at his own university. He did so together with his former Ph.D. student Fred Spier, who after Goudsblom's retirement in 1997 became the course's main organizer.

The new course proved to be a big success. About 200 students attended its first run and hundreds of students have registered for the course each year ever since. Within the university, the course's success occasionally led to some resistance, mainly from faculty members who deemed the big history approach to be too broad. But thanks to student engagement and the strong support of a number of the university's most prominent scientists a semi-permanent position in big

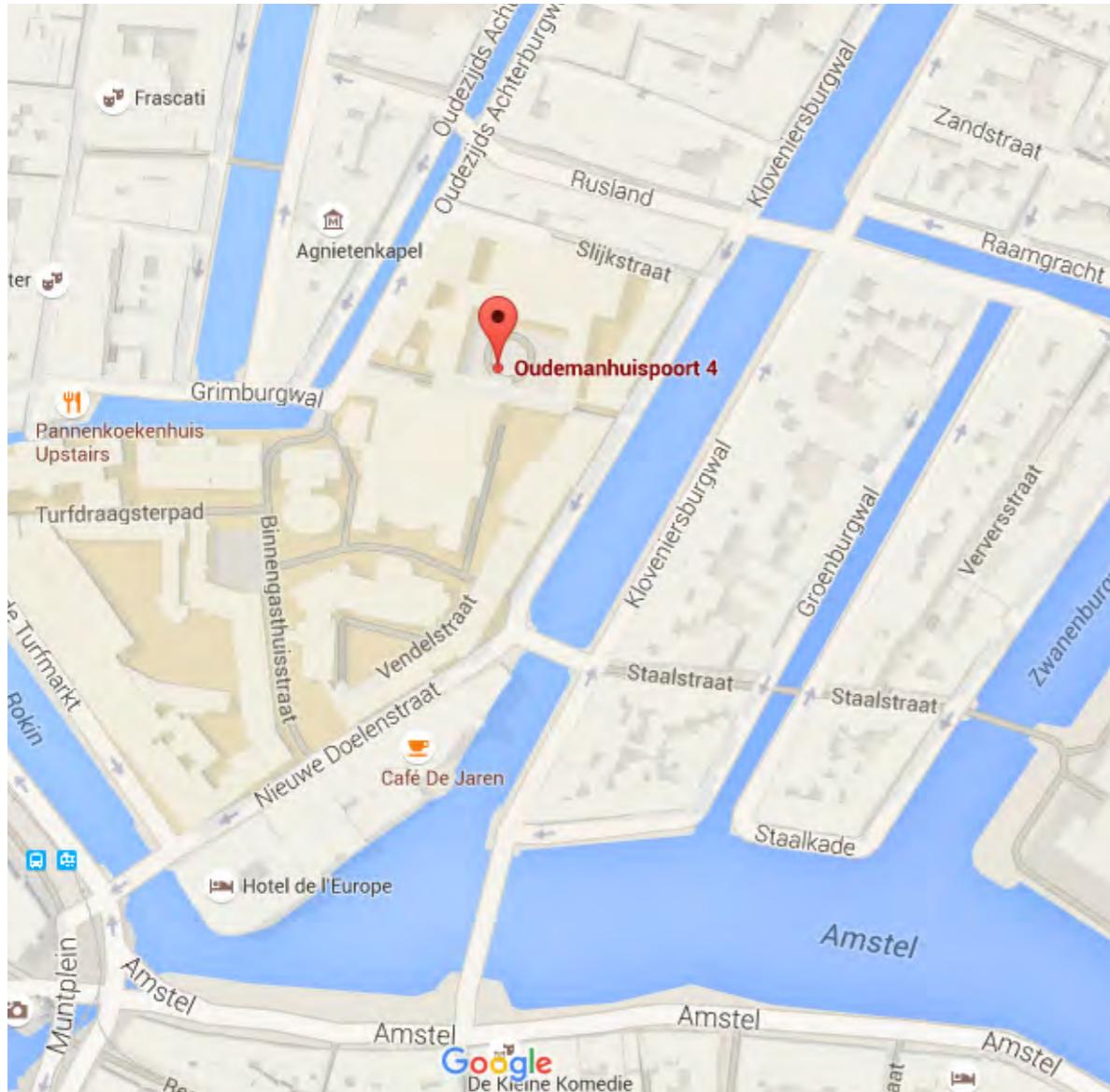
history was created for Fred Spier in 1997 and was turned into a permanent position in 2006.

Meanwhile, new big history courses, aimed at slightly different student populations, were established both within the University of Amsterdam and outside the university. The university started to function as a kind of big history course contractor, which in turn made it possible for the university to develop into a regional big history hub. The university's latest efforts to create a big history MOOC that will be published on Coursera in early 2016 (alongside Macquarie's big history MOOC that will be published on the same platform in the upcoming months) neatly fits into this pattern.

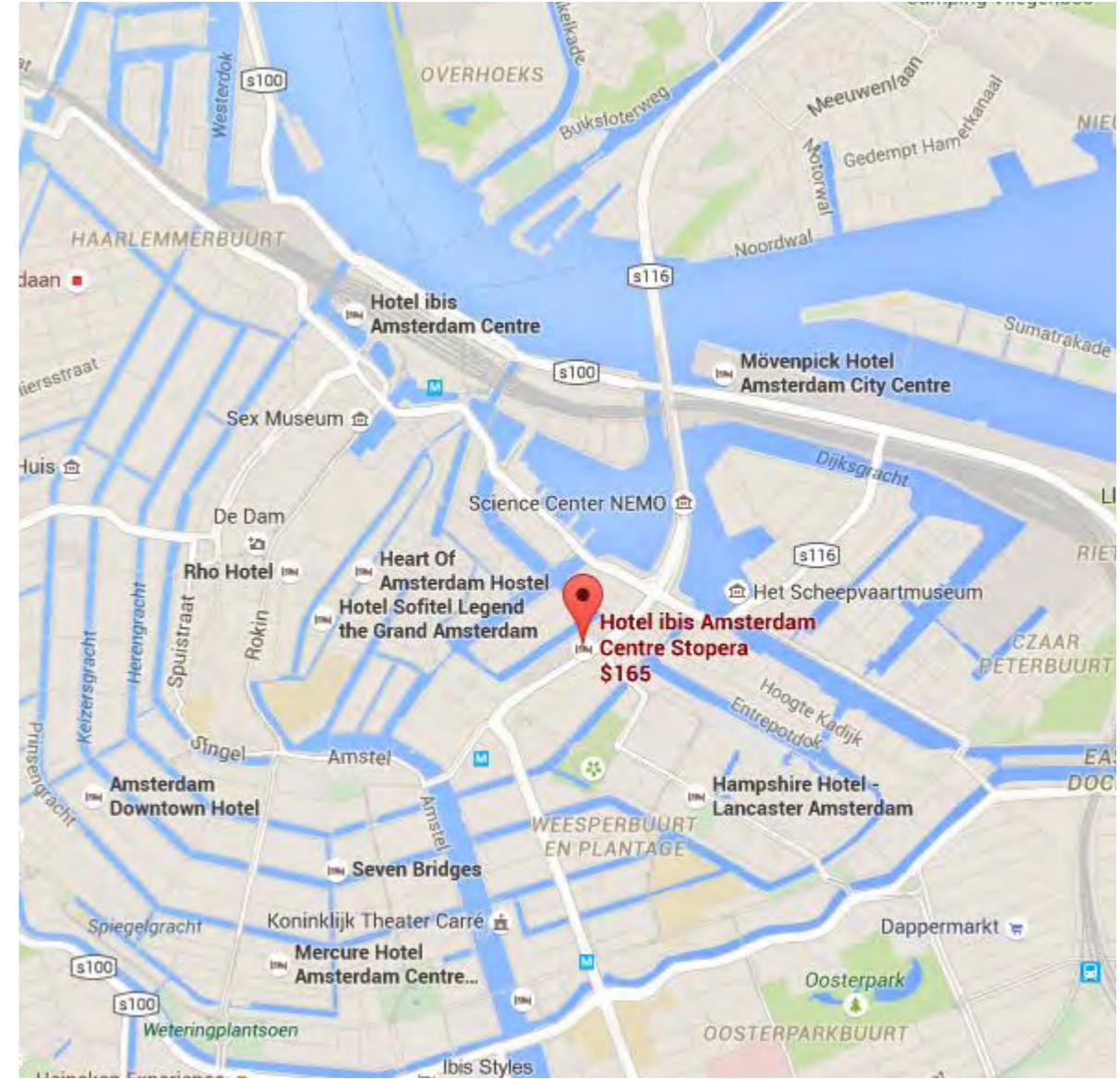
All of these developments have led to the creation of another permanent position in big history in August 2015, which will be filled by Esther Quaedackers. These developments have also enabled the University of Amsterdam offer to host the 2016 IBHA conference. This offer has been accepted by the IBHA, which, given the university's dedication to big history, deemed it to be a suitable place to hold its first conference outside of the US.

For more information on the history of big history at the UvA, you can also read Fred Spier's [The Small History of the Big History Course at the University of Amsterdam](#) that appeared in World History Connected in May 2005.



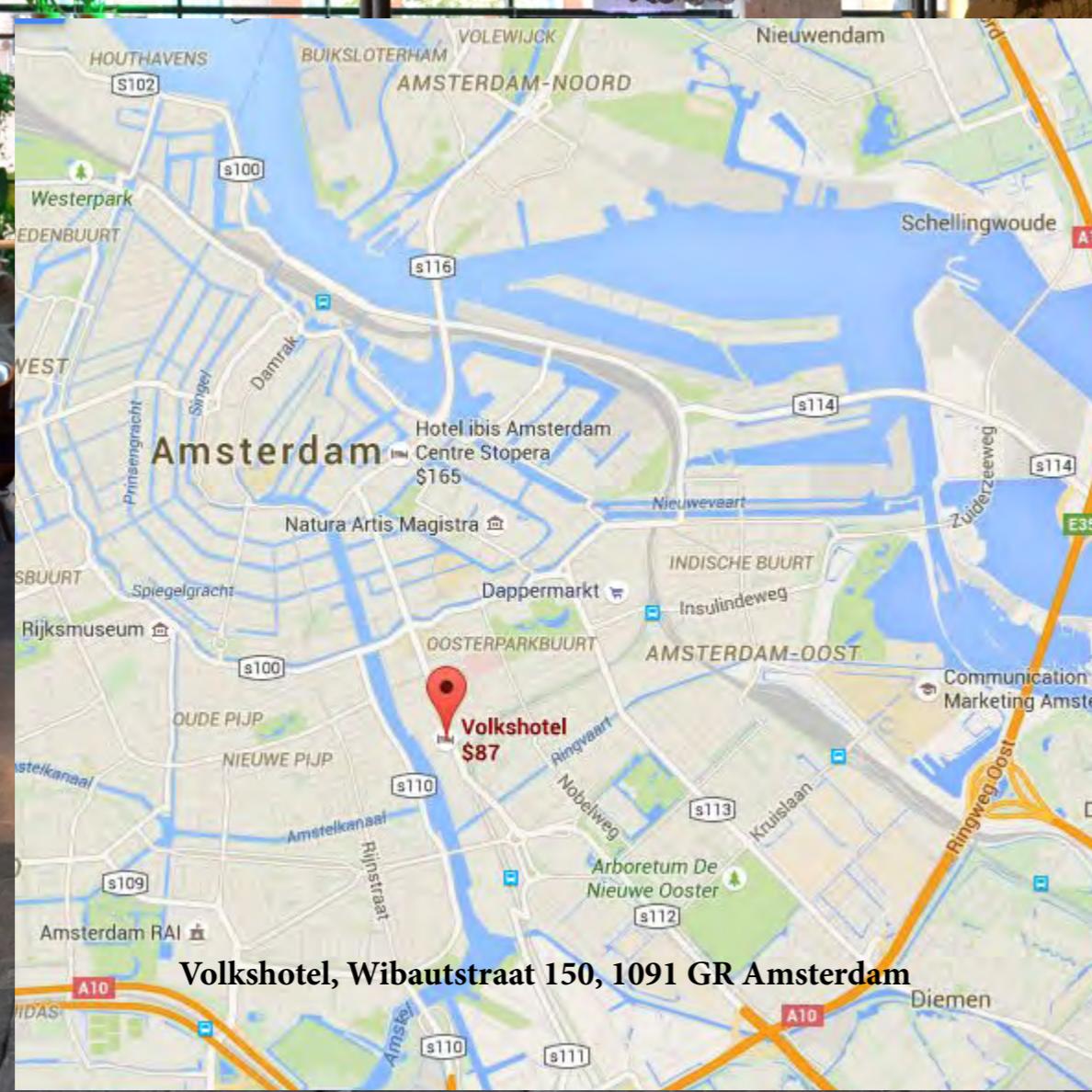


Location of Conference: Oudemanhuispoort 4-6, 1012 EZ Amsterdam



Hotel ibis Amsterdam Centre Stopera, Valkenburgerstraat





Nominations for IBHA Board of Directors

The members of the IBHA Board of Directors hold staggered three year terms. Each year, a few seats become open. This year, four seats become open. Since the IBHA was founded, there have been a number of Board members who have cycled off the Board, a number of new people who have joined it, and a number who have stayed on. In the interest of serving the purpose of the IBHA while fostering both continuity and change, the IBHA selects Board candidates in two ways:

- (1) the existing Board proposes a list of names; and
 - (2) IBHA members may identify additional names (please see the next page)
-

Barry Rodrigue is an archaeologist, geographer and historian. His technique of telescoping local, regional, global and universal studies into a unified context made him an early advocate of micro/macro studies. A founder of the International Big History Association (IBHA), he serves on its Board of Directors as International Coordinator. He is also a founding member of the Eurasian Center for Megahistory & System Forecasting (Russian Academy of Sciences), in which he is a research professor, as well as of the Asian Big History Association. He organized the big history sessions at the 2011 WHA conference in Beijing, the 2012 Global Futures 2045 conference in Moscow, and the 2015 International Congress of Historical Sciences in Jinan. He serves on the board of the Network of Global & World History Organizations as an IBHA representative. His latest production is the three-volume collection, From Big Bang to Galactic Civilizations: A Big History Anthology, which includes articles by 100 scholars from 25 nations.

John Mears is a member of the history faculty at Southern Methodist University for forty-nine years, is retiring this spring as professor emeritus. A specialist in early modern Europe, he received his undergraduate education at the University of Minnesota and his Ph.D. from the University of Chicago. He began to study what we now call big history in the 1980s after he joined the World History Association, ultimately serving as the association's president. His scholarly work increasingly involved giving conference papers as well as publishing article and essays that placed topics of persistent concern within the framework of cosmic evolution. He is currently writing what has become a two-volume work tentatively entitled TO BE HUMAN: A PERSPECTIVE ON OUR COMMON

An electronic election for new Board members will begin on June 1, 2016, and end on June 30, 2016. Members of the IBHA will receive an email from simplyvoting.com on June 1 with instructions for how to vote.

The new Board will be announced in July.

We welcome your active engagement in this important process.

HISTORY in which he sets forth an interpretation of the human experience viewed as an integral dimension of the epic of evolution. As a member of the IBHA board, he would hope to encourage the elaboration of interdisciplinary approaches that would tighten connections between the natural sciences and humanities.

Lucy B. Laffitte: My education and experience are detailed in my nomination announcement so I thought I would share what shaped my journey to Big History here. My intellectual north star aligned early on with big thinkers like Rachel Carson (the narrative of ecosystems), David Attenborough (the narrative of evolution) and Carl Sagan (the narrative of the cosmos). I sought to build a bedrock understanding of “natural history” as an undergrad—taking astronomy, geology of the solar system, physical geography, paleontology, evolution, biogeography, ecology, climatology, and meteorology. Bolstering this with a PhD in environmental history, environmental decision-making, and institutional systems thinking, I came away curious about the relationships between ecosystems, human institutions, and the status of human dignity. When my practice as a science educator introduced me to the work of Chaisson, and then Christian, Spier, and Brown, I felt a jolt, knowing I’d found an intellectual home. I would be honored to contribute my services to an organization that supports the growing group of scholars, teachers, writers, and researchers that fuse scientific evidence and the arrow of time into narratives that edify the socio-ecological system that is now planet Earth.

Andrey Korotayev: My original research interests were in Ancient Yemen and

general theory of social evolution. When I first heard about the Big History idea in the mid-1990s, this idea appeared very attractive for me immediately, as it implied the possibility to find some meaningful patterns that could be relevant for a few types of evolution. In 2000s together with Alexander Markov and Leonid Grinin I have undertaken a few attempts to identify patterns that are common for the biological and social phases of the Big History and to demonstrate that they could be described with similar mathematical models. Finally, I hope to contribute to a general theory of universal evolution that could serve as a sound theoretical basis for the Big History. With respect to the IBHA activities I hope to contribute to the integration of a rather substantial Eurasian Big History community into the global community of the big historians. I also hope to contribute to the publication activities of IBHA - first of all to the publication of scholarship from the forthcoming Amsterdam IBHA conference and additional research by Big Historians. I promise to contribute to this as much effort as possible.

Lowell Gustafson: I have appreciated being secretary and vice-president of the IBHA, as well as editor of *Origins*. It has been a great intellectual adventure to learn from so many of the brilliant people who have developed this new field — and such a pleasure to see how students from preschool to graduate school, academics, professionals, retirees, and citizens of nations from around the world share a passion for exploring the evidence based narrative of the entire known past. My modest contributions include chapters such as “From Particles to Politics,” “Big Politics,” web publications such as “Nature and the Imagination,” academic papers such as “Science, the Deep Past, and the Political,” and other publications and presentations. I am a professor of political science at Villanova University in Pennsylvania, USA, with a PhD in Government and Foreign Affairs from the University of Virginia. Goals that I share with others include developing an IBHA academic journal that will publish scholarly articles about Big History, inviting more people to participate in the IBHA, and to watch how the field of Big History develops.



IBHA Board Elections

will be held in
June.

All current IBHA members
are eligible to vote.

Origins: VI 5

May 2016

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World History Conference

July 2 - 5, 2016 in Ghent, Belgium

Craig Benjamin, current Treasurer of the IBHA and outgoing President of the World History Association, wants to remind members of the IBHA that the World History Association will hold its 25th annual conference in Ghent, Belgium from July 2-5, 2016, ten days before the IBHA Amsterdam Conference. The WHA conference will be held in Het Pand (right), the historic cultural center of Ghent University. Het Pand is an old Dominican monastery located in the heart of the city on the banks of the river Leie, near the medieval port. If any IBHA members planning on attending and presenting at Amsterdam are also interested in attending and perhaps presenting at the WHA Conference in Ghent, please contact Craig Benjamin who can assist in organizing designated Big History panels. Craig's email is: benjamic@gvsu.edu



Ghent canal, Graslei and Korenlei streets, Ghent, Belgium



2016

IBHA Post-Conference Tour

A TASTE OF EUROPE

JULY 18–27, 2016



Craig Benjamin, pioneering Big Historian and tour lecturer, on the Jungfraujoch.

10
DAYS

Jump into world history and scientific discovery in Five European Countries

From First World War battlefields in Belgium and Paleolithic cave art in France to world-class wine vineyards in Germany and thematic lectures provided by leading historians, this tour has it all. Discover distinct style, substance and science in the cultural capital of Paris, among the magnificent *chateaux* in the Loire Valley and in the center of particle physics research at CERN. You'll absorb the best of history and beauty on this fascinating tour through five European countries.

Go Ahead

Start planning today | Contact Charlie Thurston **1.617.619.1133 or charlie.thurston@goaheadtours.com**

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Overview

A TASTE OF EUROPE



Let us handle the details



Expert
Tour Director



Local
cuisine



Handpicked
hotels



Sightseeing with
local guides



Private
transportation



Personalized
flight options

Your tour includes

- 9 nights in handpicked hotels
- Breakfast daily, 4 three-course dinners with beer or wine
- Multilingual Tour Director
- Private deluxe motor coach
- Guided sightseeing and select entrance fees

Your tour highlights

- World-class museums and beautiful gardens in Paris
- Magnificent architecture and rich history at Château de Chenonceau
- Stunning replicas of Paleolithic art in the Lascaux II Cave
- Sweeping, mountainous landscapes in Auvergne
- Impressive scientific technology at CERN, the European Organization for Nuclear Research
- Medieval castle views in the UNESCO-recognized Rhine River Valley
- Daily lectures by leading historians

Where you'll go



Price is on a sliding scale for 20-40 travelers - \$3439-\$3139.

Go Ahead

Start planning today | Contact Charlie Thurston **1.617.619.1133 or charlie.thurston@goaheadtours.com**

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Itinerary

A TASTE OF EUROPE

Paris | 2 nights

Day 1: Arrival in Paris

Welcome to France! Say goodbye to some of your fellow conference-goers and hello to your Tour Director as you transfer from Amsterdam to Paris by deluxe coach. Stop en route in Ypres, Belgium, which was a site of heavy fighting during the 1916 Battle of the Somme.

- Tour the In Flanders Fields Museum, which focuses on the futility of war
- Visit the Menin Gate, a memorial to British and Commonwealth soldiers whose graves are unknown

Later, enjoy free time to explore and eat lunch in Ypres before continuing on to Paris.

If time allows, additional stops will be made in Antwerp and Amiens.

Day 2: Sightseeing tour of Paris & the Musee d'Orsay

Included meals: breakfast, welcome dinner

Paris was central to the French Revolution in the late-eighteenth century and largely rebuilt under Napoleon III in the 1860s. A guided tour introduces you to the architecture and history of the City of Light's neighborhoods, called *arrondissements*.

- Drive down the sycamore-lined Champs-Élysées to view the famous Arc de Triomphe, a tribute commissioned by Napoleon
- Pass Pont Neuf and the Notre-Dame Cathedral, located on the Seine River
- Make a photo stop at the Eiffel Tower viewpoint to see the wrought-iron landmark
- See the opulent Palais Garnier opera house, Hôtel des Invalides and Place de la Concorde, the city's grandest square

Later, enjoy the Musée d'Orsay Museum's rich collection.

- Enjoy free time for lunch in the afternoon and tonight, sit down with your group and your Tour Director at a welcome dinner.

Dordogne Region | 2 nights

Day 3: Périgueux via the Loire Valley

Included meals: breakfast, dinner

Transfer to Périgueux in the Dordogne Region today. Stop along the way in the Loire Valley, which produces world-class wines and was once known as France's "Playground of the Kings." You'll learn more about the area's royal past on a guided tour of the extravagant Château de Chenonceau.

- Explore the interior and gardens of the castle, which sits on the River Cher and is a famous late-Gothic/early-Renaissance architectural gem
- Discover how it got the nickname "Château de Femmes"—some of its famous female residents included Diane de Poitiers and Catherine de' Medici

Take free time for lunch at the chateau and then continue on to the Dordogne Region for an included dinner this evening.

Day 4: Lascaux II Cave & Les Eyzies-de-Tayac-Sireuil

Included meals: breakfast

Explore the Dordogne Region to discover prehistoric remnants, ancient history and spectacular Paleolithic art, and then eat lunch during free time.

- Follow a guide as you marvel at the reproductions of Paleolithic paintings in the Lascaux II Cave, a 39-meter replica of the original cave
- Transfer to the village of Les Eyzies-de-Tayac-Sireuil this afternoon, where you'll enter the National Prehistoric Museum and see awe-inspiring archaeological finds from some of the most famous excavation sites in the Vézère Valley

Geneva | 1 night

Day 5: Geneva via Auvergne

Included meals: breakfast

Make your way to the historic city of Geneva, Switzerland today, stopping along the way in the mountainous region of Auvergne.

- Take in scenic surroundings as you drive through the Auvergne Volcanoes Regional Park, a well-preserved site that boasts stunning landscapes, beautiful villages and 10,000-year-old volcanic peaks
- As you drive through the park, stop for photo ops at the Puy de Dôme, a large lava dome, and the Puy de Sancy, the highest volcano in France
- Revel in the park's beauty as you enjoy free time for lunch

Grindelwald | 2 nights

Day 6: Grindelwald via CERN

Included meals: breakfast, dinner

Today, explore the European Organization for Nuclear Research, known as CERN. Follow a CERN staff member on a guided tour of the laboratory, where scientists do groundbreaking research on particle physics.

- View the Large Hadron Collider, a massive particle accelerator that is responsible for some extraordinary discoveries, including the pentaquark

Later, take free time to eat lunch and explore CERN's permanent exhibitions before continuing on to Grindelwald for tonight's included dinner.

Day 7: The Bernese Oberland & Jungfraujoch

Included meals: breakfast

Today, head into the Bernese Alps and discover the UNESCO World Heritage site of Jungfraujoch, a windswept mountain pass known as the "Top of Europe."

- Ride a railway car to the Jungfrau plateau, where you can enjoy free time for lunch 11,617 feet above sea level
- Take a train to view the Sphinx Observatory and enter the Ice Palace

Later, enjoy a spectacular hike on the trails below these formidable mountains.

Heidelberg | 2 nights

Day 8: Heidelberg via Basel & Strasbourg

Included meals: breakfast

Transfer to Germany today, making a brief stop for free time in Basel, Switzerland's third-largest city. Then, continue on to Strasbourg, the capital of France's Alsace region and the official seat of the European Parliament. Take a guided tour of the city's Parliament building and eat lunch during free time. Then, make your way to Heidelberg, which has a history of human occupation dating back at least 200,000 years and is home to one of the most influential universities in the world.

Day 9: Wine Tasting & Rhine River Cruise

Included meals: breakfast, lunch, wine tasting, farewell dinner

Start your day with a guided tour of Bopparder Hamm, the largest wine vineyard in the Middle Rhine Valley.

- Tour the cellar and vineyards before sitting down to a lunch accompanied by a tasting of some signature vintages
- Enjoy magnificent views over the Rhine valley as you learn about the cultivation of wine in the region

Later, take in the spectacular sights of the UNESCO-recognized Rhine River Valley on a scenic cruise from Boppard to St. Goar.

- Marvel at breathtaking landscapes and fine architecture of the Middle Ages
- View medieval castles along the river, including Kurtrierische Burg in Boppard

After disembarking, say goodbye to your group at a farewell dinner.

Day 10: Amsterdam via Cologne

Included meals: breakfast (excluding early morning departures)

Make a brief stop in Cologne, home to a UNESCO-listed cathedral, before transferring back to Amsterdam with your group.



Tour Notes

By tour lecturer Craig Benjamin

One of the highlights of the IBHA Post-Conference tour will undoubtedly be our two days in southwestern France, where we will visit Lascaux II and the National Prehistoric Museum at Eyzies-de-Tayac. The region is famous for its Paleolithic cave paintings, particularly those of the UNESCO World Heritage Site of Lascaux, which are estimated to be 17,300 years old. The caves themselves are products of the erosion of the sedimentary karst and limestone basin of the Vezere River, before it joins the Dordogne River. The Lascaux valley is located some distance away from the major concentration of decorated caves and inhabited sites, which are further downstream. Near the village of Eyzies-de-Tayac there are in fact 37 decorated caves and shelters, all dating to the Upper Paleolithic Era.

The entrance to Lascaux Cave was discovered on September 12, 1940 by 18-year-old Marcel Ravidat. He later returned with three friends, and after entering the cave via a long shaft they discovered that the walls were covered with depictions of animals. The cave complex was opened to the public in 1948, but by 1955, the carbon dioxide, heat and humidity produced by 1,200 visitors per day had damaged the paintings and intro-

duced lichen onto the walls. The cave was closed to the public in 1963; the paintings were then restored to their original state and were monitored daily.

In 1988 the cave was beset with a fungus, blamed on a new air conditioning system, and in 2008 the cave was infected with black mold which scientists are still trying to keep away from the paintings. Today only a few experts are allowed to work inside the cave for a couple days a month, but the efforts to remove the mold have taken a toll, leaving dark patches and damaging the pigments on the walls. In 1983 the French government opened Lascaux II, a replica of the art work in the Great Hall of the Bulls and the Painted Gallery. Lascaux II is located 200 meters away from the original, which means that visitors like us can view the paintings without further damaging the originals.

The original Lascaux cave contains nearly 2,000 figures, including animals, human figures, and abstract signs. The paintings contain no images of the surrounding landscape or the vegetation of the period. Most of the images were painted onto the walls using mineral pigments, although a few were also incised



into the stone. Over 900 images can be identified as animals, and 605 of these have been precisely identified. There are 364 paintings of horses, 90 paintings of stags, and aurochs, bison, seven felines, a bird, a bear, a rhinoceros, and a single human are also depicted. The most famous section, which is reproduced in Lascaux II, is The Great Hall of the Bulls where aurochs, horses and stags are depicted. The four black aurochs, which appear to be in motion, are the dominant figures; one is 17 feet long, the largest animal discovered so far in cave art.

Many theories have been advanced to try and explain why the images were painted: that they represent past hunting successes, or some sort of ritual to improve future hunting; that they depict myths in which dangerous animals play a prominent role; or that they are simply realistic representations of the real life and environment of these animals, which humans interacted with on a regular basis. Whatever their original purpose, they demonstrate the very sophisticated level of art that had been achieved by humans in the Upper Paleolithic, and offer an astonishing window into the world of our stone age ancestors.



Australian soldiers at the Somme, July 1916.

Courtesy: The Australian War Memorial

The day that we pass through southern Belgium and northern France and visit the Flanders Fields Museum and Menin Gate – July 18th - marks the one hundredth anniversary of the final day of one of the bitterest campaigns of the First World War, the Battle of the Somme. The Battle took place on both sides of the Somme River between the 1st and 18th of July, as British and French troops tried to dislodge the German army from its entrenched positions. At the cost of one million men killed or wounded, this ranks as one of the bloodiest battles in all world history.

The casualty rate was exacerbated by the fact that the Battle of the Somme marked an important stage in the industrialization of warfare, in that both aircraft and tanks played a decisive role. This is precisely the sort of critical relationship between science and human history that big history attempts to highlight.

My grandfather Eric Benjamin served on the Western Front as part of the Australian Imperial Forces, and although he (fortunately!) arrived too late to participate in the Battle of the Somme. I look forward to sharing with you all some of the entries from the meticulous diaries he kept of his experiences one hundred years ago in this part of Europe as a soldier in the First World War.

Those of you attending the IBHA conference before the tour might also enjoy attending a panel that I will be participating in with my colleagues Jonathan White and Gordon Olson, who with his wife Christine will be a member of the tour party. The panel, 'Big History and the Great War', specifically explores these sorts of connections between geography, science, technology and human agency.

Now let's turn to a topic that is much more pleasant: the city of Paris, where we will spend a full day and two evenings. Although Paris is known as 'The City of Light', both because of its leading role in the French Enlightenment, and more literally because Paris was one of the first European cities to adopt gas street lighting, the history of Paris has been just as strongly influenced by geography as it has by ideas or street lights.

The city of Paris occupies a small portion of the great Anglo-Paris Basin that includes much of northern France, the English Channel, and parts of southern England. During the Eocene Era, sedimentary processes laid down extensive gypsum deposits on the Right (North) Bank of the Seine, and limestone, chalk, clays and sand on the Left Bank, materials that later proved vital in physically building the city. Paris also sits in a favorable fluvial position just downstream of the Seine-Marne confluence, and upstream of the confluence with the Oise. These naturally occurring fluvial intersections are one of the features that made the site so attractive to early settlers.

The settlement that would become Paris also formed around two natural islands in the Seine, the Ile de la Cité and Ile St. Louis. Today, the 50 acres of these islands are home to many magnificent sacred and secular buildings, such as Notre-Dame, Sainte-Chapelle and the Palais de Justice, and just across on the right bank, the Hôtel de Ville, that were constructed using some of the materials deposited during the Eocene.

If we had visited these island 2300 years ago we would

have found ourselves in the fortified settlement of the Parisii, a sub-tribe of the Celtic Senones, who took up residence on the south bank of the Seine in the mid-third century BCE. The Parisii were great traders and had commercial relationships with towns as far south as the Iberian Peninsula, even minting their own coins to facilitate this. The fact that an ancient north-south trade route also crossed the Seine via the Ile de la Cité made this an even more strategic choice for their settlement

All that changed in the Year 53 BCE when Roman legions under the command of Julius Caesar conquered the Paris basin, displaced the Parisii, and constructed a garrison camp on the Ile de la Cité. During the centuries of Roman control that followed they extended their settlement in a more permanent way to Paris's Left Bank, making good use of the available natural resources, particularly limestone and water. The Gallo-Roman town was still known as Lutetia, although its full name was Lutetia Parisiorum, 'Lutetia of the Parisii'. It became a prosperous city with a forum, baths, temples, theatres, and an amphitheater. By the time the Western Roman Empire disintegrated in the fifth century CE, the town was known simply as Parisius in Latin and Paris in French. We will certainly be thinking about the role of geography as we stroll the streets of these two stunning islands and the beautiful Latin Quarter, where the layout of the Roman settlement can still be discerned.

Please note that there are still some spaces available on this wonderful tour, so if you have any friends or colleagues who might be interested in joining us, have them contact Donna @ tewd@gvsu.edu.

