



International
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Association

Origins

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Thank you for your membership in the IBHA. Your membership dues all go towards the administration of the association, but do not by themselves cover our costs. The only paid position is a part time administrative assistant. Other costs are for our website, for example. [Please consider a tax deductible \(in the US\) gift](#) to our 501(C)3 and please consider remembering the IBHA in your will.



Who is the African child?

By Nganfon Eric
African Big History Association

It has been a little long for the world dwellers. Actually, not that long as compared to the big history of the Mother Earth and the Mysterious Universe, but they still find it too complex, intellectually and emotionally, to call Africa their home. Billions of humans got their genesis from Africa. Others found themselves today in different countries with different characteristics from their siblings - the Africans who are still dwelling in Africa today.

Humans who are dwelling on different continents all have unique ways of life, different skin colours, distinct climatic conditions and discrepancies in their understanding on how to apply their knowledge to benefit their peoples. In the past, geographical location divided us and now legal requirements separate us. Many people who left Africa have lost their souls and refuse to call Africa their home.

The fear of the unknown has caused billions of sons and daughters of the soil to divide Mother Earth among themselves to claim different nationalities: thinking and acting indifferently, and scuffling and shouting to each other aggressively. Looking beyond Africa, one is tempted to believe that the potent majority of Africans out there are defining the destiny of the impotent minority of Africans who are at home.

The sounds vibrating through their tongues no longer identify them as a voice of an African. I remember my grandfather once told me: “Son, when the lion is in the forest, even the birds that are pluming on trees feel uneasy to whistle.”

The lion is early man; the forest is Pangaea surrounded by the Panthalassan Ocean; the birds are the descendants of early man; the act of pluming on trees is living in two separate landmasses Laurasia (Eurasia, North America and Greenland) and Gondwana (Africa, South America, India, Australia and Antarctica); uneasiness is the difficulties and confusion that the young descendants of early men had during the era of gradual continental drift and climatic change; to whistle is an ability to clear all the fear and ambiguities surrounding the present world dwellers to accept and believe their origin.

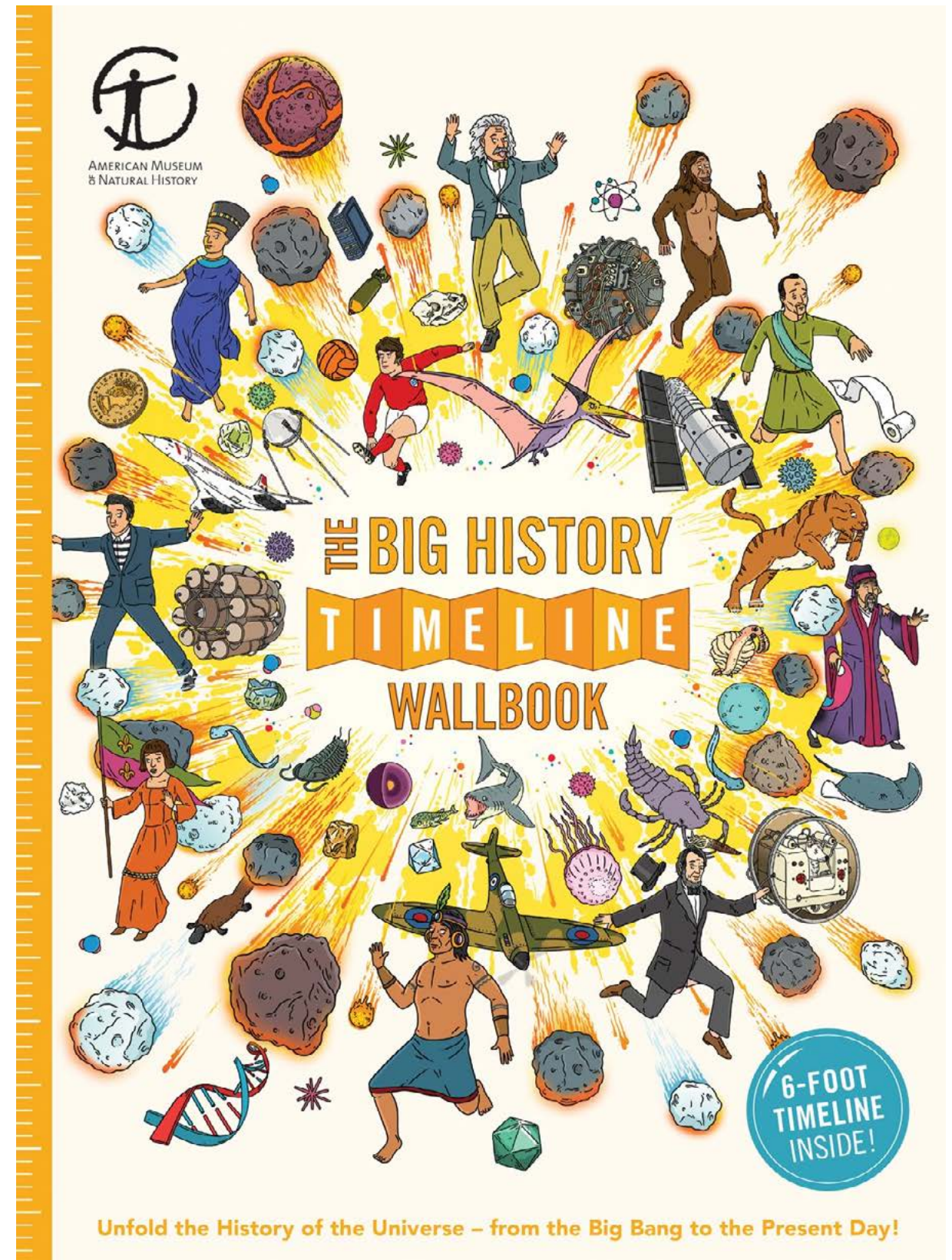
When would the birds start to whistle again? When would the birds start to understand they and the lion are one? Who is the African child? When would the African child come home?

Wall Charts, Timelines, and World Views: A Big History Perspective on the Past

A review of *The Big History Timeline Wallbook*
American Museum of Natural History, 2017
by Christopher Lloyd & Patrick Skipworth
Illustrated by Andy Forshaw

Despite the numerous disciplines that contribute to Big History, a narrative organization provides an essential unity. For this, the six-foot horizontal presentation of *The Big History Timeline Wallbook* (2017) provides a compelling visual metaphor, probably because any such diagram captures the left-to-right directional movement of written narrative. This wallbook is valuable as a pedagogical tool in and of itself, but it also indicates that Big History—generally regarded as confined to IBHA, its handful of authors, biennial conferences, newsletter, and recently launched journal—is now spreading across a broader swath of the academic world. *The Big History Timeline* is published by the American Museum of Natural History, thus providing an impressive imprimatur for a movement that started with a dozen expeditioners on a mountainside in the Apennines less than eight years ago.

While exploring a local college library a number of years ago, I discovered information in a book I needed and so made my way to the copy room. While inserting quarters in the Xerox machine, I gazed at *The Wall Chart of World History*, a foldout thumbtacked to the wall so long it decorated the surface above all three machines. It was about eighteen inches tall, intriguing, and inviting enough to encourage walking its length. It was colorful and attractive, the kind of thing a high school student might want to look at while brushing up for a final history exam. But as I walked back to the left end of the chart, its primary problem was immediately apparent. It started at the year 4004 BC, the date for creation established by the Irish archbishop, James Ussher in 1649 in his *Annals of the World*.



Scholars who have tracked down biblical dating tell us that there were at least 125 attempts from the fourth to the eighteenth centuries to establish a date for the creation of the world based on biblical genealogies. Few calculations matched; creation varied between 3800 and 5400 BC, the reason being that biblical genealogies are in places discontinuous, thus inviting guesswork about how many years had elapsed during the gaps. Over the centuries, scholars made different assumptions, and different guesses, and so came out with different chronologies. Bishop Ussher’s advantage was his reputation: following years of scholarship and copying of books from libraries across Europe, he was appointed archbishop of Armagh at the age of forty-four, making him the most powerful clergyman in the Church of Ireland. He was closely connected to the English monarch and the aristocracy, and he searched out books relentlessly, assembling an enormously intimidating library—10,000 volumes by the time he died. In general he was regarded as perhaps the most erudite religious scholar of his time. The peerage in England knew for years that he was dating the Bible. Once *Annals of the World* was published, his dates were universally accepted as authoritative and correct. Soon afterward, they were printed in the margins of English Bibles, a practice that continued for more than 200 years. Eventually the dates became so wedded to the content that they were regarded, like the text itself, as divinely inspired revelation.

By the end of the 19th century, the geology of James Hutton and Charles Lyell, and the biological writings of Charles Darwin had made clear that the Earth had been around much earlier than 4004 BC. In 1900 Bishop Ussher’s dates were dropped from Bibles printed by Cambridge University Press; ten years later Oxford University Press followed suit. But many years ago I bought a huge discarded family Bible for its impressive introductory art work—paintings, maps, drawings of temples, and inventories of biblical animals. Its date was 1911, and there on the first page, beside the first verse (“In the beginning, God created the heavens and the earth . . .”), 4004 BC was printed in the margin. (I subsequently learned that Ussher was even more precise, placing the darkness “on the face of the deep” (Gen. 1:2) during the night of Saturday, October 23, 4004 B.C., with God’s command, “Let there be light” (Gen. 1:3) signaling a Sunday-morning dawn. The dating is a reminder that verifiable historical information does not necessarily filter to the public; a substantial percentage of Americans still hold a literal belief in Young Earth Creationism deriving from Bishop Ussher’s dates.

I was somewhat distressed to find this *Wall Chart of World History* displayed in a college setting, especially where substantial numbers of two-year college students would see it. The chart was, after all, an anachronism, a monument to an outmoded literalist interpretation of the Bible. College courses in astronomy and geology tell us the origin of the Universe and the Earth is a matter of verifiable scientific information that supersedes ancient accounts, and even when mysteries remain in scientific explanations, the solution is not a return to myth. Given the campus context, the *Wall Chart* looked like an instrument of cognitive dissonance, a repudiation of what was being taught in the next building. I wondered briefly who might have pinned this chart on the wall, though biblical literalism is widespread, instilled in children early in life where it becomes an element in the believer’s psychology—an embedded foundation of personal stability and identity. Despite how one feels about it, this is best left alone. The only way to dislodge an outmoded story—if it can be dislodged at all—is never to criticize, and to tell a more compelling story, which has become my goal in teaching my own Big History course, *Cosmic Narratives*.

The earliest version of the *Wall Chart of World History* was produced by the Presbyterian minister, Sebastian Adams, and titled the *Chronological Chart of Ancient, Modern, and Biblical History*. It carried history up to its date of publication, 1871. Present versions have added modern history, but the biblical and genealogical structure has not changed. Despite its archaic assumptions, it is reprinted regularly, shipped by Amazon, and sold at modern bookstores—a good example of how the ideology of free speech and publication nurtures ideas that should have been eclipsed more than a century ago.

The *Wall Chart* begins by adopting a literalist interpretation of the pre-deluge characters, according to which they all lived for hundreds of years, with Methuselah living to age 969. This ten-generation genealogy—averaging 165 years per generation—stretches the pre-deluge era from 4004 BC to 2349 BC, Ussher’s date when the flood began. Modern radiometric dating shows that rocks, fossils, and early human artifacts are much older than this chronology allows, but literalists tend to deny the accuracy of radiometric dating. Following the Noachian flood, the *Chart* exhibits twin fallacies: first, a biblical genealogy imposed on history and, second, the maintenance of national boundaries as primary dividers in the flow of history. According to the Book of Genesis, Noah and his family survived the

flood, and his three sons, Shem, Ham, and Japheth, became the ancestors of all the world’s population. The Bible established local descendants: Shem as the ancestor of Semites, Ham as the ancestor of a motley collection of tribes, Japheth as the ancestor of “the coastal peoples of the Gentiles” (Gen. 9:5). These three lines of descendants are presented as forerunners of three races—a faulty demographic that lumps disparate people into groups by skin color, though the Bible itself was unclear on these distinctions. These three are then bifurcated into nations, with Europeans (read Caucasians) as descendants of Japheth by default and the British and their colonies given preferential treatment, a transparently Eurocentric prejudice. The genealogical metaphor has built in constraints: every planetary region, every kingship, empire, nation, and ethnic group must be fitted into a Noachian genealogy tracing to his three sons. This constraint reveals the *Wall Chart’s* underlying limitations in omitting any history of Africa, any recognition of the ancient civilizations of Asia, the peoples of South and Southeast Asia, the island peoples of the Pacific ocean, and the pre-contact Native peoples of the Americas—five of several telling omissions. One should hardly expect more: a constricted, entirely patrilineal narrative of Hebrew history is simply untenable as a foundation for world history.

Genealogical lines imposed on ethnic groups, empires, and nations is at best metaphorical, certainly a long way from fact, a cognitive jump that escaped

Sebastian Adams and our contemporaries who tack the *Chart* on their walls as though it provides an accurate presentation of history. Its somewhat limited value is the simultaneity of events in the Eurocentrically-chosen regions included, but responses to it are nebulous, with little recognition of its underlying fallacies: sixty Amazon reviews include phrases like “packed full of great information,” “shows how the nations spread out from Noah,” “it was hanging at my Doctor’s office and I had to track it down,” “so amazing I must share my excitement,” “finally makes world history clear,” “what a fabulous teaching and learning tool!” A glimmer of awareness that something about the *Chart* might be amiss is evident in the remark, “it doesn’t detail anything about dinosaurs or Neanderthals. Interesting . . .” Recognitions such as “It’s Young Earth Creationist silliness” are distressingly rare.

Given the persistence of this mythical world view, it is indeed refreshing to discover the scientifically based *Big History Timeline Wallbook*, published in the U.S. by The American Museum of Natural History (2017), following publication in England by What On Earth Publishing (2010). Presented between hard covers (10 ½” x 14”), the timeline unfolds to six feet. It begins with the Big Bang and ends in 2016 with the Paris Climate Accord, the British vote to leave the European Union, and the women’s march following the election of Donald Trump. The chart is followed by “The Wallbook Chronicle”—twenty-nine news-formatted articles dating as early as the 1796 La Place theory of Earth’s origin from a cloud





of swirling gas to the 1965 Penzias and Wilson detection of the microwave echo of the Big Bang, the 1969 landing on the Moon, and the 1974 discovery of Lucy. The time chart compresses the first 13 billion years of cosmic history into less than a foot of the *Timeline*, with dozens of postage-stamp explanations in miniscule print (A convenient magnifier is included in a pocket inside the front cover). This compressed segment of the *Timeline* illustrates the Big Bang, galaxy formation, element creation in the stars, Earth history, the rise of life, the development of stromatolite colonies, and life forms up to the emergence of vertebrates—certainly too much for the physical space allotted. However, the problematic organization of the *Wall Chart of World History* with genealogies and nations as its lines of continuity is replaced here with the underlying strands of Space, Earth, Sky, Sea, Land, and Stone Ages appearing sequentially as a backdrop for Humanity—an alternate substructure for the Cosmos-Earth-Life-Humanity structure of Big History. Sub-Saharan Africans, East Asians, Pacific settlers of Hawaii, and the Native Americans are here given their appropriate places in the story.

The brevity of the *Big History Timeline*—six-feet in length in comparison with the 20+ foot length of the *Wall Chart of World History*—suggests there is room for significant expansion in subsequent editions that could benefit from a slight decrease in density of illustration. Additionally, big historians are familiar with

the diagrams of the Big Bang that have appeared in print in many forms and are available as posters; these articulate the steps of the Big Bang in considerable detail. The dawn of “first light,” now detectable as the Cosmic Microwave Background (CMB), is typically dated at 380,000 after the Big Bang—a period amounting to 1/400th of one percent of the Universe’s 13.8-billion-year history—but it usually appears half way along the diagram between time zero and the present. This kind of expansion of detail in treatment of early cosmic history, all the way down to the structure of the atoms and elements, would add a significant cosmic prologue to galactic, stellar, and planetary history. Similarly, the three-billion-year history of bacteria and plankton prior to their amalgamation into invertebrates could be extended. A glance at the pre-vertebrate tree of life at the beginning of Lynn Margulis’ and Karlene Schwartz’ *Five Kingdoms* (1982), with its radiations of unfamiliar life forms like *Monera* and *Protoctista*, reveals how much expansion of the *Big History Timeline* would be possible.

That said, there is little to be faulted with *The Big History Timeline Wallbook*. Its visual quality makes it suitable for an adolescent—a high school student enrolled in The Big History Project, for instance—but it appeals to the visual learner much as the recent oversized, gold-covered *Big History* volume (DK, 2016), introduced by David Christian. Big History is intensely interdisciplinary, spanning astronomy, physics, chemistry, geology, biology, anthropology, sociology, and conventional history. Any linear treatment inevitably appears to treat these components as separate silos of information, thus reinforcing the already fragmented idea of knowledge created by our departmentalized educational system. *The Big History Timeline* integrates information by diagramming vertical as well as horizontal sequences. The constant struggle of Big History teachers is to bridge the silos, to provide unifying themes, to suppress the knowledge silos in favor of the overarching narrative. The Big History Project goes a long way toward communicating this unifying narrative; *The Big History Timeline Wallbook* provides a useful visual presentation worthy of attention.

Barry Wood
University of Houston

IBHA conference

Big History, Big Future: A Cosmic Perspective

July 26 - 29, 2018

Please plan on participating in the 2018 IBHA conference from July 26 - 29 at Villanova University, near Philadelphia, Pennsylvania, USA. Here are [directions to Villanova](#), which is a half hour train ride from Philadelphia on the “Main Line.” Take a [virtual tour](#) of Villanova here. Panels and plenary sessions will be in the Connelly Center. You may reserve an attractive room on west campus or stay at nearby hotels.

Before or after the conference, you will enjoy the [Philadelphia area](#). [Independence Hall](#), the birthplace of America, is where the Declaration of Independence and later the US Constitution were signed.

Great museums include the [Philadelphia Museum of Art](#), The [Barnes Foundation](#), [Rodin Museum](#), The [Academy of Natural Sciences](#), and the [Museum of Archaeology and Anthropology](#). The [Liberty Bell](#) has inspired many in the struggle for freedom. Among [Eastern State Penitentiary's](#) celebrated prisoners were Al Capone. A few ideas for restaurants are [here](#), another one is [here](#), and [here](#).

Villanova University is proud to host the 2018 International Big History Association conference. The integration of the natural sciences, social sciences, and humanities has been central to the university's mission from its beginning.

Our science building in the College of Arts and Sciences, which houses our

departments of physics, astronomy, chemistry, biology, and computing sciences, is named for Gregor Mendel. Mendel was the nineteenth century Augustinian friar who is generally recognized as the founder of the modern science of genetics. He conducted his famous pea plant experiments between 1856 and 1863 in which he established many of the rules of heredity, now referred to as the laws of Mendelian inheritance. Each year, the university gives the Mendel Medal to an outstanding scientist.

Villanova's Mendel Medal was given to the Belgian Catholic priest Abbé Georges Lemaître, Ph.D., D.Sc. in 1934 for his ground-breaking article on the primeval atom – what later became better known as the big bang. He was the first to derive what is now known as Hubble's law and made the first estimation

of what is now called the Hubble constant, which he published in 1927, two years before Hubble's article. His work was controversial at the time. Albert Einstein, who was committed to the steady state or eternal universe, told Lemaître, "Your calculations are correct, but your physics is atrocious." Once Edwin Hubble's observations confirmed Lemaître's theory, Einstein accepted the new view of the beginning of our universe. As astrophysicists have honed Hubble's Law, a beginning for our universe was dated at about 13.82 billion years ago. Big History begins

with the "primeval atom" (even as we examine theories of the multiverse, cyclical universes, and other hypotheses).

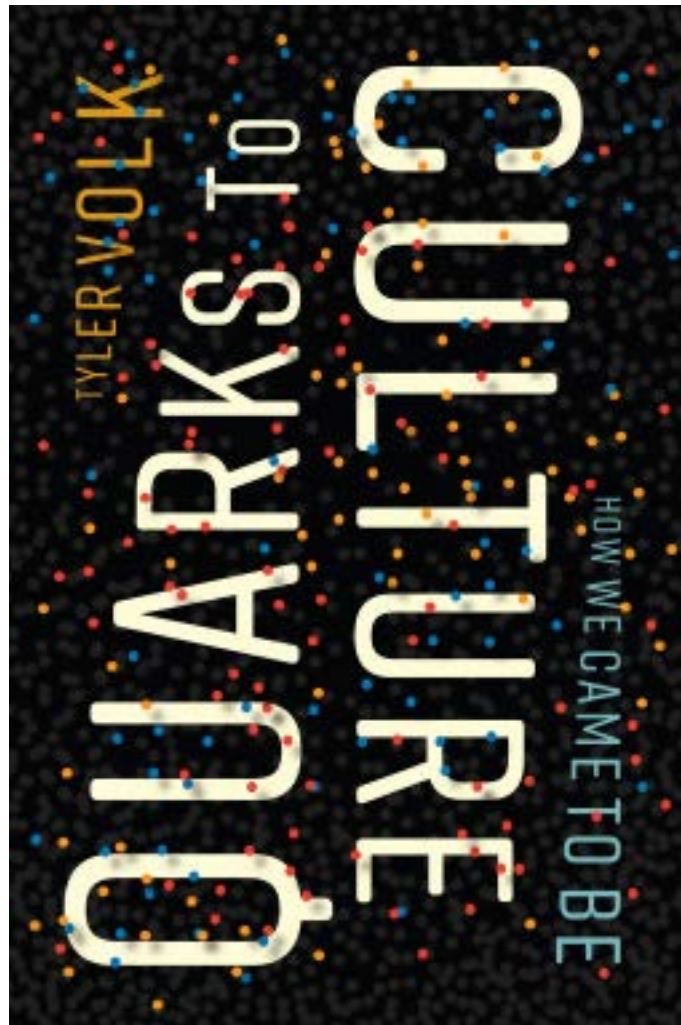
The 1937 Mendel Medal was awarded to Dr. (Rev.) Pierre Teilhard de Chardin, S.J. for his work on key developments from the origin of the universe to the present

and into the future. He argued that the universe had not been created originally as it is now, but that it evolved through stages. Big History investigates the periods of time from which there are transitions from one to the next.

In 2008, the award went to the evolutionary biologist, [Kenneth Miller](#). The Mendel Medal was given to Dr. George V. Coyne, S.J. in 2009, when he was the Director of the Vatican Observatory. [His lecture](#) at the award ceremony was an account that is familiar to big historians. Villanova's astronomers and physicists teach and research the origins and evolution of the universe over the past 13.82 billion years. Our earth scientists investigate the history of the earth since its accretion 4.6 billion years ago. Our bio-chemists and evolutionary biologists in Mendel Hall work on the origins and evolution of life over the past 3.8 billion years. Our departments

in the humanities and social sciences pick up the story over the past thousands of years. The contributions to big history of all of these scholars have been of great importance – and make Villanova University a great place to hold the 2018 IBHA conference.





Our plenary speaker to open the conference on Thursday evening, July 26, is Tyler Volk, who has just published *Quarks to Culture: How we came to be*. He argues that the world is nested, both physically and socially, and at each level we find innovations that are necessary for the next. He argues for a universal natural rhythm—building from smaller things into larger, more complex things—resulted in a grand sequence of twelve fundamental levels across the realms of physics, biology, and culture. He introduces the key concept of “combogenesis,” the building-up from combination and integration to produce new things with innovative relations. He explores common themes in how physics and chemistry led to biological evolution, and biological evolution to cultural evolution. Volk also provides insights into linkages across the sciences and fields of scholarship, and presents an exciting synthesis of ideas along a sequence of things and relations, from physical to living to cultural. The resulting inclusive natural philosophy brings clarity to our place in the world, offering a roadmap for those who seek to understand big history and wrestle with questions of how we came to be.

Tyler Volk is professor of biology and environmental studies at New York University and a recipient of the University’s Distinguished Teaching Award and Golden Dozen Award. His books include *Metapatterns: Across Space, Time, and Mind* (Columbia, 1995); *Gaia’s Body: Toward a Physiology of Earth* (1998); and *CO2 Rising: The World’s Greatest Environmental Challenge* (2008).



Craig G.
Benjamin

Our after dinner speaker will be **Craig G. Benjamin**, who is an Australian-American historian and Professor of History in the Frederik J. Meijer Honors College at Grand Valley State University, where he teaches East Asian civilization, big history, ancient Central Asian history, and world history historiography. Benjamin has presented lectures at conferences throughout the world, and he is the author of several published books, and numerous chapters and essays on the ancient history of Central Asia, Big History and world history. He has recorded lectures for the History Channel and the Discovery Channel, and has been a lecturer for the Big History Project, and on cruises sponsored by both Scientific American and the New York Times. Benjamin has recorded two courses for the Teaching Company’s Great Courses series, the Foundations of Eastern Civilization and the Big History of civilization. Together with David Christian and Cynthia Brown, he is the author of the first Big History textbook, *Big History: Between Nothing and Everything*, which was published by McGraw-Hill in August 2014. Benjamin has been a board member of the International Big History Association since 2011. He served as IBHA Treasurer from 2011 until 2016 and now as Vice-President. He is a consultant for the College Board and current co-Chair of the Test Development Committees of the SAT World History exams. In 2014 and 2015 Benjamin served as President of the World History Association.

A vibrant cosmic nebula in shades of red, orange, and blue, with bright yellow and white stars scattered throughout. The nebula's wispy, ethereal structure fills the background, creating a sense of depth and celestial wonder.

Emergent Universe Oratorio

Main Line Symphony Orchestra
Directed by Don Liuzzi

Saturday, July 28, 2018, 7:30 pm
Villanova University Church
800 Lancaster Avenue, Villanova, PA, 19085
(in front of the bridge across Lancaster Avenue)

Composed by Sam Guarnaccia

From 13.82 billion years ago
until today - and into the future

The *Emergent Universe Oratorio* creatively integrates science with beauty from superb musical direction, choral singers, and orchestral players. Performed by the Main Line Symphony Orchestra (MLSO), now in its 72nd season, the oratorio will be a highlight of the 2018 IBHA conference. The MLSO is directed by Don Liuzzi, who is also a member of the Philadelphia Orchestra.

The Oratorio, by Vermont composer Sam Guarnaccia, gives expression to the awe inspiring narrative of the universe from the big bang to the emergence of humanity's global and universal consciousness. It is a series of alternating intensively scored recitatives with major lyrical choral sections.

The oratorio will be introduced by Ursula Goodenough, Professor Emerita of Biology at Washington University in St. Louis where she has engaged in research on eukaryotic algae. She authored the best-selling book, *Sacred Depths of Nature*, participated in a *Mind and Life* dialogue with the Dalai Lama in 2002, has participated in television productions on PBS and The History Channel, and contributed to the NPR blog, *13.7: Cosmos & Culture*, from 2009 to 2011. Goodenough was instrumental in the writing of the libretto for the oratorio.

The oratorio will be performed in the beautiful church on the campus of Villanova University, the location for the 2018 conference of the International Big History Association.

Emergence describes the appearance of new properties in the new levels of complexity that have developed over time. The sciences have provided us evidence of a beginning of our universe 13.82 billion years ago. Almost immediately, quarks formed relationships that produced protons and neutrons. Since then, there has been a process of relationships within ever more complex relationships from protons to atoms,

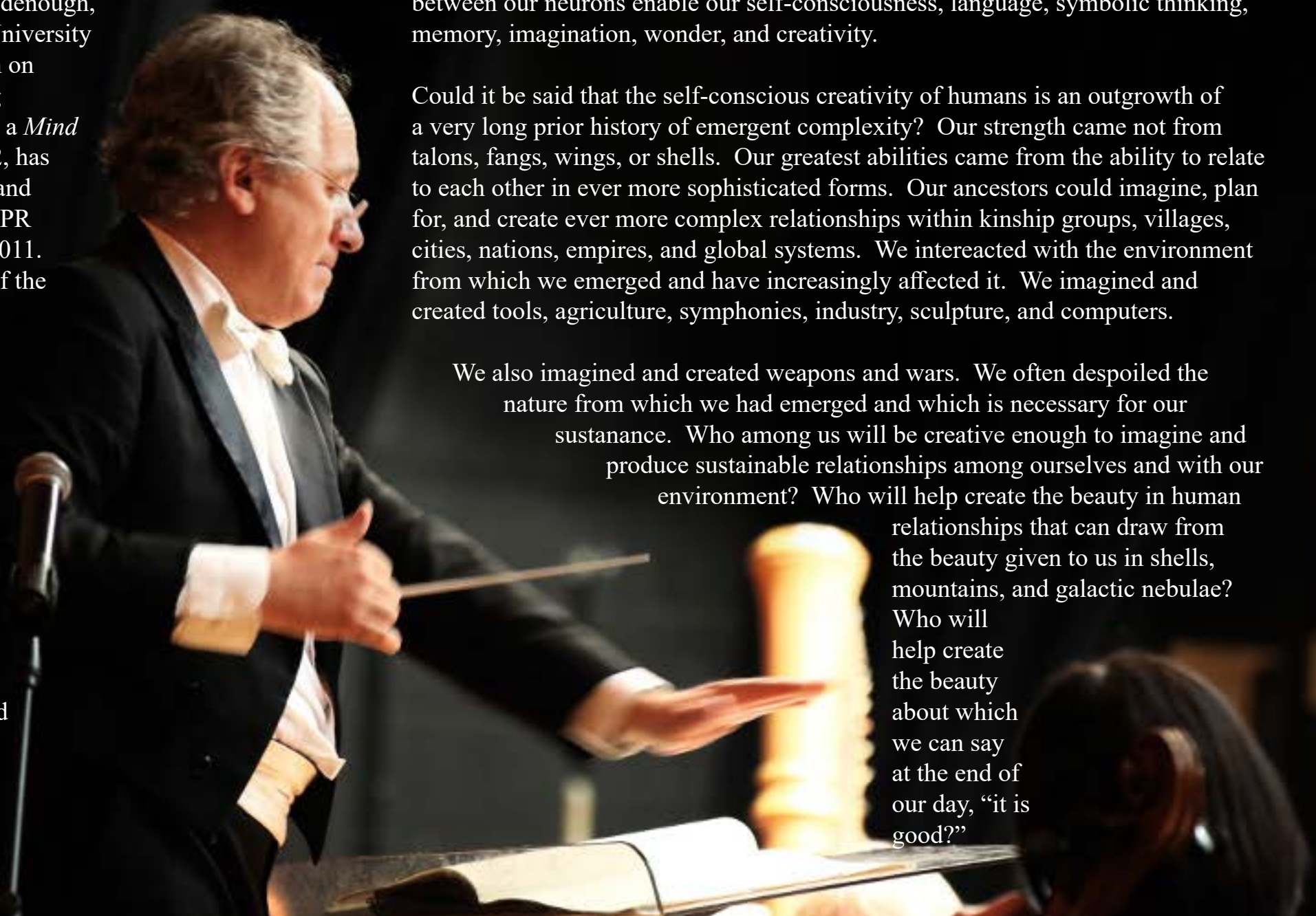
stars, galaxies, chemicals, our solar system, our Earth, tectonic plates, changing oceans and continents, amino acids, cells, multicellular life forms, a stunning variety of plants and animals in the sea and on land, and – some 200,000 years ago – humans. Our human nature emerged from a very long past in which at first there had not been any of those relationships and things mentioned above. But atoms, cells, and much more did develop and eventually came together in us.

Among the relationships within us were the 100 trillion synapses between the 100 billion neurons within each of our brains. Our brains are the most complex relationships of matter in the universe of which we are aware. We are that part of the universe that is able to reflect on itself. The electric and chemical exchanges between our neurons enable our self-consciousness, language, symbolic thinking, memory, imagination, wonder, and creativity.

Could it be said that the self-conscious creativity of humans is an outgrowth of a very long prior history of emergent complexity? Our strength came not from talons, fangs, wings, or shells. Our greatest abilities came from the ability to relate to each other in ever more sophisticated forms. Our ancestors could imagine, plan for, and create ever more complex relationships within kinship groups, villages, cities, nations, empires, and global systems. We interacted with the environment from which we emerged and have increasingly affected it. We imagined and created tools, agriculture, symphonies, industry, sculpture, and computers.

We also imagined and created weapons and wars. We often despoiled the nature from which we had emerged and which is necessary for our sustenance. Who among us will be creative enough to imagine and produce sustainable relationships among ourselves and with our environment? Who will help create the beauty in human

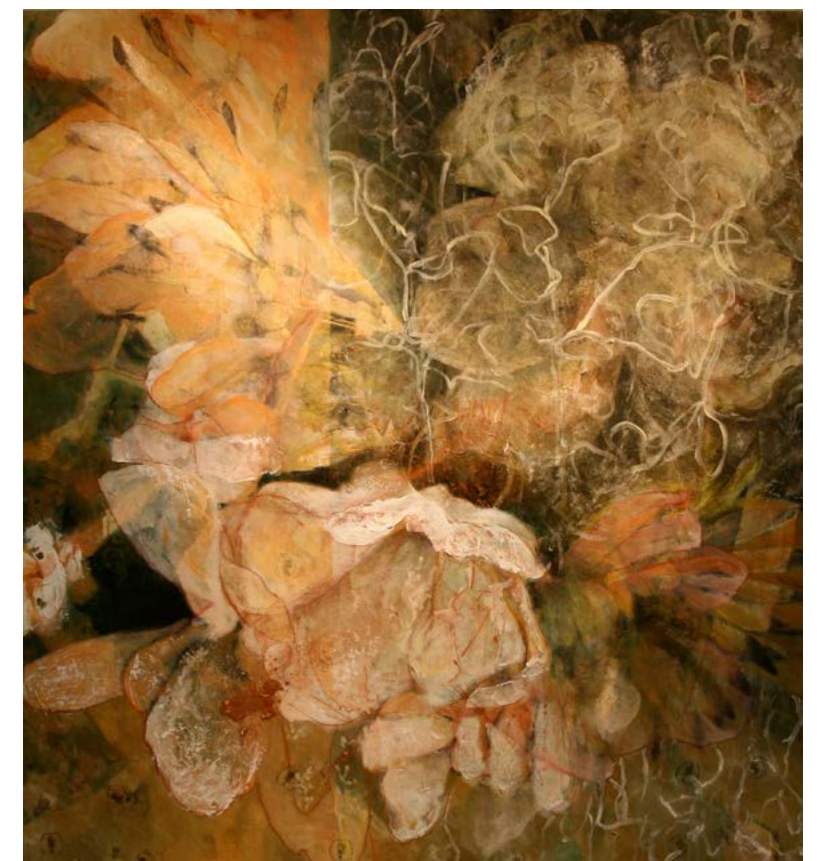
relationships that can draw from the beauty given to us in shells, mountains, and galactic nebulae? Who will help create the beauty about which we can say at the end of our day, "it is good?"





Cameron Davis' paintings will be exhibited at the IBHA conference in conjunction with the Emergent Universe Oratorio. These paintings explore wholistic aesthetics; art, science and imagination, as contributing to our capacity to create a life affirming future. Her collaboration with the Oratorio continues to evolve; including the original Emergent Universe Oratorio paintings, Endless Spring, the series Airs, Waters, Soils (Places) and her new work exploring the language of plants, mycelium, soils and bedrock across felt & temporal conceptions --- "Deciphering the Lyrics of Lichens," and the "Meter of Eternity" based on the writings of Ursula LeGuin. We need to "learn the languages of mountains... rivers... trees, ... of birds, animals and insects... and the languages of the stars." (EUO, Recitative: Emerging Earth Community).

camersondavisstudio.com



Conference Housing

VILLANOVA UNIVERSITY Dorm Apartments

Guest Apartments - Air-Conditioned (West Campus) Daily Rates*	
Bed Linen*/Towels2 etc. and Private Bath (1.5 or 2 baths per apt) included Includes a Kitchen (w/out cookware) and Living/Dining Room	
2- or 4-bdrm apt, shared by 4 guests (quad occupancy)	per person \$50.00
2- or 4-bdrm apt, shared by 2 guests (double occupancy)	per person \$70.00
2- or 4-bdrm apt, not shared, occupied by 1 guest (single occupancy)	per person \$95.00

*above rates include breakfast

You may extend your reservation before or after the conference in order to visit locations in the Philadelphia area. Please contact Donna Tew at tewd@gvsu.edu to reserve a dorm apartment.



Villanova's west campus apartments



Conference Housing in Philadelphia



Home2Suites by Hilton Philadelphia Convention Center

\$169 per night plus tax (this rate includes breakfast)

This location will be approximately a half hour train ride to Villanova campus

- Downtown Philadelphia hotel just blocks from Rittenhouse Square
- Two blocks from Jefferson Station and easily accessible to public transportation
- Indoor saline swimming pool

Your HiltonLink is: <http://home2suites.hilton.com/en/ht/groups/personalized/P/PHLCCHT-IBH-20180725/index.jhtml>

Pre-Conference Tour (Option #1)

If you want to look around Philadelphia after the conference, we’d like to invite you to a couple of events that can offer a little structure to your explorations on Wed., July 25.

The **Barnes Museum**, on the Parkway in Center City Philadelphia, has one of the outstanding collections of Post-Impressionist Art in the world. The collection was the work of Albert C. Barnes, who bought his first paintings in 1911. In 1912, he visited Paris and met Gertrude Stein, Matisse, and Picasso. Today, the collection includes 178 Renoirs, 69 Cezannes, 60 Matisses, and 44 Picassos. The Barnes was located outside the City, in Merion, PA, until 2012, when it moved to its present location, which recreates the initial site’s unique presentation.



We plan to take advantage of a self-guided tour the museum offers, with a half-hour introduction. We’ll begin with the introduction at 2:00 PM. After that introduction, you’ll have an hour to explore the museum, with the help on an audio tour. This tour costs \$34.50. A similar tour without an introduction, but with the audio guide, is also available for \$23.00.

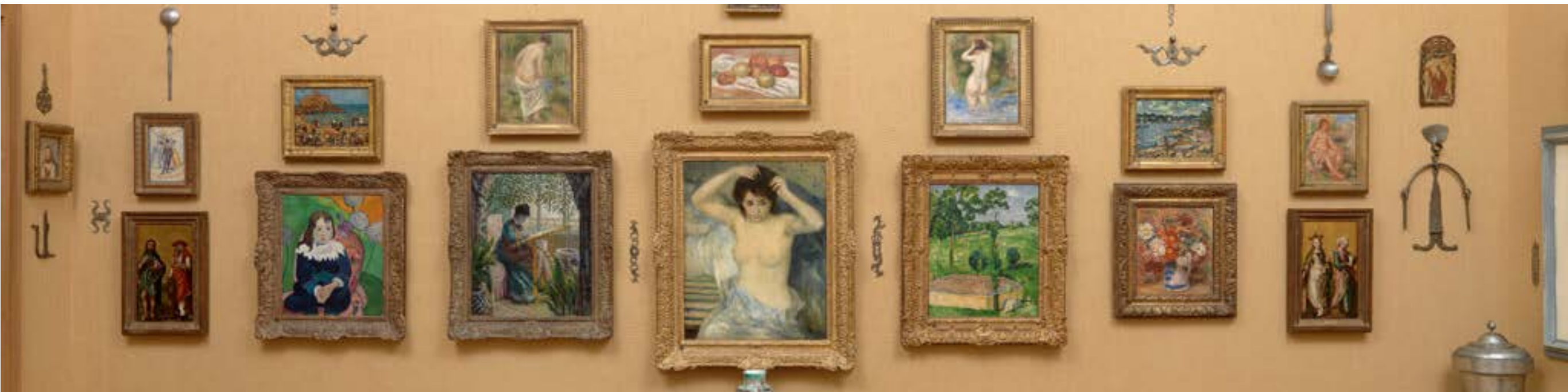
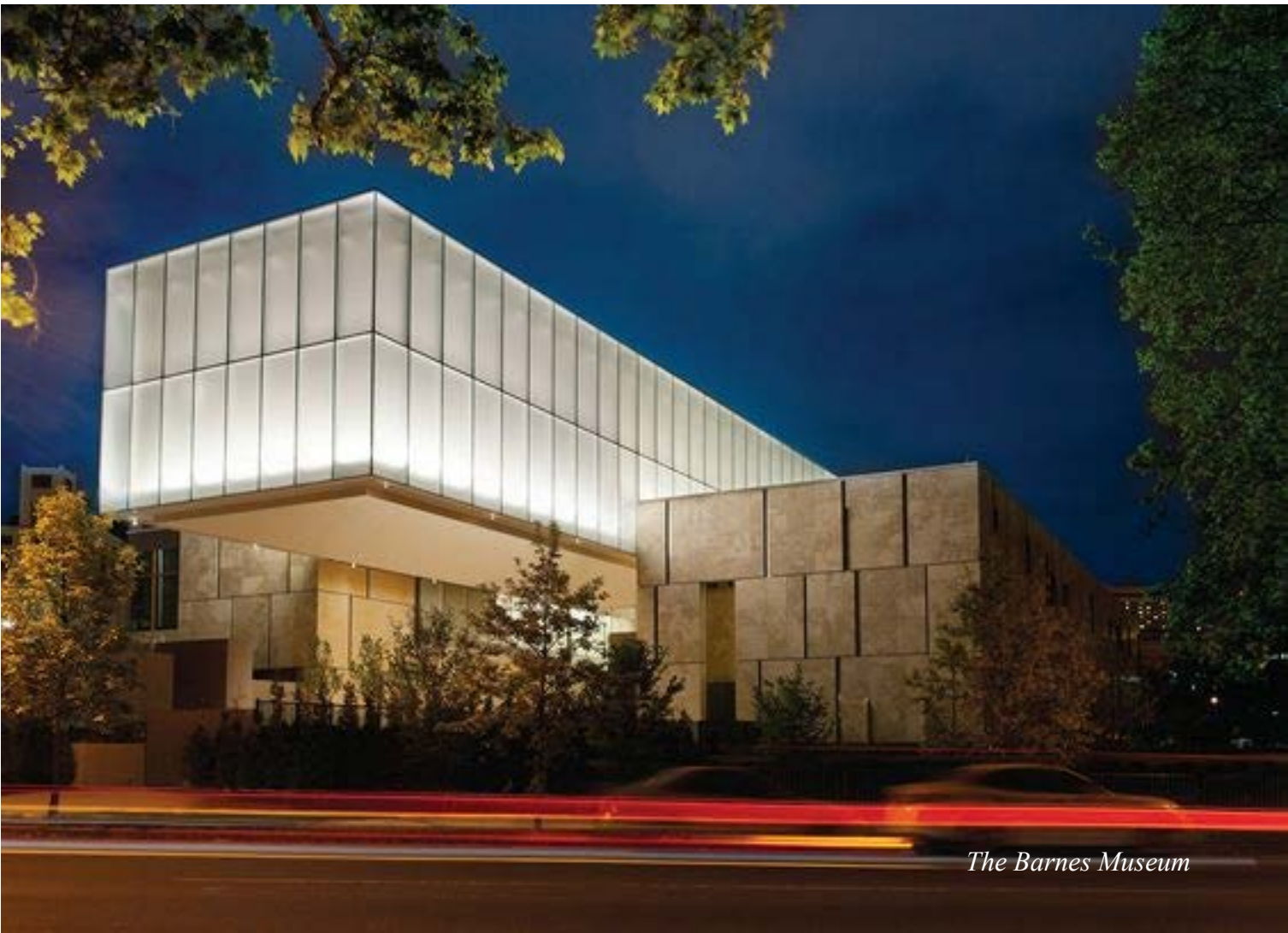
If you are interested in the tour with an introduction, please let us know as soon as possible. We will cap the group at 60 participants.

Then, on Wed., at 7:00 p.m., we’re planning a banquet dinner at the opera-themed **Victor Café** in South Philly, “The Music Lovers Rendezvous”. This Italian Restaurant is located in what had been, starting in 1918, an RCA gramophone outlet, quickly becoming a gathering place for audiophiles. In 1933, with the end of Prohibition, owner John Stefano, transformed it into the restaurant, decorating its walls with signed photos of opera composers and stars and other opera memorabilia. Up front is a larger-than-life replica of Nipper the Dog, listening to a gramophone, which was once RCA’s icon.

The food is good and sometimes excellent. But the real reason to go is the atmosphere. Not only is the restaurant decorated in an opera theme, but all the

waiters and waitresses are opera singers or students. Opera music plays throughout the night, but every once in a while, one of the waiters/waitresses will ring a bell and sing an aria. We've taken several groups and the response has always been positive. The Victor is a unique experience we hope to share with you. Again, please let us know if you plan to join the group as soon as possible.

Looking forward to seeing you in Philly this coming summer, Please contact Ken Baskin (baskinman47@yahoo.com) to make your reservation!





Post-Conference Tour (Option #2)

Founded in 1887, the **University of Pennsylvania Museum of Archaeology and Anthropology** has always been one of the world's great archaeology and anthropology research museums, and the largest university museum in the United States. With roughly one million objects it encapsulates and illustrates the human story: who we are and where we came from.

Your guide will be Dr. Brian Spooner, who is Professor of Anthropology and Museum Curator for Near Eastern Ethnology. He has done ethnographic research in Iran, Afghanistan and Pakistan, and has been an IBHA member since 2011. The train leaves right from the campus of Villanova University. You would transfer at the 30th Street station and get off at University City Station, which is right in front of the museum.

Please contact Dr. Spooner (spooner@sas.upenn.edu) to make your reservation!



Post Conference Tour (Option #3)

Rowan University Big History Fossil Park Dig

Monday, July 30th, 2018
Mantua, NJ

Join Paleontologist Ken Lacovara, Dean of the Rowan University School of Earth & Environment, on a post-conference field trip into an old sand quarry that is revealing secrets of the extinction event that ended the reign of the dinosaurs. Unassumingly located behind a shopping center in suburban New Jersey, the site is in the process of becoming a living laboratory and future science museum for the University. Dr. Lacovara will lead the field trip participants to the depths of the pit going back in time 65 million years to dig up the past and learn what the past can tell us about our future. Participants will be invited to dig for their own fossils which they are welcome to keep. The site is rugged with no utilities and little shade so expect to get dirty and wear appropriate clothing. The field trip includes transportation between Villanova and the Rowan Fossil Quarry and a food voucher for a resident food truck. **Contact John E. Hasse at <hasse@rowan.edu> to reserve your place!**

Cost: \$50 – (includes roundtrip bus transportation from Villanova to Rowan and a \$10 lunch voucher).

Itinerary

8 AM pickup Villanova Campus

9-12 fossil lecture and quarry activities

12:00 PM – 12:30 PM lunch

12:30 PM return to Villanova (arrive ~ 1:30)



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The Study of All Existence:

SSLA Conference on Interdisciplinarity and Big History

March 23rd and 24th, 2018

Symbiosis School for Liberal Arts,
Pune, Maharashtra, India



[Conference Overview](#)

[Conference Schedule](#)

[Participants](#)

[Abstracts](#)

The Study of All Existence: Interdisciplinarity and Big History is a conference from 23rd–24th of March, 2018 (Friday and Saturday) at the Symbiosis School for Liberal Arts in Viman Nagar, Pune, Maharashtra, India.



This conference is an inquiry on the nature of our existence, our studies, and our lives. This gathering engages with interdisciplinarity, which is at the heart of the SSLA model of liberal arts education. Big History is a form of super-interdisciplinary and seeks to explain existence by connecting the dots across globalized humanity and in symbiosis with nature. The new field of Big History has been adopted by SSLA as a way to better engage with global learning where the class room space has been engaged with content and courses following this philosophy.

Symbiosis School for Liberal Arts (SSLA) is the Centre for the Big History Association of India. The conference is being hosted by SSLA in association with Asian Big History Association and the International Big History Association.

This event is a celebration of Liberal Arts with its creative and integral thinking about the world around us. This is our first gathering at SSLA to inquire about this integrated vision of our role in the cosmos. It seeks to interlace ideal concepts with pragmatic applications. This unique and creative academic event will include students, scholars and community organizers from across Asia and the world in conversation with each other, sharing ideas and on-going work, as well as exploring future possibilities. Some of the themes that will be discussed include:

- Interdisciplinarity and Super-Interdisciplinarity (BigHistory);
- Agriculture and the Future of theWorld;
- Social Change: NGOs, Business, Communities and Global Networks;
- Indigenous Understandings, Rights andContributions;
- Society, Media and Global Understandings;
- Visions of Existence, Universal Peace and Human Society;
- Global Realities;
- Cultural Revitalizations – Past, Present and Future;
- The Search forMeaning;
- Workshops on Cosmic Dance andMeditation;
- Nature and the World Around Us; alongwith
- Student Salons, exhibitions and performancepoetry



Barry Rodrigue

Conference Schedule

Day 1: Friday, 23rd March, 2018

8:30 to 9:00 AM

Introduction to the conference - Nivedita Nair

Film: Eric Law Anderson, *The Looking Planet*, Giant Dolphin Pictures & others, 2014.

9:00 to 10:00 AM, Venue Dance Studio

Cosmic Dance and Meditation

This is a contemplative exercise, with audience participation, on the theme of our place on Earth and in the Universe. It will get our hearts and thoughts flowing with movement and experience.

Introduction by Sulakshana Sen, SSLA

Prashant Olalekar, St. Xavier's College, Mumbai

10:00 to 11:00 AM, Venue MPH

Arts, Humanity and the Environment

Humans have altered our planet in profound ways. Questions arise about: 'What is to be done?' Many of these questions, and solutions, have been expressed in creative ways. This panel considers some of them.

Moderator: Vasudev Menon, SSLA

- Siddhartha, 'Interbeing', Fireflies Intercultural Centre (Dinnepalya, Karnataka)
- Juhi Pandey, 'Craft as a Way of Life', Kachchh Heritage Resources (Bhuj, Gujarat)
- Robert Athickal, 'Tarumitra: Friends of Trees' (Patna, Bihar) AND

10:00 to 11:00 AM, Venue Classroom 314

Cultural Revitalization – Past, Present, Future

One of the conundrums of modernity is how to advance progressive and inclusive change while still respecting social integrity and identity among the peoples and other species of the world. This panel considers these questions on a variety of important issues.

Moderator: Lowell Gustafson, Villanova University (USA)

- Sanjana Thandaveswaran, Simran Singh, 'Exploring Race in Shaping Latin America', SSLA
 - Harsh Agarwal, 'Tilonia – Inclusive Growth/Sustainable Development', SSLA
- Gayatri Mendanha, Ananya Dutta, 'Sita: Spiritual Centre of the *Valmiki-Ramayana*', SSLA

11:00 to 11:30 AM

Tea break / Jividha exhibition / Salon Presentations
SSLA Theatre Club presentation (MPH)

11:30 AM to 12:50 Noon

Inaugural Session

- Dr S.B. Mujumdar, Chancellor, Symbiosis International (Deemed University)
 - Dr. Vidya Yeravdekar, Pro-Chancellor, Symbiosis International (Deemed University)
 - Dr. Rajani Gupte, Vice Chancellor, Symbiosis International (Deemed University)
- Atsushi Nagaoka, Associate Director, International Programs, J.F. Oberlin University (Japan)
- Lowell Gustafson, President, International Big History Association (USA)
 - Prof. Anita Patankar, Director, SSLA
 - Dr. Shweta Sinha Deshpande, Deputy Director, SSLA
 - Dr. Barry Rodrigue, Professor, SSLA

12:50 to 2:00 PM

Interdisciplinarity & Super-Interdisciplinarity (Big History) Roundtable

Both models of research and learning encourage a holistic understanding of our existence as life forms and a unified civilization on Earth and in the cosmos. From this understanding, we then ask: 'What now?'

Moderator: Shweta Deshpande, SSLA

- Lucy Laffitte, North Carolina State University (USA)
- Lowell Gustafson, Villanova University, (USA)
- John Clammer, 'Integral Thought in the Context of Planetary Crisis', Jindal University (Delhi)
- Hirofumi Katayama, 'Cosmic Evolution & Perspective', J.F. Oberlin University (Japan)

2:00 to 2:45 PM

Lunch for Panellists, Invited Guests and Faculty of SSLA / Conversations

2:45 PM

Welcome by the Symbiosis Ishanya Educational & Cultural Centre.

3:00 to 4:30 PM

Indigenous Understandings, Rights and Contributions - Roundtable

The indigenous communities of the world represent a way of life and that has often been ignored or forgotten in a rush to modernity. Tribal visions of modernity and humanity and the world have a capacity to help solve many of the problems we face today. The delegates consider some of these issues and discuss ideas of self-organization and identity. Is a post-colonial discourse helpful to understand tribal identity and tribal realities? How can indigenous women make their visions of change happen? How can foodways empower families? Is a new fundamental vision of landscape needful? Is it time to create an All-India Tribal/Indigenous Peoples Federation? The delegates speak of connection and how we owe each other culturally and historically.

Moderator: Yangkahao Vashum, Eastern Theological College, Jorhat, Assam (Tangkhum)

- Anjali Daimari, Boro Women Justice Forum, Udalguri-Guwahati, Assam (Boro / Bodo)
- R.K. Debbarma, Tata Institute of Social Sciences, Guwahati, Assam (Debbarma)
- Carl Rangad, North East Slow Food/Agro-Biodiversity Society, Shillong, Meghalaya (Khasi)





Dr. Mathew Chandrankunnel asking a question.

9:00 to 10:00 AM

Visions of Existence, Universal Peace, and Human Society

In the spirit of the Jividha exhibition, the panellists consider how humans have seen our existence in the past and do so today. We are now confronted with a larger human footprint on Earth and the capacity for larger destruction. Many seek to avert such calamity, as with the Peace Centre partnership between J.F. Oberlin University (Tokyo) and Symbiosis International University (Pune). We ask the question, like Paul Gauguin in his painting from Tahiti: Where Do We Come From? What Are We? Where Are We Going?

Moderator: Anita Patankar, SSLA

- Afshan Majid, 'India & Emperor Akbar's Vision of Universal Peace', SSLA
- Hirofumi Katayama, 'Peace & Symbiosis in Tokyo', J.F. Oberlin University (Japan)
- Rekha Wagani, 'Peace and Self-Awareness', Amity University, Mumbai

10:15 to 11:15 AM, Venue MPH

Nature and the World Around Us

What is real, what is possible? How has this been done in the past? We explore the nature of reality and seek ways to transcend it.

Moderator: Rashida Atthar, 'Nature, Art & Science', Climate Reality Project (Mumbai)

- Lucy Laffitte, 'Water: A Biophilic Vision of Cities', North Carolina State University (USA)
- Priya Sundarrajan, 'Saving a Fragile Legacy', St. Xavier's College (Mumbai)
- Isha Mathur, 'Marwadi Communities, Women and Change', SSLA AND

10:15 to 11:15 AM, Venue Classroom 314

The Search for Meaning

Humanity has sought meaning since they began telling stories around campfires and painting symbols on cave walls over a million years ago. What meanings do we consider today?

Moderator: Gayatri Mendanha, SSLA

- John Clammer, 'Narratives of Hope and Future', Jindal University (Delhi)
- Enid Still, 'The Anthropocene: Search for Meaning / Imagined Goal?'
Pune University
- Vaidyanatha Gundlupet, 'Post-Truth Politics in the Contemporary World', SSLA
- Matthew Chandrankunnel, 'Context, Meaning, Happiness', ECC (Bengaluru)

11:15 to 11:30 AM

Tea break / Jividha Exhibition / Salon Presentations

11:30 to 12:45 PM

Cosmic Pedagogy: Education for a Healthy Vasudhaiva Kutumbakam

Big History is a platform to foster ways of forming a sense of community. This panel to considers how Big History can help resolve social, environmental and spiritual alienation.

Moderators: Prashant Olalekar and Orla O'Reilly Hazra, St. Xavier's College (Mumbai).

- Roy Pereira, 'Neuroscience, Mindfulness and Creativity', St. Xavier's College (Mumbai)
- Tonmoy Halder and Megha Siddhanta, 'Dance Therapy and Evolutionary Psychology', SSLA
- Sandip Ravindra, 'Cognitive and Buddhist Psychology', SNDT Women's University (Pune)

12:45 to 1:45 PM**Lunch for Panellists, Invited Guests and Faculty of SSLA / Conversations****1:45 to 2:45 PM. Venue: MPH*****Society, Media, Performing Arts and Global Understanding***

Media has been the signature accomplishment of humanity. Cultural expression is a way for us to re-envision who we are and provide a medium to share that vision – to create a new reality, a new sense of our existence. Creativity has become increasingly global along with its messages. It is expressed through cinema, anime, literature, songs, poetry and many other forms. This panel considers some of the forms and ideas that have resulted and speculates about future directions.

Moderators: Shyama Dutta, SSLA

- Sulakshana Sen, ‘Uday Shankar Style of Creative Dance: A Mirror of Modern India’, SSLA
- Nobuo Tsujimura, ‘The Fundamental Role of Music’, Oberlin Big History Project (Japan)
- Swati Gopalkrishna, ‘The Expanding Realms of Carnatic Music’, SSLA
- Tirthankar Chakravorty, ‘Society, Media, Understanding’, Azim Premji University (Bengaluru)

AND

1:45 to 2:45 PM / Venue: Classroom 314***Social Change: NGOs, Business, Communities and Global Networks***

An important part of changing the way we think is how to put it into practice. This panel considers ways that they and others begin change at the grassroots level.

Moderator: Siddhartha, Fireflies Intercultural Centre (Dinnepalya)

- Shishir Nikam, ‘Tourism’s Role in Heritage Sustainability’, Black Swan Journeys (Pune).
- Aditya Nain, ‘Money: Cash, Crypto & Beyond’, Flame University (Pune)
- Paloma Pavel, ‘Building Just & Sustainable Communities’, Breakthrough Communities (USA)

3:00 to 4:00 PM***Agriculture and the Future of the World***

Sustenance is basic to all life forms. So, we must ask ourselves: How can 11 billion people feed themselves and still maintain a quality of life and biodiversity in a sustainable fashion?

Moderator: Priyadarshini Karve, SSLA

- Anand Karve, Appropriate Rural Technology Institute (Pune)
- Carl Rangad, Agro-Biodiversity Society (Shillong, Meghalaya).
- Khaliq Parkar, Srushti Borkar and Siddharth Desarda, ‘Food in the Smart City’, SSLA.

4:00 to 4:15 PM**Tea break / Jividha Exhibition / Salon Presentations****4:15 to 5:00 PM****Valedictory**

Radhika Seshan, Head of Department, History, Savitribai Phule Pune University Prof. Anita

Patankar, Director, SSLA

Dr Barry Rodrigue, Professor, SSLA

5:15 PM to 6:00 PM***Cosmic Walk***

Introduction by Gayatri Mendanha, SSLA Orla Hazra, St. Xavier’s College, Mumbai, with Sakshi Saldanha, Khushboo Saluja and Nicole Louzado, SSLA.

Participants

Harsh Agarwal is a final year student of liberal arts at SSLA in economics and business. With a focus on sustainable development, he has worked on projects from monitoring household solar panels in rural Rajasthan for the Barefoot College NGO to evaluating solar business models in rural Karnataka for the SELCO Foundation, as well as on livelihood- projects for rural women to more inclusively participate in the Indian economy. Harsh worked at the United Nations Economic and Social Council at their headquarters in New York on Sustainable Development Goals for cooperatives / partnerships and was a recipient of a Bill and Melinda Gates Foundation Fellowship in 2014. He may be contacted at <harsh.agarwal@ssla.edu.in>.



Prof. Anita Patankar and Lowell Gustafson

Robert Athickal, SJ, is an activist, teacher and painter. He holds an LHD in Ecological Ministry from the College of the Holy Cross in Worcester, Massachusetts (USA). He directs Tarumitra <www.tarumitra.org>, which is a United Nations recognized bio-reserve and NGO in Patna, Bihar. Tarumitra is a spot where students and teachers gather for workshops on eco-spirituality in the middle of a forest planted by students, where sessions on Big History are regularly discussed. Robert has co-ordinated over a 1000 workshops and eco- camps at Tarumitra. He may be contacted at <robertathickal@gmail.com>.

Rashida Atthar is a social scientist who is deeply involved in work on nature and ecology. She is a consultant researcher and visiting faculty, as well as mentor and leader with the Climate Reality Project. After graduating in psychology and sociology from St. Xavier's College, Mumbai (India), she pursued an MSW and took employment with an international NGO in the field of health care. Her advanced research certificate is in the area of development, a specialty for which she has produced papers on sustainability, communication, and global NGOs for national and international conferences. Rashida has also presented papers in the field of botany, based on her observations and study of the Mumbai forest. Her work blends theory, practice, and research. At present, she is conducting workshops along with educational and awareness programmes about the environment and climate change, with an emphasis on the science and solutions to problems. She may be contacted at <atthar.rashida@gmail.com>.

Srushti Borkar is a BA student at the Symbiosis School for Liberal Arts, studying Psychology and Biology. Her areas of interest include Cognitive and Educational Psychology, Linguistics, and Neuroscience. She has a passion for research and is enthusiastic about gaining experience across disciplines. Srushti is working with faculty and a team of students at SSLA on mapping urban agriculture in Pune. She can be contacted via e-mail at <srushti.borkar@ssla.edu.in>.

Tirthankar Chakravorty is pursuing a Masters of Arts in Education from Azim Premji University, Bangalore. Prior to this, he was a fellow at Teach for India, engaged in working towards educational equity by bringing academic excellence into classrooms, along with leadership development in the community and for stakeholders in Pune and New Delhi. His areas of interest include multiculturalism, classroom innovation, adult pedagogy, and philosophy. He may be contacted at <tirthankar.chakravorty17_mae@apu.edu.in>.



SSLA Students

Mathew Chandrankunnel CMI, PhD, rounded-out his study of physics, philosophy, psychology and spirituality with post-doctoral work at the Harvard-Smithsonian Center for Astrophysics. He unites these inquiries into the study of consciousness, striving to discover strategies to encourage the path for peace, progress, and sustainability. Mathew received the Templeton-CTNS award in 2000 and has written numerous books, including *Ascent To Truth: The Physics, Philosophy and Religion of Galileo*; *From Quantum Holism to Cosmic Holism: The Physics and Philosophy of David Bohm*; *Cosmosophy, Philosophy of Physics*. He is Editor-in-Chief of the *International Journal for the Transformation of Consciousness*, which can be accessed at <<http://www.globetranscons.com/home.html>>. He also is Director of the Ecumenical Christian Centre in Whitefield, Bengaluru <<http://www.eccbengaluru.in>>. More details about Mathew may be gathered from <www.chandrankunnel.com> and he can be reached at <chandrankunnel@gmail.com>.

John Clammer is Professor of Sociology in the School of Liberal Arts at O.P. Jindal Global University, Sonapat, Delhi NCR, and has taught and researched in the United Kingdom, Germany, Singapore, Australia, Argentina, South Korea and south India. Before Delhi, he was Professor of Development Sociology at the Institute of Sustainability and Peace at the United Nations University and, for almost twenty years, Professor of Comparative Sociology and Asian Studies at Sophia University in Tokyo. He has published extensively on culture and development,

including books on art, religion, sustainability, urbanism, ethnicity, and Eastern/Western social theory. He may be reached at <jrclammer@jgu.edu.in>.

Anjali Daimari completed her PhD in 2016 on *Social and Cultural Transition of the Boros*. She has led the Boro Women's Justice Forum, which she founded, for the last 24 years. It is a mass-based organisation that works for the rights of indigenous women, as well as their communities. The BWJF is associated with Asian Women's Network. Anjali is retired as a university professor and has been representing her community at the UN Permanent Forum on Indigenous issues. She may be reached at <anjalidai@gmail.com>.

R.K. Debbarma received his PhD in political science from University of Hyderabad in 2012. The next year, he joined the Tata Institute of Social Science, Guwahati Campus, Center for Peace and Conflict Studies in Assam: <<http://www.tiss.edu/view/15/guwahati-campus/>>. He writes on issues of space, place and politics, some of which are accessed at <<https://tiss.academia.edu/RKDebbarma>>. His e-mail is <rkdebbarma@gmail.com>.

Siddharth Desarda is a BA student in Economics, Sociology and Law at the Symbiosis School for Liberal Arts. He is interested in migration and agriculture economics as well as policy research. He is also working on mapping urban and peri-urban agriculture in Pune. He can be reached at <siddharth.desarda@ssla.edu.in>.

Shweta Sinha Deshpande has a PhD in archaeology from Deccan College. Her dissertation dealt with cultural interactions in central and western India during the third and second millennia BCE. As a scholar of ancient Indian history and a ceramic analyst, she has done statistical research for institutes like the Yashwant Rao Chavan Academy for Development Administration. She is currently deputy director at the Symbiosis School for Liberal Arts, where she teaches a diverse range of courses, including 'The Idea of Art', comparative religion, and anthropology. Her contact may be had through <deputydirector@ssla.edu.in>.

Ananya Dutta is a Teaching Assistant at the Symbiosis School for Liberal Arts, where she teaches courses in Media and Literature. She worked as a journalist for over six years with *The Hindu* and subsequently *The Times of India*. She trained as a journalist at the Asian College of Journalism. Her areas of interest are women and media, freedom of the press, and cinematic adaptation of literary texts. She may be reached at <ananya.dutta@ssla.edu.in>.

Shyama Dutta is a Visiting Professor of Media Studies at SSLA. A writer who has worked extensively on advertising, digital content, screenplay and documentary / commercial projects, she has also written children books, which include concepts that make science accessible for young people. She believes that there is much left to learn, and not enough time. Shyama's e-mail address is <shyama@ssla.edu.in>.

Swati Gopalkrishna is pursuing her BA in Economics and International Relations at the Symbiosis School for Liberal Arts. She is passionate about music and cultural studies, and so has dug deeply into her own heritage to investigate the very idea of 'tradition', especially in the context of Carnatic music. She appreciates modern artists like T.M. Krishna, who also try to gain answers to questions of cultural representation and identity in South India. She may be reached at <swati.gopalkrishnan@ssla.edu.in>.

Vaidyanatha Gundlupet has a PhD in Political Science from the University of Chicago in Illinois (USA) and is Assistant Professor for Political Science at the Symbiosis School for Liberal Arts. His research and teaching interests focus on political rhetoric, international relations theory and international security issues, particularly the impact of nuclear proliferation on strategic stability and diplomatic practice. He may be reached via e-mail at <vaidya.gundlupet@ssla.edu.in>.

Lowell Gustafson is a professor of political science at Villanova University in Pennsylvania (USA). A scholar of Latin-American studies, his works include *Economic Development under Democratic Regimes: Neoliberalism in Latin America* (1994) and the co-authored monographs, *Ancient Maya Gender Identity and Relations* (2002) and *Economic Performance under Democratic Regimes in Latin America in the Twenty-First Century* (2003). He also is engaged in the study of how science helps to explain the origin and development of polity. He serves as President of the International Big History Association and may be reached via <lowellgustafson@gmail.com>.

Tonmoy Haldar is Visiting Faculty in Psychology at the Symbiosis School of Liberal Arts and the Maharashtra Institute of Technology / World Peace University. He is a Computer Science graduate with a double Masters in Human Resource Management and Psychology from Savitribai Phule Pune University. He is also a Bharatnatyam and contemporary dancer. Tonmoy's passion for dance and psychology have merged in his work with children with special needs as a

Movement Therapist. His e-contact is at <tonmoy.haldar@gmail.com>.

Orla O'Reilly Hazra is Adjunct Professor and Researcher, Department of Interreligious Studies, St. Xavier's College, Mumbai, India. With a PhD in religious education from Fordham University, her studies integrate the ways that science, spirituality, indigenous peoples and women see the world. Currently, she is renewing the Ignatian Pedagogical Paradigm in the context of an evolutionary universe, a project she links with Tarumitra, a United Nations Environment Programme bio/reserve near Patna, India. She also works with the Swasthya Swaraj Society <www.swasthyaswaraj.org> in India and is a founding board member of the *Deep Time Journey Network* <https://deeptimejourney.org/>. Orla may be reached at <ohazra@aol.com>.

Priyadarshini Karve, PhD (Physics), is Director of Samuchit Enviro Tech and Visiting Faculty at the Symbiosis School for Liberal Arts (SSLA) in Pune. After working for ten years in the academic, research and non-profit sectors, she started her own enterprise in 2005, which promotes environmentally sustainable energy and lifestyle products. Priya has invented solid biomass cooking energy devices, decentralised biofuel technologies, and methodologies for effective adoption of renewable energy by intended beneficiaries. In 2010, she developed a personal carbon footprint calculator for urban residents throughout India and conducted climate friendly lifestyle workshops for urban communities. Among her many educational initiatives, she is co-editor of a Marathi bi-monthly journal on science and education for teachers in Maharashtra and co-developed and co-taught the first course on Big History in South Asia at SSLA in the spring semester of 2018. Priyamaybereached at <priyadarshini.karve@gmail.com>.

Anand Karve was born and raised in Pune. He received his PhD from the University of Tübingen in Germany in 1960, specializing in Plant Physiology, Agriculture and allied subjects. After serving in various universities, as well as working in the seed industry in India, he joined the United Nations Food and Agriculture Organization for projects in Myanmar and Iran. The recipient of many national and international awards, he founded the Appropriate Rural Technology Institute <http://www.arti-india.org/> in Pune in 1996. He is an author who popularizes science and a creative writer of science fiction, in Marathi and in English. Anand may be reached at <adkarve@gmail.com>.

Hirofumi Katayama is a professor of economics at J.F. Oberlin University, Tokyo, where he specializes in environmental studies. He organized and teaches the first big history course in Japan – see the J.F. Oberlin University Big History Project at <http://obhp.org>. His publications include *Free Market and the Commons: An Introduction to Environmental Finance* (2008) and *Politics of Climate Change over the Arctic: Preliminary Thoughts on the Global Commons* (2014). Hiro may be contacted at <katayama@oberlin.ac.jp>.

, Med, PhD, teaches science in the universal context from the big bang to the future, both in-class and online. She has published widely: writing a newspaper column, founding an environmental radio program, creating certificate programs, and developing digital learning objects for public television. She has a BS in Natural Science from the University of Oregon, an MA in Adult Education and Instructional Design, as well as a PhD in Environmental Resource Management from North Carolina State University. Lucy has been an educator at the Oregon Museum of Natural History, the North Carolina Museum of Natural Science, the New England Wildflower Society and the Rachel Carson Institute, among others. She currently serves on the board of directors as secretary for the International Big History Association and is Chair of the 2018 IBHA Conference. She may be reached at <lucy.laffitte@gmail.com>.

Afshan Majid has a PhD in Medieval Indian History from the Centre of Advanced Study in History at Aligarh Muslim University. Her thesis involved a reconceptualization of Mughal society and culture as gleaned from 16th century historian Abdul Qadir Badauni's work: *Muntakhab-ut-Tawarikh*. In addition to her specialisation in history, Afshan also holds a degree in Women's Studies, and has interdisciplinary publications in both fields. She is teaching History as a Visiting Faculty at SSLA and co-developed and co-teaches the first Big History course in South Asia. She may be reached at <afshanmajid15@gmail.com>.

Isha Mathur is completing her undergraduate degree at the Symbiosis School for Liberal Arts in Media Studies, Philosophy, and International Relations. Her work reimagines static disciplinary boundaries to explore public culture (especially cinema) through the Hindu philosophy of *Advaita Vedanta* (spiritual enlightenment). She also studies the experiences of women in Marwadi communities in western India to reveal the universal relationship between culture and identity. She concludes her study by focusing on the phenomenon of change with respect to individuals and societies. Isha may be contacted via e-mail at <isha.mathur@ssla.edu.in>.



Gayatri Mendanha holds MAs in Philosophy and English. She is Assistant Professor at the Symbiosis School for Liberal Arts, where she teaches courses in Literature and Philosophy, Creative Writing, Modern Theater, Literature and Religion, and Women Philosophers. Her e-mail is <gayatri@ssla.edu.in>.

Vasudev Menon has a PhD in Molecular Therapeutics from Glasgow University, an MPhil from the University of Edinburgh, and an MSc from the University of Madras. He has been a Research Fellow with The Medical Research Council (UK), Kidney Research UK and the British Heart Foundation. Vasudev is also a trained actor with the Royal Scottish Academy of Music and Drama (Voice and Classical Theatre) and with the Edinburgh Acting School. Upon his return to India, he studied Cinematography at the L.V. Prasad Film and TV Academy. He currently is Visiting Faculty with Symbiosis International University, where he teaches Biology and Performing Arts. He is an actor, independent filmmaker, and science educator. He may be reached at <vasudev.menon@yahoo.com>.

Aditya Nain is Assistant Professor of Philosophy and Logic at FLAME University in Pune, where he teaches courses as part of the Core and Humanities curriculum. Aditya is also a member of the Board of Studies, Department of Philosophy at Fergusson College, Savitribhai Phule Pune University, where he is involved in the review and development of Philosophy and Logic. He is also finishing up his PhD on the Philosophy of Money from Indian Institute of Technology Bombay. He is also researching and writing on the philosophy of money, with an emphasis on blockchain based currencies like Bitcoin. Prior to joining FLAME, Aditya was Assistant Professor of Philosophy and Logic at the Symbiosis School for Liberal Arts, where he set-up its Philosophy program. He may be reached via e-mail at <aditya.nain@gmail.com>.

Although **Shishir Nikam** began his career as a business analyst, six years holed away in a cubicle convinced him that he was built for other things in life. He set out to re-imagine the travel experience, interacting with local artisans, folk singers, historians and chefs, voyaging around the world, experimenting with cuisines, embracing new ideas and shared perspectives. En route he met inspiring change-makers who were creating new experiences at the grassroots level. He then began curating and designing activities that were transformational. His company, Black Swan Journeys, has been featured in journals like *The Hindu* and *India Today*. He may be reached at <shishir@black-swan.in>.

Prashant Olalekar SJ, PhD, is the Head of the Department of Interreligious Studies (DIRS) at St. Xavier's College, Mumbai, Maharashtra (India). He explores creative ways of introducing and integrating play into education and spirituality. He may be contacted at <olalekar@gmail.com> or DIRS Facebook page <<https://www.facebook.com/dirs.xaviers>>.

Juhi Pandey is Director of Kachchh Heritage Arts Music Information Resources (KHAMIR), an NGO based in Gujarat that works on the conservation and preservation of traditional craft and knowledge. An alumnus of the National Institute of Design and the National Institute of Fashion Technology, she has always been inspired by traditional craft, organic materials, and handmade techniques. Juhi engages with groups across India, using holistic design-thinking, process and systems at the grassroots levels. She is also visiting faculty with NID-Ahmedabad. Her current work focuses on continuing the revival of craft value chains and local economies, with the objective of building traditional ecosystems for sustaining not only the lives of traditional artisans but also protecting the natural resources of a region. Juhi may be reached at <juhi.pandey@khamir.org>.

Khaliq Parkar is Assistant Professor of Political Science at the Symbiosis School for Liberal Arts, where he also coordinates undergraduate research. He earned his MPhil at the Centre for Political Studies, Jawaharlal Nehru University, New Delhi. He teaches foundation courses in political science and environmental politics in developing countries. He has taught at St. Xavier's College (Mumbai), Wilson College (Mumbai), and the University of Mumbai. Khaliq has presented his work on Indian student politics at the University of Cambridge and at the Paris Institute of Political Studies and served as co-editor of *Student Politics: Movements and Mobilizations in Contemporary India* (2018). He has also worked on research projects related to urbanization with the Centre for Policy Research (New Delhi) and on indigenous peoples for Oxfam India (New Delhi). He is currently working with a research team on urban food production and supply systems in Pune as well as translating essays about modernization within Muslim communities by Hamid Dalwai, a mid-twentieth century reformer. His writing on culture, cinema and politics have appeared in *The Indian Express*, *The Caravan*, and *The Economic and Political Weekly*. Khaliq may be reached at <khaliq.parkar@ssla.edu.in>.

M. Paloma Pavel, PhD, is co-founder of the Breakthrough Communities Project. Her dissertation (Organizational Culture and Leadership Development) was part of a five-year study by the Carnegie Foundation on the workplace in the United States. She served as Director of

Strategic Communications for the Sustainable Metropolitan Communities Initiative at the Ford Foundation and has been a Fulbright Scholar in community development, environmental literacy and climate justice. Paloma teaches in Bay Area institutions, lectures internationally on living systems and urban sustainability, and co-edits the Sustainable Metropolitan Communities Books series at MIT Press with Robert Gottlieb. Her publications include *Breakthrough Communities: Sustainability and Justice in the Next American Metropolis* (2009). She can be reached via e-mail at <palomapavel@gmail.com>.

Anita Patankar is founding Director of the Symbiosis School for Liberal Arts, the first liberal arts program in India. She engages students to challenge themselves and their faculty, which is what she believes Indian colleges need to desperately invest in. She is committed to educating young adults about the need for a critical appraisal of our lifestyles. A specialist in Marketing and Education Management, Psychotherapy and Counselling, Anita is also completing her PhD at Pune University. Her previous experience at the Symbiosis College of Arts & Commerce, Symbiosis Centre for Distance Learning and other departments within the Symbiosis International University have helped her develop a 360-degree outlook on education. In 2017, she initiated the first Big History program in South Asia at SSLA. Anita may be reached at <director@ssla.edu.in>.

Roy Pereira SJ, PhD, is currently the Provost/Vice-Principal (Academics) of St. Xavier's College (Autonomous), Mumbai, where he has taught in the Department of Chemistry since 1993. He has also begun a programme in Neuroscience there, being awarded two research fellowships at the University of California, Berkeley (2016) and at St. Louis University (2017) in the United States. Roy's current research considers the effects of cell phones, internet use and social media on the brain, on which he spoke at Google Headquarters. His research also involves understanding of the mind-body link, the effect of meditation on health outcomes and ways of dealing with stress in our lives. In this connection, he spoke at Harvard University in 2017. In addition, he has Masters Degrees in Chemistry, Philosophy and Biblical Theology. His presentations are interactive and strive to explain complex concepts of Neuroscience in easy-to-understand ways through use of multimedia, music and the piano. Roy may be contacted at <roy.pereira@xaviers.edu>.

Carl Oswald Rangad belongs to the Khasi community, an indigenous tribe of Meghalaya, and has a doctorate in Agriculture, with specializations in Mycology and Plant Pathology, from

the Himachal Pradesh Krishi Vishva Vidyalaya in Solan. He served in the Meghalaya Agriculture Department for 32 years, retiring as the Director of Horticulture. In 2012, Carl set up and was Director of the North East Slow Food and Agrobiodiversity Society (NESFAS). He played a central role in the 2015 Indigenous Terra Madre, attended by delegates from 62 countries and 169 indigenous food communities from 7 continents. It culminated in the ‘Shillong Declaration’, which was presented at the UN Permanent Forum on Indigenous Issues in 2016. He is currently also a member of the Meghalaya State Biodiversity Board and Vice Chairman of NESFAS in Shillong, Meghalaya, India. Their web-portal is <www.nesfas.in>. Carl may be reached at <rangadco@gmail.com>.

Sandip Ravindra is Assistant Professor in the Department of Psychology, Shreemati Nathibai Damodar Thackersey Women’s University in Mumbai. He has done a Masters and MPhil in Clinical Psychology and is a PhD candidate in Cognitive Psychology. He specializes in Buddhist Psychology and Applied Cognition. He is working on a book about Eastern and Western views of Mind, which is an historical account of theories and perspectives. He has made presentations on human cognition at Oxford University (2017) and Harvard University (2018). He may be contacted at <sandipravindra@gmail.com>.

Barry H. Rodrigue is Professor of Anthropology, Symbiosis School for Liberal Arts. He began his ethnographic work in Alaska in the 1970s, establishing the international journal, *Archipelago*, as a vehicle to network residents around the North Pacific. He holds a PhD in Geography from Université Laval (Quebec), in addition to other post-graduate degrees in Archaeology, History, and Folklore. His efforts for global cooperation include work with the Chinese Academy of Social Sciences, the Australian National University, the US Open World Leadership Program, and the Russian Academy of Sciences. As co-founder and international coordinator of the International Big History Association and the Asian Big History Federation, Barry co-developed and co-taught the first course in Big History in South Asia at Symbiosis International University in 2018. His three-volume collection, *From Big Bang to Galactic Civilizations: A Big History Anthology* (Primus Books, 2015– 2017), brought together 100 scholars from 25 nations. His e-portal may be found at <<http://www.rodrigue-global.org/>>.

Sulakshana Sen has been with the Symbiosis School for Liberal Arts since its inception and is Head of the Department for International Relations, Political Science and Performing Arts.

With an MA in International Relations and Strategic Studies from Jadavpur University in Kolkata, she is pursuing a PhD from the Department of History at Savitribai Phule Pune University. Her career has traversed a variety of sectors, ranging from print media and the corporate world to high school teaching. Sulakshana is trained in the Indian classical dance forms of Odissi and Bharatnatyam as well as the Uday Shankar style of Creative Dance. She received training in painting in the Bengal School of Art. An avid reader of Victorian and Contemporary English literature, she enjoys Indian classical music and Rabindrasangeet. Her research interests include Uday Shankar Creative Dance as a narrative medium reflecting modern India, the socio-political philosophy of Rabindranath Tagore, and the Sustainable Development Goals 2030. She may be contacted via <sulakshana@ssla.edu.in>.

Megha Siddhanta is completing her BA at the Symbiosis School for Liberal Arts in Media and Psychology. Her areas of interest lie in history, mythology, and psychology. Her work reimagines how human evolutionary history came into being through a cultural lens and movement, thus combining different sciences, so as to understand evolution from a broader perspective. She further plans research in the field of political psychology. She is a trained Classical Odissi dancer and has taken theatre lessons from Nadira and Juhi Babbar. Megha, has worked with the Salaam Bombay Foundation, Mumbai, and has headed the Vocational English training program for the children in government schools. Megha may be contacted at <megha.siddhanta@ssla.edu.in>.

Siddhartha is an author, journalist and social activist who writes on ecological, cultural and social issues. He studied law in India and sociology in Paris, and participates in many global organizations, including the Asian Cultural Forum for Development (ACFOD) Bangkok, which is one of the oldest and most active Asian regional organizations for ecological and social issues. He is also a former international committee member of the World Social Forum, director of Pipal Tree, an NGO concerned with media, inter-cultural and environmental issues, and founder of Fireflies Intercultural Centre, outside Bangalore. Its website is found at <<http://www.fireflies.org.in/>>. Siddhartha may be contacted at <sidd173@gmail.com>.

Simran Singh is a third-year student at Symbiosis School for Liberal Arts, majoring in Economics, Statistics, and International Relations. During her internship at a healthcare startup, she developed an interest in ways to overcome barriers to medical care access for low-income families in India. Her dissertation tackles this question, with a special focus on measuring poverty

in terms of estimates provided by the Rangarajan Committee. She has also been associated with the CHF India Foundation, an NGO that works towards raising fire-safety awareness and organizing self-help groups in Pune slums. She may be reached at <simran.singh@ssla.edu.in>.

Enid Still is an Erasmus Scholar and MPhil. student at Savitribai Phule Pune University. Her work focuses on how global developmental narratives and imaginaries entangle with hope and the realities of everyday life, reproducing systems of power that attempt to dominate how we perceive of ourselves and our place in the world. Currently, she is conducting applied research with NGOs in Pune, to explore how the ‘smart city’ narrative is experienced and translated within the local urban landscape. Her e-mail is <enidhenriettastill@gmail.com>.

Priya Sundarrajan has a PhD in Genetics from the University of Madras. Currently, she is an Associate Professor at the Department of Life Science and Biochemistry, St. Xavier’s College – Autonomous, Mumbai, India. She has been teaching in the college since 2001. She is also the director of Caius Research Laboratory and member secretary of its Institutional Biosafety Committee. She teaches cell biology, biotechnology, genetics, molecular biology, and environmental science to undergraduate and postgraduate students. She has a particular interest in integrative and multidisciplinary approach to teaching and learning. She can be reached at <priya.s@xaviers.edu>.

Sanjana Thandaveswaran is a third-year student at the Symbiosis School for Liberal Arts, studying Economics, History, Mathematics, and Statistics. Her work has an interdisciplinary approach to problems, and she is currently investigating income inequality in India. She is also working on bringing about social change within the domain of Education and has been volunteering with the NGO, U&I, for the last three years. Sanjana may be reached at <sanjana.t@ssla.edu.in>.

Nobuo Tsujimura is adviser and webmaster for J.F. Oberlin University’s BigHistory Project: <<http://obhp.org>>. His goal is to make big history as broad and as accessible as possible – to be lived and felt, to make us sense the world and the cosmos vividly, and by doing so, to vitalize our creativity to weave a new worldview together by involving all the people across all the genres. He has developed a series of Japanese big history books with the Institute for Global and Cosmic Peace in Yokohama, including *An Introduction to Big History* (2014); *Big History and the 21st Century’s International Order* (2014); *Applying Big History: Nature, War and Peace* (2016); and *Universal Studies and the Modern World: Becoming Global and Cosmic Humanity* (2017). Nobuo’s e-mail contact is <palettehole@gmail.com>.

Yangkahao Vashum is Associate Professor of Christian Theology and Tribal Theology, as well as Head of Department, at the Eastern Theological College, Jorhat, Assam (India). He also has served as ETC’s Dean of the Tribal Study Centre, Executive Editor of the *Journal of Tribal Studies*, and Dean of Post-Graduate Studies. He received his ThM from Princeton Theological Seminary (New Jersey) and his PhD from the Iliff School of Theology and the University of Denver (Colorado) in the United States. Ahao has edited and co-edited a number of books, including *Tribal Theology and the Bible* (2011), *Peacemaking in Northeast India* (2012), *Search for a New Society* (2012), and *The Quest for Harmony* (2013). His latest work, *Christology in Context: A Tribal-Indigenous Appraisal of North East India* (2017), was awarded the J.G. Frank Collison Award for Theological Research in India. Ahao may be reached at <yvashum@gmail.com>.

Rekha Wagani completed her PhD at the University of Delhi with a specialization in Health and Positive Psychology. She is Assistant Professor at the Institute of Behavioural and Allied Sciences, Amity University in Mumbai. Before joining Amity, she taught undergraduate and post-graduate courses at Banasthali University and Daulat Ram College at the University of Delhi. As an active social worker, Rekha gives professional talks to community organizations on health, stress management, parenting skills, child psychology and other topics. Before joining the teaching profession, she ran the Child Excellence Program for children and parents. Her e-contact is through <rwagani@mum.amity.edu>.

Abstracts

Friday, 23 March 2018

Conference Introduction

Nivedita Nair SSLA

This conference is an inquiry on the nature of our existence, our studies, and our lives. This gathering engages with interdisciplinarity, which is at the heart of the SSLA model of liberal arts education. The new field of Big History is a form of ‘super-interdisciplinarity’ and has been adopted by SSLA as a way to better engage with global learning. This is our first gathering at SSLA to inquire about this integrated vision of our role in the cosmos. It seeks to interlace ideal concepts with pragmatic applications. It includes international guests, faculty, students, and community organizers.

Cosmic Dance and Meditation**Introduction by Sulakshana Sen, SSLA****Prashant Olalekar, St. Xavier's College, Mumbai.**

Prashant Olalekar will lead participants in cosmic meditation and movement. The integrating of Eastern and Western traditions – mindfulness, movement, music, story and stillness – can offer us an awareness of our interconnection with life, humanity and even stars and galaxies. Such experience gives us a sample of the profound connection found within the deep-time context of an evolving universe.

Cultural Revitalization – Past, Present, Future

Moderator: Lowell Gustafson, Villanova University (USA)

‘Exploring the Role of Race in Shaping Latin America’ **Sanjana Thandaveswaran** and **Simran Singh**, Symbiosis School for Liberal Arts

This paper explores the origins of race and its role in the process of nation-building in Latin America. Darwin's journey to the Galapagos Islands (1835) resulted in his theory of evolution through the identification of various ‘species’ that seemed to share similarities, despite appearing different. However, his work was construed by others to relate biology with the idea of progress and subsequently provide a scientific explanation for racism. The concept of race has transformed, acquiring various meanings through time. The evolution of race has had a direct impact on the creation of divisions in Latin America, which was the pretext to its independence from the colonizers. Despite the acknowledgment of the racial differences in the discourse of Latin America, there continues to be limited inquiry with respect to its influence on contemporary policy-making. The idea of race has played a fundamental role in shaping policies on education, immigration, crime, and healthcare. Yet, a historical analysis of the Latin American narrative presents a striking case for showing that through the acceptance of racial mixtures, communities were able to measure modernity in non-European terms.

‘Tilonia – Inclusive Growth & Sustainable Development’ **Harsh Agarwal**, Symbiosis School for Liberal Arts

Primary Health Centres (PHC) constitute the cornerstone of rural healthcare in India. However, the service provided by PHCs is weak, hampered by a lack of infrastructure and poor accountability. NGO's have begun to step in and play an important role of being the first point of contact for villagers to better deal with health issues. This paper focuses on efforts made at the Barefoot College NGO in Tilonia village in the state of Rajasthan, India. It considers their role in

making medical care accessible through local participation, as well as its promotion of healthcare training to rural people themselves to treat their own neighbours. In short, the NGO is achieving a healthy society in rural areas by training local people, especially women, to treat their own members. This program is successful, and health promotion through community participation should be promoted as a positive strategy for rural healthcare.

‘Sita as the Spiritual Centre of the *Valmiki-Ramayana*’ **Gayatri Mendanha** and **Ananya Dutta**, Symbiosis School for Liberal Arts

In the *Valmiki-Ramayana*, Rama's treatment of Sita is contrasted with Sita's unrelenting, righteous *bhakti* towards Rama, placing her firmly at the moral centre of the epic. Sita must remind Rama of his own divinity as well as hers. Rama did not know that he was an *avatar* of Vishnu until after the battle. Even after this revelation, Rama considers himself as Son of Dasaratha – a human being in all aspects, misguidedly asserting his ‘lineage’. Rama's inability to maintain his consciousness of himself as god is contrasted with Sita's awareness of her true nature. Significantly, by the end of the epic, Sita has achieved *moksha*, the ultimate spiritual goal, independently of Rama, while Rama continues to live on in the earthly realm, performing sacrifices and ruling his kingdom, placing a golden statue of Sita by his side. Yet, in actual popularity, Rama seems to have remained the central model of identification for Hindus.

AND

Arts, Humanity and the Environment

Moderator: Vasudev Menon, SSLA Venue: Classroom 314

‘Interbeing’ **Siddhartha**

Fireflies Intercultural Centre, Dinneplaya, Karnataka.

The notion of *Interbeing* was suggested by the Buddhist thinker Thich Nhat Hanh. It is similar to what Chief Seattle was reported to have said about a hundred and fifty years ago: All things are connected. In today's highly individualistic world where self-promotion and self-aggrandizement are all too common the notion of Interbeing comes as a touchstone to create a sustainable planet.

‘Craft as a Way of Life’ **Juhi Pandey**

Kachchh Heritage Arts Music Information Resources (KHAMIR)

Craft is the practice of making products, systems and processes by an individual or community

that help in the enhancement or betterment of life. Human civilizations existed and sustained themselves through creating inter-dependent systems that were inclusive, democratic and holistic. Every civilization had methods that were sensitive towards the natural resources of their ecosystem as much as they were of their own human needs. The approach to education was experiential and hands-on. There were hierarchies and a strict social structure but also freedom of speech and expression through dialogue and consultancy. Over time, with the advent of ‘modern’ education and ‘global’ influences, the simple nuances of life and living started getting lost. Natural disasters, political and social movements, influenced the way of thinking and way of life with which craft practices started being perceived more as commodities and commercial products. This change started breaking down traditional linkages and local economies that were sustainable as well as ecologically friendly practices. The need to re-look at these traditional practices and linkages is not only a social scientist’s job but a need for every ‘responsible’ human being. The awareness of these practices and adaptation of these practices today can help in creating a more sustainable way of living.

‘Bio-Heritage: Friend of Trees’ **Robert Athickal Tarumitra**

This presentation describes the work at Tarumitra, a UN sanctioned bio-reserve community of four hectares in Patna, Bihar. Begun in 1988, it has the largest student movement dedicated to Earth conservation in India. It is also an Earth literacy centre and, like other such centres around the world, its focus is on bioregional education and demonstration. The community members focus on four areas that are seen as being universally profitable, urgent and neglected: (1) Big History education, (2) biodiversity conservation, (3) organic farming, and (4) saving electricity. At Tarumitra we try to think of what we would become one day – a universal and organically connected family. Why don’t we then start living it today? That is the attempt in Tarumitra: Live that life of the future in some way at the same time we mobilize resources and persons to create that beautiful possibility today.

Inaugural Session

- **Dr S.B. Mujumdar**, Chancellor, Symbiosis International (Deemed University)
- **Dr. Vidya Yeravdekar**, Pro-Chancellor, Symbiosis International (Deemed University)
- **Dr. Rajani Gupte**, Vice Chancellor, Symbiosis International (Deemed University)
- **Atsushi Nagaoka**, Associate Director, International Programs, J.F. Oberlin University (Japan)

- **Lowell Gustafson**, President, International Big History Association (USA)
- **Prof. Anita Patankar**, Director, SSLA
- **Dr. Shweta Sinha Deshpande**, Deputy Director, SSLA Dr. Barry Rodrigue, Professor, SSLA

Interdisciplinarity & Super-Interdisciplinarity (Big History) – Roundtable

Both models of research and learning encourage a holistic understanding of our existence as life forms and a unified civilization on Earth and in the cosmos. From this understanding, we then ask: ‘What now?’

Moderator: Shweta Deshpande, SSLA

Delegates:

Lucy Laffitte, North Carolina State University (USA).

Lowell Gustafson, Villanova University, (USA)

John Clammer, ‘Integral Thought in the Context of Planetary Crisis’, Jindal University (Delhi).

Hirofumi Katayama, ‘Cosmic Evolution / Cosmic Perspective’, J.F. Oberlin University (Japan)

Welcome by the Symbiosis Ishanya Educational & Cultural Centre.

Indigenous Understandings, Rights and Contributions – Roundtable

The indigenous communities of the world represent a way of life and that has often been ignored or forgotten in a rush to modernity. Tribal visions of modernity and humanity and the world have a capacity to help solve many of the problems we face today. The delegates consider some of these issues and discuss ideas of self-organization and identity. Is a post-colonial discourse helpful in understanding tribal identity and tribal realities? How can indigenous women make their visions of change happen? How can foodways empower families? Is a new fundamental vision of landscape needful? Is it time to create an All-India Tribal/Indigenous Peoples Federation? The delegates speak of connection: how we owe each other, both culturally and historically.

Moderator: **Yangkahao Vashum**, Eastern Theological College, Jorhat, Assam.

Delegates:

Anjali Daimari, Boro Women Justice Forum, Udalguri-Guwahati, Assam.

R.K. Debbarma, Tata Institute of Social Sciences, Guwahati, Assam.

Carl Rangad, North East Slow Food / Agro-Biodiversity Society, Shillong, Meghalaya.

Saturday, 24 March 2018

Visions of Existence, Universal Peace, and Human Society

Moderator: **Anita Patankar**, SSLA

‘India in the 16th Century World: Emperor Akbar’s Vision of Universal Peace’

Afshan Majid, Symbiosis School for Social Work

The writings of the 12th century scholar from Spain, Ibn-i-Arabi, talk about *Sulh-i-Kul* or the idea of Universal Peace. This idea was adopted by Indian Mughal Emperor Jalaluddin Muhammad Akbar in 16th century as his state ideology. It is remarkable to see that in the 16th century, Spain, from where the idea originated, was itself in the throes of the Inquisition. This paper looks at the philosophy of *Sulh-i-Kul* by Ibn-i-Arabi. It also considers the alienation of Akbar from orthodox religion and his adoption of *Sulh-i-Kul* in his life and state policy, which led to an environment of religious toleration. The paper will situate Akbar’s India with respect to the rest of the world in the 16th century.

‘Peace and Symbiosis in J.F. Oberlin University’

Hirofumi Katayama, J.F. Oberlin University, Tokyo

Yasuzo Shimizu (1891–1988) was founder of J.F. Oberlin University in Tokyo. A Congregational pastor, he went to China as a missionary in 1917. Four years later, he moved to Beijing, where he founded Sutei Girl’s School to educate children from poor families. As an alternative to prostitution, Shimizu encouraged their independence through reading, writing, and needlecraft. He wrote newspaper articles on Chinese political affairs, in sympathy with Asian liberation movements, but as an internationalist. He maintained friendships with progressive Chinese writer Luxun and Russian anarchist writer Vasili Eroshenko. His views were especially inspired by Indian poet Rabindranath Tagore (1861–1941). He came back to Japan and founded J.F. Oberlin University in 1946. Its philosophy is pacifist in spirit, which reflects Shimizu’s idea of peace and symbiosis. Now we promote the Oberlin Big History Program, with its slogan, ‘Think Cosmically, Act Globally’, in the spirit of Shimizu.

‘Inculcation of Peace in Youth through Self-Awareness’

Rekha Wagani, Amity University, Mumbai

Humans have a distinctive ability for self-knowledge and self-awareness. Knowledge of self can help individuals construct a worldview that may serve as a background of values, like peace. Ancient Indian scriptures provide systematic knowledge and discuss practices to help humans

to achieve the highest level of self-knowledge through self-awareness, but such knowledge and practices are gradually disappearing in today’s world. Current educational systems focus on knowledge outside of oneself. This tends to make humans passive recipients of environmental information but depreciates internal human action. For example, values like peace cannot be learnt only through information, rather it is a state of mind achieved through understanding and a volitional act to achieve peace. This paper discusses the role self-awareness, to inculcate peace, especially in youth.

Nature and the World Around Us

Moderator: **Rashida Atthar**, Climate Reality Project, Mumbai

Venue: MPH

‘Complex Human and Eco-systems: Inter-Linkages of Nature, Art and Science’

Rashida Atthar, Climate Reality Project, Mumbai.

From the cosmos to harvester ant nests, every phenomenon in space and time has a system harmoniously balanced. Human beings have complex systems, and so is the natural world around us. We have adopted biomimicry to a large extent. Life on earth, under the sea and climate change are issues that requires holistic understanding and imaginative solutions. This presentation will look at how we are at crossroads, seeking alternatives to the capitalist system and how to strike a balance, so as to have harmonious growth, wherein artistic expressions and scientific abilities are nurtured towards a more equitable and justworld.

‘Water as a Metaphor for a Biophilic Vision of Cities’

, North Carolina State University, USA.

Water is life. The presence of its three phases makes Earth a home. Fix the water, and everything else will fall into place. Restoring water quality in a city is a lesson in fractals. We start small, with the trickle that coalesces in the swale of a headwater. We end wide, with the meandering veins and arteries of the watershed mapped. We go deep below the stream where the nutrients in the groundwater and surface water mix. We consider the food web at multiple scales. We look at the slippery biofilm covering every surface under the microscope and see the producing algae, consuming bacteria and decomposing fungi. We study the stunning diversity of macroscopic insects that collect, shred, graze and predate. We investigate the diversity of fish that sequester these nutrients up and out of the river system by feeding the terrestrial food web. We

make room for the landscape of water as it moves in meandering ribbons over time. And then we reweave the infrastructure of the city to support these functions and requirements by bringing rain gardens, permeable pavement, rainwater cisterns, green roofs, floodplains and bioswales to the city, re-enchanting the social square by reconnecting civic engagement with the care and nurturing of the arteries of our Earth.

‘Saving a Fragile Legacy: Big History and Biotechnology’

Priya Sundarrajan, Department of Life Science and Biochemistry, St. Xavier’s College (Autonomous), Mumbai.

Big History is a fast-emerging study that provides a holistic approach for inquiry into the Earth and all its constituent parts, from the big bang to the present-day. Its method is multidisciplinary and combines evidences from humanities, science, commerce and other fields, so as to understand the development of Earth and facets of its evolution – physical, chemical, biological. Our cultural heritage are invaluable but are fragile and their conservation is of great importance. Identifying a sustainable way of conservation of our art works is of utmost importance. The techniques that are used for conservation purpose requires that the materials that are used do not have negative consequences and impede future treatments. Such methods are considered more sustainable and environment friendly. My work involves use of molecular biology and biotechnology-based methods for the preservation and conservation of heritage artefacts, these methods are also called Green Technology as they are environment friendly.

‘Marwadi Communities, Women and Change’

Isha Mathur, Symbiosis School for Liberal Arts

Questions of identity are central to anthropological studies. Likewise, the use of self-narrative as a resource has widened the scope for ethnographic research, becoming a form of participant-observer study. The author produces a narrative of the experiences of women in Marwadi communities in western India, which examines the relationship between culture and identity. The author explores the concept of veiling as a discriminatory practice and uses it as a metaphor for understanding wider gender issues. A central purpose of this personal ethnography is to understand the implications of ancestry and to develop voice in the process of identification of oneself as a feminist.

AND



The Search for Meaning Moderator: Gaytri Mendanha, SSLA

Venue: Classroom 314

‘Creating New Stories: Narratives of Hope and Future’

John Clammer, Jindal Global University, Delhi.

Stories shape the world in which we live and our relationship to it. Some scholars have suggested that we need new stories to shape our future as well as understand our past. This presentation will explore this idea and develop ways of creating new narratives that re-orientate the ways we see each other, our place in the world and our relationships to one another. It will explore the role of narratives in creating our sense of self, our images of history and our social imagination - the ways we can conceive of living together. While it will draw on examples from religion, history and literature, it will also help us to think about the ways we can individually and collectively shape new stories that direct us towards peace and freedom, a positive relationship with nature, and to re-shape our ideas of gender, identity and being-in-the-world.

‘Deconstructing the Anthropocene: Search for Meaning or Anthropocentric Imaginary?’

Enid Still, Savitribai Phule Pune University.

The Anthropocene is considered to be the new geological epoch, into which the Earth has been catapulted due to the extensive and irreversible damage humans have had upon Earth’s surface, atmosphere and hydrosphere. There are also many contestations to this assertion, which deem it an overtly anthropocentric theory, reinforcing notions of human’s infallible dominance over ‘nature’. In dialogue with such debates, anthropologists have sought to understand how the circulating Anthropocene notions, meanings and ideas are shaping societal and political relations today. As anthropologist Amelia Moore argues, ‘...[if] the recognition of anthropogenic planetary change calls for the refashioning of human and nonhuman life on earth, then extreme care must go into redesigning eco-bio-political configurations, socioecological forms of reason, and viable earthly relation on multiple levels’. Moore’s notions of ‘care’ and ‘redesign’ are the focus of this paper, which attempts to explore how different voices from academics, activism, and communities themselves are negotiating the shifting physical and meta-physical landscapes under the gaze of the Anthropocene. Does therefore, the Anthropocene ‘idea’ demand an increased consciousness of human and non-human relations, or do such discourses only serve to re-imagine the world from the window of the ivory tower?

‘Post-Truth Politics in the Contemporary World: Comparing Political Rhetoric in India and the USA’

Vaidyantha Gundlupet, Symbiosis School for Liberal Arts

‘Post-Truth’ politics has gained increasing significance in the contemporary world. This paper is an inquiry into whether the differentiation between emotional and factual appeals exist in the practice of politics and the role of media – particularly social media – in accentuating different kinds of appeals. It seeks to understand political rhetoric in contemporary India and the United States by focusing on two specific issues: health care in the US and the rhetoric of nationalism, particularly the application of the sedition law in India. While these are diverse issues in their own context, the rhetoric and the structure of the political debate encompass many common elements that can be best understood by the concept of post-truth politics. I argue that post-truth politics itself is not a new phenomenon, but that social media brought more attention to the issue because of the heightened partisanship in both countries.

‘Context, Meaning and Happiness’

Matthew Chandrankunnel, Ecumenical Christian Centre, Bengaluru, Karnataka

As our individual and collective knowledge grows, our search for meaning also expands. In this process, many of our old ways of coping need to be likewise expanded, so as to provide us with a greater sense of well-being and, indeed, happiness. This is an on-going dynamic that has driven humanity for thousands of years. It has not been a smooth process, as Galileo’s encounter with the Catholic Church showed – from the 16th century conflict over celestial mechanics to his present celebration by the Vatican, reflecting a significant paradigm shift. It was Galileo’s search for meaning that drove him to act courageously, so science and church need not be in a collision course. For that, he proposed that the scriptures be understood spiritually rather than historically and that the representation of the cosmos be made through evidence-based experiments. In this way, context needs to be well interpreted so that the maximum meaning can be derived and happiness achieved.

Cosmic Pedagogy: Education for a Healthy Vasudhaiva Kutumbakam

Moderators: **Prashant Olalekar** and **Orla O’Reilly Hazra**, St. Xavier’s College, Mumbai

‘Neuroscience, Mindfulness and Creativity’

Roy Pereira, St. Xavier’s College, Mumbai.

When we talk of Cosmic Pedagogy we talk of a new way of doing things. And this new way of doing things originates in the brain but is not confined to the brain only. It draws in the body to express the spirit within. Right down the ages, it was believed that the formation of the brain stopped after the first few years of childhood and that no matter what one did, the brain was, so to speak, set in stone. In recent decades, research has shown us that this is not true. All our experiences and activities continue to bring about additional neuronal connections even in the adult brain. The brain far from being ‘set in stone’ is actually more ‘plastic’ than we can imagine. This plasticity, or more technically this synaptic plasticity, of the brain assures us that even after the age of sixty, we can still choose to learn to play the piano. So, does it mean that it’s actually ‘all in the mind’? Can the way we think bring about a change even in an aging body? And what happens when we bring in emotions and feelings into our learning methodologies? Does it make learning easier and more fun? Education for a healthy *Vasudhaiva Kutumbakam* calls out for an integration of the mind, body, heart and spirit. Come experience this journey through prose, poetry and the piano!

‘Human Evolution: Blend of Dashavatara, Darwin and Maslow through the Lens of Movement.

Tonmoy Halder and **Megha Siddhanta**, Symbiosis School for Liberal Arts, Pune

This paper is to point out how human evolutionary history came into being through cultural and bio- psychological lenses. It considers three main aspects – 1) A cultural view, as seen in the Dashavatara narratives of the *Puranas*, compared with the bio-psychological view of the scientific theory of evolution; 2) Theories of evolutionary psychology and humanistic psychology; 3) Abraham Maslow’s hierarchy of needs. Through these theories, we seek to bring out how movement has been a constant factor in human development – even though the Dashavatara theory, Darwin’s theory and Maslow’s theory were constructed in different times. We identify movement as a consistent factor on the timeline and back up with evidences of the same from the domains of culture, biology and psychology.

‘Cognitive and Buddhist Psychology’

Sandip Ravindra, SNTD Women’s University, Pune

Big History enables us to examine our present in the light of past which enlarges our spectrum to view our future. In the East, the concept of history has been influenced by spirituality. The embedded psychological nature of Eastern religions differentiates them from the Abrahamic religion in the West. This distinction encourages us to revisit the history of religions in the East and reconceptualize present and future views. A significant feature of Eastern psychology is that consciousness has been a subject of study. This presentation will shed light on the Big History of consciousness and knowledge in Eastern psychology. It will touch upon the evolution of consciousness and how it is shaping our present and future – why the need for the spiritual quest was felt which culminated into the systematic development of the various ways to know oneself. The presentation will cover how different schools, ranging from Buddhism, Jainism and Vedanta, contribute to the evolution of mind and consciousness, which has been synonymous with spirituality.

Society, Media, Performing Arts and Global Understanding

Moderator: Shyma Dutta, SSLA Venue: MPH

‘Uday Shankar Style of Creative Dance: A Mirror of Modern India’

Sulakshana Sen, Symbiosis School for Liberal Arts

Natya Shastra, the ancient Sanskrit text, is said to have been written by Bharat Muni over 2500 years ago. A treatise on performing arts traditions in India, it classifies two distinct traditions in terms of *Gandharva* and *Gana*. *Gandharva* implies the celestial dance forms, which later translated into the temple dances and evolved into what we now know as the classical forms

of India, while *Gana*, literally translating to mean ‘people’, representing the folk-art form. In the twentieth century, Uday Shankar created a new genre in Indian dance that did not exist before – the genre of Indian Creative Dance. Hailed as India’s cultural ambassador, in a public reception by the Mayor of Calcutta in 1933, his emergence as a dancer and choreographer in the field of Indian dance was akin to a revolution. Through his inimitable style, Shankar was not only a representative of Indian culture to the world at large, but his vibrant new form was a corollary to the newly emerging India in the early twentieth century. Be it in terms of themes, music, movements or stagecraft, his style made a tremendous contribution to Indian performing arts traditions. It also became a narrative medium of stories never told before – the story of the common person in modern India. But despite the incredible impact and influence of Uday Shankar on performing arts in India, literature on Uday Shankar is sadly lacking. The little writing that does exist is mostly biographical in nature, chronicling his life and work. This paper, through primary and secondary research, partially fills the knowledge gap by exploring the socio-political-economic imagery that the maestro portrayed through his dance form post the 1940s, and thereby reflecting his vision of modern India.

‘The Fundamental Role of Music: Evolution and Big History’

Nobuo Tsujimura, Oberlin Big History Project

To our human ancestors, music was essential as a cooperative strategy to survive. During some million years, from hominin migration onto the savannas until the invention of stone tools, our forbearers had to survive with nothing more than stones on the dangerous grasslands, which were full of predators. Evolutionary musicologist Joseph Jordania argues that early humans got food mainly by scavenging, while defending themselves in a group by loudly singing and rhythmic drumming in a trance state with hideous appearance and strong body odour. This demonstration of music as a form of collective defence shaped human nature and culture, as seen today with choral singing, music, dance, language, painting, clothing, collective identity, altruism and religion. Thus, music made humans human. Music is also a way to return to something larger than ourselves. As once ancient myth gave humans such a larger map and meaning, Big History scientifically tries to do that as a modern creation myth. As the ancient myths were drawn, sang and danced, the Oberlin Big History Project has encouraged all forms of expressions with a cosmic sense.

‘The Expanding Realms of Carnatic Music in India’

Swati Gopalkrishnan, Symbiosis School of Liberal Arts

India is an amalgamation of cultural traditions. The country offers a plethora art forms that seem to coexist within a culturally diverse diaspora. No single tradition can be studied in complete isolation. At the same time, there exists no single cultural tradition that can be termed as ‘Indian’, as it would not be a just or accurate representation of its people. The Carnatic music tradition emerging from the southern region of the country forms an integral part of cultural discourse for the arts in India. On looking at the history of this ‘tradition’ and its evolution over the years, one realizes that there exist certain fundamental concerns, not only in the way in which the tradition has been consciously constructed but also in the way it propagates itself. The author tries to dig deeper into the discourse surrounding Carnatic music in today’s times. Furthermore, looking at the aesthetics of the tradition, the ideological basis is analysed, particularly through a socio-political lens. The author provides evidence of the shifting landscapes of Carnatic music today as she attempts to find a place for herself within this complex ‘tradition’.

‘How Do You Know That?: Popular Culture and Education’

Tirthankar Chakravorty, Azim Premji University, Bangalore.

Knowledge is a fundamental building block of any educational effort. It is important to distinguish knowledge from more superficial beliefs, as well as to have a standard to evaluate claims to know something. The necessity to judge knowledge posits a need for guidelines to distinguish right propositions from inconsistent ones. This paper looks at cases from popular culture, where agencies like advertisement firms, film industries and others make claims, but with disclaimers of the claims having no basis in real life. Such disclaimers may get producers out of legal obligations, but they can be held accountable for prior knowledge about the implications of their claims in real life. In such cases, they can be accused of leveraging false information for vested interests. This paper also, explores the needs to educate children about the importance of reason in their lives and the norms that enable them to be self-aware and defend themselves from potential agents of deception.

AND

Venue: Classroom 314

Social Change: NGOs, Business, Communities and Global Networks

An important part of changing the way we think is how to put it into practice. This panel considers ways that they and others begin change at the grassroots level.

Moderator: **Siddhartha**, Fireflies Intercultural Centre, Dinnepalya, Karnataka

‘Immersive Tourism’s Role in Cultural Heritage Sustainability’

Shishir Nikam, Black Swan Journeys

In engaging with our shared cultural heritage, we experience stories and traditions of the past that connect us to our ancestors. In tracing prehistoric rock-painting and burial sites in Anegundi, the Kishkindha of the Ramayana or the capital city of the historic Vijayanagara Empire, we stand at the confluence of myth and history. In the heritage village of Garli, in the foothills of the Dhauladhar mountain range we step into 300-year-old havelis and mansions. In witnessing the symbiotic relationship that the tribal honey-hunters of the Nilgiris share with *Apis dorsata*, the largest and most aggressive bee species known today, we are left awe-struck. In working with artisans on art forms that are endangered, we encounter living traditions that have been practiced by indigenous communities for centuries. The role of *Immersive Tourism* is to invite the traveller on these journeys: to learn, preserve, embrace and celebrate this shared cultural heritage.

‘Possible Futures of Money: Cash, Crypto and Beyond’

Aditya Nain, Flame University and IIT Bombay

Every financial crisis throws up fresh thought and research on the nature of money systems and their interplay with social and economic realities. The 20th century, through its financial and monetary crises, from the great depression in the 1930s to the recent great recession, has thrown up a number of possible futures of money. These perspectives have come from such diverse fields as history, economics, anthropology, philosophy and most recently in the case of cryptocurrencies, from studies in computation and network security. What is common to these various responses to monetary crises is an exercise in imagining new and reformed future monetary systems and orders; systems that seek to address the faults in the present bank credit system of money. This paper discusses a few reimagined futures of money and places them in the broader context of monetary reform in the 20th century. The faults of the current bank credit system of money have become increasingly clear over the past hundred years or more. Monetary innovation is not only needed, but also underway both in theory (as in revitalized interest on the ‘Chicago Plan’) and in practice (as in cryptocurrencies like Bitcoin). This paper shows that there are a number of routes that monetary innovation can take and argues that a sustainable monetary ecosystem calls for a plurality of money systems. This paper explores contemporary innovations in money systems, with a special emphasis on Bitcoin and other cryptocurrencies and makes the argument for thinking seriously about the constitution and design of money systems and not

merely on their mode of representation of being physical ordigital.

‘Building Just & Sustainable Communities’

Paloma Pavel, Breakthrough Communities Project

The triple breakdown of environment, economy and equity presents an opportunity to re- imagine and co-create a just and sustainable world, as well as to heal ourselves and our relationships with one another. Big History offers new pathways for action by providing a framework for re-examining our past as part of a larger planetary history. This has been called the ‘great work’ of our time, giving shape and meaning to everyday life by relating human ventures to our larger existence, and so it offers a new horizon for the transformation of thinking.

Agriculture and the Future of the World

Moderator: Priyadarshini Karve, SSLA Venue: MPH

‘New Insight into Mineral Nutrition of Plants’

Anand Karve, Appropriate Rural Technology Institute

Green plants grow all over the world, even in uncultivated areas. This shows that the minerals needed by plants are generally present in all types of soil. But because minerals in the soil have very low water solubility (<5 ppm), farmers use highly soluble chemical fertilizers. In spite of the low concentration of minerals in the soil solution, soil bacteria can absorb minerals from the soil at a much faster rate than plants. In nature, plants obtain the minerals sequestered in bacterial cells by killing and digesting soil bacteria. This explains why the population density of soilmicrobesispositivelycorrelatedwithsoilfertility. Some plants have even evolved the strategy of killing and digesting insects in order to obtain minerals. Because plants are dependent on soil bacteria for their supply of minerals, plants nurture them by shedding their leaves, flowers and fruits on the ground. Using these plant organs and the sugars and organic acids from the water of guttation as a carbon source, and by absorbing the necessary minerals directly from the soil, the bacteria proliferate, only to be killed and consumed by the roots of plants. Now that the natural mechanism of mineral nutrition of plants is understood, we can plan new, low-cost strategies for providing agricultural crops with mineral elements. Farmers should mimic the plants by applying high calorie, non-composted digestible organic matter to the soil at regular intervals. The dosage and frequency of application will have to be determined through proper scientific experiments. Another strategy would be to breed plants that exude into the soil more potent bactericides and more effective digestiveenzymes.

‘Agriculture and the Future of the World’

Carl Rangad, Agro-Biodiversity Society

Over the last few thousand years, domestication, selection and hybridisation, both unconscious and conscious, has led to significant changes in the appearance of plants and animals, and in their nutritional value. In essence, the changes in agronomic and animal husbandry practices, and in the crops and animals being farmed, have had collateral effects that have changed the balance and intensity of different selective forces. Agriculture, in all its dynamic parameters, has been stretched to the limit, and the environment is reeling under all the ramifications that are apparent today. To look to the future, we need to look into the past and learn from ancestral wisdom if we are to create a sustainable world and merge sensibly with know-how. Modern technologies have undoubtedly served to feed the world – but at what costs? Overall, recognition and application of ecological and evolutionary principles will be an increasingly important part of the overall development and management of agriculture. There is a growing consciousness and thrust for Agroecology and Environmental Agriculture, which will ensure a habitable earth with good, clean, fair food andshelter.

‘Food in the Smart City’

Khaliq Parkar, Srushti Borkar and Siddharth Desarda Symbiosis School for Liberal Arts

The agricultural production of perishable food (fruits and vegetables) tends to be concentrated closer to consumer areas so as to reduce the supply time taken to deliver the goods and reduce spoilage. Small, decentralized units of agrarian production benefit from availability of labour, transport facilities, and an extensive network of wholesale and retail market areas in urban metropolitan cities. Institutions like Agricultural Produce Market Committees (APMC) and producers’ cooperatives like Farmer Producer Companies (FPC) bring together these decentralized units to form what we understand as urban food supply systems. Agricultural areas tend to be within or in the immediate vicinity of the limits in cities such as Pune and Mumbai. As the demand for perishable foods increases with growth in population in metropolitan areas, the land available for food production tends to decrease because of growing urbanization and land use changes. As we try to balance between the needs of sustainable cities and the imaginations of smart cities, issues of labour, transport, market institutions, environment, laws and policies play a significant role in questions of employment, access and sustenance. In our study of the food systems of Pune City, we try and understand the future of food security in the Smart City.

Cosmic Walk**Orla Hazra**, St. Xavier's College

Sakshi Saldanha, Khushboo Saluja, Nicole Louzado

The *Cosmic Walk* is an experiential way of bringing together the Big History narrative of Humanity, Life, Earth and the Cosmos. Gathered around a galactic spiral, participants engage in passage through a labyrinth of our collective 13.8-billion year history unfolding in candlelight, music and contemplative silence.

Salon / Poster Presentations

- **Prachi Agrawal**, 'Wellsprings of Personhood: Hindi and English Harmonies'
- **Madison Krieger**, Parth Kalia, Sandip Ravindra, 'Meditation, Consciousness, Social Transformation'
- **Luz Hernandez**, 'Cultural Identity and Acceptance'
- **Pranshu Kabra**, 'Existence: Images & Impressions'
- **Ava Gilder, Pranati Narayan Visweswaran**, 'Transcending Sexuality'
- **Joshua Lyngdoh**, 'Sherman Alexie and Indigenous Literature'
- **Tanvi Shah, Sakshi Saldanha, Anupoma Bandyopadhyay, Arshiya Dutt, Najiba Yasmin, Abhiman Paul**, 'Recognizing Indian Anthropologists'

'Wellsprings of Personhood: Hindi and English Harmonies' explores the tales the author heard from her elders when she was a child. She considers how those stories have affected her poetry, the themes of her poetry, which she had internalized. Her English poetry is about her nostalgia for childhood, confusion, fears and things she could not express when speaking, while her Hindi poetry reveals a different side of her experience. It is fierce and strong, reflecting her suppressed anger towards the patriarchal society that is as much a part of her life as it was a part of those stories she heard as a child. She asserts that her poetry builds her like those stories built her many years ago. She seeks to understand and distinguish between her Hindi and English poetry.

Prachi Agrawal is a fourth-year student at the Symbiosis School for Liberal Arts in English Literature and Media Studies. She is a poet who loves to write and perform her poetry in both Hindi and English. She is the author of *Adhoori Si Poori Baat* (Incomplete Complete Conversation). Prachi also created an art form *Goonj* (Echo) by merging Spoken Word Poetry with Theatre of the Oppressed while she was working with the international NGO, Prayasam, in Kolkata. She can be contacted via her e-mail at <prachi.agrawal@ssla.edu.in>.

'Creating A Global Conscious Mind Begins with You'. Global and personal conflict are matters of perception. While we cannot control many things happening around us, we do have the power to allow our conceptions of ourselves and others to evolve. There are many ways to expand the mind beyond what we know today. The benefits of raising our consciousness have the power to change the world as we know it. When problems that cloud our minds and societies are resolved, we can better live free of such constraints. Often society, media, schools and the workplace see people as a conformed mass, as numbers, and parts of a machine. But the reality is that we are all on our own journey and have our own part and all share a quest for understanding. How we achieve a deeper connection with the world around us is different for everybody. Our poster proposes ways to experience the world in new ways. The goal is to find what works for you, figure out how to clear your mind, release stress, and momentarily escape past conceptions that limit perception of the world, to see there is a universe within and a world outside. Together we can change world, but the change must begin with our perception within.

Madison Krieger is a third-year student at Saginaw Valley State University with a major in Psychology and Neuroscience. Theories of the mind have always been of interest to her and drive her to pursue these fields. She currently is doing a semester abroad at the Symbiosis School for Liberal Arts. Madi has noted how Eastern perspectives have been very influential and complimentary to her previous understandings of the mind, which have been based largely on Western philosophies. She hopes to do research in her post-grad years on incorporating alternative medicine with healing of the mind and body. Her e-mail contact is <madison.krieger@ssla.edu.in>.

Parth Kalia is a professional counsellor with an MS in Clinical Mental Health. He has experience working with depression, suicidality and anxiety in adults and young adults. Additionally, he has also worked with chronic mental illnesses and concerns such as self-harm and personality disorders. In his free time, Parth enjoys reading, tablet-top gaming, and nerd culture. He teaches Psychology at SSLA, primarily relating to mental health and wellness. His e-mail contact is <pkalia90@gmail.com>.

Sandip Ravindra is Assistant Professor in the Department of Psychology, Shreemati Nathibai Damodar Thackersey Women's University in Mumbai. He has done a Masters and MPhil in Clinical Psychology and is a PhD candidate in Cognitive Psychology. He specializes in Buddhist Psychology and Applied Cognition. He is working on a book about Eastern and Western views

of mind, an historical account of theories and perspectives. He has made presentations on human cognition at the University of Oxford (2017) and Harvard University (2018). He may be contacted at <sandipravindra@gmail.com>.

‘Experience through a Different Lens’ We all come from different places with different stories to tell. We start to assume and judge people from a distance, not knowing that a simple encounter with someone can change our lives and our perspective of things. Our experiences and where we come from makes us who we are and creates our identity. I am Mexican-American, and I have been discovering a lot about my background, but others’ perception of me is distorted by what media has to say about my ethnicity. One gets stuck in a gap of not knowing where they belong as they question themselves and feel odd in a society that has put labels on them. Society and media creates labels and stereotypes that makes us forget that we all human no matter our skin color. For the past couple of years, it has become a fascination for me to hear people’s stories, no matter what place they come from, on issues about race, women’s concerns and more. I provide examples on how misconceptions of society and media have amplified problems of how we assume things about other ethnicities and cultures, which in turn affect our identity.

Luz Hernandez is a Mexican-American exchange student at the Symbiosis School for Liberal Arts, who attends Brevard College in North Carolina (USA). She is a fourth-year student who is studying English, Psychology, Gender Studies, and Leadership. She plans to seek a Masters in Counselling and to work with minority groups, not only in her own community but in other parts of the world. She may be reached via e-mail at <luz.hernandez@ssla.edu.in>.

‘Existence: Images & Impressions’ These photographs reflect our first Big History course in South Asia – The Study of All Existence. Pranshu’s photographs illustrate our class experiences, as well as his wildlife, landscape and human experiences from his internships. The photographs go back to the year 2015 and portray mountains and lakes, like Pangong Tso and Tso Moriri in Ladakh, Khardung La Pass at 5300 metres, and the border areas of Jammu and Kashmir. These photographs illustrate his connection with wildlife, nature, architecture and landscape. They are structures that weigh aesthetic value and represent cultures that are skilled in specialized forms.

Pranshu Kabra is a third-year student at SSLA in Psychology, Economics and Political Science. His courses have helped him gain a better appreciation of human emotions and

situations, which has also helped his expression as a theatre artist. He was an intern at the Leadership Program for Youth at OASIS, an NGO where he also worked as faculty for the Dream India Camp, which not only helped him know more about children’s perceptions of the world but also gave him a strong insight into their culture and families. In addition, he worked with another NGO in the border areas of Jammu and Kashmir. He is keen to occupy positions in the future that are linked with providing services and a conducive working environment for people. A photographer, has interest in landscape, portraits, and architecture. Pranshu shares his images at our salon. He may be reached at <pranshu.kabra@ssla.edu.in>.

‘LGBTQ+ Activism: The Subcontinent and Beyond’. The history that makes up LGBTQ+ activism is rich, deep and eye-opening. Since the 1870s, people have delved deep into the realms of research and art and resistance to produce stunning results that have impacted young queer lives. We highlight movements that have contributed towards understanding and promoting queer activism in the world we live in today, for example, the Stonewall Inn Riots in New York City, the formation of PFLAG (Parents and Friends of Lesbians and Gays), and the assassination of Harvey Milk and the subsequent creation of the rainbow pride flag by Gilbert Baker. India is moving much slower in terms of progress and acceptance for the LGBTQ+ community. Only now are LGBTQ+ issues being slowly accepted by some members of Indian society but ignored or rejected outright by others. Despite having annual Pride Parades in various cities over the country and having various NGOs like the Naaz Foundation and the Humsafar Trust fighting for Queer rights and against archaic laws criminalizing alternative sexualities, LGBTQ+ movements are still armchair-activist oriented, with most support garnered online, where it is easy for people to maintain anonymity and discretion.

Pranati Narayan Visweswaran is currently pursuing a major in Media Studies and a minor in Film Studies at Symbiosis School for Liberal Arts (SSLA), Pune. She is a founding member and the secretary of Queer Qrew, a community for members of the queer community and its allies at SSLA. The Queer Qrew has been creating greater discussion about issues that affect the lives of members of the queer community, and have hosted a Pride Parade and a Queer Festival at the SSLA campus. The Queer Qrew aims to provide a safe space for expression of identity. Pranati can be reached at <pranati.visweswaran@ssla.edu.in>.

Ava Gilder is completing her degree in Media Studies with a minor in Sociology from the Symbiosis School for Liberal Arts. She is the founder and head of the Queer Qrew, a club at

SSLA that aims to provide a safe space for people across the LGBTQ+ spectrum. The Queer Qrew hosted a Pride Parade in 2017 and SSLA's first Queer Fest in February 2018 with poetry, music, and dance performances. She is studying queer representation in American sitcoms by way of comparison. She may be reached at <ava.gilder@ssla.edu.in>.

'Sherman Alexie and Indigenous Literature' Sherman Alexie is a Native American of the Spokane / Coeur d'Alene tribe, born in Washington State in 1966. He left his tribal reservation to go to school in Reardan, Washington and is now well known for his poems, short stories, novels, and performances. His work is simple, creative, funny as well as brutally honest. The most telling attribute about his writing is the moral behind his stories. Alexie is a beacon of hope. Through his writing, he teaches readers how to survive and to never give up on their dreams. Alexie's description of indigenous culture in the US is intriguing as it gives us an insight as to how indigenous people function as a society. Much like the Native Americans, the indigenous peoples of India and Asia live similar styles of life. There may be differences of traditions and practices, but they follow similar cultural traditions. It is this common thread that I will portray in my poster.

Joshua Lyngdoh was born in Shillong, Meghalaya of the Khasi tribe. He is currently pursuing his undergraduate degree at the Symbiosis School for Liberal Arts in Anthropology and International Relations. His observations and research on various indigenous groups and their cultures from different parts of the world give him a better understanding to the ways of life of minority groups within a nation and help him to seek ways to improve their living conditions. Joshua's e-mail is <joshua.lyngdoh@ssla.edu.in>.

'Recognizing Indian Anthropologists'. Anthropologists who are popularly and professionally known for their work are predominantly Western and male. It has taken over a century for women to be acknowledged, while Eastern anthropologists have yet to gain much recognition. Other such local and regional traditions of anthropology can provide profound insights about humanity and the world. The presenters consider several Indian anthropologists who have investigated the human condition and socio-cultural environment, including Irawati Karve, Dhurjati Prasad Mukerji, Benoy Kumar Sarkar, and Patrick Geddes. These anthropologists adopted an interdisciplinary approach and considered topics as diverse as nature, education, kinship and caste, politics, socialism, nationalism, and urban development. This presentation shows

that there is much to be understood about culture and society from an Indian anthropological context, a model that can be expanded to other areas around the world to develop a truly 'global anthropology'.

Tanvi Shah is a third-year student at the Symbiosis School for Liberal Arts, Pune in Media Studies, Anthropology and Psychology. She is a passionate travel photographer and likes writing poetry. She can be contacted at <tanvi.shah@ssla.edu.in>.

Sakshi Saldanhais a third-year student at the Symbiosis School for Liberal Arts, Pune, where she majors in Media and Anthropology. Her main interests are mental healthcare, animal care and historical and modern culture. She has been involved with the NGOs, CUPA that focuses on animal care, safety and rescue, and the Enfold Trust, which works towards 'Demystifying Sexuality' and preventing child sexual abuse. She is currently working on introducing a peer-counselling programme for the SSLA student body. She can be contacted at <sakshi.saldanha@ssla.edu.in>.

Anupoma Bandyopadhyay is a third-year student at the Symbiosis School for Liberal Arts with a major in Media Studies and Anthropology. Some of her interests include exploring the traditions of her heritage community, along with academic life and learning disabilities. She is a core member of the Theatre Club, producing socially aware plays for competitions. She has been associated with Salaam Baalak Trust, an NGO working in sheltering and educating destitute children. She can be found at <anupoma.bandyopadhyay@ssla.edu.in>.

Arshiya Dutt is a third-year student from the Symbiosis School for Liberal Arts. Her studies focus on Political Science and Anthropology, which she thinks are an important way of gaining a conscience about our surroundings. She is the proud caretaker of six dogs and devotes a lot of time observing their behaviour and studying them. She is an avid tennis player and treats the sport as more than just a hobby. Arshiyaloves giving back to the society and wants to help animals and humans in any way possible. She has worked helping orphans and red-light workers through NGOs like MITR and CONNECTING. She wants to help secure a world towards a more balanced coexistence between humans and animals. She can be contacted at <arshiya.dutt@ssla.edu.in>.

Najiba Yasmin is third-year student at the Symbiosis School for Liberal Arts, where she

majors in Media Studies, History and Anthropology. She is an artist and designer, with a keen interest in illustration. She has volunteered in teaching art to young children in her home state of Assam. Najiba has consistently been an active member of the college student council and was the cultural officer, having a regulating and energizing force between the diverse clubs of SSLA. She spent a semester abroad in Germany as a part of her scholarship program. She can be contacted at <najiba.yasmin@ssla.edu.in>.

Abhiman Paul is a third-year student at the Symbiosis School for Liberal Arts, where he is studying Psychology and Anthropology. His interests vary from sketching and painting to documenting details through photographs. He has been taking part in various art projects, such as the wall outside the SSLA library and the cover design for the School handbook. He is also working as a photographer for the college yearbook (2017–2018) and supervises the Visual Media Team at SSLA. Abhiman feels passionately for the physically challenged and has worked with the National Association of the Blind, New Delhi, to understand and help individuals fulfil their aspirations and build a stepping stone to a brighter future. He can be reached at <abhiman.paul@ssla.edu.in>.

Archaeology, either as an independent discipline (as in the European tradition) or as a subdiscipline of Anthropology (as in the American tradition) has contributed to an understanding of human civilization as writing and written sources, are recent additions to the list of human

accomplishments. Its scientific approach and methodology often defines the role it plays in constructing identities of cultures, communities and nations today. It is through analysis and understanding of artefacts, that we have been able to construct the trajectory of the majority of our cultural and civilizational ‘progress’ and ‘development’. Sir Mortimer Wheeler while talking about the importance of artefacts had once said that “archaeologists are digging up not things but people”. Artefacts encompass the life ways of our ancestors – technology, food habits, beliefs and practices; they help write the history of people where none existed or may not have survived. Archaeologically discovered similarities in the nature of a large variety of artefacts across the globe, emphasize not the universal, but definitely the ‘Big History’ of the human race.

The exhibits in the salon are not part of a sequential time line but are intended to express the creative and technological genius and cultural interface of the past societies.

Image courtesy: <https://lostworlds.org/mill-creek-culture-artifacts-housed-museum/>



Perspective on Big History

Stephen Satkiewicz

What connections could exist between Big History and the religious perspective? The answer is more than plenty. If Big History is defined as “the attempt to understand, in a unified, interdisciplinary way, the history of the Cosmos, Earth, Life, and Humanity”¹, then the parallels to the concerns of someone like St. Augustine are rather striking. For my purposes, the religious perspective as it is related to Big History will be defined as *an attempt to understand the common history of humanity and the cosmos as being guided by divine providence*.

For good or ill, religion has served as a powerful force in human history and continues to do so to this day. It also represents many of mankind’s highest aspirations in varying degrees. Sociologist of religion Peter L. Berger argues “[t]he religious impulse, the quest for meaning that transcends the restricted space of empirical existence in this world, has been a perennial feature of humanity... It would require something close to a mutation of the species to extinguish this impulse for good.”²

So regardless of one’s personal religious beliefs, such perspectives should not be neglected, but rather should be explored in order to further develop Big History by adding a new dimension from which scholars may engage its subject matter; that is from a more philosophical and theological point of view.

So what is the religious perspective? What follows will be a brief but hopefully still comprehensive attempt to summarize the historical developments of these religious meditations on the nature and meaning of history. Special attention will be given to the Abrahamic faiths, since it is within these traditions, beginning with Judaism, that a more central focus on the divine significance of history presents itself.

A common characteristic of the religions of the ancient world, in particular the Ancient Near East (Sumeria, Babylon, Egypt, etc.), was the idea of time consisting

of endless cycles of birth, death, and rebirth of the cosmos. This was seen as a larger scale imitation of the cycle of seasons or even the daily rising and setting of the sun. Historian of religion Mircea Eliade referred to this concept as the “myth of the eternal return”. Then around the second half of the first millennium B.C.E., there emerged new conceptions of time in a period known as “the Axial Age”. It was from this time period that many of the world’s great religions emerged from Judaism to Christianity to Buddhism, Confucianism, Taoism, and so on. One of the revolutionary concepts to emerge from this era was the proposition of time being linear in nature as opposed to being of endless cycles. This would have significant influence on the development of historical consciousness, for example the modern concept of progress is based upon a linear conception of time. This linear concept of time finds expression in the Abrahamic imaginings of time, but also in other faiths of this time period such as Zoroastrianism (the religion of ancient Persia until the Islamic conquests of around the 7th century CE).

Judaism was the first of the major Abrahamic faiths to mark its place in world history. From the Jewish perspective: God had chosen a particular people in history as the means through which his work would be fulfilled to the world. Huston Smith, a scholar of world religions, summarizes the Jewish perspective as follows:

“To the Jews history was of towering significance...God was the ruler of history; nothing, therefore, happened by accident. His hand was at work in every event – in Eden, the Flood, the Tower of Babel, the years in the wilderness – shaping each sequence into a teaching experience for those who had the wit to learn.”³

This Jewish vision of history reaches its fullest expressions in the apocalyptic visions of the Old Testament prophets; who were among the first to proclaim that history was not just a series of random meaningless events, but had a deeper meaning and purpose.

This foundation would be further developed once Christianity emerged in the first century. With Christianity, a new emphasis on the centrality of history was

1 International Big History Association <http://www90.homepage.villanova.edu/lowell.gustafson/bighistory/index.html> Accessed May 08, 2012

2 “The Desecularization of the World: A Global Overview”, *The Desecularization of the World: Resurgent Religion and World Politics*, edited by Peter L. Berger 1999 pg. 13

3 *The Religions of Man*. Harper and Row. 1958 pg.266,267

provided with the concept of the Incarnation, the theological notion that God had become man in the form of Jesus Christ; which marks him as the very centre and final fulfillment of history as a whole⁴.

The final word on the meaning of history within the New Testament is found in the apocalyptic visions of the Book of Revelations, the last book of the Bible. Inspired by the catastrophes of the Jewish Revolt of 66 C.E. which resulted in the destruction of the Great Temple in Jerusalem, as well as the struggles of the early church; the Book of Revelations sought to give a sense of comfort and hope to the early Christians that such trials would not last and a greater glory would manifest itself. A parallel exists here to the role such visions played in the Old Testament, to give comfort and hope to the Jews in face of repeated wars, exile, and persecution. Yet behind all the vivid imagery of such visions of the end of the world lies a deeper point, as explained by Russian philosopher Nikolai Berdyaev: “History has meaning because it comes to an end...the true philosophy of history is eschatological in nature: that is to say, the historical process ought to be understood in the light of the end....”⁵

A great parallel can be drawn here to the concerns of Big Historians over “future history” concerning the extinction of species and the destruction of the world due to dying out of the sun.

A few centuries later with the sack of Rome in 410 C.E., this notion of history having meaning in light of its final endpoint was greatly articulated when St. Augustine of Hippo wrote his monumental work *the City of God*, perhaps the most influential text in Western theology second only to the Bible. St. Augustine’s main point was that the final survival of the Roman Empire was irrelevant in the grand scheme of history, and that one should not place too much faith in earthly kingdoms. Although deserving of one’s civil allegiances, man’s ultimate focus should be on the kingdom to come, the City of God. The rise and fall of empires and states, the traditional focus of history, was of secondary importance to the higher processes of man’s salvation. The greater impact of St. Augustine’s work on the historical consciousness of the Western world at least cannot be

overestimated. Just as Alfred Whitehead famously remarked that all Western philosophy is mere footnotes to Plato, one could say that all philosophy of history is mere footnotes to St. Augustine. A parallel could be drawn between St. Augustine’s sense of salvation history and the emphasis placed on the common developments of humanity in the Big History of Humanity; despite the obvious contrast of a religious perspective with a scientific perspective but still dealing with a similar subject matter.

Yet meditations on the universal history of humanity and its deeper meanings are not confined to Judaism and Christianity. In the fourteenth century, Ibn Khaldun provided an Islamic narrative of universal history with *the Muqaddimah*. As with his Christian counterpart, St. Augustine, Ibn Khaldun’s wider impact has been considerable as well, and is often hailed as a precursor to modern sociology (since Khaldun examines the basic nature of societies, in particular that of the Berber nomads of northern Africa).

Yet such religious meditations upon the deeper meanings of history are not confined to the past, for the traumatic events of the 20th century inspired a great renewal of work in this field by religious scholars of various backgrounds. This was in order to make sense of the catastrophic events of that century; the two World Wars, the Holocaust, the rise of totalitarian regimes, the demise of the old system of international affairs in wake of the emerging Cold War, among many others.

Religious scholars from this period who sought were to probe into the deeper meanings of history included men like Reinhold Niebuhr, Christopher Dawson, Herbert Butterfield, Eric Voegelin, Pitrim Sorokin, Josef Peiper, and many others. Even more secular minded scholars like Karl Löwith (although originally from a Jewish background) argued about the important legacy of theological presuppositions on the development of modern philosophies of history, such as Hegel’s to give the most famous example. Even Arnold Toynbee, author of the multivolume *A Study of History*, was inspired by a nominal religious sensibility and argued for the importance of religions to the evolution of civilizations.

Even into the 21st century, there are still scholars who address the grand themes of history from a religious perspective. Here’s a brief overview of a few scholars and their works.

Brendan Purcell is one scholar of particular interest, whose latest work

4 Lowith, Karl. *Meaning in History*. University of Chicago Press. 1949 pg. 182

5 Cited in *Main Currents of Western Thought: Readings in Western European Intellectual History from the Middle Ages to the Present* Fourth Edition Yale University Press pg.771

demonstrates the contemporary developments within religious scholarship towards big history themes, as can be readily detected in its title *From Big Bang to Big Mystery: Human Origins in the Light of Creation and Evolution*. Although admittedly addressing issues of the meaning and nature of human existence from a philosophical angle, Purcell does not negate the latest scientific evidence regarding evolutionary processes but rather admits to addressing “the relation between revelation, the natural sciences, and philosophy...”⁶ He constantly argues that rather than being mutually exclusive – science and the Christian account of creation (when properly understood) are in reality rather complimentary.

Another scholar whose recent work touches upon themes related to Big History is Robert Bellah, a distinguished sociologist of religion. His recently published book *Religion in Human Evolution: From the Paleolithic to the Axial Age* could easily be classified as a big history of religion, at least the early history of religion. It begins with the Big Bang and continues onto the pivotal Axial Age mentioned earlier. Considerable parallels do exist between Bellah’s account of the evolution of early religion and certain perspectives related to the Big History of Humanity. Bellah himself acknowledges this connection, even admitting his title as an influence of David Christian.⁷

Bellah argues that religion is built into human nature by evolutionary processes. If so, then the study of religion and religious history provides a key element to the study of big history of humanity.

The concept of the convergence of Big History and religious perspectives is not necessarily new, but has already been acknowledged by leading figures such as David Christian and Craig Benjamin. Both men have argued for the need of a new creation myth to help underground human understanding of the cosmos and where it came from, for such narratives “speak to our deep spiritual, psychic and social need for a sense of place and a sense of belonging”.⁸

No doubt an understanding of creation that takes into account both the latest

science and theology and still addresses the concerns of contemporary society is certainly very viable.

A common thread between Big History and the religious perspective is a common focus on history from its very beginnings right to its very end (or potential end at least). There is also the common thread of focusing on the fate of humanity as a whole, and stressing the commonality of humanity. The concern with the deeper meanings of history is another common feature of both. There is also the common critique of the post-modern rejection of metanarratives, and with a related assertion of the importance of myths and symbolism to human growth.

So the question for Big Historians to address is how exactly they should proceed in dealing with these already existing parallel developments within religious scholarship. Do they wish to embrace them and seek greater common ground, or perhaps maybe shy away from them? No doubt there will be considerable debate about these issues.

It should be stress that Big History can still emerge as a scientific field of study whilst still having a healthy inclusion for religious viewpoints. When the scientific and religious are both understood in their proper contexts, the two perspectives need not inherently be in conflict. Big History could even indeed emerge as vital platform for the continual dialogue between not just science and religion, but also even between different religions themselves. The religious-based narratives of Universal History can serve as a vital foundation for such a platform. Universal History can be interpreted as both a precursor as well as a parallel field to Big History with considerable overlaps involved.

Major themes within Universal History that concern the deeper meanings of history, how we as humans think about history, as well as the centrality of history within with big picture are serious issues Big Historians should engage with on a significant level. This has relevance not just to make sense of Big History to those approaching it from a religious background, it also help develop certain paradigms through which Big History could be explored. Big History’s grand scale of inquiry inevitably lends itself to a variety of perspectives, and this most certainly will mean a subsequent development within Big History of more religious-influenced paradigms. This development in some ways is already underway, as indicated by David Christian’s own references to Big History serving as a “modern creation myth”.

6 *From Big Bang to Big Mystery: Human Origins in the Light of Creation and Evolution* Pg. 15-16

7 *Religion in Human Evolution* Pg. 45

8 Cited in Benjamin, Craig G.R., ‘The Convergence of Logic, Faith and Values in the Modern Creation Myth’. *World History Connected* 6.3 (2009): 19 pars. 9 May 2012 <<http://worldhistoryconnected.press.illinois.edu/6.3/benjamin2.html>>.

The use of this phrase “modern creation myth” can be further interpreted in another manner. The scholarly work of Pitirim Sorokin was briefly referenced to earlier, and a major theme of his work was the cyclic interplay between within social evolutionary dynamics between more materialist “Sensate” forms of societies and more spiritual “Ideational” forms, with “Idealistic” forms that attempt to synthesize both forms. To briefly summarize, Sorokin argued that the modern world has been governed by a “Sensate” dynamic but it was reaching a crisis point which would give birth to a more spiritual “Ideational” form of culture.⁹ It could be possible that the very interpretation of Big History as a “modern creation myth” is one indication of this evolutionary dynamic being underway. If this is the case, it further underlines the importance of Big History to take seriously religion and religious arguments.

This is only addressing only the most rudimentary elements of this issue. There are so many nuances to address it’s difficult to do so within a single paper. Yet all arguments presented here are intended to spark much lively discussion within Big History on the perplexing topic of the place of religion and religious-based perspectives within the field. This kind debate within Big History should not necessarily be seen as a negative, for it could lead to vibrant discourse within the field. Many Big Historians may take a positive attitude towards religion; others may take a more negative view. Such a plurality of viewpoints is commonplace within any other scholarly field of research, and Big History will no doubt be no exception.

⁹ Sorokin summarized this thesis in *The Crisis of Our Age*, originally published in 1941 but reprinted in 1992 by Oneworld Publications. His multi-volume work *Social and Cultural Dynamics* sought to outline a more general study of the interplay of the varying dynamics in social evolution.