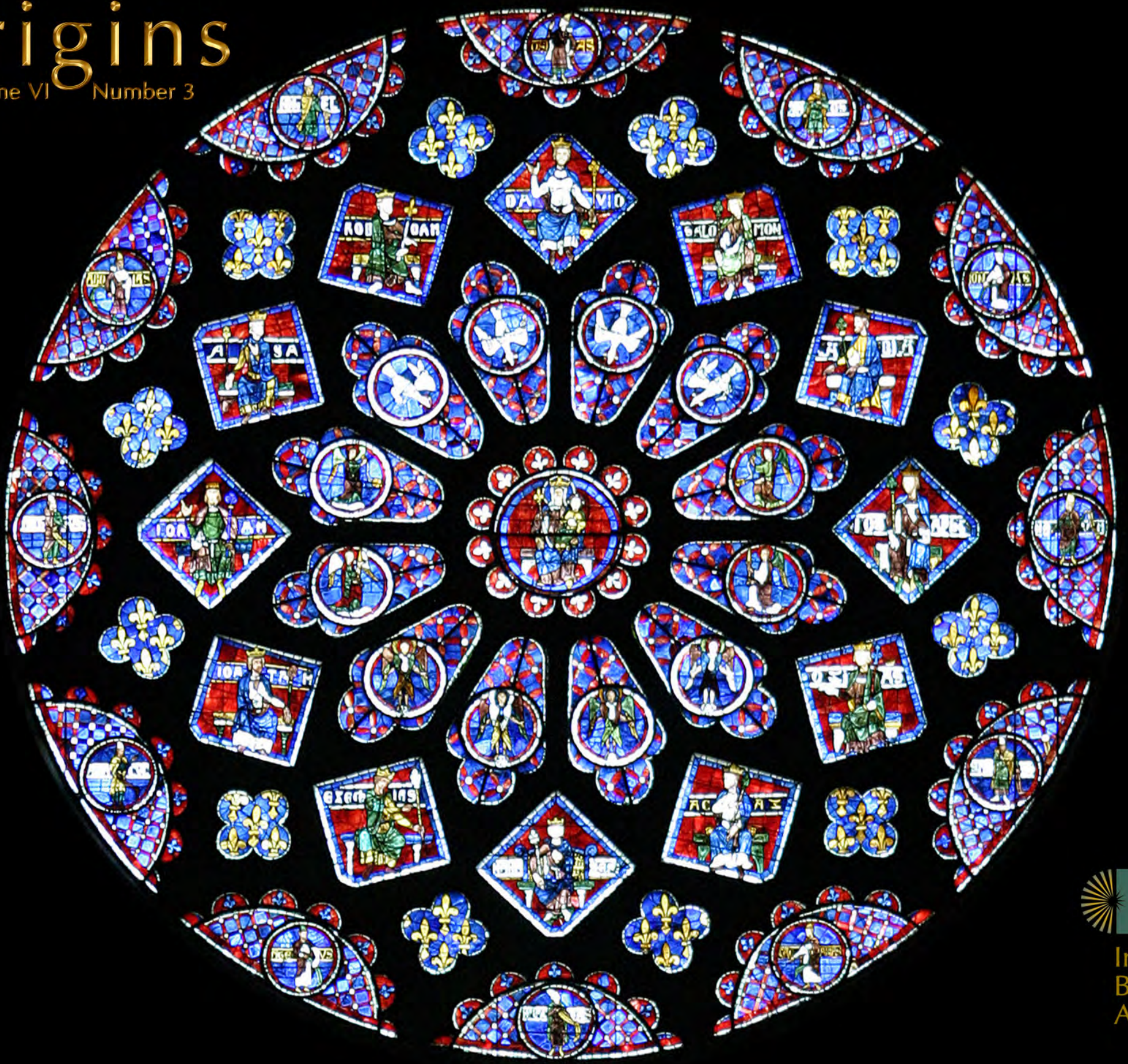
Origins

Volume VI Number 3



International Big History Association

Table of Contents

Origins. ISSN 2377-7729

Please submit articles and other material to *Origins*, Editor, ibhanet@gmail.com

The views and opinions expressed in Origins are not necessarily those of the IBHA Board. Origins reserves the right to accept, reject or edit any material submitted for publication.

International Big History Association
Brooks College of Interdisciplinary Studies
Grand Valley State University
1 Campus Drive
Allendale MI 49401-9403
http://ibhanet.org/
616-331-8035

Thank you for your membership in the IBHA. Your membership dues all go towards the adminsitration of the association, but do not by themselves cover our costs. The only paid position is a part time adminsitrative 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.

International Big History Association

The Stained Glass of Chartres Through the Lens of Big History

By **Julia Rathmann-Bloch**
Nueva School, San Mateo, CA

In darkness, they stand mute. Each day, with the rising sun, the narrative begins. When you enter the cathedral of Chartres, the light streaming down through the stained glass windows draws your eyes upward. There, the windows capture both stories long past and those contemporary to the people who crafted them in glass. The glass aims to communicate fundamental and historical truths (as well as some propaganda). To all those who worshipped there, but could not read, the windows provided an enduring symbolic language of shared history and understandings. But, of course, the glass did not begin in this translucent splendor; it comes from humble elements. Even after the original fusing of these elements and, thereby, creation of glass, many centuries passed before what we currently think of as glass, transparent and colorful, surfaced with the invention of glassblowing in the first century C.E. Once it had been established and developed into the art form we see at Chartres, glass became fundamentally intertwined with light. This symbol of culture and art, which provides neither food nor other practical survival advantages, fascinates historians. Those who research the subject often speculate on the reasons communities have invested enormous amounts of energy and money in creating these windows. In the

cathedral of Chartres, one of the most famous for its extraordinary stained glass, 176 windows, each of which would have cost a small fortune, dominate the internal landscape. Given the enormous investment, historians wonder not only why they were originally created, but also what they have given us, and what their meaning is in a larger historical context.[1]

The discipline of Big History, one that extends history back beyond human existence, furnishes us with a lens that helps us find more contextualized answers. In analyzing the purpose of stained glass, we consider three guiding questions through the broader perspective of Big History. First, how were stained glass windows used, and what did they communicate? Second, what came together to produce these works of narrative? Third, what are the implications and effects of stained glass? In the beginning section of the tripartite analysis below, we consider the first question by examining the stories physically worked into the glass, the tangible messages they communicate. To consider the second question, we examine the two journeys of the glass itself: first, the one that the art of glassmaking underwent before evolving into the kinds of stained glass in Chartres, then, the journey of the materials that make up the stained glass. To answer the final question, we go beyond the physical messages the glass contains to examine the relationship stained glass has with light and the message imbedded within that relationship. These three central questions guide us to our conclusion. Stained glass tells stories, not only the ones physically worked into the art, but also the story of a human search to find meaning. When we examine the stained glass of Chartres, our gaze is turned up to the heavens. Whether that serves its original purpose of helping parishioners consider God, or makes us ruminate on the stars, which formed all of our constituent elements, glass forces us to consider our place in the universe. Through that lens, much like the lens of Big History, we situate ourselves within the stories and among the stars.

In analyzing the purpose of stained glass windows, we begin with the first guiding question of how they were used. The 176 windows at Chartres portray dozens of stories written in glass. Through their images, these glass windows transmit ideas, and are a kind of symbolic language, or language that communicates concepts without the presence of the subject. But why is symbolic language significant? David Christian, the founder of the discipline of Big History, introduced collective learning as an explanation of humans' unique ability among animals to independently colonize all the environments on the surface of the earth. Collective learning is defined as learning passed on through generations using symbolic language. In the thirteenth century, most of the population of France wasn't literate. The stained glass windows were the churches' way of spreading Bible stories and other stories to the masses and between generations. Using symbolic language, the stained glass windows of Chartres epitomize collective learning.[2]

In general, the stained glass windows there display three types of tales. The first type is historical: tales of ancient heroes and significant events. The second type of story is of contemporary events; these windows featured figures prominent in the 12th and 13th centuries and provided a sort of marketing. The third, and most prevalent type, was of biblical stories. In this way, these windows were a history book, a newspaper (albeit sometimes a bit stale), and a religious text. Because stained glass windows had a broad audience, including both literate and illiterate individuals, and covered many genres and ideas, they provided a way for viewers to situate themselves, both in their current contexts, and in a broader historical narrative.

An example of the first type of tale crafted by the windows is the Charlemagne window in Chartres Cathedral. It depicts the epic tale of Charlemagne's crusades throughout Jerusalem and Spain in a long arched window containing 24 panels. According to scholars of Chartres, the window uses various common symbols, like gestures or specific clothing, to denote position or rank. For instance, shield shape in a battle was used to identify the combatants' affiliation; the Christians with Charlemagne carried triangular shields, while their foes carried round ones. The stories in these stained glass windows could be consumed by the general populace of the time and presented a substantial quantity of information per square foot through only pictures. The average person from the 1200s would likely have been able to understand the intended meaning of the windows. In this case, the viewers would learn both the overarching story and many details of Charlemagne's crusades. These windows provide a form of symbolic language information that spans generations. Nonetheless, current visitors may find it hard to parse the stories written in the windows, as this language, like written language, evolves over time. The original audience of these windows probably found them more accessible than we do in the same way that contemporaries of Shakespeare found his work easier to parse than modern readers often do. These windows enabled the mostly illiterate thirteenth century population and their descendants to learn about important

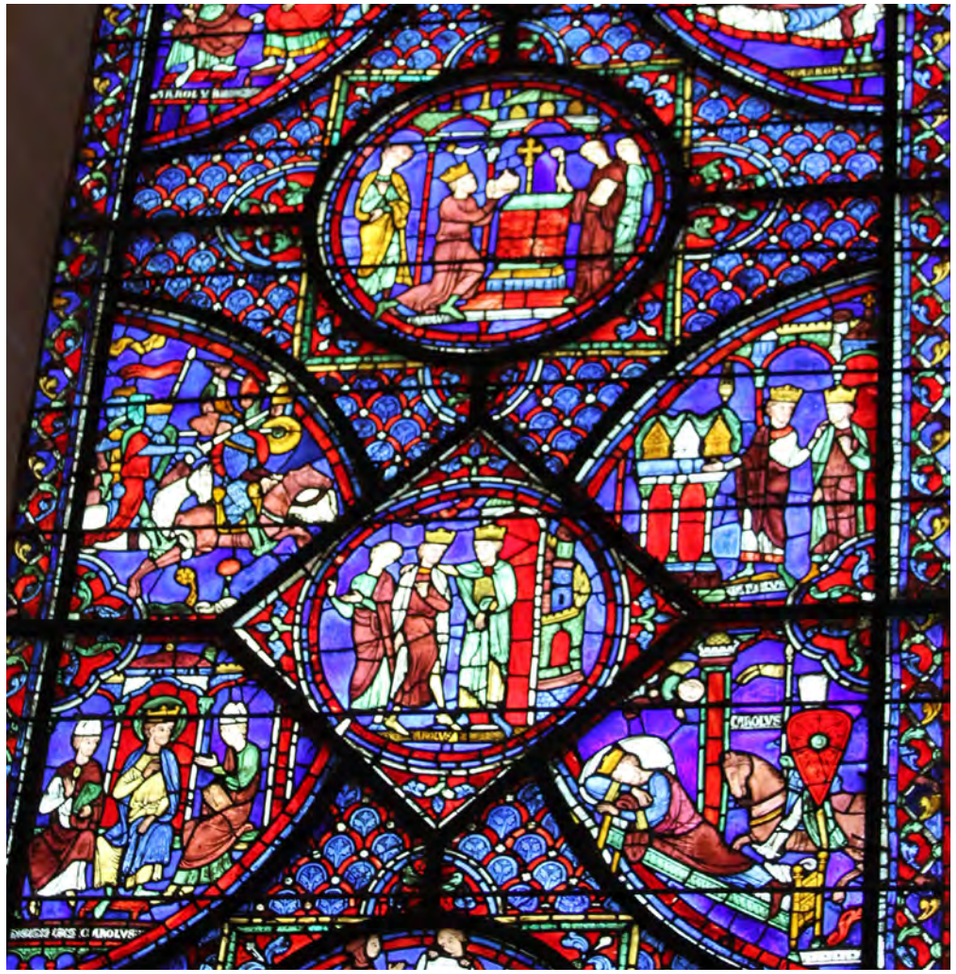
1 Miller, Malcolm. *Chartres Cathedral*. Gloucestershire: Pitkin, 2014. Print.

2 Christian, David. "What Makes Humans Different?" *Threshold 6: Collective Learning*. The Big History Project, Web. 15 Feb. 2016. <https://www.bighistoryproject.com/en/thresholds/6#>.

The Charlemagne window.

historical events like Charlemagne's crusades.[3]

The second type of story presented in the windows involves current events or things that were designed specifically to influence the public's opinion of contemporary leaders. An example of the second type of window depicts Jean Clément, a 13th century marshal, receiving a military banner called the Oriflamme from Saint Denis (*see figure on page 6*). A marshal receiving the Oriflamme is rather unusual because, according to art historian James Bugslag, the banner was a sign of protection from St. Denis that French kings carried into battle. Bugslag explains that "[a]fter 1124, there is no record of anyone but a French king taking the Oriflamme from the Abbot of Saint-Denis, so why is a mere marshal accepting it in the stained glass of Chartres Cathedral and accepting it not from the abbot but from St. Denis himself?"[4] Bugslag argues that this peculiar image, in fact, appears to be a kind of propaganda for the ruler of the time, Queen Blanche. Because she had no king to lead the royal army, she needed another way of rallying feudal lords with military obligations to the crown. By depicting the gift to Jean Clément of the Oriflamme, which was carried into battle by such successful and famous kings as Charlemagne and Constantine, this image was intended as a rallying point for the nobles and a public statement of support for the royal army from the bishop and cathedral. Bugslag opines that this window served a purpose similar to that of the Uncle Sam "We want you" posters that were disseminated in support of the American military. Like the posters, the stained glass of Chartres served in part to solicit support for the military.[5]



Central portion of Charlemagne window, including red triangular shield attributed to Christian soldiers on bottom right side and gold circular shield attributed to opponents in panel on left side.

The third and most common type of window illustrates events from the Bible. A representative example of this type of window is the central window at the front of

3 Maines, Clark. "The Charlemagne Window at Chartres Cathedral: New Considerations on Text and Image." *Speculum* 52.4 (1977): 801-23. Web.

4 Bugslag, James. "Ideology and Iconography in Chartres Cathedral: Jean Clément and the Oriflamme." *Zeitschrift Für Kunstgeschichte* 61.4 (1998): 500. Web.

5 Bugslag, James. "Ideology and Iconography in Chartres Cathedral: Jean Clément and the Oriflamme." *Zeitschrift Für Kunstgeschichte* 61.4 (1998): 491-508. Web. In addition to the military propaganda described here, stained glass medallions for local guilds and trades also appeared in the windows.

Window depicts presentation of the Oriflamme

Chartres, which, with a series of 30 medallions in three columns, begins the story of Christ as it appears in the Bible. For instance, one of the medallions depicts the Nativity, Jesus's birth. In this window, author Marcel Aubert explains that the Nativity is reduced to its simplest details. The Virgin reclines in a bed; St. Joseph sits at its foot with baby Christ in a cradle nearby. Simultaneously, the window depicts the cradle as an altar to symbolize God's later sacrifice of Jesus. With this window, the viewer can understand the story of Christ through a series of scenes, each using known symbols to create comprehension.[6]

These three different types of tales in the stained glass windows demonstrate not only the versatility and use of a new form of symbolic language, but these stories also help people situate themselves within a greater context. The historical events help people answer the question of where they fit into a historical chronology. The current events allow people to place themselves among their contemporaries. The biblical stories are intended to show viewers their place in the larger universe. The windows disperse information intended to answer questions about humanity's place on earth. The windows, like Big History, utilize a uniquely human trait of complex symbolic language to attempt to answer the

The Nativity, from Central Window, West Front

6 Aubert, Marcel. "Stained Glass in Chartres Cathedral." *The Burlington Magazine for Connoisseurs* 42 (1923): 266-67, 270-73. Web.

deep-rooted question of the human place in larger contexts on several scales.

Big History enables us not only to inquire about what our place is as a species, but also to analyze how humans utilize an innovation in symbolic language to do so. Whenever a new innovation of import appears, especially one that characterizes a unique dimension of human civilization, like collective learning, the steps leading up to it must be examined. This analysis brings us to our second guiding question: how did stained glass originate, and what came together to produce it? To examine how stained glass as a form of symbolic language arose, we begin with a brief history of glass in general.

Many histories of glass commence with a tale that describes how it was thought that human-made glass was first discovered. The story proceeds as follows: a group of Phoenician sailors were stranded on an island; when they cooked their food, they placed their pots on natron (soda) blocks and set fires underneath the pots. By the following day, the soda-sand mixture under the pots had hardened and transformed into glass. Although this vignette may be a fictitious one, it illustrates that the origins of human-made glass are important enough to merit legend. According to art historian H.E. Winlock, "[t]he earliest definitively dated glass vessels, which have survived to our day, have been found in Ancient Egypt tombs of the reign of Thut-mosĕ III of the fifteenth century B.C."[7] Although these are the earliest dated vessels, we still do not know whether these are the first glass vessels created by humans. What we do know is that the 15th century B.C.E. Egyptian glass and the glass developed for the next 15 centuries was very different from the colorful and transparent glass to which we have grown accustomed. The early Egyptians created largely opaque vessels, rather unlike what we now generally consider art or decorative glass. To create these glass objects, for instance, a mold would be coated with a glassy glaze and cut away, leaving a hollow glass object. Ancient Egyptians became very proficient in this process.[8]

Around the first century C.E., however, the process of glassmaking was revolutionized with the advent of glassblowing. This new blown glass could be shaped and colored with ease. The advent of glassblowing allowed for larger, cheaper, and lighter vessels that came in an infinite variety of shapes. This new and improved kind of glassmaking swiftly spread. The invention of glassblowing coincided with the launch of the Roman Empire, and, as such, expanded along with it. Roman merchants traded blown glass across their trade routes as far as China. Now that glass had become popular, the stage was set for many new innovations and novel uses, including the creation of stained glass. [9]

Turning from the overarching chronology of the development of glass, we shift focus to the materials of which that glass has been composed. Big History also lends perspective to answering this inquiry. Big History takes us from the finished windows sparkling in Chartres's walls into the materials from which they are made. Over the centuries, glass has commonly included some combination of several major ingredients: silica sand, soda ash/potash, and sometimes lime. Each of these materials had to undergo an intriguing and lengthy journey before becoming glass.[10]

There are two basic steps that the original rocks must undergo before being combined with other materials and melted into glass. The first is natural degradation; it begins in the surroundings of a beach, high in a mountain or many miles from shore. Sand is composed of degraded rocks, shellfish, and biota from all around the local environment. Each grain of sand comes from a different environmental origin. In a way, a handful of sand from the beach is a story not only of all the mountains and rocks that were the origins of those grains, but also the rivers and rubble piles through which the rocks travelled to reach their destination at the beach. For instance, a grain of sand could have been dislodged from a nearby mountain by a rainstorm, travelled down a river, and washed onto the sandy delta before being collected to melt into glass. After the sand reaches the beach, it often gets washed out to sea and washes up on a different beach before it actually reaches the second step. The second part of the process is extraction. This step can be as straightforward as collecting sand from a riverbank or the beach as the Ancient Egyptians presumably did, or as complicated as mining sand from the sea floor using floating dredges that suction sand up and bring it to the surface. Thus, before the sand can be used in glass, it must have been naturally degraded and subsequently collected.[11]

The use of natron in glass, Ancient Egyptians' source of sodium carbonate or soda ash, also involves multiple steps and links the creation of glass to Ancient Egypt. Natron is formed when salt lakes, rich in sodium carbonate, dry up. The

7 Winlock, H.E. "The History of Glass: An Exhibition." *The Metropolitan Museum of Art Bulletin* 31 (1936): 193. Web.

8 Stuart, Evelyn Marie. "The History of Artistic Glass." *Fine Arts Journal* 27 (1912): 725-40. Web; Winlock, H.E. "The History of Glass: An Exhibition." *The Metropolitan Museum of Art Bulletin* 31 (1936): 192-97. Web; Kämpfer, Fritz, and Beyer, Klaus. *Glass: A World History; the Story of 4000 Years of Fine Glass-making*. Trans. Edmund Launert. Greenwich, CT: New York Graphic Society, 1966. Print.

9 Winlock, H.E. "The History of Glass: An Exhibition." *The Metropolitan Museum of Art Bulletin* 31 (1936): 192-97. Web.

10 James H. Hogan, "Stained Glass," *Journal of the Royal Society of Arts* 88 (1940), 574. Elements, like cobalt or selenium, also play a central role in the coloring of glass.

11 Whitehouse, David. "The Transition From Natron to Plant Ash in the Levant." *Journal of Glass Studies* 44 (2002): 193-96. Web; Cavette, Chris. "Sand." *How Products Are Made*. Vol. 3. Detroit: Gale Research, 2002. Print.

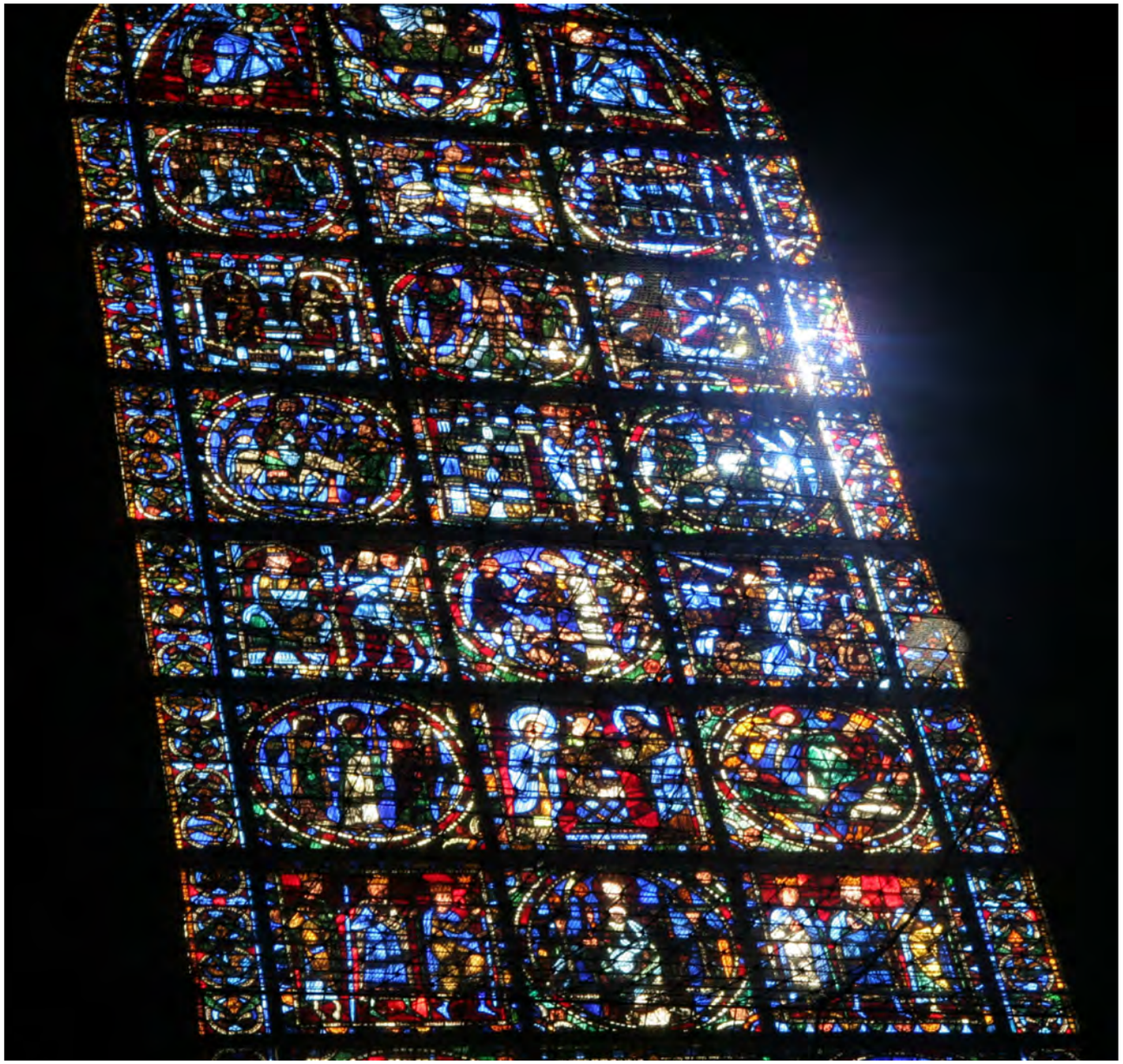
Ancient Egyptians procured this natron from digging up lakebeds and transporting the material to their workshops. In fact, Egyptians had been using natron for hundreds of years before they began using it in glass. Natron is one of the main preservatives used in mummification, a funerary practice for which Ancient Egyptians are renowned. The fact that Ancient Egyptians may have been the first people to create glass presumably stems from their long history with natron, one of glass's two main ingredients. Had they not used natron as their main preservative for mummies, humanity probably would have had to wait much longer for the invention of glass.[12]

From the early glass of Ancient Egypt, to the windows of Chartres Cathedral, to the screen of an iPhone, glass has deep roots in human culture. In stepping beyond the human history of glass to examine its constituent elements, we utilize the broader lens of Big History. This perspective enables us to stretch our vision past simply the human steps involved in glass production, and see entire journeys that a finished window represents. Big History opens windows onto these journeys.

Moving now from the journeys that glass's existence embodies, we arrive at the final question, the one inherent in the relationship of glass and light. Scholars, and, in fact, almost anyone entering the cathedral of Chartres, would agree that light is central to the effect of the stained glass. This brings us to our third and final question: what are the implications and effects of stained glass? After all, what is the purpose of a window, such as Chartres has in such opulent abundance, but to let in light? One essential perspective on the importance of light derives from a religious viewpoint. For example, Genesis describes light as God's first creation. Genesis reports that God declares, "Let there be light: and there was light. And God saw the light, that it was good." In many religions, including Christianity, light represents the divine, and in the setting of a religious cathedral, stained glass windows showcase the light that is viewed as godly.[13]

Big History provides us another perspective, one that supplements the religious dimension of light. Light, as the energy that comes from the sun, plays another extremely important role in all life. Light from the sun provides almost all the resources for energy use on earth. Indeed, virtually all of the energy conversions that sustain life can trace their source back to the sun's light energy. For example, the energy used in plants to engage in photosynthesis is light, therefore our food can be directly attributed to the same light that shines through stained glass windows. Many religions view light as a representation of the creator. Big History also depicts light as the source of life's energy. Thus, from this broader viewpoint, a religious view of light and Big History's view of light may converge. In each, light is the source of life on earth; light is life's catalyst.

We look up, through the windows, to the heavens, hoping to better understand our place in a greater context. After considering three guiding

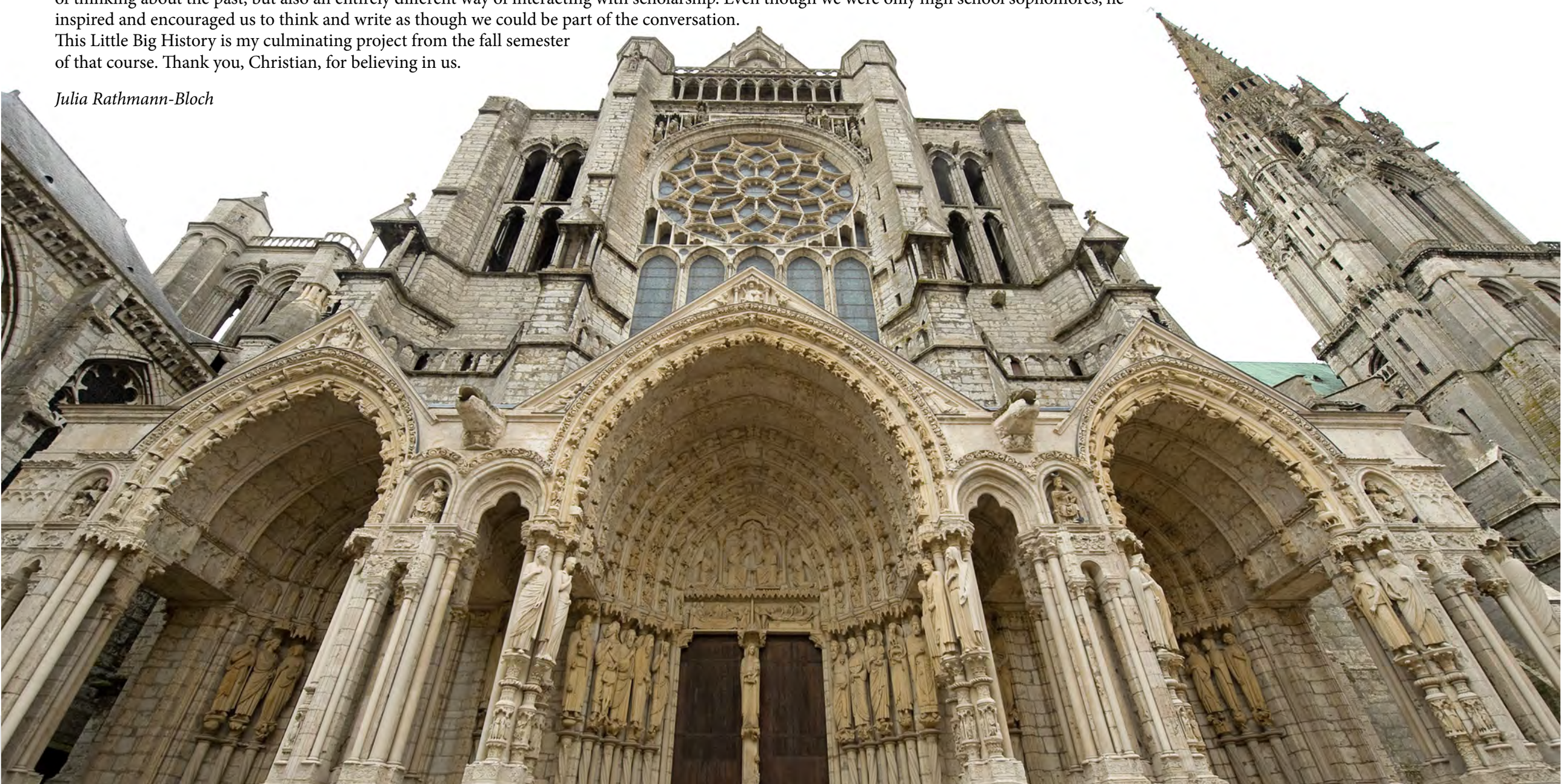


12 Whitehouse, David. "The Transition From Natron to Plant Ash in the Levant." *Journal of Glass Studies* 44 (2002): 193-96. Web.
13 James H. Hogan, "Stained Glass," *Journal of the Royal Society of Arts* 88 (1940), 570-571.

questions, we come to the underlying purpose of stained glass. Stained glass's ultimate purpose is to tell stories—stories about the past and present, stories about our ancestors and our contemporaries, stories about quotidian aspects of life and extraordinary ones. Everything about these windows pulls our focus up and out, into the stories they physically tell, the history of their constituent elements and how they got there, and the story they imply about light. The purpose of stained glass comes at the consilience of these broader themes. Much like Big History, stained glass asks us to consider ourselves in a broader context, one beyond our experience, beyond even human experience, and maybe even beyond our planetary experience. Beyond the glass, or the pages of the history textbook, or even the original purpose of the cathedral, is the same question, the same search. The purpose of these stained glass windows, those of Chartres and other cathedrals, is to help us situate ourselves in the cosmos. Stained glass, just like Big History, is about helping us find our place, our context, our own story.

Last year, I was lucky enough to be introduced to the discipline of Big History by Christian Jennings. He not only presented an intriguing new way of thinking about the past, but also an entirely different way of interacting with scholarship. Even though we were only high school sophomores, he inspired and encouraged us to think and write as though we could be part of the conversation.
This Little Big History is my culminating project from the fall semester of that course. Thank you, Christian, for believing in us.

Julia Rathmann-Bloch



New and Returning

IBHA Members

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

Ken Baskin

Thomas Burr

Penelope Corfield

Katayama Hirofumi

Peter Gambino

Ken Gilbert

Giovanni Grieco

John Lancaster

Davidson Loehr

Kimberley Macdonald

David Osleger

Felipe Pérez Solari

Marina Porta

Peter Rathmann

Evan P Serio

Ken Solis

Jesus Tagle

IBHA Members are from:

Australia
Austria
Bahrain
Brazil
Canada
Chile
China
France
Germany
Hong Kong
India
Ireland
Italy
Japan
Korea
Netherlands
Nicaragua
Norway
Peru
Russia
Serbia
South Korea
Spain
United Kingdom
United States

Third IBHA Conference

July 14 - 17, 2016

Amsterdam

Last

Call for Papers

INTERNATIONAL BIG HISTORY ASSOCIATION CONFERENCE

July 14-17, 2016

The University of Amsterdam

The Netherlands

Building Big History: Research and Teaching

PAPER OR PANEL SUBMISSIONS by MARCH 12

Extended Deadline

> The International Big History Association (IBHA) defines its purpose as "to promote, support and sponsor the diffusion and improvement of the academic and scholarly knowledge of the scientific field of endeavor commonly known as "Big History" by means of teaching and research and to engage in activities related thereto."
>
> Article 2 of the IBHA Articles of Incorporation.

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

To allow the Program Committee to effectively group individual participants into panels, we request that you format your proposals as follows:

- Individual paper proposals must include two separate paragraphs of no more than 150 words each.
  - Paragraph one should contain the title of your proposed paper, and provide a summary of its specific content.
  - Paragraph two should carry the title "Methodology, and Relevance to Big History", in which you address the underlying methodology of your paper, your approach to Big History, and in which you explain how your

specific paper (as described in paragraph one) relates to the broader field of Big History.

- Your proposal must include your name, institutional affiliation (if you have any), e-mail address, phone and/or fax numbers, and a brief curriculum vitae.
- All of this must be provided as one single file, preferably in MS-Word.
- Proposals for entire sessions or panels must contain all this information for each participant, as well as contact information and a brief C.V. for the moderator, if you suggest one. (The program committee can help find moderators, if necessary.)

Please submit your paper or panel proposal by clicking on one of this link, which allows for submission of information. The time limit at the conference for presenting papers will be 20 minutes, and the extended deadline for submitting paper and panel proposals is March 12.

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

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

The Conference Planning Committee is already hard at work investigating walking and other pre-conference tours of the city, and a post-conference tour that will visit many of the leading scientific, geological, and cultural sites in Europe. We will keep all members fully informed as plans for the third IBHA conference evolve. (See the IBHA website www.ibhanet.org) For all things Amsterdam, you can go to http://www.iamsterdam.com/en/. For a complete guide to the Netherlands and its many attractions, you can visit http://www.holland.com/us/tourism.htm. If you have more time to explore the larger area, similar websites exist for nearby Belgium, France, Germany, and Great Britain.

Please find more details on the conference at www.ibhanet.org. We very much hope that you can join us at the 3rd IBHA conference.

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

The conference will take place at the Oudemanhuispoort (Old Man's Home Gate). Part of it was built, as the name implies, as a home for poor old people in the early 17th century. In the late 19th century the University of Amsterdam started to use the building. Around that the same time book traders also moved into the little shops that line the main hallway of the building. The book traders are still there. Fred Spier started teaching a Big History course in Oudemanhuispoort 20 years ago. It ran there for 10 years.

Oudemanhuispoort (Old Man's Home Gate)

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

Please submit your paper or panel proposal by emailing to tewd@gvsu.edu. IBHA Office Coordinator.

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

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

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

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

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

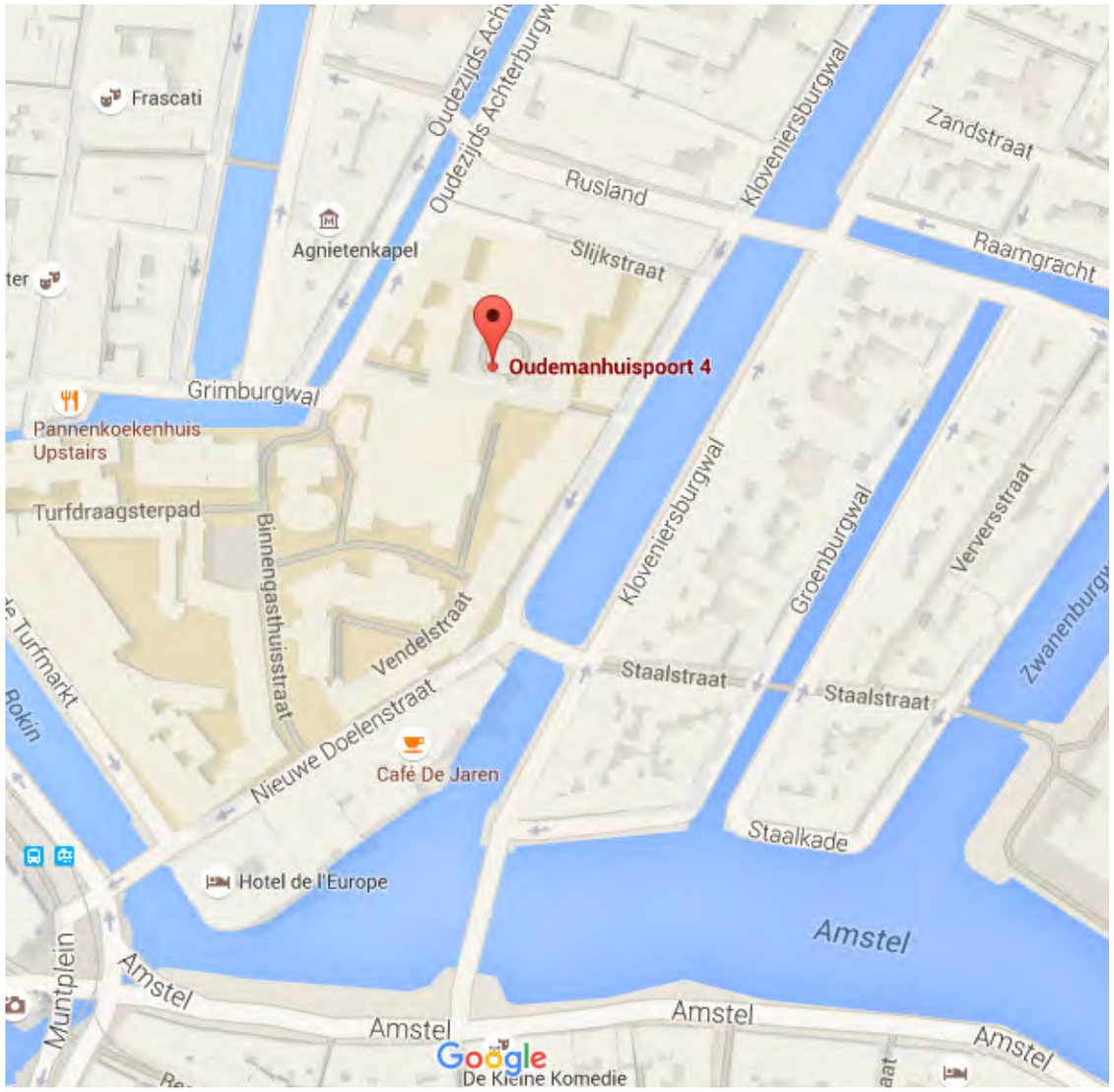
The new course proved to be a big success. About 200 students attended its first run and hundreds of students have registered for the course each year ever since. Within the university, the course's success occasionally led to some resistance, mainly from faculty members who deemed the big history approach to be too broad. But thanks to student engagement and the strong support of a number of the university's most prominent scientists a semi-permanent position in big history was created for Fred Spier in 1997 and was turned into a permanent position in 2006.

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

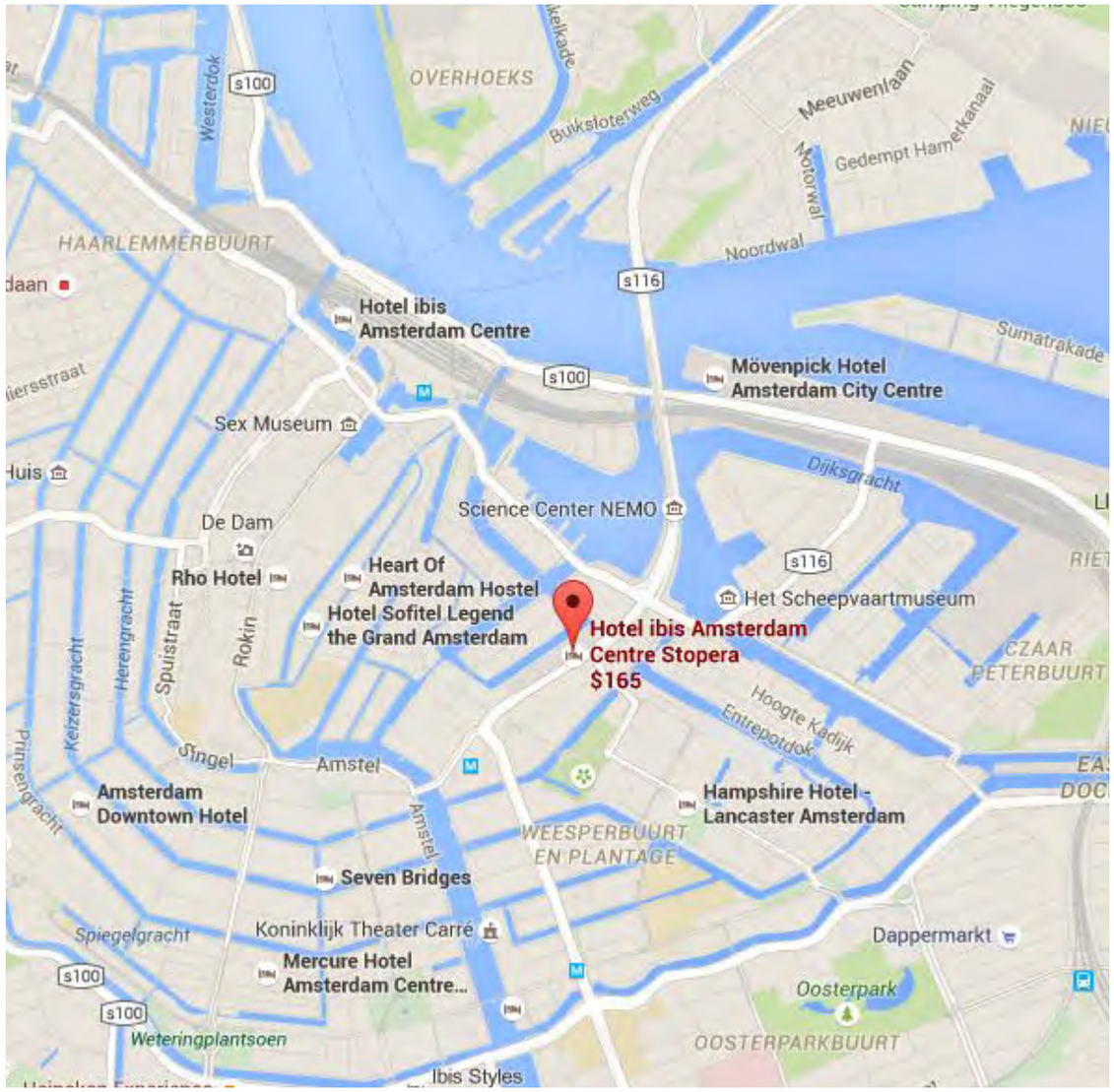
All of these developments have led to the creation of another permanent position in big history in August 2015, which will be filled by Esther Quaedackers. These developments have also enabled the University of Amsterdam offer to host the 2016 IBHA conference. This offer has been accepted by the IBHA,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

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

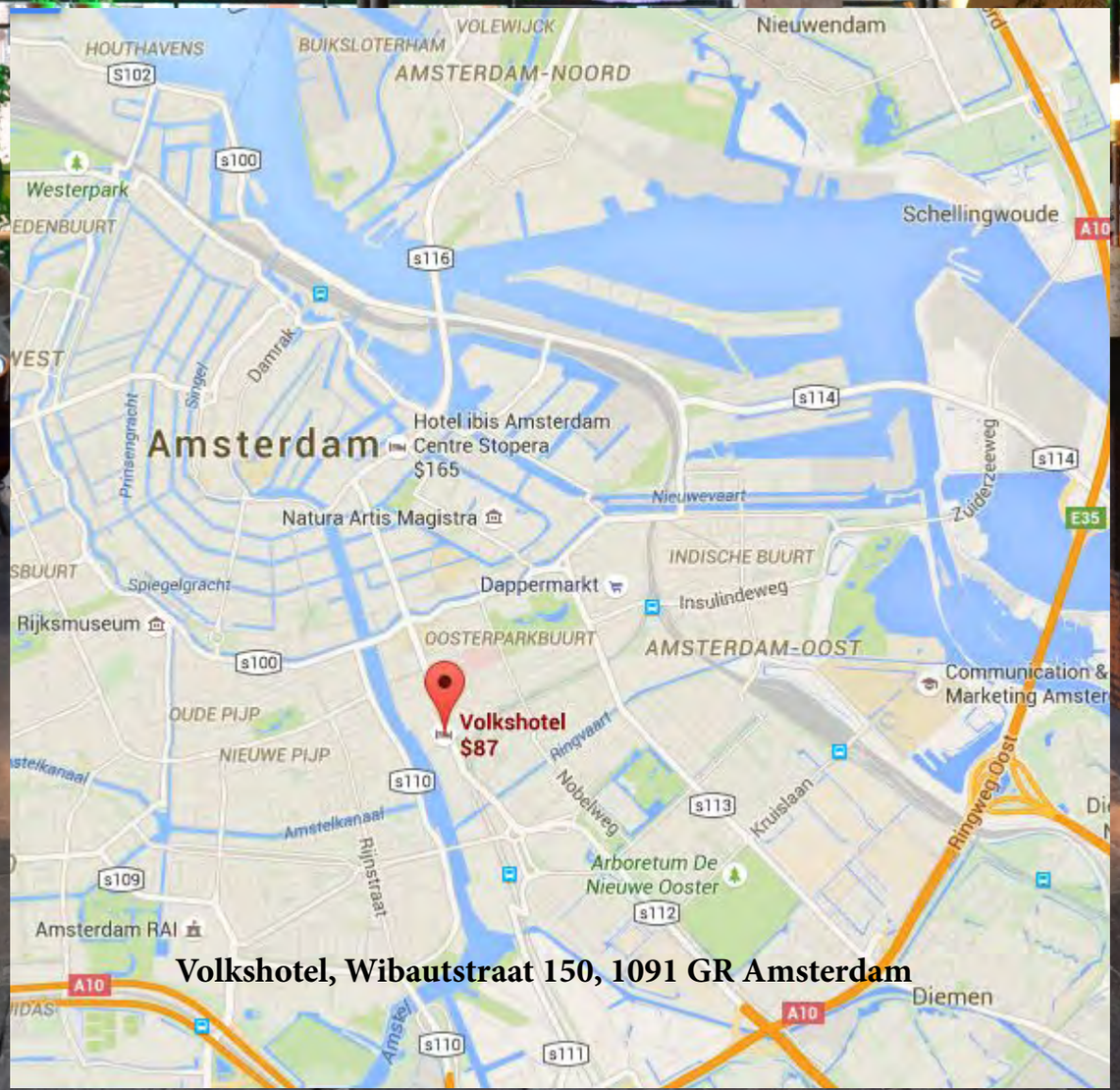
The Agnietenkapel
(source: Wikimedia Commons)



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



Hotel ibis Amsterdam Centre Stopera, Valkenburgerstraat



Volkshotel, Wibautstraat 150, 1091 GR Amsterdam

Nominations for IBHA Board of Directors

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

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

We encourage you to participate by logging on to the IBHA website at http://ibhanet.org/. Click on "Forum," "IBHA Discussions," and "IBHA Board of Directors Nominations." You may by April 15, 2016 post the names of any members you recommend for Board membership.

Up to that time, please check the forum periodically for new postings and endorse all candidates of your choice. (Just follow the simple instructions at the website.) Moreover, if you become a candidate, please add a statement describing your interest in serving as a Director. Should you be recommended but unable to serve, please let us know. Candidates endorsed by at least 10% of IBHA membership before May 15, 2016 will become nominees.

An electronic election for new Board members will begin on June 1, 2016, and end on June 30, 2016.

The new Board will be announced in July.

We welcome your active engagement in this important process.

Please first log into http://www.ibhanet.org/ . . .

, , , then go to Forums, IBHA Discussions to nominate an IBHA member as a candidate to become a Board member or to endorse a nomination.

The Biggest Picture

From the Big Bang to the Development of the Big Bang Theory

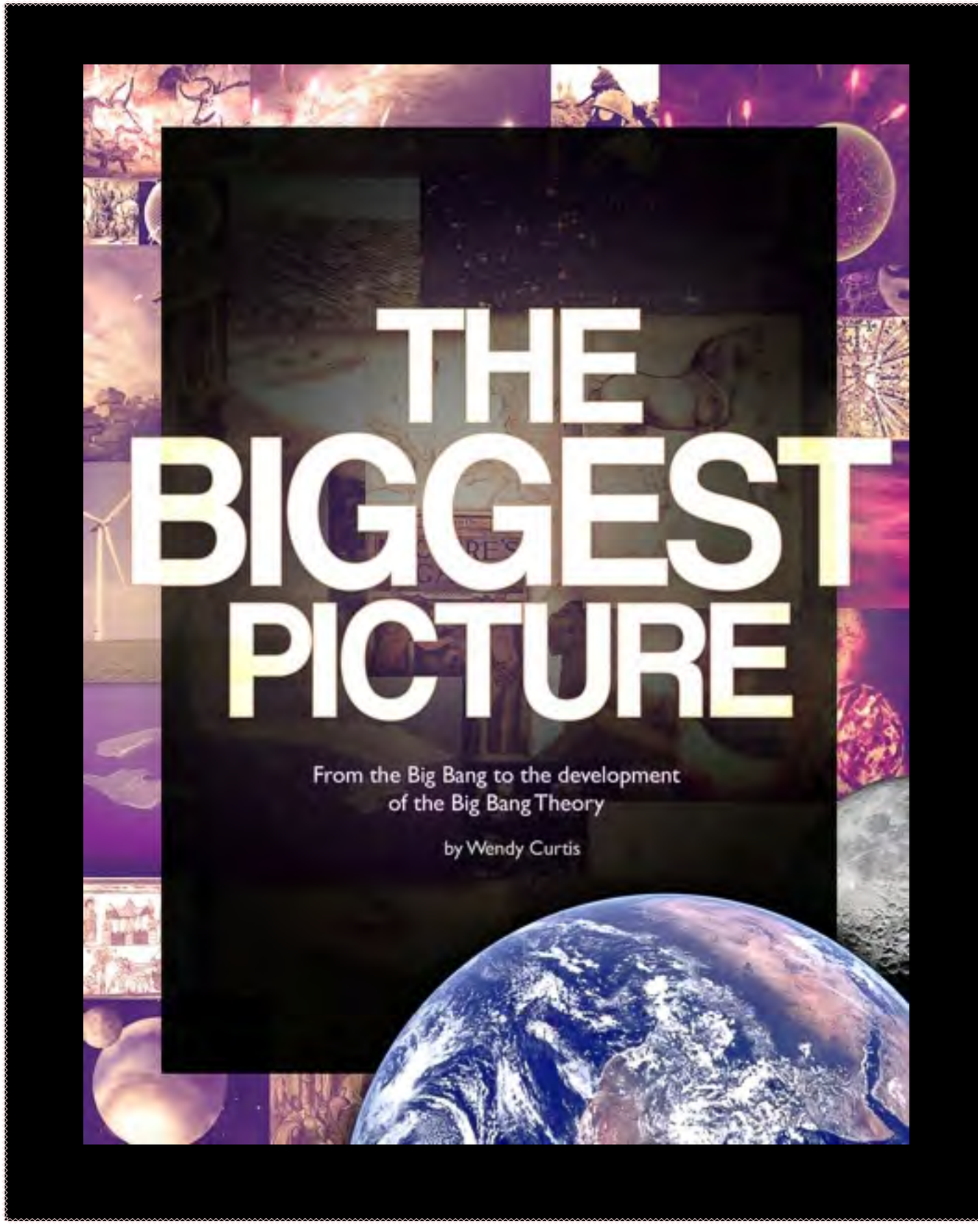
by **Wendy Curtis**

Using stunning graphic representations and an easy-to-read, present tense format, The Biggest Picture shows pivotal moments from our planet's evolution in a new light. Wendy Curtis sought the advice of experts from a wide variety of fields–including astronomy, geology, and anthropology–and compiled this knowledge into a visual record with concisely written supporting text; creating a rich, all-encompassing tapestry of our planetary history.

The journey begins with the Big Bang and continues in one unbroken sweep forward through time, leaving readers with a clear and concise picture of our transit through history. Curtis gives her audience a thorough understanding of how the cosmic creation of the elements affected the evolution of stars and solar systems, how the mechanics of the Earth-Moon system nurtured the rise of life, and how life subsequently influenced geologic processes. As the reader approaches the final chapters, they arrive where we are today: Contemporary astrophysicists are grappling to explain the origin of the cosmos; biologists are attempting to untangle the web of evolution; and social and environmental scientists are struggling with the problems of crime, terror, war, economic downturns and disruptions, climate change, and the preservation of the biosphere.

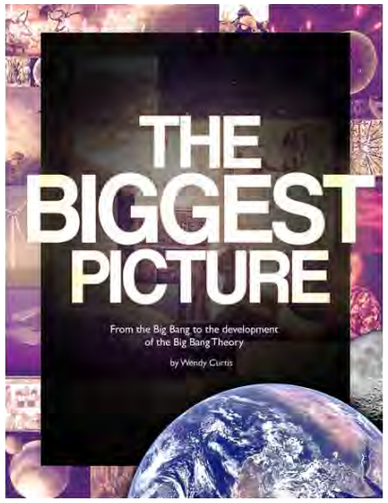
The Biggest Picture, like other books in the new genre of Big History, restricts itself to a single volume that includes only the most important events. While this format does not allow for the extent of detail given in books that resign themselves to only a portion of any one subject, it does allow major trends and turning points to be revealed and the overall framework of history to be discerned. Visual cues assist the reader in remembering specific events and in finding topics without using the index.

By adhering to its simple structure where each page moves one step further through time, seemingly unrelated events are juxtaposed on the same page in insightful and sometimes amusing ways: Life emerges on Earth as a large moon with active lava flows looms above; a hot air



balloon takes flight as the revolution erupts in France; and the pseudo science of eugenics emerges in America just as Einstein's Theory of Relativity is tested and becomes front page news.

The Biggest Picture utilizes an innovative new format that the new genre of Big History deserves, and is a great fit for any reader looking to expand their knowledge in earth science, history, and a multitude of other subjects.



The Biggest Picture:

From the Big Bang to the Development of the Big Bang Theory

Authored by
Wendy Curtis

After years of dreaming and planning, Wendy Curtis began work on a visually driven Big History narrative, in 2001. A studio was remodeled with one wall large enough to display all the pages of the book, so that the subject could be reviewed in its entirety. At the time, Wendy spent a lot of time just explaining why a narrative of such large scope - the Big Bang to the present day - would be worthwhile. Soon, however, other collaborators were found, each of whom gave some criticism, encouragement, or contributed ideas. The project progressed slowly and overtime an array of researchers, illustrators and designers made contributions. Eventually a small, flexible team was assembled. We hope that our visually exciting, scientifically-based narrative is useful and empowering to readers and nourishes their sense of wonder and optimism. The Biggest Picture is aimed at a broad range of ages and abilities.

Upon opening this book the reader is embarking on a visual odyssey through vast cosmic stretches of space and time, from the moment the Universe is born to the present. The illustrations lead the chronological unfolding of events and the words support the illustrations.

Download on iBooks

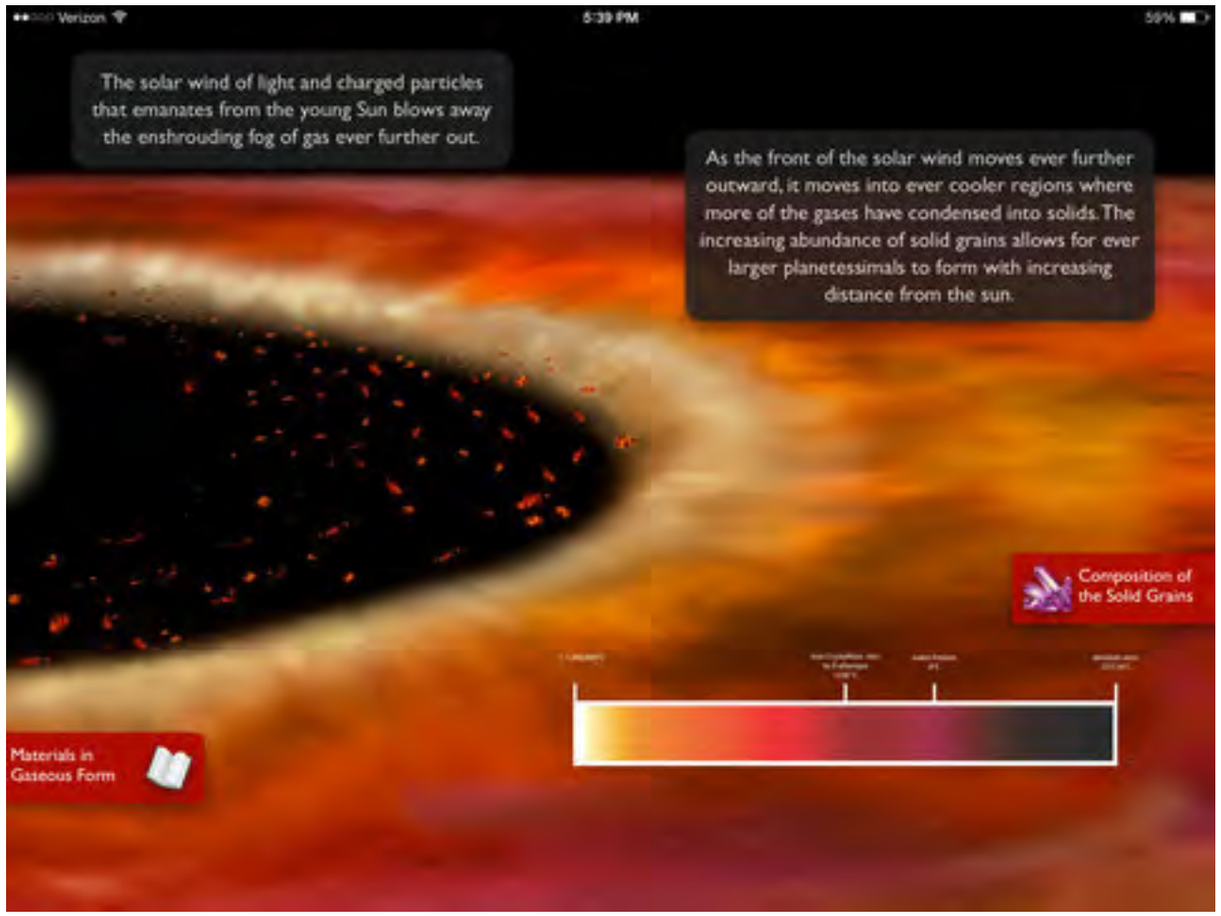
createspace an Amazon company

Winner of the Independent Publishers Silver Medal Award, Science category - IPPY 2015

Recognizing Excellence In Independent Publishing
INDEPENDENT PUBLISHER BOOK AWARDS
IP
SILVER

Contributors to *The Biggest Picture* include:

Evan Penn Serio
Michelle Kroll
Jim MacAllister
Michael Kelley
Robert Wilfong
Carl Caivano
Ernie Carbone
Arianna Bruno
Jason Root
Patrick MacAllister
Steffani Scheer
Alan Fleming
Grace Dickinson
Dan Tabbi
Lee Bouse
Jay Rathaus
Michael Thorn
Katie Knutson
David Kelley
Navit Reid
Dan O'Neil
Titus Neijens
Melisha Santiago
Dennis Spencer
Caroline Romedenne
Billy Mantzios
Chris Gaudreau
Jared Snider



World History Conference
July 2 - 5, 2016 in Ghent, Belgium

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

Ghent canal, Graslei and Korenlei streets, Ghent, Belgium

2016

IBHA Post-Conference Tour

A TASTE OF EUROPE

JULY 18–27, 2016

International Big History Association

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

10
DAYS

Jump into world history and scientific discovery in Five European Countries

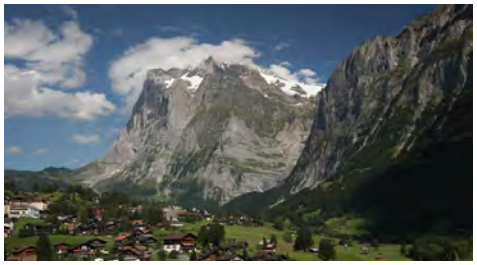
From First World War battlefields in Belgium and Paleolithic cave art in France to world-class wine vineyards in Germany and thematic lectures provided by leading historians, this tour has it all. Discover distinct style, substance and science in the cultural capital of Paris, among the magnificent *chateaux*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

Go Ahead

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

Overview

A TASTE OF EUROPE


Let us handle the details

- Expert Tour Director
- Local cuisine
- Handpicked hotels
- Sightseeing with local guides
- Private transportation
- Personalized flight options

Your tour includes

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

Your tour highlights

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

Where you'll go

OVERNIGHT STAYS

2 nights • Paris
2 nights • Dordogne Region
1 night • Geneva
2 nights • Grindelwald
2 nights • Heidelberg

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

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

Itinerary

Paris | 2 nights

Day 1: Arrival in Paris

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

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

Later, enjoy free time to explore and eat lunch in Ypres before continuing on to Paris. If time allows, additional stops will be made in Antwerp and Amiens.

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

Included meals: breakfast, welcome dinner

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

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

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

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

Dordogne Region | 2 nights

Day 3: Périgueux via the Loire Valley

Included meals: breakfast, dinner

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

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

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

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

Included meals: breakfast

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

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

Geneva | 1 night

Day 5: Geneva via Auvergne

Included meals: breakfast

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

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

Grindelwald | 2 nights

Day 6: Grindelwald via CERN

Included meals: breakfast, dinner

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

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

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

Day 7: The Bernese Oberland & Jungfraujoch

Included meals: breakfast

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

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

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

Heidelberg | 2 nights

Day 8: Heidelberg via Basel & Strasbourg

Included meals: breakfast

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

Day 9: Wine Tasting & Rhine River Cruise

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

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

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

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

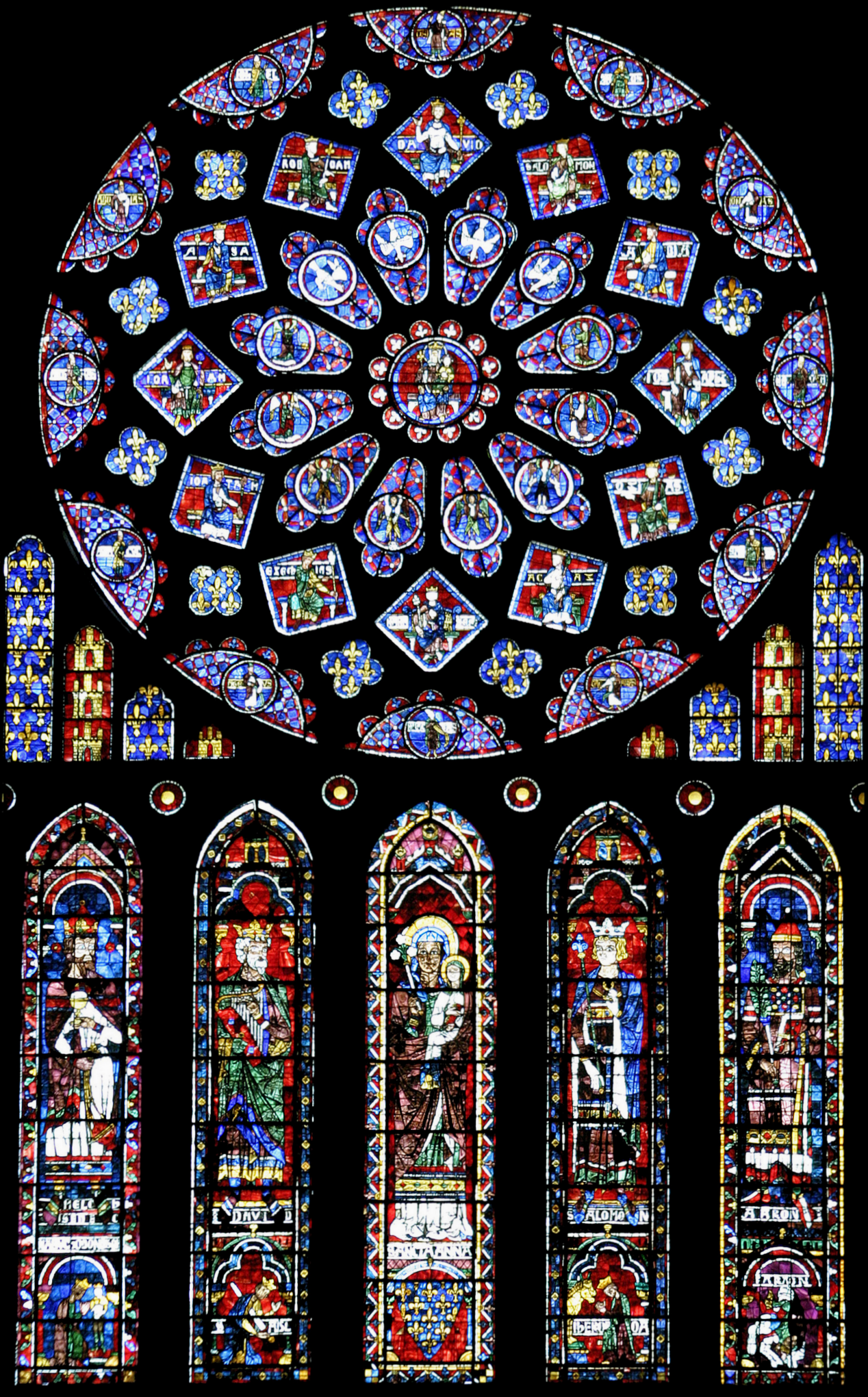
- Marvel at breathtaking landscapes and fine architecture of the Middle Ages
- View medieval castles along the river, including Kurtrierische Burg in Boppard

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

Day 10: Amsterdam via Cologne

Included meals: breakfast (excluding early morning departures)

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


DAVID
SALOMON
AARON