

Sample Implementation Grant Application

Project Title: The Vinland Map Exhibition

Organization: Mystic Seaport Museum

Project Case Statement:

Why should Connecticut Humanities Fund this project?

Give a brief project abstract and explain how this project supports both [CTH funding priorities](#) and your organization's mission.

The May 2018 Vinland Map exhibition at Mystic Seaport places this controversial manuscript on U.S. public view for the first time in 50 years. Purported to be documentary evidence that the Vikings reached North America 500 years before Columbus, the map triggered a firestorm of public and scholarly debates among humanities scholars, scientists, and Italian Americans. As for the public, many Americans now accept that Vikings were the first Europeans to reach the New World. Yet a formative audience study in 2017 suggests that very few know this belief dates to the 1960s' announcements about the Vinland Map and the archaeological evidence of a Viking settlement in L'Anse aux Meadows, Newfoundland. This exhibition will examine the Map's mysterious origins; the reasons scholars initially believed it to be authentic; the world's response to its unveiling; the challenges to that conclusion; and the science that finally turned the tide of scholarly opinion. The Vinland Map exhibition aligns closely with Connecticut Humanities' funding priorities, presenting "significant humanities scholarship and content that reaches broad audiences and fosters collaboration among organizations." The Museum is partnering with Yale University's Beinecke Rare Book and Manuscript Library, which holds the map in its collection. The exhibit will include newly recorded interviews with historians, scientists, curators, and archaeologists. Connecticut-based doctoral students are developing content for three interactive touchscreen stations, allowing visitors to look more closely and understand more deeply the Map and its two companion manuscripts, the Speculum Historiale and Tartar Relation. The exhibition will "encourage heritage tourism and help the public better understand and contextualize Connecticut-focused community issues or current events, and relate the past to the present." The Map's history since 1965 is a Connecticut story -- one that thrust the state's oldest university, Yale, into the national spotlight in unexpected ways. Mystic Seaport will introduce the Vinland Map to the American people as a document of intense public interest with significant historical implications. Informed by several humanities disciplines -- notably history, archaeology, anthropology and cartography -- this installation will address social issues, magnifying and shedding light on questions about first contact, national identity, and the origins of European culture in America.

Project Description and Background:

Briefly explain how you developed this project, including resources you consulted during planning (scholars, archives, collections, etc).

Describe the project you will deliver to the public and what you expect they will learn from it. Identify specific elements of this project you are asking CTH to fund.

For Documentary Film submissions please additionally respond to the following in this section:

- *Story, issues, and characters: What is the specific story your project will tell and what are the associated issues it will explore? Why are these stories or issues important or timely? Who are the characters?*
- *Describe the current stage of the project. Provide an estimated completion date.*

On October 11, 1965, after centuries of unchallenged belief that Christopher Columbus was the first European explorer to reach American shores, (and one day before the observance of Columbus Day), Yale University released a highly controversial statement to the press. That day Yale announced the existence of what it named the Vinland Map, a parchment medieval map of the world purportedly dated to about 1440. This was a remarkable claim because in the Map's far western corner lay an island named Vinlanda Insula – the Vinland of the Norse sagas that detailed the explorations of Leif Ericsson and the Vikings who claimed to have discovered new lands west of Greenland. The Map purports to show that the Norse had landed in what we now know to be Newfoundland around the year 1000, and also that knowledge of their exploits had survived for hundreds of years in Europe, to the extent that Vinland was recorded as part of the known world for a good 50 years before Columbus sailed.

The public response was overwhelming. Newspapers around the globe published the Map, a new acquisition at Yale's Beinecke Library, as a challenge to the history books. Scandinavian-Americans beamed; Italian-Americans took affront, some even marching in the streets of New Haven. A young law student named Joe Lieberman was photographed burning the map in effigy in front of the library.

Beyond the public response another storm was brewing. Scholars from around the world challenged Yale's evidence that the Map was authentic. Over several years, historians of manuscripts, science, cartography, and exploration debated the merits of the modest-sized document, now one of the most valuable in the world. Finally, at the urging of Alexander Vietor, Curator of Maps, Yale decided to put it up for scientific scrutiny and requested that several researchers examine the Map using the most advanced tools then available. The findings have been mixed but the majority of scholars are of the opinion that, while the parchment is authentic, the Map itself is a forgery. However, this does nothing to diminish the Map's outsized role in shaping our understanding of our past, where we've come from, who arrived in America first (archaeological evidence now supports the Norse exploration of Newfoundland), and how many of these ideas have evolved since the 1960s.

The idea for an exhibition on the Vinland Map came about in response to the Museum's plans to host the pre-Viking and Viking collections of the Gustavianum Museum at Uppsala University, Sweden, in 2018 through the exhibition *The Vikings Begin* (opening May 19 in the Collins Gallery). Museum staff felt strongly that this exhibition, and an exhibition in a separate gallery on the story of the Vinland Map, would complement each other well.

Nicholas Bell, senior vice president for curatorial affairs, held a preliminary meeting with Edwin Schroeder, director of the Beinecke Rare Book and Manuscript Library, in 2016 to discuss the concept. The Beinecke staff's response was overwhelmingly supportive of the idea of dovetailing the two exhibitions. Other experts consulted on the project include Ray Clemens, Curator for Early Books and Manuscripts, Beinecke Library, Kirsten Seaver, independent historian of the Norse medieval period, Kenneth Towe, Curator of Paleobiology, National Museum of Natural History, Smithsonian (retired), Robin Clark, Head of Chemistry and Dean of Science, University College London (retired), and Aniko Bezur, Director of the Institute for the Preservation of Cultural Heritage, Yale University.

Opening May 19, 2018 in the Museum's R.J. Schaefer Gallery, The Vinland Map exhibition at Mystic Seaport will be the Map's first public viewing in the U.S. for more than 50 years. Three medieval documents – the Vinland Map, the *Hystoria Tartarorum* (Tartar Relation), and *Speculum Historiale* – will stand as the center of the installation, shown together publicly, we believe, for the first time since the 1960s.

The exhibition will present the complete saga of the Vinland Map, examining in detail the Map's mysterious origins, the reasons scholars initially believed it to be authentic, the world's response to its unveiling, the challenges to that conclusion, and the science that finally turned the tide of scholarly opinion. Besides presenting the documents at the center of the maelstrom, the exhibition will also bring the story right up to the present as the world's leading experts on the Map go on record with their current positions regarding the various controversies. The story weaves together the often-conflicting views of historians and scientists and draws the public into a debate with profound contemporary resonance. Visitors will be encouraged to weigh the various forms of evidence that together create our history, and illustrate how history is continually being re-written.

Interpreting the history of the Vinland Map as a parallel exhibition will demonstrate how publication of the Map in 1965 dramatically influenced the American public's awareness of and interest in Norse history and the possibility of pre-Columbian contact with the New World. The Map's controversial history will serve as an unsurpassed example of how scholars, historians, scientists, and indeed the public examine evidence and weigh the documentary record to arrive at often different conclusions about our shared past.

The Vinland Map exhibition will help fulfill Mystic Seaport's commitment to tell the story of the voyages by the Norse – their quests for exploration, love of competition and adventure and the freedom of the sea – the same inspirations that underpin the American character. The exhibition will also aid the public in understanding the origins of European culture in America, and help us to grasp how we weigh the various forms of evidence that together create our history, and how our history is continually rewritten.

Three interpretive units with interactive touch screen technology will cover the following topics:

Modes of Medieval Ethnography

Through this program, visitors will learn about the content of the Tartar Relation, one of the texts bound with the Vinland Map. This manuscript relates 13th c. Friar John of Plano Carpini's travels to the Mongol Empire, and through exploring these texts visitors can learn more generally about medieval modes of ethnographic and geographic writing.

Interactive Version of Vinland Map

This program will allow visitors to interact with the Vinland Map in digital form and learn more about the various locations mentioned on the map. Using a large, flat touchscreen monitor, visitors will click on locations highlighted on the map to open pop-up boxes containing information and/or images with captions.

Decoding the Manuscript Page

This program will offer visitors the chance to explore the elements of the manuscript page (specifically, one from the Speculum Historiale, which is probably the most striking and varied example in the exhibit) and the many ways that scribes communicated how the audience ought to read a manuscript.

The exhibit will also feature clips from video interviews with prominent players in the historical, scientific, and archaeological sides of this story, interviewed over the last 5 months by Nicholas Bell and filmed by Mystic Seaport videographers Dan Harvison and Brandon Morgan. The raw footage will be added to the Museum film & video collection for use by future researchers. It will also make public for the first time the results from the most recent rounds of scientific scrutiny of the map, conducted in February 2018.

Project Goals, Outcomes, and Evaluation:

Please list your project's goals, outcomes, and evaluation techniques (maximum 5).

Project Goals: What do you hope this project will achieve? Goals may include impact on the audience, institution, community, etc.

Outcomes: What will you observe that will let you know you are successfully meeting your goals?

Evaluation Technique: How will you collect and interpret information to measure goal attainment? (For example: survey, observation, interviews etc.)

Each Project Goal should have a corresponding Outcome and Evaluation Technique.

Please present in the following format:

Project Goal 1

Outcome 1

Evaluation Technique 1

Project Goal 2

Outcome 2

Evaluation Technique 2

Etc

Project Goals:

Goal 1: This exhibit will introduce a new audience to the 60-year controversy over the Vinland Map in a manner that is engaging, clear, and convincing.

Outcome 1: Visitors will exit the exhibition understanding why Yale initially presented the Map as a medieval document, what the public response to this news was, why other experts were skeptical of Yale's findings, what we've learned via scientific testing, and that current consensus is that the map is not genuine.

Evaluation 1: Outside evaluator Dr. Karen Wizevich and exhibits specialist Emma Hodges will conduct a total of 80 exit interviews with gallery visitors, including at least half with visitors previously unfamiliar with the topic. Questions will probe 1) what the visitor learned, 2) how they'd characterize their experience, 3) if they understand at least one argument on each side as to why the map might be authentic or not, and 4) if they see the connection between this manuscript and larger issues surrounding American identity.

Goal 2: For an audience of enthusiasts already familiar with the Vinland Map story, this exhibit will provide greater detail and updated information, including the results of recently conducted scientific tests and a new willingness by Yale authorities to proclaim the map is probably a fake.

Outcome 2: Knowledgeable visitors will exit the exhibition understanding that, while media and some specialists have promoted the Map's history as inconclusive, the evidence that the Map is modern is firm. They will also be able to identify the evidence.

Evaluation 2: Exit interviews with Vinland Map enthusiasts (defined as visitors who claim a pre-existing familiarity and interest in the topic) conducted by outside evaluator Wizevich and exhibits specialist Hodges will probe 1) what new information the exhibit presented, 2) whether the exhibit changed their minds about the authenticity of the map, and 3) whether they learned more than/less than/as much from the exhibit as they did from other prior sources (books, documentaries, lectures, etc.)

Goal 3: This exhibit will reach one of the primary goals of the "Era of Exhibitions" by drawing an increased number of visitors to our formal galleries.

Outcome 3: High visitor interest, as recorded by electronic counters mounted in the entrance/exit. Numbers will be checked and recorded daily by staff interpreters and tallied by exhibits specialist Emma Hodges, then given to evaluator Karen Wizevich for analysis.

Evaluation 3: A comparison of the numbers of visitors who pass through the exhibit compared to other exhibits in the same gallery, particularly the popular and well-publicized "Ships, Clocks & Stars" exhibit in 2015, to quantify visitor interest.

Goal 4: Mount an exhibit on an intellectually complex topic that will prove engaging to a broad number of people.

Outcome 4: Visitors will display an average dwell time that meets or exceeds the Mystic Seaport standard of 34 minutes for a narrative exhibit of this size.

Evaluation 4: Exhibits Specialist Emma Hodges, under the direction of outside evaluator Dr. Karen Wizevich, will conduct timing and tracking studies in the gallery during the following times: opening weekend; several regular weekdays in late May/early June; and during the Viking Days special weekend in mid-June. She will tabulate the data and then pass it to Dr. Wizevich for analysis to see the average dwell time and which exhibit sections engage visitors for the longest time.

Sample Evaluation Materials:

Please include an attachment containing your sample evaluation materials.

[\[See the appendix for this upload\]](#)

Humanities Content:

How do you expect the final project will help the audience understand and appreciate human history, culture, values, and beliefs?

What themes or issues did you convey in this project?

The exhibition will help our target audiences understand how a single sheet of parchment has served as a touchstone for a wide ranging debate within American culture about first European contact with the New World, and how the origins of those contacts continue to influence cultural narratives in this country about who we are and where we come from.

Themes will include an investigation of the response to the Map's publication from Italian-American and Scandinavian-American communities and why supposed evidence of medieval Norse exploration of North America was perceived as antagonistic by the former, including many examples of responses from members of the general public held in the archives at Yale.

Another theme will be the subject of expertise – who holds it, how we define it, who respects it, and how we determine as individuals and as a culture whom to believe when 'experts' offer conflicting opinions on historical evidence.

Related to this theme, the exhibition will review how different forms of evidence are weighted differently by the public – eg. visual (the Map) vs. archaeological (excavations of a Norse settlement in L'Anse aux Meadows, Newfoundland), vs. oral (the medieval Vinland sagas passed down by generations of Icelanders). In particular, the exhibition will detail the results of many years of digs in Newfoundland, which have established that a Norse settlement existed there circa 1000.

The exhibition will also highlight the variety of tools we can use to investigate the authenticity of a document – from comparing a purported 15th century map to other medieval maps, to study of medieval handwriting (paleography), to text analysis, to several generations of scientific testing, including carbon dating, raman microscopy, X-ray fluorescence, and peptide sequencing – and look at how the 40-year history of scientific testing has influenced consideration of the Map within the humanities.

Another subject of the exhibition will be, how can careful analysis of historical evidence go wrong? Several experts at Yale and the British Museum were convinced the Vinland Map was an authentic medieval document, some to their deathbeds, regardless the mounting evidence to the contrary. What led them to believe they were right, and how can we extrapolate that dynamic for other contexts?

A key opportunity in the exhibition is to bring the Vinland Map out into public view along with two genuine 15th century manuscripts associated with the Map to discuss how we can learn about all three by comparing them with each other. There is a fundamental benefit when discussing a possible fake to view it in relation to materials we know to be medieval. This will also be an opportunity for the target audiences to experience first hand documents and materials nearly six centuries old, and to learn about them through interactive content stations developed by Yale's digital humanities group. These stations will provide translations and historical context for all three manuscripts in the exhibition.

Project Audience:

What target audience did you identify for this project? Why did you choose this audience?

This exhibition will target three key audiences among Mystic Seaport audiences:

Casual Visitors: (including both first-time and returning members) who may be unfamiliar with the Vinland Map, or are only vaguely aware of it through press or TV coverage. If they have heard of it, these visitors are most likely to possess dated information on the Map's validity, and may be unaware of the current scholarly consensus. Casual visitors may also recall the shock of the Map's publication, and how it jarred Americans' sense of history..

Enthusiasts: (including scholars in the humanities, the history of exploration, cartography, medieval history, Norse history, paleography and manuscript studies, scholars in the sciences, paleobiology, mineralogy, and forensic study). The Vinland Map can be included among the most controversial documents in modern history and has generated enormous interest among academics of all stripes in both the humanities and sciences. Of those almost none have seen the Map in person, it not having been on public view in the US since 1966. The exhibition will not only afford this audience an overview of the Map's history but also allow it to examine the Map up close.

School Groups: The exhibition will be overlap with two school years (the end of 2017-2018 and beginning of 2018-2019) and will provide an excellent case study for teachers in multiple subjects to discuss topics as varied as the importance of history in shaping cultural identity and how scientific testing advances through generations of new technologies.

Public interest in Viking-related topics is very strong, as evidenced by visitor, member, and social media data from the visit of the replica Viking longship Draken Harald Hårfagre at Mystic Seaport (October 2016 – present). The Draken is a Viking longship, a reconstruction of what the Norse Sagas refer to as a "Great Ship." In April 2016, Draken left her home port Haugesund in Norway to begin an expedition to sail to America. The aim of the expedition was to explore and relive one of the most mythological sea voyages - the first transatlantic crossing and the Viking discovery of the New World, more than 1,000 years ago. Captain Björn Ahlander recounted the crew's adventures as the kickoff

speaker in the Museum's 2016-2017 Adventure Series; his two programs had the highest registration in the history of the Adventure Series Program. A total of 7,282 visitors boarded the Draken to learn about the ship, the story of her journey, and the history of the Vikings. The following video posted to the Museum's Facebook page garnered 490,000 views, 6,700 shares, 3,000 reactions, and 252 comments: <https://www.facebook.com/mysticseaport/videos/10155188477524288/>
The Draken will be at Mystic Seaport through May 2018 to coincide with the installation of The Vinland Map and The Vikings Begin exhibitions.

A formative study of visitor interviews conducted in summer 2017 showed that while the majority of visitors believe that Vikings arrived in North America before Columbus, very few were familiar with the story of the Vinland Map. Respondents expressed strong interest in the archaeological and forensic aspects of the Vinland Map story, along with the conflicting points of view it elicited from different societal and ethnic groups. The exhibit addresses those components. 58% of respondents reported they were extremely likely or very likely to return this year to see The Vinland Map exhibit.

Total # of Audience Members Anticipated for Entire Project (Total Project Attendance):

14000

Marketing and Publicity:

Describe your plans to promote the project, including specific media outlets (print, broadcast, social) and estimated coverage for each. How will you reach your target audience?

For Documentary Film submissions please additionally respond to the following in this section:

- *Describe the outreach strategy, including plans for theatrical, festival, educational and/or community presentation, broadcast and/or distribution, web distribution, and for cultivating and engaging online audiences, as applicable.*

Given the scope of Mystic Seaport's visitation, marketing impact, and media outreach, the Museum has significant capacity to build broad public awareness of the Vinland Map among local, regional, national, and international audiences. It will be the focus of a coordinated multi-media outreach effort to generate coverage in print, television, radio, online, and social media (e.g., Facebook, Twitter, YouTube, Instagram and LinkedIn). Exhibit details will be shared through Museum event and program emails. In addition, Mystic Seaport Magazine (distributed to 13,700 member households) will feature the exhibit. During the grant period, Mystic Seaport will employ multi-media outreach for the project, including coverage through social media and Museum eblasts, which are distributed to an estimated 31,000 email addresses. Information about the project will be disseminated through Mystic Seaport's news blog on the Museum's website, www.mysticseaport.org. The Museum's website hosted 540,266 unique web visitors in the last fiscal year. The project will also be showcased in the "Our Community" section of Mystic Seaport's website for teachers, <http://educators.mysticseaport.org/community/>. This site averages 1,000 views per month.

Schedule:

Describe the major tasks to complete the project, specific dates for both the beginning and completion, and the team member(s) responsible for each. Include ONLY tasks during the requested grant period.

Please use the following format:

1 Start & End Date; Task; Team Member(s)

2 Start & End Date; Task; Team Member(s)

etc

CTH Workplan: Grant period May 1 - June 29

WEEK 1: (May 1-6)

- Daily production meetings (Engelman, Crewe, Schaefer, Hodges, Andersen, Shay, Nadelberg)
- Evaluator Wizevich at Mystic Seaport for evaluation launch (Wizevich, Engelman, Hodges)
- Deliver final casework and exhibit furniture to gallery; install and clean vitrines (Schaefer, Crewe, Nadelberg)
- Install gallery interior graphics and text panels (Andersen, Hodges, Nadelberg)
- Final files for touchscreen programs submitted by content developers (Hurley, Ringel-Ensley, Westermeier)
- Purchase third and final Kioware kiosk software license and install software and content modules for touchscreen programs (Caldwell)
- Promotional work (content production, media outreach, website production, event and social media promotion) and digital advertising (paid social-media posts and ads, geo-targeted digital ads) for opening weekend (Bass)

WEEK 2: (May 7-13)

- Daily production team meetings (Engelman, Crewe, Schaefer, Hodges, Andersen, Shay, Nadelberg)
- Develop visitor evaluation tools and train exhibits specialist Hodges in data collection (Wizevich, Hodges)
- Install artifacts (White, Nadelberg)
- Install promotional signage outside gallery and in visitor centers (Andersen, Nadelberg, Hodges, Schaefer)
- Install touchscreen kiosks in gallery (Schaefer, Hodges)
- Lock-down kiosk software and operating system for touchscreen interactives; test and prepare kiosks for public use (Caldwell)

WEEK 3: (May 14-20)

- Daily production team meetings (Engelman, Crewe, Schaefer, Hodges, Andersen, Shay, Nadelberg)
- Prepare and distribute training materials about touchscreen interactives to staff (Caldwell)
- Light gallery and check light levels for original artifacts & manuscripts (Shay, White)
- Clean gallery surfaces and remove trash, work tables, work lights, etc. (Schaefer, Hodges, Shay, Crewe, Andersen)
- Install new batteries in electronic people-counters at gallery entrance doors and reset to 000 (Hodges)
- Train interpretation and museum education staff (Engelman, Nadelberg)

- Staff and volunteer preview (Engelman, Nadelberg)
- Press preview (Engelman, Bass)
- VIP opening for Vinland Map and Vikings Begin (Engelman, Bass)
- Member preview and public opening day (Engelman, Bass)
- Data collection (observations and interviews) for visitor evaluation begins; tally visitor counts (Wizevich and Hodges)

WEEK 4: (May 21-27)

- Data collection for evaluation: enter data and tally visitor counts (Hodges)
- Opening weekend debrief and to-do list for remediation (Engelman, Nadelberg, Hodges, Andersen, Crewe, Shay, Schaefer)
- Graphic panels repair & replacement, if necessary (Andersen)
- Re-supply interactives (Andersen, Crewe)
- Promotional work (content production, media outreach, website production, event and social media promotion) and digital advertising (paid social-media posts and ads, geo-targeted digital ads) for Viking Days weekend (Bass)
- Pay bills, begin archiving files (Engelman, Crewe, Andersen, Hodges)

WEEKS 5-6: (May 28-June 3; June 4-10)

- Promotional work (content production, media outreach, website production, event and social media promotion) and digital advertising (paid social-media posts and ads, geo-targeted digital ads) for Viking Days weekend (Bass)
- Data collection for visitor evaluation study (Hodges)
- Pay bills, finish archiving project files (Engelman, Crewe, Andersen, Hodges)

Week 6: (June 11-17)

- Viking Days weekend festival (Engelman, Wizevich, Hodges, Bass)
- Promotional work (content production, media outreach, website production, event and social media promotion) and digital advertising (paid social-media posts and ads, geo-targeted digital ads) for Viking Days weekend (Bass)
- Begin compiling narrative and budget info for CTH grant report

WEEK 7:

- Analyze data from visitor observations and interviews; write summative report (Wizevich and Hodges)
- Finish CTH grant report: submit June 29 to close out the grant

Presenters, Consultants, and Project Team:

Please list your project's major participants including presenters, consultants, scholars, staff, etc.; indicate if they will be paid with CTH grant funding; and list their major project responsibilities.

Make sure you include ALL participants for whom you are requesting CTH funding in this section.

Please attach resumes or bios for all listed in the Project Team in the next question.

Please use the following format:

Team Member 1 Name

Team Member 1 Title

Team Member 1 Organization

Paid with CTH grant funds

Major Responsibilities

Project Team*

Team Member #1 Name: Elysa Engelman

Team Member #1 Title: Director of Exhibits

Team Member #1 Organization: Mystic Seaport Museum

Paid with CTH Grant Funds: No

Major Responsibilities: Project Director: manage project team; lead daily production meetings; train Interpretation and Museum Education staff in exhibit content; lead staff/volunteer/press previews; participate in Viking Days weekend

Team Member #2 Name: Nicholas Bell

Team Member #2 Title: Senior Vice President for Curatorial Affairs

Team Member #2 Organization: Mystic Seaport Museum

Paid with CTH Grant Funds: No

Major Responsibilities: Manage partnership with Yale's Beinecke Library; manage Audio/visual components including interviews and involvement of subject matter experts; draft exhibit script; write label and panel text (prior to start of grant).

Team Member #3 Name: Laura Nadelberg

Team Member #3 Title: Research Assistant

Team Member #3 Organization: Mystic Seaport Museum

Paid with CTH Grant Funds: No

Major Responsibilities: Draft exhibit script; write label and panel text (prior to start of grant); deliver casework and exhibit furniture to gallery; install exhibit artifacts; train Interpretation and Museum Education staff; install/clean vitrines; assist with staff/volunteer preview

Team Member #4 Name: Emma Hodges

Team Member #4 Title: Exhibit Specialist

Team Member #4 Organization: Mystic Seaport Museum

Paid with CTH Grant Funds: No

Major Responsibilities: Install touchscreen kiosks in gallery; install interior/exterior signage in gallery and visitor center; clean gallery; conduct visitor timing/tracking (observation) studies and interviews; tabulate data; participate in Viking Days weekend; assist Wizevich in writing summative evaluation report.

Team Member #5 Name: Elissa Bass

Team Member #5 Title: Social Media/Digital Manager

Team Member #5 Organization: Mystic Seaport

Paid with CTH Grant Funds: No

Major Responsibilities: Promotional work (content production, media outreach website production, event and social media promotion) and digital advertising (paid social media posts and ads, geo-targeted digital ads); assist with press review; participate in Viking Days weekend.

Team Member #6 Name: Arleen Andersen

Team Member #6 Title: Exhibits Graphic Designer

Team Member #6 Organization: Mystic Seaport Museum

Paid with CTH Grant Funds: No

Major Responsibilities: Design, produce, and install gallery interior graphics and text panels; install external promotional signage outside gallery and in visitor centers; graphic panels repair/replacement as needed; resupply interactives

Team Member #7 Name: Jeff Crewe

Team Member # 7 Title: Exhibit Supervisor and Designer

Team Member #7 Organization: Mystic Seaport Museum

Paid with CTH Grant Funds: No

Major Responsibilities: Create floor plans, elevations, and concept drawings for installation; deliver casework and exhibit furniture to gallery; clean gallery; resupply interactives

Team Member #8 Name: Alan Schaeffer

Team Member #8 Title: Exhibits Carpenter/Fabricator

Team Member #8 Organization: Mystic Seaport Museum

Paid with CTH Grant Funds: No

Major Responsibilities: Exhibit fabrication; deliver final case work and exhibit furniture to gallery; install vitrines; install

Team Member #9 Name: Jonathan Shay

Team Member #9 Title: Special Project Manager

Team Member #9 Organization: Mystic Seaport

Paid with CTH Grant Funds: No

Major Responsibilities: Light gallery and check light levels for original artifacts and manuscripts; clean gallery surfaces;

Team Member #10 Name: Chris White

Team Member #10 Title: Assistant Collections Manager

Team Member #10 Organization: Mystic Seaport

Paid with CTH Grant Funds: No

Major Responsibilities: Light gallery and check light levels for original artifacts and manuscripts; install exhibit artifacts

Team Member #11 Name: David Caldwell

Team Member #11 Title: Website Consultant

Team Member #11 Organization: Self-employed

Paid with CTH Grant Funds: No

Major Responsibilities: Purchase software license, install software and content modules for touchscreen programs; prepare and distribute training materials about touchscreen interactives to

staff; lockdown kiosk software and operating system for touchscreen interactives; test and prepare kiosks for public use

Team Member #12 Name: Gina Hurley
Team Member #12 Title: Ph.D. Candidate
Team Member #12 Organization: Yale University
Paid with CTH Grant Funds: No
Major Responsibilities: Develop content for exhibit touchscreen interactives

Team Member #13 Name: Burton Westermeier
Team Member #13 Title: Ph.D. Candidate
Team Member #13 Organization: Yale University
Paid with CTH Grant Funds: No
Major Responsibilities: Develop content for exhibit touchscreen interactives

Team Member #14 Name: Meredith Ringel-Ensley
Team Member #14 Title: Lecturer
Team Member #14 Organization: University of North Carolina Ph.D. student; lecturer, Eastern CT State University
Paid with CTH Grant Funds: No
Major Responsibilities: Develop content for exhibit touchscreen interactives

Team Member #15 Name: Dr. Karen Wizevich
Team Member #15 Title: Museum Consultant
Team Member #15 Organization: Self-employed
Paid with CTH Grant Funds: Yes
Major Responsibilities: Manage exhibit summative evaluation: develop visitor evaluation tools and train exhibits specialist Hodges in data collection; data collection (observations and interviews); analyze data from visitor observations and interviews; participate in Viking Days weekend; prepare summative evaluation report

Project Team Resumes and Bios:

Please attach a CV or resume of up to 3 pages for each person for whom CTH grant funding is being sought that demonstrates appropriate skills and/or scholarship to carry out their role in the project.

Short (one- or two-paragraph) bios of vital team members NOT paid through CTH funds may also be included.

Note: Only 1 attachment can be uploaded in this space. If you have multiple resumes to share, please combine into 1 document before uploading.

[NOTE: Sample Model Grants do not share this upload]

Collaborative Projects:

If the project is a collaborative effort, managed with other organizations, please include letters from those partners describing their respective roles in the project.

[\[See the appendix for this optional upload\]](#)

Budget: [\[See the appendix for this upload\]](#)

Budget Notes and Justification:**CTH Budget Notes****Salaries & Wages:**

Nicholas Bell, Senior VP for Curatorial Affairs, is listed in the Project Team but his time is not counted as match so is not included in the budget

[REDACTED]

Honoraria:

David Caldwell's work during this grant period will be Phase III of a 3-phase project. Phases I and II will occur before the grant begins and be paid for out of external cash in-hand. See his separate proposal for more details.

Technical Design Services:

Graphics production will be done by our regular supplier, Synnott Imaging Systems of Plainfield, CT. Amounts are based on costs for recent work either in the gallery or other gallery installations for work of the same kind, material, and size: standard graphics cost is \$12/sq. foot for full-color panels, on 1/8-inch Sintra, with double-stick tape.

Custom-printed wallpaper graphics are large (6 ft high x 8 ft wide or larger) full-color images printed on panorama Walk & Wall vinyl that is applied directly to the wall. Price includes installation and removal at the end of the exhibit.

Evaluation:

See the separate cost estimate from evaluator Karen Wizevich for greater detail.

Project Revenue Plan for External Cash Match

Please provide information about your plans to secure the required percentage of matching funds from external sources prior to the end of the requested grant period.

List of Expected Grants/Grantors:

Please provide information about your project's grants/ grantors to be used as external cash match.

Please use the following format:

Grant/Name of Grantor

Requested Grant Amount

Anticipated Award Date

Confirmed Amount

Name of Grantor: Anonymous individual donor
Requested Grant Amount: \$15,000
Anticipated Award Date: April 2018
Confirmed Amount: \$15,000

Contingency Plan for Grants:

If you do not receive grants for which you have applied, how will you generate the required percentage of external cash match?

Funding for the external match is already in hand.

Total Individual Donations:

Please list the total amount of individual donations expected to be used as external cash match for your project.*

**Certification that individual donations are directed to a CTH-funded project is required at the end of the grant period.*

\$10,655.00

In addition to the attachments required in previous sections, Implementation grants require certain, additional attachments based on project type.

1. Exhibitions and Site Interpretation

Exhibitions and site interpretation are the physical presentation of humanities content and are typically installed on a permanent or temporary basis at museums and other public sites.

Exhibitions and site interpretation grants require all of the following:

- *A list or illustrations of key objects or images*
- *Sample text for introductory panel, main section panels, and object labels*
- *A rendering of the exhibition's floor plan and sample elevations*
- *A brief narrative "walk-through" of the exhibition or site that describes the visitor experience*
- *Specific examples of "take-away messages" or learning objectives and how you will convey them through the exhibition*
- *Admission and other fees*

Exhibition Attachments Quick Check List

If you are requesting funding for an exhibition, have you included:

- ☐ *List of objects/images*
- ☐ *Sample text copy*
- ☐ *Floor plan*
- ☐ *Sample elevations*
- ☐ *Narrative walk-through*
- ☐ *Take-away messages/learning objectives*
- ☐ *Admission and fees*

2. Presentation Programs

Public presentations include lectures, performances, festivals, and guided discussions that engage audiences in interpreting and examining issues and themes.

Include a summary (maximum two pages) that provides a concise description of the proposed program, including:

- *Title, theme(s), and format of public program(s)*
- *Dates and times of program(s)*
- *Location and audience capacity of the venue(s)*
- *Admission and other fees*
- *Name of speakers, educators, or presenters*
- *If presentation is part of a larger program, include a schedule of events for the date(s)*

For film and theater presentations, also include up to two pages that include:

- *A synopsis of the plot or story line*
- *Specific examples of "take-away messages" or learning objectives*

3. Interpretive Digital Media Projects

Connecticut Humanities invites digital media projects including websites, creation & dissemination of audio and visual material, mobile applications, Geographic Information System applications, & data visualization projects.

Projects must be well grounded in scholarship and illuminate ideas and insights central to the humanities. Please provide these attachments for all digital projects:

- *Statement of technologies to be used and justification for selection*
- *Justification for choosing any proprietary technologies over open-source options*
- *Description of standards (digitization, metadata, public accessibility, privacy) that will be employed*
- *Access or other fees for the public to use the site or app*

- *Explanation of how you will obtain permissions for intellectual property you do not own*
- *For website and mobile app projects: sample text, screen shots and site map or structural description for the website*
- *For other media projects: sample text & audio/visual components*

4. Documentary Films

Documentary film grants strengthen the humanities content of documentary media productions and help propel projects to completion.

Projects must be:

- *in the production stage*
- *have a work in-progress to submit*
- *actively involve at least two Humanities subject area experts to help advise on, frame, & contextualize subject matter throughout the production process*
- *have a previously completed work sample to submit.*

Documentary film grants require:

- *A brief treatment detailing the creative style, narrative structure, imagery or audio content, animation, & interactive elements, as applicable, of your project. (2 pp. max)*
- *Access to the work-in-progress sample for which you seek funding. (Suggested length: 10 minutes.)*
- *Access to a prior work sample in its entirety.*
- *Explanation of the prior work submitted & brief outline of role(s) your project team members played in its creation. Provide any necessary background information or context for the work-in-progress. (2 pp. max)*

File Upload:

Please attach one (1) document containing all of the materials required as outlined above, based on the project type(s) for which you are requesting funding, to help us evaluate the quality and humanities content of your project.

Note: Only 1 attachment can be uploaded in this space. If you have multiple documents to share, please combine into 1 file before uploading.

[\[See the appendix for this upload\]](#)

Appendix

While Project Team Resumes and Bios are required for this application, this upload is not included with this sample model grant application.

This sample model grant includes the following documents:

1. Sample Evaluation Materials
2. Collaborative Projects
3. Budget
4. Required File Upload

The Vinland Map Exhibition

Sample Evaluation Material

Vinland Map Interview -- Formative Study, conducted Summer 2017 by Scripps intern Elizabeth DiPippo

1. Have you ever heard of the name Vinland? Y/N If N, skip to Q #6.
2. What do you know of it?
3. Have you ever heard of the Vinland Map? Y/N, if N skip to Q #6.

Some knowledge Well-informed Professional expertise

4. What do you remember about it?
5. Where did you learn about it?
6. When you view this image what catches your eye? [show picture of the Vinland Map]
7. Have you heard or read that there were Viking settlements in North America before Columbus? Y/N
8. Where did you learn of this?
9. There has been a lot of disagreement over the past 50 years concerning the authenticity of the Vinland Map, and Mystic Seaport is considering exploring this. For each topic, on a scale of 1-10, please rate your interest in learning more about each of the following:

Forensic Research

Extremely interested Less Interested

10 9 8 7 6 5 4 3 2 1

Archaeological Discoveries

Extremely interested Less Interested

10 9 8 7 6 5 4 3 2 1

Italian American vs. Norwegian Points of View

Extremely interested Less Interested

10 9 8 7 6 5 4 3 2 1

10. How likely are you to return to Mystic Seaport for an exhibit on the Vinland Map? Please choose one:

Extremely Likely

Very Likely

Somewhat Likely

Not at all Likely

11. How likely would you be to return for an exhibit on Vikings? Please choose one:

Extremely Likely

Very Likely

Somewhat Likely

Not at all Likely

Demographics:

Age:

Gender:

Thank you for your participation.

Yale Beinecke Rare Book & Manuscript Library

January 17, 2018

CT Humanities
100 Riverview Center, Suite 270
292 Main Street
Middletown, CT 06457

Dear members of the Connecticut Humanities Review Committee:

On behalf of the Beinecke Rare Book & Manuscript Library, I write to express great enthusiasm about our partnership with Mystic Seaport in the development of The Vinland Map exhibition, which will be on display at the Museum from May – September 2018. We look forward to serving as a key humanities partner for the project, with roles to include the loan of key artifacts, resource sharing, and advising on content, as outlined below.

The Beinecke Library is pleased to loan Mystic Seaport the three central artifacts of the installation: the Vinland Map and two additional related and genuine 15th century documents, the Speculum historiale and the Hystoria Tartarorum (Tartar Relation).

In addition, the Beinecke Library and the Yale community are working closely with Mystic Seaport to shape the exhibition's interpretation. We have advised on the Map's provenance and history, the many questions still raised by the map, and current opinions on the authenticity of the Map. We will imminently conduct new scientific testing on the Map in direct support of the exhibition's goals to maximize this history's educational potential. We are also poised to assist in addressing any conservation and security concerns as the Map visits Mystic. (This will be the first time the Map has been on public view in the United States in more than 50 years.)

The Beinecke Library is also pleased to partner with Mystic Seaport in jointly hosting a symposium around the Vinland Map this summer.

We are excited to join Mystic Seaport in re-introducing the Vinland Map to the American people as a document of intense interest and controversy, with much to teach us about the tools and techniques of historical inquiry and how our history is continually rewritten.

Please do not hesitate to contact me if I can provide further information on the scope of our collaborative efforts.

Sincerely,



Edwin C. Schroeder, Director
Beinecke Rare Book & Manuscript Library

SALARIES & WAGES: Total amount of Salaries & Wages requested in CTHF Funds may not exceed 10% of the total grant request.
There is no cap on Salaries & Wages used as Applicant Cash Contributions.

Note: Quick Grants do not fund Salaries & Wages, but it can be used as Applicant Cash Contributions.

NOTE: The total of each item detail must match the total of each source of funds. X indicates a problem.

Item Detail				
Name/Position		Rate	#	Total
1	Elysa Engelman			\$3,866
2	Laura Nadelberg			\$1,696
3	Emma Hodges			\$1,339
4	Elissa Bass			\$1,163
5				
6	Jeff Crewe			\$2,245
7	Alan Schaeffer			\$1,550
8	Jonathan Shay			\$1,022
9	Chris White			\$651
Total				\$13,532

CTHF Funds Requested and Matching Funds (Source of Funds)				
CTHF Funds	External Cash Contributions	Applicant Cash Contributions	In-Kind Contributions	Total
		\$3,866		\$3,866
\$1,696				\$1,696
		\$1,339		\$1,339
\$0		\$1,163		\$1,163
\$0		\$2,245		\$2,245
		\$1,550		\$1,550
		\$1,022		\$1,022
		\$651		\$651
\$1,696	\$0	\$11,836	\$0	\$13,532

HONORARIA & CONSULTING

NOTE: The total of each item detail must match the total of each source of funds. X indicates a problem.

Item Detail				
Name/Position		Rate	#	Total
1	David Caldwell			\$3,225
2	Gina Hurley			\$1,000
3	Burton Westermeier			\$1,000
4	Meredith Ringel-Ensley			\$1,000
Total				\$6,225

CTHF Funds Requested and Matching Funds (Source of Funds)				
CTHF Funds	External Cash Contributions	Applicant Cash Contributions	In-Kind Contributions	Total
	\$3,225			\$3,225
	\$1,000			\$1,000
	\$1,000			\$1,000
	\$1,000			\$1,000
\$0	\$6,225	\$0	\$0	\$6,225

TECHNICAL DESIGN SERVICES

NOTE: The total of each item detail must match the total of each source of funds. X indicates a problem.

Item Detail				
Name/Position		Rate	#	Total
1	Intro Panel	\$175.00	1	\$175
2	Donor panel	\$0.00	1	\$0
3	Custom-printed wallpaper graphics	\$1,200.00	5	\$6,000
4	Graphics, sections 1-7, @\$12.01/sq ft	\$12.01	700	\$8,408
5	Dayna Carignan, freelance designer			\$2,400
Total				\$16,983

CTHF Funds Requested and Matching Funds (Source of Funds)				
CTHF Funds	External Cash Contributions	Applicant Cash Contributions	In-Kind Contributions	Total
\$175				\$175
\$0				\$0
\$6,000				\$6,000
\$6,004	\$2,404			\$8,408
\$2,400				\$2,400
\$14,579	\$2,404	\$0	\$0	\$16,983

TRAVEL: CTH may cover mileage up to .57 per mile. Enter rate and number of miles below.

Total travel expenses may not exceed 20% of total grant request.

NOTE: The total of each item detail must match the total of each source of funds. X indicates a problem.

Item Detail				
Name/Position		Rate	#	Total
1				\$0
2				\$0
3				\$0
4				\$0
5				\$0
6				\$0
7				\$0
8				\$0
9				\$0
10				\$0
11				\$0
12				\$0
13				\$0
14				\$0
15				\$0
Total				\$0

CTHF Funds Requested and Matching Funds (Source of Funds)				
CTHF Funds	External Cash Contributions	Applicant Cash Contributions	In-Kind Contributions	Total
				\$0
				\$0
				\$0
				\$0
				\$0
				\$0
				\$0
				\$0
				\$0
				\$0
				\$0
				\$0
				\$0
				\$0
\$0	\$0	\$0	\$0	\$0

PRINTING, COPYING & SUPPLIES: Total photocopying or printing expenses may not exceed 40% of total grant request

NOTE: The total of each item detail must match the total of each source of funds. X indicates a problem.

Item Detail					CTHF Funds Requested and Matching Funds (Source of Funds)				
Description		Rate	#	Total	CTHF Funds	External Cash Contributions	Applicant Cash Contributions	In-Kind Contributions	Total
1									\$0
2									\$0
3									\$0
4				\$0					\$0
5				\$0					\$0
6				\$0					\$0
7				\$0					\$0
8				\$0					\$0
9				\$0					\$0
10				\$0					\$0
11				\$0					\$0
12				\$0					\$0
13				\$0					\$0
14				\$0					\$0
15				\$0					\$0
16				\$0					\$0
17				\$0					\$0
18				\$0					\$0
19				\$0					\$0
20				\$0					\$0
Total				\$0	\$0	\$0	\$0	\$0	\$0

EQUIPMENT AND ROOM RENTAL OR PURCHASE: Total Equipment expenses may not exceed 40% of total grant request.

NOTE: The total of each item detail must match the total of each source of funds. X indicates a problem.

Item Detail				
Description		Rate	#	Total
1				\$0
2	Light fixtures and bulbs	\$200.00	7	\$1,400
3	Projector bulbs	\$60.00	2	\$120
4	60-in. monitor for intro area		0	\$0
5	1-year kiosk software subscription	\$100.00	1	\$100
6	Interpreter stool		0	\$0
7	Stools for scriptorium and science area	\$50.00	6	\$300
Total				\$1,920

CTHF Funds Requested and Matching Funds (Source of Funds)				
CTHF Funds	External Cash Contributions	Applicant Cash Contributions	In-Kind Contributions	Total
				\$0
\$1,400				\$1,400
\$120				\$120
				\$0
\$100				\$100
				\$0
\$300				\$300
\$1,920	\$0	\$0	\$0	\$1,920

PROMOTION

NOTE: The total of each item detail must match the total of each source of funds. X indicates a problem.

Item Detail			
Description		Rate	#
1	Exhibition building exterior signs	\$420.00	2
2	Exhibition posters in visitor centers	\$60.00	2
3	Marketing costs - FB, magazine, etc.		
4	Visitor center banner	\$325.00	1
5	Door graphics	\$200.00	1
Total			\$3,485

CTHF Funds Requested and Matching Funds (Source of Funds)				
CTHF Funds	External Cash Contributions	Applicant Cash Contributions	In-Kind Contributions	Total
\$840				\$840
\$120				\$120
\$2,000				\$2,000
	\$325			\$325
	\$200			\$200
\$2,960	\$525	\$0	\$0	\$3,485

EVALUATION

NOTE: The total of each item detail must match the total of each source of funds. X indicates a problem.

Item Detail			
Description		Rate	Total
1	Karen Wizevich @ [REDACTED]/day		\$3,600
2	Paper, clipboards, pens for evaluation		\$15
3	Lithium batteries for people counters	\$15.00	\$150
Total			\$3,765

CTHF Funds Requested and Matching Funds (Source of Funds)				
CTHF Funds	External Cash Contributions	Applicant Cash Contributions	In-Kind Contributions	Total
\$1,800	\$1,800			\$3,600
	\$15			\$15
	\$150			\$150
\$1,800	\$1,965	\$0	\$0	\$3,765

BUDGET SUMMARY: Values fill automatically from the detail pages.

Make sure that the CTH Funds requested total below matches the CTH Funds Requested total on your application cover page.

Budget Summary	Source of Funds Summary				
	CTH Funds	External Cash Contributions	Applicant Cash Contributions	In-Kind Contributions	Total
Salaries & Wages	\$1,696	\$0	\$11,836	\$0.00	\$13,532
Honoraria	\$0	\$6,225	\$0	\$0.00	\$6,225
Technical Design Services	\$14,579	\$2,404	\$0	\$0.00	\$16,983
Travel	\$0	\$0	\$0	\$0.00	\$0
Printing, Copying and Supplies	\$0	\$0	\$0	\$0.00	\$0
Equipment and Room Rental or Purchase	\$1,920	\$0	\$0	\$0.00	\$1,920
Promotion	\$2,960	\$525	\$0	\$0.00	\$3,485
Evaluation	\$1,800	\$1,965	\$0	\$0.00	\$3,765
Total	\$22,955	\$11,119	\$11,836	\$0	\$45,910

Mystic Seaport
Implementation Proposal to
Connecticut Humanities

The Vinland Map Exhibition

Attachments:

List of Key Objects
Sample Label Copy
Exhibit Floor Plan and Elevations
Synopsis of Exhibit Walkthrough and Learning Objectives
Detailed Exhibit Script (Working Draft)
Description of Touchscreen Interactives
Mystic Seaport Admission Fees
David Caldwell Quote
Karen Wizevich Quote

The Vinland Map Exhibition: List of Key Objects

Speculum historiale

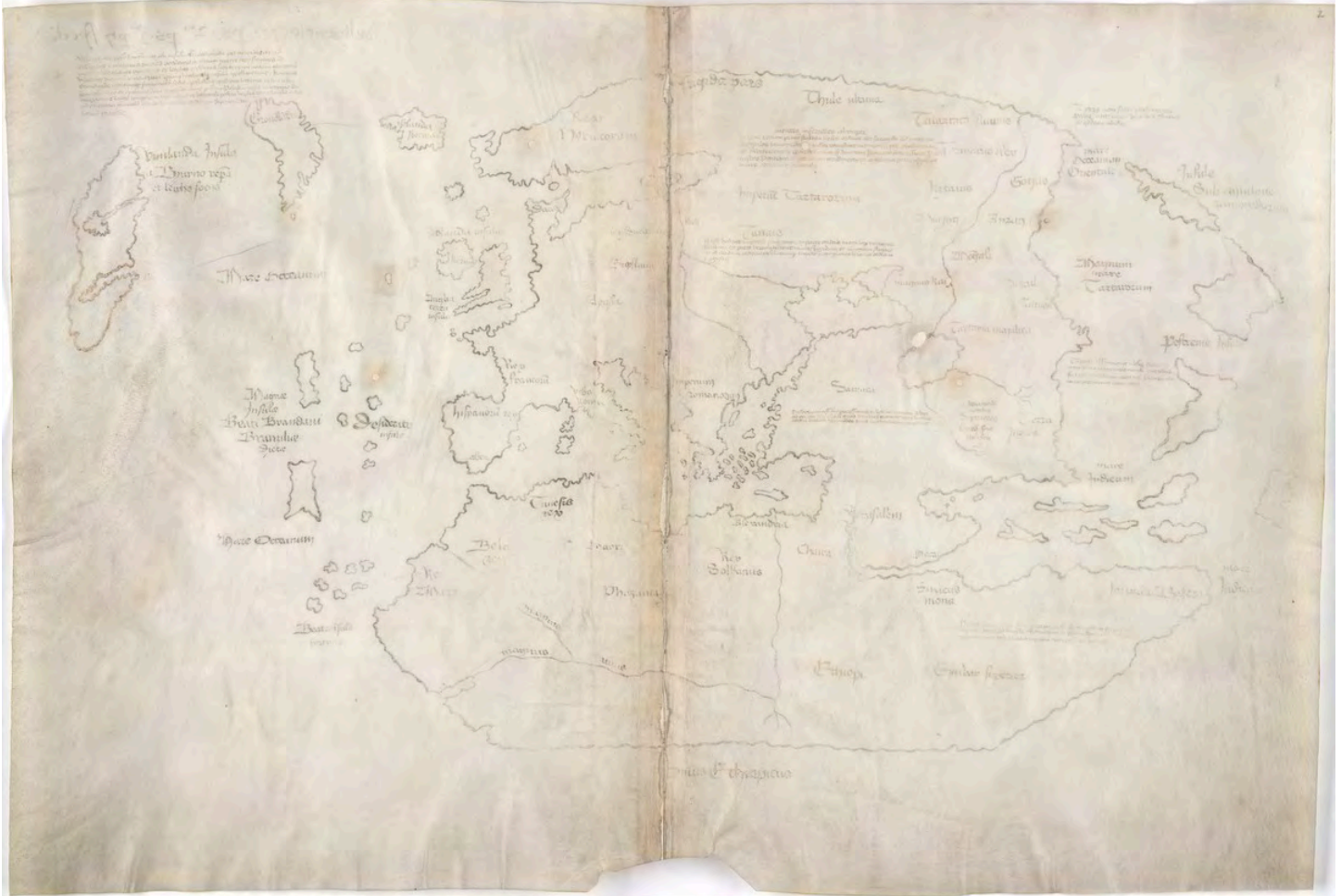
Call Number: Beinecke MS 350

Hic morte honoz
theodosius eiusde
nepos cepit Anno
domini cccc. m. et
mundi vero m. cccc. lxxviii.
et impauit solus annis m.
huic anno primo Vandal
mauritaniam inuaserunt an
no. n. celestinus romane eccie
quadragessimus primus papi
det hic constat ut psalmda
uid. c. l. ante sacrificiū caneret
androphonatum ex omib; p
ante non fiebat nisi tantum
epla bti pauli et sandi euuan
gelii recitabat. **H**ic m
tuto excerpti de psalms mtrou
tus gradalia offertoria ante
sacrificiū orationes mtrou
candum cum modulatione ad m
sam in ecclia romana cantari ce
perunt Theodosius per audibu
rū ductu angeli iohanne tiza
num opprimt rone niter echi
um et Bonifacium ex rei mili
tariis gloria acta mudiā rei
publice percurrit dispendia
Anno sequenti Cassianus de ecclia
constantinopolitana iohanne
crisostomo electus et in massi
liam pallacie gallic prebiter
ordinatus multa scripsit inter
que etiam compertas in egypto
uitas patrum docti magis et
regulas datus ad plurimos li
bras exposuit **actor** // hic est
iohannes heremita cuius dca
superius et collationes abbe
uitas ad edificacionem lege
cum mserui **S**icut apocryfa
reputari videantur eius opus
cula in decarto tclasi pape.

Anno theodosii. **h** de mipe
in theodosius uo eisdem
Valentinianū palat theodosii cu
de amice sue ex con valentima
stano filium impato **no** **synibeg**
rem facit cum q. am palatda aya
tie romam ad impetrandion
micit et regnauerunt simul
annis xviii. **C**epit autē ano
dm cccc. xlviii. apudi. f. aji
cccc. xvi. **ezum** anno. i. i
britanniam elimotheus quida
contmenae et religionis yma
gine multis illudens eoz
herozem sue heresis induxit
dicens xpm iū qdem deum
et hominem de uirgine ma
natum fuisse **S**ed menacens
dicendo q. **S**ma. natura dūpa
sit in humana Romam h
nos a pamoma fugat q. per
annos l. tenuant **mo** **yo**
hundericus rex **V**andaloz
capta hyssali cum impie cla
tus manne in ecclia ipius ci
uitatis expendisset ayor dei p
dicto a demone correptus mht
Cui gerezicus frater in regno
succedens regnauit annis xl
viii. **H**ic ut fertur de fide ca
tholica marianam y sectam
apostatauit **mo** **m**. clo
dius pharammudi filius rex
crinitus annis xviii. regnat
super francos et ex hoc fraci
ceperunt habere reges cmtos
Hic elodius chorin thiam iua
sit et in dypyo castello chori
gorum aliquandiu habitauit
Inde missie explozatoribus
usq. ad urbem cameraticum the
num transijt et pro certo multo

Vinland Map

Call Number: Beinecke MS 350A



Hystoria Tartarorum

Call Number: Beinecke MS 350A

Incipit hystoria tartarorum

Reuerentissimo patri fili
 Bonifacio mm sro fratri
 amoniam in Boemia et polonia
 reuerentiam frater. C. de bridia
 inter minores minime filii
 obediencie subiectionem tam de
 bitam q. deuotam perfecte obe
 diencie hoc exposcit offm ut si
 quis meo excozatu desiderat
 non solum pacha deum eoa
 ardua sibi uolenti aggredia
 tur animo peccandi sui supe
 uozis uoluntatem hie patrem
 tati quampis super dices ege
 m. me audient que uidet q.
 tartaris intellem ab uenerabi
 libus fratribus nostri ordines
 fce videlicet iohanne sedis ap
 legato ad omne exilis nationes
 precepit q. ad tartaros carere
 et fce benedicto polono et fce
 ceslao boemo socis eius breui
 ter in scripto posui caues fce
 dum eoz et ut ira h. audiat
 deuocao que de terzementis nouit
 utilia eluce ex mirabilibus
 dei omnipotentis iudicij tam oc
 tis que in fine iam curesunt
 fce in quo appropinquat sto
 redemptio exultat in laudem
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 igitur q. secundum tartaros z
 quosdam alios habitabiles mun
 de huius maxime diuiditur
 in duas principales orientales
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 mali inchoatur aute in occide
 a terra inome et uadit apu

3
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 tartari appellant aplice ma
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 dentem. Reliqua vero pars de
 orientalis in qua posita est ter
 ra tartarorum ouens inuenit
 aquilonem habens contiguam ma
 re oceanum aquilonem et appel
 latur moal. Erat autem in ea
 liz quidam nobilis quid gene
 sed moribus crudelis nomine
 emgis aquo et principu tarta
 ri habuerant hic cum paucis
 hominibus suis cepit polia exte
 cere. Tandem crudelior effectus
 homines fceim capiebat et in sue
 iniquitatis sommo. Duagebat
 cuq. erigunt satellites sibi co
 actiasset prozumpens inefama
 publicam totam terram sue na
 tuitatis f. moal sue dñacoi
 per omnia subuigauit. Quo fce
 cepit ut mores et elatozum
 appetere ampliora et congre
 to excozatu processit uersus
 terram eis contiguam ex par
 te orientis que ab eisdem deno
 minatur zimoal. i. agtici mo
 gali z. n. tartarice aqua dicit
 lat me. moal. terra mongali in
 cole dicitur terre. p. autem
 appellabant se tartaros a fluuio
 magno et impetuoso qui transit
 terram eorum et dicitur tatar
 tata n. grece ehe tartar trahens
 dicitur in lingua eorum. p. si
 binet ipis fce ordmabant. Duce
 eo autem tempore prececerat
 sibi ducem nomine. Calu que

Portolan chart of Mediterranean

Call Number: Beinecke 30cea/1505



The Vinland Map Exhibition

Sample Label Copy

Intro Panel:

On Monday, October 11, 1965 unsuspecting Americans reacted in disbelief as their sense of history was turned upside down. Just hours before Columbus Day, Yale University published a modest medieval document it called the Vinland Map, so-named because in the far western corner a squiggle of ink was labeled *vinlanda insula* – the Vinland of Leif Ericson’s sagas recounting a land beyond Greenland, what we now know to be Newfoundland. Could it be that Norse explorers had reached American shores as early as the year 1000? And that Europeans knew of a land beyond the sea before Columbus sailed? The Vinland Map unsettled our past with more questions than answers.

On that October morning this little sheet of parchment ignited a firestorm of debate about the moment of first contact between worlds, how we identify as a nation, and the very nature of evidence. Disagreements about the Map have festered for decades, while it remained hidden in storage at Yale. Today, the Vinland Map is on view in America for the first time in over fifty years. Here is its story.

Sample Section Panel [Section 3]

Meanwhile in Canada....

In a remarkable coincidence, new evidence confirming Norse contact with America emerged in Newfoundland while scholars at Yale and in London were preparing the Vinland Map publication. Norwegian explorer Helge Ingstad and his wife, archaeologist Anne Stine, began looking in the early 1960s for material traces that would support the stories told in the medieval Norse sagas of contact with a place they called Vinland.

Moving up and down the Newfoundland and Labrador coasts by boat, Ingstad and Stine eventually came to the remote fishing village of L’Anse aux Meadows, at the extreme northern tip of the island. There, a village elder pointed out overgrown mounds locally believed to be the remains of old French fishing huts. A survey by Stine quickly revealed a much older style of building. The Norwegian team began excavations in the summer of 1962. By 1964 they were ready to announce their find to the world: archaeological evidence confirmed that medieval Norse explorers reached Newfoundland around the year 1000.

Sample Label for a replica [Section 3]

Replica spindle whorl

This small bead was 3D printed from a scan of the original discovered at L'Anse aux Meadows in 1966. The original was carved by hand and would have been used one thousand years ago to spin wool. Despite its small size, this whorl has played an outsized role in the understanding of the archaeological site: whorls just like this one have been excavated from medieval Norse sites in Greenland, confirming the origin of the people who lived at this distant outpost.

Sample Section Panel [Section 5]:

Enter the Sciences

Following years of heated debate over the Map's authenticity among scholars in the humanities, Beinecke curator Alexander Vietor tried a different tack. In 1971 he invited scientist Richard McCrone to conduct the first extensive scientific tests on the Vinland Map. McCrone had recently tested the Shroud of Turin, and was at the forefront of microscopic analysis of controversial historic materials. Following careful study, he released his report on the Map in 1974, prompting new headlines around the world. Multiple generations of scientists have analyzed the Vinland Map in McCrone's footsteps, often with emerging technologies, and sometimes with contradictory results. One thing is for certain – the Vinland Map debate has been focused on scientific analysis for over forty years. In 2018 new testing was conducted by Yale to support this exhibition.

Sample label [Section 5 Interactive]:

Looking at ink with ultraviolet light

The first scientific test conducted on the Vinland Map was also the simplest. A researcher studying the Map at the British Museum looked at it under UV light. Iron gall ink – the most common ink used in the medieval period – will quench the fluorescence, appearing black under UV light. The Vinland Map's ink did not appear black, revealing that it did not contain iron. This result was the first clue the Vinland Map's ink was far from typical.

Below are two pieces of parchment with different inks. One ink is iron gall and the other is not. How do they appear under normal lighting conditions? Now how do they appear under ultraviolet light?

Sample artifact ID label copy [Section 6]:

Portolan Map, 1505

Judah Abenzara, Majorca

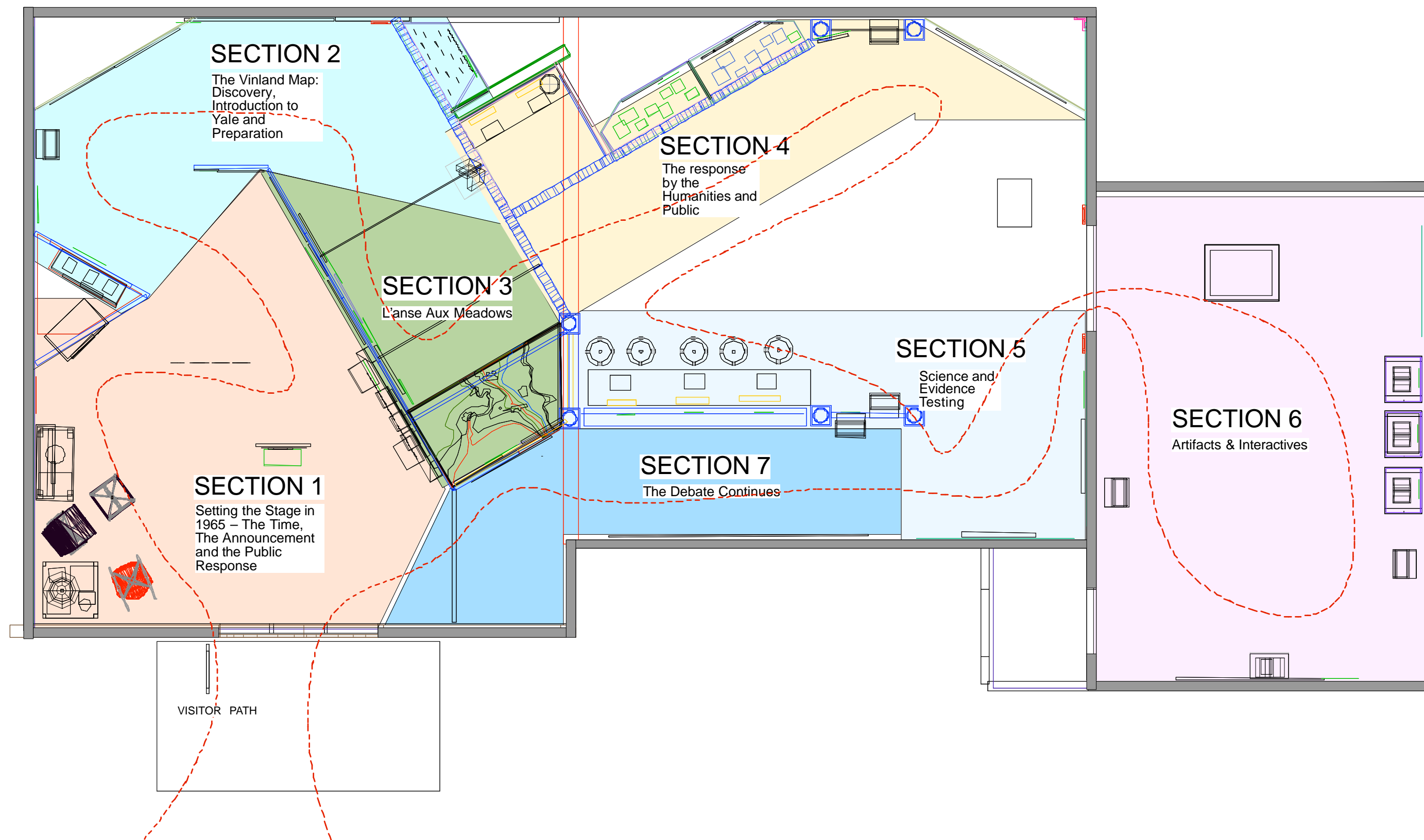
Vellum, ink

Courtesy of the Beinecke Rare Book and Manuscript Library, Yale University

Mystic Seaport
Implementation Proposal to
Connecticut Humanities

The Vinland Map Exhibition

Exhibit Floor Plan and Elevations



1965

The Washington Post
Historic Domination Continues
Vinland Map Discovered Too Late

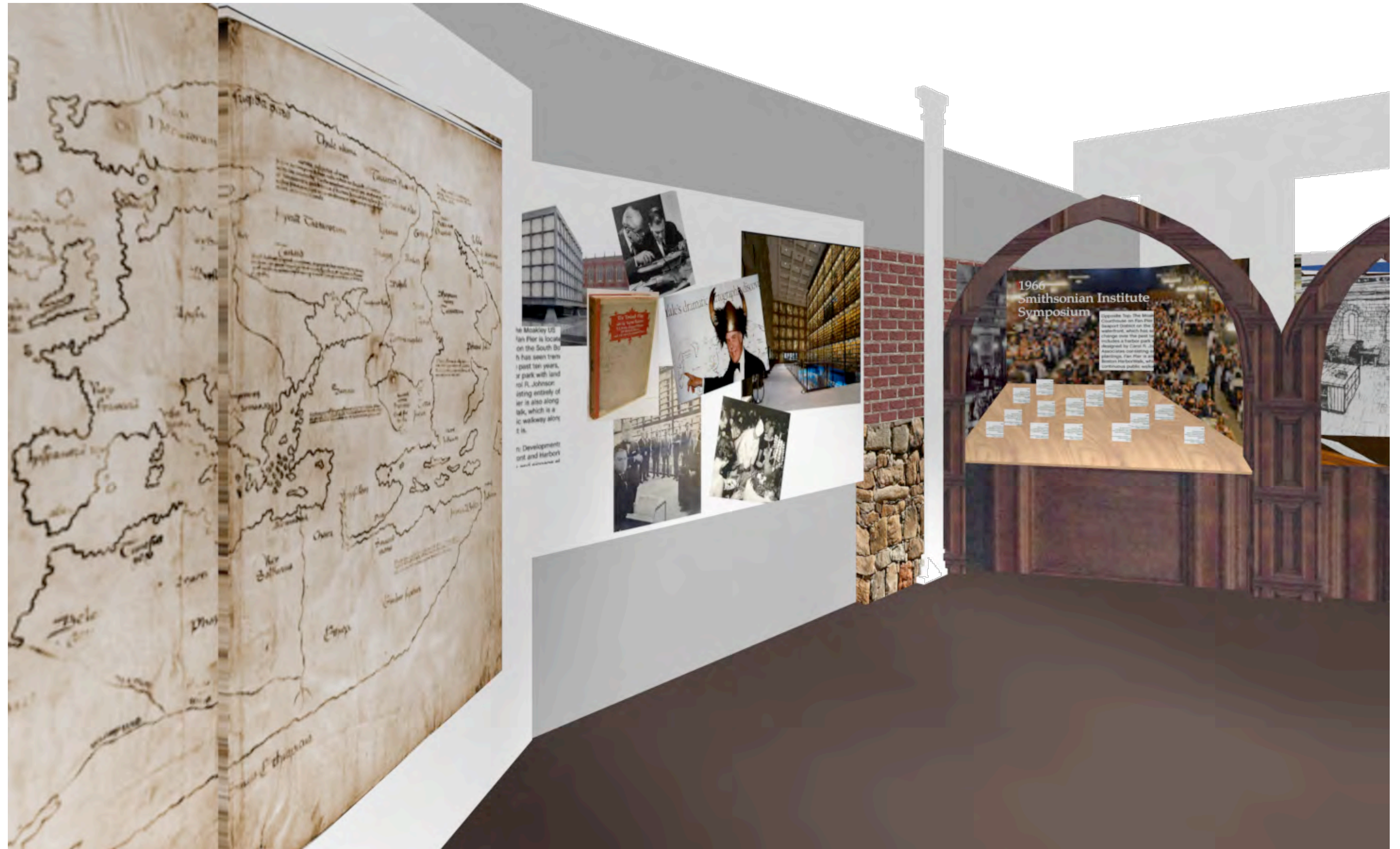
Opposite Top: The Moulton, U.S. Courthouse at Fair Hill is located on the western edge of the town. The building was built in 1965 and is a fine example of modern architecture. It is a two-story building with a large central tower and a series of wings. The building is surrounded by a large parking lot and is situated on a hill. The building is a fine example of modern architecture and is a landmark in the town.

NY NEWS ST

COLUMBUS DAY

AYBILL

Cheese in Flavors













“The Vinland Map” -- Exhibit Walkthrough Synopsis

NOTE: For a fuller description of the exhibit from a content perspective, please see the Script

This will be a narrative exhibit of 2,000 sq. feet with 7 sections, arranged roughly in chronological order, from the late 1950s through today. The exhibit introduction section is set in early October 1965.

SECTION 1: “Setting the Stage”

Visitor Experience: Upon entering the Schaefer gallery, visitors will step into a 1960s setting with 3 parts:

-A living room set with a television screen showing a looped intro video featuring news footage of heated public and academic response to Yale University’s announcement that the Vinland Map proved that the Vikings (not Columbus) were the first Europeans in the New World. It will also feature a display case featuring collectibles of Christopher Columbus and the Vikings, to inform visitors of dominant depictions at that time

-A news-stand set, with both graphic blow-ups of Oct. 1965 newspaper headlines and magazine covers, as well as actual 1965 and 1966 magazines featuring stories on the Vinland Map that visitors can pick up and read in the gallery. These, along with a soundtrack of 1965 musical hits that will play in-between showings of the intro video, will establish a cultural context for the Vinland Map announcement.

-A photomural of a 1960s school, with a display of history and social-studies textbooks that conveyed messages about Christopher Columbus and the Vikings to students. A blackboard on the wall will have the question “Who arrived first, according to YOUR school lessons?” Visitors will be invited to leave a mark in one of three columns: “Ancestors of the Native Americans,” “Christopher Columbus,” and “The Vikings.”

Goals: This introduction will set the stage for the story that follows -- establishing that Yale’s Vinland Map announcement came at a heated moment in U.S. history, with raging debates about the Vietnam War, immigration policy, and Civil Rights. The Vinland Map threatened a commonly held national-origin story, triggering emotional outbursts and decades of debate. The intro will pull visitors into the human aspects of the Vinland Map story, prompting them to want to learn more about this curious manuscript and its history.

Artifacts:

- Viking and Columbus-centered collectibles from the 1950s and 1960s
- Popular magazines with articles about the Vinland Map
- School textbooks with chapters on Columbus, the Vikings, and the “discovery” of North America

Audio/Visual: Intro video (3 mins. long) composed of clips from newsreel coverage of Columbus Day parades and interviews with irate prominent Italian-Americans denouncing the Vinland Map.

SECTION 2: “Yale’s Discovery and Preparation for the Announcement”

Visitor Experience: Upon entering this section, visitors will be faced with a large, wall-size image of the Vinland Map, with the title “What’s Right With This Map?” Thought-balloons linked to different areas of the map will draw attention to the evidence that the Yale experts found compelling when they were judging the map’s authenticity in the late 1950s and early 1960s.

Period photos of the curators, the Beinecke Library, and the October 1965 celebratory party for the publication of *The Vinland Map and the Tartar Relation*, will show the significance of the announcement for Yale and the genuine belief of the librarians and cartographers that the map was real.

Visitors will also learn about the process of making animal-skin parchment and ink during the Medieval period, and see samples of the raw materials involved

Section Goals:

- Provide a brief but comprehensive overview of: how Yale came to acquire the Vinland Map; why it waited 7 years to announce it; and the physical and textual evidence that convinced Yale experts it was authentic.
- Introduce the 3 central manuscripts: Vinland Map; *Tartar Relation*; and *Speculum Historiale*; their key characteristics; and the worm-hole evidence that suggests they were bound together before arriving at Yale
- Demonstrate that 15th-century manuscript making was a time-intensive process requiring many skills to create a single document

Artifacts:

- First edition of *The Vinland Map and the Tartar Relation* (Yale University, 1965)
- Proof pages from the book, with authorial edits
- Sample of goat-skin in 3 different phases of processing into parchment
- Samples of oak gall, carbon used to make Medieval ink

Audio/Visual: - Touchscreen with clips from video interview with present-day parchment maker Jesse Meyer (interviewed by Nicholas Bell, Senior VP for Curatorial Affairs, and shot by Mystic Seaport videographers)

SECTION 3: L’Anse aux Meadows: Archaeological Evidence of Viking Settlement

Visitor Experience: In this section, visitors will learn that other evidence was emerging about early Norse settlements in North America from an archaeological site in northern Newfoundland named L’Anse aux Meadows, excavated by a Norwegian couple, Helge Ingstad and Anne Stine. Ultimately, that material evidence proved more convincing than the Vinland Map.

Visitors will see photos taken during the L’Anse aux Meadows archaeological excavations in the 1960s-1980s and learn how the Ingstad/Stine’s search was influenced by the Norse sagas that referred to Leif Erickson’s successful western voyage to “Vinland.”

Replicas: Replicas of a soapstone spindle whirl and a bronze ring-headed pin (used for fastening a cloak) show the type of small but convincing material evidence that was unearthed at the site. The materials, styles, and fabrication techniques of these artifacts are consistent with those of Nordic artifacts from the 11th century. Carbon dating confirms the date of 1000 AD, consistent with the date that Viking sagas claim Leif Ericson sailed to “Vinland.”

Scale Model: Visitors will see an accurate scale model of the site, as researchers believe it looked during its occupation. Its specifications are based on Ingstad and Stine’s meticulous measurements and documentation, as found in their book *The Viking Discovery of America: The Excavation of a Norse Settlement in L’Anse aux Meadows, Newfoundland*.

Goals:

- Provide a point of comparison to the Vinland Map -- in the case of L’Anse aux Meadows, both the historical research and scientific testing of the material evidence corroborate each other
- Convey the central irony of the Vinland Map: even though it is probably not genuine, its underlying argument that the Vikings reached North America and established settlements there 500 years before Columbus is almost certainly true

Audio/Visual: Touchscreen interactive will feature clips from a video interview with Birgitta Wallace, who led a later archaeological dig at L’Anse aux Meadows following the work of Ingstad and Stine. Wallace was interviewed by Nicholas Bell, Mystic Seaport Senior VP for Curatorial Affairs, and shot by Museum videographers.

SECTION 4: The Public and Humanities Responses

Visitor Experience: Visitors will see that during the 1960s and 1970s, the Vinland Map elicited a great deal of scrutiny among humanities scholars who were eager to settle whether it was a genuine 15th century manuscript or not. Yale's curator of maps, Alexander Vietor, invited scrutiny of the map by outside scholars, ultimately culminating in a symposium at the Smithsonian and a second book, *The Proceedings of the Vinland Map Conference*, in 1971.

Many humanities scholars (including paleographers, cartographers, and historians) were suspicious of the map's authenticity, while others argued that the evidence suggested it was genuine. Ultimately, Yale turned to scientists in the hopes that forensic testing would settle the issue once and for all. It didn't.

WALL GRAPHIC: "What's Wrong with This Map" (counterpart to the large, custom-wallpaper graphic "What's Right with This Map" in Section 2) -- with thought balloons identifying the areas of the map that struck many humanities scholars as unconvincing or problematic

Interactive: Visitors will be encouraged to try their hand at tracing the Vinland Map on a lightbox. This will accomplish several things: 1) give them the experience of writing very small, precise lettering, and 2) getting them more familiar with the features of the map itself, so when they see it in-person in Section 6, it will already be a "known" manuscript.

The first few years after Yale announced the Vinland Map, the university received a great deal of unsolicited mail about the manuscript from schoolchildren and adults alike. Visitors will be able to see and read high-res facsimiles of a dozen of these postcards and letters, which together attest to the intense passion that this document elicited at the time, across the nation. Examples include:

"Not only are you people a pack of filthy bums, but you are also the best bunch of liars in the USA. We need you, however, for laughs."

"The map you have is evidently a map copied from maps drawn by Christopher Columbus himself. He drew these maps so that others could find their way to America [...] About Leif Ericson – he was born long after Christopher Columbus discovered America. All you have is a map, others have facts. P.S. In Springfield Mass there was a parade in honor of Christopher Columbus on Sunday Oct 10, which was attended by 60 thousand viewers and the parade last for 2 hours and 30 min. It was beautiful."

"The news tells us every once in a while some nut will turn up to tell us someone other than Columbus discovered the Western Hemisphere or America. But I didn't think the nuts would come from the Universities. Why find a map at this late date when Columbus isn't there to defend himself? [...] What do they teach at Yale University, to take Honor away from Men that made History and aren't here to defend them-selves?"

Audio/Visual: A touchscreen will feature clips from video interviews with Ray Clemens, current curator of manuscripts at Beinecke, and Kirsten Seaver, author of *Maps, Myths, and Men: The Story of the Vinland Map*, an outspoken critic of the Vinland Map. (Interviews conducted by Nicholas Bell, Senior VP for Curatorial Affairs, and filmed by Mystic Seaport videographers).

SECTION 5: Scientific Testing and Evidence

Visitor Experience: Visitors will enter an exhibit section designed to resemble a science lab with a lab bench, stools, microscope, and lightboxes with magnifying lenses. Here they will be able to sit and look more closely at the Vinland Map through the eyes of scientists, learning about a range of tests conducted on the map by experts in carbon 14 dating, forensic microscopy, and chemistry. Large graphic/text panels on an adjoining wall will give more details on the scientific teams, their tests, and when they were conducted.

Goals:

- Show that the Vinland Map has undergone a wide range of scientific tests and analysis over the past 40 years, with inconclusive results
- Reveal how the use of each generation's newest and "greatest" technology on the Vinland Map mirrors the history of scientific advances in x-ray, laser, and other techniques
- Convey the consensus that the Vinland Map parchment is probably 15th century, but analysis of the ink convinces many that the writing itself is a modern 20th-c. fake

Ink Interactives: Visitors at the lab bench will be able to compare the chemical composition of the Vinland Map ink with Medieval ink; study the Vinland Map ink strokes, which appear to have two layers, perhaps to make it appear more aged

Audio/Visual: A touchscreen interactive will include clips of video interview with Kenneth Towe, who conducted chemical analysis of the Vinland Map ink in 1990, when in the paleobiology department at the Smithsonian Institution. Interview already filmed.

SECTION 6: The Vinland Map and Its Companions

Visitor Experience: Visitors will be drawn into this room by seeing “The Vinland Map Compared with Other Medieval/Early Modern Maps,” a colorful, looping, high-definition slideshow of Medieval and Early Modern maps, projected on the wall facing the doorway. This program will allow visitors to compare the Vinland Map with other contemporary maps from the 15th century. Sidebar captions accompanying each image will provide a date, title, and additional information. They will also view the Vinland Map itself, along with its two companion manuscripts, on public display together for the first time in more than 40 years.

Visitors will be encouraged to think of the Vinland Map as an artifact with its own history. A large wall graphic, “The Well-Traveled Map,” that shows all the places in the world that the single-sheet Vinland Map has been documented to travel since before Yale acquired it -- including locations in Europe (England, Iceland, Norway, Amsterdam) and the U.S. (New Haven, Chicago, Los Angeles, and Mystic)

Interactive Programs: Three touchscreen monitors will each feature a different program:

- 1) “The Vinland Map” -- Visitors will be able explore the Vinland Map in digital form in greater detail and stronger light than is possible with the original. They will click on locations highlighted on the map to open pop-up boxes containing information and/or images with captions. Types of information include: transcriptions and/or translations of the map’s Latin text; quotations from relevant medieval texts; and summaries of secondary scholarship.
- 2) “Modes of Medieval Ethnography” -- Visitors will learn about the content of the *Tartar Relation*, one of the texts bound with the *Vinland Map*. This manuscript relates 13th c. Friar John of Plano Carpini’s travels to the Mongol Empire. The main image on the touchscreen will be a map of Europe and Asia. Icons will mark locations on the map described in the *Tartar Relation*, which visitors can click to open a pop-up window, with a quotation from the *Tartar Relation* and information on the location’s historical significance. It will also include an image relevant to that location, whether from a medieval manuscript or a photograph of a corresponding topographical detail or archaeological site.
- 3) “Decoding a Manuscript Page,” -- This program will offer visitors the chance to explore the common elements of a manuscript page (specifically, one from the *Speculum Historiale*). Clickable icons will indicate rubrics that marked the beginning and end of each text, or the extenders that embellished the top line of text on the page. This will allow readers to explore the many ways that scribes communicated how the audience ought to read a manuscript.

Goals:

- Provide greater depth of information about the 3 manuscripts and their characteristics
- Prompt visitors to look closely at the manuscripts, especially the genuine 15th-c. documents

Artifacts

- Vinland Map
- Speculum Historiale*

-*Tartar Relation*

-15th century portolan map of the Mediterranean

SECTION 7: The Debate Continues

Visitor Experience: This section serves as the exhibit's conclusion and brings the visitor back to the gallery entrance. Anticipating that visitors will have experienced information-saturation by this point, but will still desire a wrap-up that stays true to the exhibit's approach and delivery methods used throughout the earlier sections, it updates the science story while also providing a participatory activity for them to contribute to the public response.

One large wall graphic with a timeline will summarize the map's remarkable history from 1957-2018. Another will provide photos of the most recent round of scientific testing of the map, conducted by Yale in February 2018. Most of the tests will be replicating earlier tests by other labs to compare the results, others will be conducted for the first time and photographed by Mystic Seaport staff photographers.

Goal:

- Convey the takeaway message that although some disagreement still exists, there is a fairly clear consensus among experts from all fields that the map is, in fact, a forgery.

Audio/Visual: A touchscreen interactive will provide brief clips from interviews with the same experts featured earlier in the gallery (Ray Clemens, Kirsten Seaver, Ken Towe) giving their overall thoughts on whether real or fake, and what brought them to that conclusion.

Interactive Programs : Bulletin board with a participatory activity, encouraging visitors to add their voice to the debate

WORKING DRAFT -- “Vinland Map” Script -- Jan. 2017

Purple Text – level 1 information

BLUE TEXT – level 2 information

PINK TEXT – quotes

YELLOW TEXT/RED HIGHLIGHT – VISUAL/INTERACTIVE/VIDEO/INTERVIEW

SECTION 1: Setting the Stage in 1965 – The Time, The Announcement and the Public Response

1.1: 1965 & the announcement of the Map

- **Intro Panel:**
 - 50-75 word text
 - Place the announcement in the context of this moment in history when things are getting turned upside down and ideas are being challenged
 - “It’s October, 1965...”
- **What else was happening at this time?**
 - Music
 - top chart song at this time – “Hang on Sloopy” by The McCoys and “Yesterday” by The Beatles
 - earlier that year,
 - “I’ve Got You Babe” by Sonny & Cher
 - “Henry the VIII I Am” by Herman’s Hermits
 - “(I Can’t Get No) Satisfaction” by The Rolling Stones
 - “I Can’t Help Myself (Sugar Pie Honey Bunch)” by Four Tops
 - “Help Me Rhonda” by The Beach Boys
 - “Ticket to Ride” by The Beatles
 - “Mrs. Brown You’ve Got a Lovely Daughter” by Herman’s Hermits, etc...lots more to work with
 - Vietnam war/war protests
 - 1965 World Series (LA Dodgers vs Minnesota Twins // Sandy Koufax pitching)
 - 1964/1965 World’s Fair closed at Flushing Meadows right after VM announcement
 - President Johnson hospitalized for gall bladder surgery (10/8)
 - Pope Paul VI made first trip to US by a Pope (10/4/65)

→ 2D/3D Interior Scene and Home Interior Scene

- Videos from news reels // Interviews from news reels
- Collectibles for cabinet of (pre) 60s Columbus and Leif Ericsson kitsch

1.2: The public unveiling of the map and book

- **How did the unveiling of the map come about?**
 - Yale announced the acquisition of the map, as well as the publication of their book “The Vinland Map and the Tartar Relation” (written by R.A. Skelton, Thomas E. Marston and George D. Painter) on October 11, 1965 (just one day before Columbus Day).
 - Italian -American community was very upset not just with the announcement, but also with the timing of it. Italy’s foreign minister Amintore Fanfani called the timing of the announcement “aggressive”, in addition to taking issue with the substance of the announcement.¹
- **What were the reasons for how they did so?**
 - The claim, according to Alexander Viator when asked at the Smithsonian Institute Conference in 1966 was that “the Yale University Press does not like to lose money on books”, continuing that the press had scheduled the publication for the fall of 1965. Because Leif Ericson Day had just been announced by President Lyndon B. Johnson to take place on October 9th, and Columbus Day still fell on October 12, they felt this would naturally be a good time to release the book as it was when the discovery of America was being discussed. He said that they didn’t realize what a bombshell it was going to be, and it was not done to irritate any ethnic group. For some reason the University was unable to release it on the 9th, and the 10th was a Sunday, so the 11th was chosen. Ideally they would have wanted to release it on the 9th (Leif Ericson day)²
- **Why did Yale have the authority they did with the unveiling of this map?**
 - At this point in history, Yale (and other institutions, especially those in the Ivy League) was viewed as the nexus of intellectual authority. Up to this point, “great men” had gotten their start at these schools, and the thinkers of the world taught at them. They felt that they were the intellectual authority, and this was news to be presented to the world by the specialists. Yet, with the beginning of the 60’s counter culture revolution, anti-intellectualism was beginning to take place, and a shift away from the “authority” of “the man” (or any place of power, educational institution included) was beginning to take place.
 - Had this taken place 20 years prior, there may have been less pushback, but the fact that everything happened at the perfect point in history when all of these ideas were coming to a head, it was met with the opposition and pushback that Yale probably wasn’t expecting.

¹ From “Maps, Myths, and Men” – K. Seaver (p.153)

² From “Proceedings of the Vinland Map Conference” – W. Washburn (p.25)

1.3: How do we know what we know?

- Where do we learn what we assume is truth?
 - School
 - Newspapers and broadcasts
 - Family
 - Religion
- How do we know what we know? How do we arrive at what we believe to be true and authentic, and what do we do/how do we react when our beliefs are challenged? How do we handle ourselves when something that we've always believed as truth is suddenly not?
 - The discovery of this map is a prime example of a large part of the public coming to the realization that something they have always perceived to be true to be challenged on an international level

1.4: Brief Introduction/General Overview

- What is this map?
 - A small map, about 11x16", folded down the center. Map depicts outlines of Europe, Asia and Africa (all known during the Middle Ages), surrounded by ocean. The ocean shows islands in both the east and the west. The map is oriented with North at the top. Written on the map are various geographical names (seas, gulfs, islands, rivers, kingdoms, regions, people and cities), as well as several longer legends all written in Latin. Most notable on this map is the inclusion of northwestern island Iceland and Greenland, as well as the most controversial part of the map – Vinland.³
- What is the general discussion about?
 - The unveiling of the map completely altered how many American's viewed the history of America's discovery up to this point. If real, it had the potential to be one of the greatest modern historical discoveries.
 - If the map is real, it is the first known representation of North America, and the date of the map's creation is important in establishing a historical timeline of European knowledge of the area of the north-western Atlantic.⁴
 - The authenticity of the map also raises questions about how aware Columbus was of this earlier knowledge before setting off on his voyage in 1492
 - Additionally, the map's account of Norse voyages differs from the account presented in the sagas, and says that Bjarni and Leif voyaged together, rather than separately.⁵

³ From "The Vinland Map" – R.A. Skelton (in Yale book The VM and TR)

⁴ From "Radiocarbon Dating of the Vinland-Map Parchment" (2002) – D.Donahue et al

SECTION 2: The Vinland Map: Discovery, Introduction to Yale and Preparation

2.1: The VM, the TR and the SH

- **What is the map?**
 - Released publically by Yale on October 11, 1965, the VM appeared to be a map that showed North America and the North Atlantic created from Norse discoveries as laid out in the Viking Sagas. The map was eventually dated to have been created in the early 15th century (using information from Vikings dating back between 800-1000 A.D.), almost 50 years prior to when Columbus landed in the Caribbean. Up to this point, Columbus was assumed to have been the first European to have made contact with North America. If genuine, this would be the earliest map to depict North America.
- **Where did the map come from? How about the TR? And SH? When did knowledge of these first come about? When did they first appear “publically”?**
 - VM – Acquired by L.C. Witten in 1957 from Enzo Ferrajoli (a Spanish-Italian book dealer) for \$3,500.
 - Witten claimed that he knew where Ferrajoli had acquired the VM and TR from, but had promised that he wouldn’t reveal the source to any 3rd party.
 - However, Ferrajoli never revealed to Witten where he had acquired the documents. Claimed he was “honor bound” not to reveal sources
 - Ferrajoli had previously attempted to get the map authenticated by the British Museum, but was denied.
 - Ferrajoli kept records of books he sold, but when he was arrested for grand theft (of books from the Library at Saragossa, Spain), all documentation went with police and have since disappeared, leaving VM and TR with no provenance⁶
 - TR – Manuscript that was bound with the VM
 - Short account written in the 15th century recounting a 13th C. Franciscan missionary’s trip to Central Asia/the Mongol Empire.
 - TR is a shortened, slightly altered version of a longer text called the *Astoria Mongol rum*.
 - This document describes how John de Plano Carping traveled for 2.5 years on the request of Pope Innocent IV to “The King and People of the Tartars”

⁵ From “Radiocarbon Dating of the Vinland-Map Parchment” (2002) – D. Donahue et al

⁶ From article “Vinland’s Saga Recalled” – LC Witten

- TR claims to be work of “Friar C. de Birdie” who obtained information from Friar Benedict the Pole, who was a companion of John de Plano Carpino.⁷
 - For a long time, believed that Yale had only copy of TR (even though the *Astoria Mongol rum* isn’t a rare text), but G. Guzman claims to have discovered a second copy of the TR in Lucerne, where it was bound with another version of the *Speculum*⁸
 - Major consensus is that the TR is authentic.
- SH – *Speculum Historical*. Written by Vincent de Beauvais (Dominican friar) as part of his greater *Speculum Maius*.
 - *Speculum Maius* was a compilation of all knowledge in the Middle Ages up to the point it was written (and used as the main “encyclopedia” of the time).
 - SM was broken into 3 parts
 - *Speculum Natural* – 32 parts, summary of all science and natural history known to Western Europe up to the mid-13th C.
 - *Speculum Doctrine* – 17 books, summary of all scholastic knowledge of the age, including philosophy, logic, poetry, geometry, anatomy, medicine, philosophy of law (jurisprudence), etc.
 - *Speculum Historical* – History of the world up to this point in the mid-13th C.⁹
 - SH was acquired by Tom Marston (Curator of Classics in the Yale Library at the time, and collector of medieval and Renaissance manuscripts).
- **How did Yale wind up with documents?**
 - In 1959, Paul Mellon (alumnus of Yale and major philanthropic benefactor) bought the VM (including the TR) for an (at the time) undisclosed amount – later to be reported that it was bought for around \$1M. Mellon promised to donate the map to Yale if they were first able to authenticate it in secrecy, only going public after they were certain it was real.
 - Yale spent the next seven years working with map scholars from both the British Museum and the Yale Library to authenticate the map.
 - R.A. Skelton – Superintendent of maps at the British Museum
 - George D. Painter – Assistant keeper in charge of early printed manuscripts at the British Museum’s Department of Printed Books
 - Thomas E. Marston – Curator of medieval and Renaissance manuscripts at Yale

⁷ From article “A Skeptical View of the Tartar Relation” – F. Maddison

⁸ From article “Vinland Map Controversy & The Discovery of a Second Version of the TR – G. Guzman

⁹ From article “Vinland’s Saga Recalled” – LC Witten

- Because they were bound to keep this whole project secret, they were unable to confer with other specialists at the time, thus relying entirely on the knowledge base of just a few people rather than the collective base of many experts covering a wide variety of related subjects¹⁰.

2.2: Launch Party

- Photos
- Copies of responses to invitation from Yale archives

ESSENTIALLY LARGE TIMELINE OF VM AND YALE'S KNOWLEDGE

→LARGE GRAPHIC: "What's Right with This Map?"

2.3: Wormholes and Parchment

- How are these three documents "related" to each other?
 - Witten had wanted to compare the VM and TR with another manuscript from the same time, and used the SH to do so. Saw they were from the same geographical area, and had similar handwriting among all three. The TR and SH were even on paper that was watermarked with an ox/bull's head (suggesting that they were created in Basel, Switzerland around 1440, AD). The leaves of the 2 volumes were also the same dimensions.
 - Witten noticed wormholes that were present in all three of the documents. Upon rearranging them, saw that the wormholes of the VM matched those at the front of the SH, while the ones of the TR matched those at the back of the SH.
 - Bookworms – Also known more commonly as booklice, though they aren't actually lice (also known as psocids).¹¹
 - Booklice are wingless and very small – typically less than 1/16 of an inch in length. They move around by running quickly (rather than hopping or flying).¹²
 - Range in color from translucent white to gray or brown.
 - Booklice feed on molds. The starchy paste used in book binding can frequently support mold growth, and therefore be a favorite place to find booklice.¹³

→ WORMHOLE MODEL: BOOKWORMS AND HOW THEY ARE FORM HOLES THROUGH DOCUMENTS/HOW THESE LOOKED WITH THE DOCUMENTS AT HAND

- Concluded that these three documents must have all been bound together at one point in time, though had become separated and rebound over time.¹⁴

¹⁰From "Maps Myths and Men" – K. Seaver

¹¹ From <http://ento.psu.edu/extension/factsheets/booklice>

¹² From <http://ento.psu.edu/extension/factsheets/booklice>

¹³ From <http://ento.psu.edu/extension/factsheets/booklice>

→ALSO PUT JESSE MEYER INTERVIEW SCREEN HERE, AS WELL AS PARCHMENT INFO

Section 3: L'anse Aux Meadows

3.1: Helge and Anne Stine Ingstad

- **Background information/Biography**

- Helge Ingstad – Norwegian with a varied background. Began working as a lawyer, but soon sold his practice to work as a trapper in Canada (NW Territories). Eventually worked as amateur Anthropologist, living and traveling with a band of Inuit for three years. He eventually moved back to Norway to write about his Canadian Experiences. He was also the 1st (and only) Governor of Erik The Red's Land (an area on the east coast of Greenland that was occupied by Norway in the early 1930s. He also served as governor of Svalbard (a group of islands in the Arctic Ocean owned by Norway. He later married Anne Stine Moe, an archaeologist.
- Anne Stine Ingstad – Norwegian, almost 20 years younger than Helge. Graduated from the University of Oslo in the field of Archaeology. Most famously discovered traces of an early 11th C. Norse settlement, known as L'Anse aux Meadows, in Newfoundland with her husband.

- **What brought them to L'anse Aux Meadows**

- For many years, the location of "Vinland", as described in the sagas, was debated. The sagas mention that the Norsemen found grapes in Vinland, leading to a common belief that the land must be named for the accessibility to grapes, and therefore located far enough south on the North American continent to support this growth (several locations that have been suggested through time include Massachusetts, Rhode Island, New York, Virginia, and other regions further South). However, none of these locations ever produced any evidence of Norse occupation. Helge and Anne, however, believed that the name Vinland referred to a location meaning "land of meadows", and based on maps from 1590 and 1605, that the location was on a northern peninsula.¹⁴
- In 1953, Helge and Anne Stein were on an expedition along the western coast of Greenland, exploring various Norse settlements and the ruins which remained there. Taking note of the harsh land and weather, they felt that the land referred to in the Vinland sagas had to be somewhere else, further south (though not very far so it was fairly easy to get to) that allowed them to take advantage of better pasture land, fishing, and forests for shipbuilding.
 - In 1960, Helge set out with his daughter Benedicte to search the coast of Newfoundland by water and air to try and find any remnants of Viking

¹⁴ From article "Vinland's Saga Recalled" – LC Witten

¹⁵ From "The Viking Discovery of America" – H. Ingstad

settlements. After many misses, he finally came across the land in the north coast of Newfoundland. This land:

- Was a peninsula extending east towards the ocean
- Was low, hilly land, reminding Helge of the account in the Greenland Saga where Bjarni came across land after having been lost at sea during a voyage from Greenland to Iceland, that was described as “not mountainous, and was covered with forest, with low hills...”¹⁶
- Helge finally went ashore, and met a man living in a small fishing village who showed him some overgrown house sites on the land that proved to be very promising as Norse settlements, essentially confirming his theory.

3.2: The Dig

- **How did the decision to dig commence?**
 - After coming across the potential house sites at L’Anse aux Meadows, Helge and Anne Stine organized seven archaeological expeditions, running from 1961 to 1968. Dr. Anne Stine led the archaeological excavation work.
 - **What was found there?**
 - The remains of 8 buildings (labeled A-J) were found. These were most likely sod buildings placed over wooden frames (the same kind seen used in Greenland and Iceland around 1000 AD). These buildings form 3 complexes, each with a large dwelling, and a few workshops or smaller living quarters. The workshops included an iron smithy (a building where a forge for metalsmithing resides), a carpentry workshop, and a boat repair area.¹⁷
 - Found within the site were also everyday items that had also been found at similar sites in Iceland and Greenland. These included:
 - A bronze ring-headed pin (what a Norseman would fasten a cloak with)
 - A stone oil lamp
 - A small spindle whorl (used as flywheel of handheld spindle)
 - A fragment of a bone needle (believed to have been used for a type of knitting)
 - A polished axe head
 - A small whetstone (used for sharpening needles and small scissors)
 - Large number of iron boat nails
 - Slag from smelting and ironwork
- as well as other smaller artifact pieces.¹⁸

¹⁶ From “The Viking Discovery of America” – H. Ingstad

¹⁷ From <http://www.pc.gc.ca/en/lhn-nhs/nl/meadows/decouvrir-discover> and <http://www.thecanadianencyclopedia.com/en/article/lanse-aux-meadows/>

¹⁸ From “The Viking Discovery of America” – H. Ingstad

- Carbon dating of these sites date L'Anse aux Meadows around 1000 A.D. (which also happens to be when the Sagas indicate Leif Erikson's voyage Vinland took place)¹⁹

→WALL CASE OF 2-3 SMALL REPLICAS OF ITEMS FOUND AT L.A.M

→PHOTOS OF EXCAVATIONS

→MAP OF WHERE IN CANADA THIS SITE IS LOCATED IN RELATION TO NORWAY/ICELAND/GREENLAND

3.3: The Response

- **What was the public response to the findings?**
 - The site was first announced at an early stage in the *New York Times* on October 10, 1961²⁰
 - The announcement was met with much distrust and skepticism
 - Similar claims had been made for many years before, but none of them had ever been able to produce concrete evidence and thus were seen as bogus.²¹
 - Additionally, the site was so remote and difficult to get to (electricity arrived in 1974, telephones in 1975, and there was no major road), so people were skeptical as they could not easily view the discovery themselves.²²
- **How did this influence lasting impressions?**
- **What were the implications of the discovery?**
 - Typically, up until this discovery, most American students learned in school that Columbus was the first person to “discover” America, and that this was verified historical truth (“in 1492, Columbus sailed the ocean blue...” etc...).
 - L'Anse aux Meadows is hard, scientific evidence that Vikings were on the North American continent around 1000 years ago (almost 500 years prior to Columbus).
 - The Science and History line up, here, and also happen to match what the Sagas also said.
 - When these line up, there's not much to question (unlike with the VM, where many things are left open to more questions)
- **What is there today? Level of importance?**
 - Currently, L'Anse aux Meadows is managed by Parks Canada, and is a UNESCO world heritage site (declared in 1978).

¹⁹ From “The Viking Discovery of America” – H. Ingstad

²⁰ From “L'Anse aux Meadows: Different Disciplines, Divergent Views” – B. Wallace 2009 (p.449)

²¹ From “L'Anse aux Meadows: Different Disciplines, Divergent Views” – B. Wallace 2009 (p.449)

²² From “L'Anse aux Meadows: Different Disciplines, Divergent Views” – B. Wallace (2009) (p. 449-451)

- Interpreters in Viking costumes work at the park in re-created encampments, and tours are offered to visitors.²³

→L'ANSE AUX MEADOWS MODEL IN THIS SECTION

→VIDEO INTERVIEW WITH BIRGITTA WALLACE IN THIS SECTION

SECTION 4: THE RESPONSE BY THE HUMANITIES & PUBLIC

4.1: "Scriptorium"

- One of the academic fields that studied the map were paleographers
 - Paleography is the study of historic handwriting. They have a deep knowledge of specific ways letters were formed and words were written at a certain point in time for a specific language. Paleographers are able to use the specific way documents were written in order to understand, authenticate, and date historic manuscripts.
 - Paleography doesn't just include the study of the English language, but also everything ranging from historic Germanic languages (German, Italian, Spanish, etc.), Latin, Ancient Greek, Ancient Near East and Aramaic languages, and even those from areas further east, like Ancient Indian languages.²⁴
 - **What can the handwriting tell us?**
 - Specific handwriting can give clues to where a document was written and approximately when.
 - Everything from punctuation, abbreviations, special characters and how letters are formed are used to help paleographers determine when a document may have been created, and possibly by whom.²⁵
 - possible vehicles used during the 15th Century – India ink, tea, bearberry, sepia, tannin, celandine, gall, and iron gallotannates.
 -

INTERACTIVE: TRACING THE VINLAND MAP

- With regards to the Vinland Map, Skelton, Marston, Painter and Witten strongly felt that the handwriting on the map was the same that was found on the *Speculum Historale* and *Tartar Relation*. However, other paleographers examined all three documents after the Yale unveiling in

²³ From <http://www.pc.gc.ca/en/lhn-nhs/nl/meadows/activ/decouverte-tours>

²⁴ From <https://en.wikipedia.org/wiki/Palaeography>

²⁵ From <http://isites.harvard.edu/fs/docs/icb.topic453618.files/Central/editions/paleo.html>

1965, and many felt that there was hardly any concrete proof to show that the pieces were all written by the same hand.

- One example of this determination came from Theodore C. Skeat, keeper of Manuscripts in the British Museum, who stated **“The *Tartar Relation* and the *Speculum* are in different, though very similar hands. The hand of the *Speculum* is the better of the two, being even and regular, with the slope of the letters carefully maintained. The hand of the *Tartar Relation* is a rougher version of the same basic type, the individual letters varying in slope and often in size. An objective test is provided by the capital letter Q which is formed in quite different ways in the two MSS.”**²⁶

4.2: Critique by other areas of expertise:

- **Cartographers**
 - Cartography is not only the study and practice of creating maps, but also the academic discipline of teaching about and researching the history of maps. With regards to the Vinland Map, Cartographic Historians were among some of the specialists tasked with examining the map to determine how it relates to other maps of the same time period in order to hopefully help establish authenticity.
 - **What does the style of the map tell us?**
 - It was widely accepted by specialists that the VM was heavily influenced by the 1436 world map by Andrea Bianco, most notably in the outline of the Mediterranean coastline, and the placement and depiction of Africa and the Far East²⁷. Though, while the Bianco map is depicted as circular in shape, the VM appears to take much of that coastline and flatten it out to fit into an ellipse, making room to add additional land masses (Iceland, Greenland and Vinland). The layout of the VM is similar also similar to the Martellus World Map created c.1490 – though this map, created later, doesn’t include Vinland²⁸
 - **Is the mapping consistent?**
 - A noticeable aspect of the VM is the depiction of Iceland, Greenland and Vinland. Known maps that were created both prior to and after this map in the same general time period don’t show all three of these land masses, making the VM the only one to do so.
 - The way Greenland is depicted on the map has been called into question by some cartographers. The way Greenland is depicted on the VM is more like how Greenland is mapped today. It is shown as an island in a shape very similar to the true shape of Greenland.

²⁶ From “Maps Myths & Men” – K. Seaver (p.122)

²⁷ From <http://vinland-map.brandeis.edu/explore/documentary/mapping-style.php> (good comparison side-by-side)

²⁸ From <http://vinland-map.brandeis.edu/explore/documentary/mapping-style.php>

- Though other maps had Greenland depicted, very few had it as anything other than a part of Europe or part of North America (not an island), and those that had it as an island (which were very few) were very inaccurate with its true shape.²⁹
- What does the content of the map tell us?
- Historians
- Latin Specialists
 - What does the Latin text tell us?
 - The Latin text on the map has been determined to be inconsistent with the translations for Norse names and places.
 - Given that Latin was heavily used in the 15th C, it's questionable that someone well versed in Latin would make so many errors in the translation from Old Norse.³⁰

4.3: Discussion by those in the Humanities

- **SKEPTIC:** In 1966, G.R. Crone reviews the first edition of "The Vinland Map and Tartar Relation" that had been released the year before.
 - He publishes this review in The Geographic Journal, sparking a back and forth with Skelton that spanned several issues of the journal.
 - Crone claims that there are several oddities of the map that don't sit well with him:
 - The representation of Greenland and Vinland on the map is not typical of maps at the time
 - The map is very unfinished looking for something created at the time (missing a frame around the image)
 - Looks as though it was drawn rapidly
 - There is no scale, no geographical indication of direction (including no parallels and no meridians)
 - Most of the map falls within an elliptical shape, though it looks as though what was intended was too big for the parchment and thus takes on an odd shape
 - A major observation of Crone that skews his view towards that of skeptic is that the coastline of Africa on the VM looks as though it was copied directly from the Bianco world map of 1436, as determined by a fold which runs across the Bianco Map.
 - Other similarities to the Bianco Map include the fact that they both have a similar axis, and both show names placed (and misspelled?) in similar ways with similar features.³¹
 - His final statement in this review is: **"Whatever one's conclusions may be, it is plain that all the secrets of the Vinland Map have not yet been unraveled."**³²

²⁹ From <http://vinland-map.brandeis.edu/explore/documentary/mapping-consistency.php>

³⁰ From <http://vinland-map.brandeis.edu/explore/documentary/writing-consistency.php>

³¹ From "The Vinland Map Cartographically Considered – A Review" – 1966 – G.R. Crone

- **BELIEVER:** In response to Crone, Skelton clarifies that the publication of the book was meant to be a preliminary presentation for the VM and TR, and was NOT intended to be a firmly conclusive statement. Rather, they wanted to present the materials for examination and leave the door open to alternative interpretation and “speculation”.³³
 - He agrees that Crone was right to further examine the VM from a cartographic standpoint, but feels that it’s only part of the analysis that must be done in conjunction with other aspects of the map (source materials, historic context, etc.).
 - He also agrees that the observance of the coast of Africa was probably influenced by Bianco’s map, but argues that this doesn’t necessarily date the map. He argues that if this map was created later (in the 16th or 17th C., why would the maker have chosen a map that was medieval, as it would have been considered outdated and archaic by that point?³⁴
 - Skelton feels that it is one of two options:
 - The VM is authentic and of the 15th Century
 - The VM is a modern fabrication, “of a perfection and accomplishment not conceivable before the 20th C.”³⁵
 -
 - Skelton quotes Vietor at the end of his argument when he says “The physical evidence, from paleography and bibliotics, has created in the minds of those who have studied the original manuscripts (in Mr. Vietor’s words) ‘a presumption of authenticity so strong as to be difficult, if not impossible, to challenge’; but this is not legal proof, and the issue of authenticity must be faced.”³⁶
- In that same issue of the Geographical Journal, Crone hits back saying that he feels the misspelling of the names on the map seem uniformly mis-represented, and looking at the available evidence makes it almost positive that the VM is post-1460.
- **SKEPTIC:** Also In 1966, D.B. Quinn weighed in with his article “A Viking Map of the West?” He had several points to consider when weighing the authenticity of the map:
 - “If the map is genuine, we may then ask what was its function.”³⁷
 - “If it was a map of the known world, without Greenland or Vinland, though with legends drawn from the Tartar Relation, it could have been copied on another pair of blank parchment leaves, if any such were available in the *Speculum*. Iceland, Greenland, and Vinland, with

³² From “The Vinland Map Cartographically Considered – A Review” – 1966 – G.R. Crone

³³ From “The Vinland Map” (1966) in The Geographical Journal – Skelton & Crone (p.336)

³⁴ From “The Vinland Map” (1966) in The Geographical Journal – Skelton & Crone

³⁵ From “The Vinland Map” (1966) in The Geographical Journal – Skelton & Crone

³⁶ From “The Vinland Map” (1966) in The Geographical Journal – Skelton & Crone

³⁷ From “A Viking Map of the West?” in “Saga-Book of the Viking Society” (1966) – D.B. Quinn (p.68)

perhaps other novelties, could then have been composed and added to this copy which would then have a completely homogenous appearance. It would then be possible to dispose of the original map and to pass off the copy with its striking additions as the original. Such a feat could not have been accomplished without both scholarship, and executive skill, **but forgery has frequently been the result of an excess of scholarly vanity as well as greed.**"³⁸

- "If in the end the Vinland Map is more fully authenticated, and is admitted firmly rather than provisionally into the accepted body of sources on Norse history, it can open up an important range of inquiry into precisely what was known in southern Europe of the northerly and westerly lands of the Norse dispersion towards the end of the middle ages."³⁹

4.4: 1966 SI Symposium

- The 1966 Smithsonian Institution Symposium was arranged by Wilcomb E. Washburn, the director of the SI's Department of American Studies, and held on November 15th and 16th of that year. Washburn invited an array of scholars from different fields to convene in Washington D.C. at the Museum of History & Technology of the Smithsonian (now named the National Museum of American History) to discuss questions that came up after the map was made public and the book on all three documents was released by Yale the year before.
- **Who was present and what did they discuss?**
 - Laurence Witten – The bookseller who purchased the VM initially for \$3,500 and sold it to Yale
 - Paper – "Vinland's Saga Recalled"
 - Witten "provided detailed information concerning the circumstances surrounding his acquisition of the map. Though not satisfying some conference participants [...] because of his refusal to divulge the exact identity of the seller, Witten did impress the participants by his frankness in describing other aspects of the purchase."⁴⁰
 - Alexander Vietor – Curator of Maps at Yale University Library.
 - Vietor "provided further information on the acquisition of the manuscript by the library from the anonymous donor who purchased it from Mr. Witten. Mr. Vietor also explained the decision to publish the book just prior to Columbus Day, 1965, an event which unleashed a torrent of popular abuse unexpected, unprecedented, and, to a large degree, irrelevant."⁴¹

³⁸ From "A Viking Map of the West?" in "Saga-Book of the Viking Society" (1966) – D.B. Quinn (p.71)

³⁹ From "A Viking Map of the West?" in "Saga-Book of the Viking Society" (1966) – D.B. Quinn (p.71)

⁴⁰ From "The Proceedings of the VM Conference" – W. Washburn (p.xi)

⁴¹ From "The Proceedings of the VM Conference" – W. Washburn (p.xi)

- Thomas Marston - Curator of Medieval and Renaissance Literature at Yale University Library.
 - Marsten “revealed that shortly before the conference the offset of a document from the Council of Basel had been discovered in the cover of the Vincent of Beauvais volume in which, according to the theory developed in *The Vinland Map and the Tartar Relation*, The map and Tartar Relation had originally been bound. This discovery provided additional support for the deduction of the authors that the map was a product of the place and period of the Council of Basel.”⁴²
- Dr. Stephen Kuttner – Institute of Medieval Canon Law (laws and legal principles made by the Catholic Church) at Yale University
 - Paper – “Observations on the Relationship between Church History and the Vinland Map”
 - Kuttner “presented, with reference to canon law and medieval church practices, a stimulating hypothesis concerning the mission of Bishop Eirik of Greenland and his relationship to the “neighboring regions,” a relationship expressed in the largest caption on the Vinland Map.”⁴³
 - “A spirited discussion involving Dr. Kuttner, Professor Konstantin Reichardt (Director of Graduate Studies in the Germanics at Yale University), and Professor Robert Lopez (Department of Medieval Studies at Yale University), became particularly concerned with the reliability of Professor Luca Jelič, who had reported to a Catholic Historical Congress in the 1890s, without reference to a specific source, a title for Bishop Eirik startlingly like that found on the map. Although Dr. Kuttner felt that the title could be explained as a Latin translation by Jelič of the French phrase he had used in describing Bishop Eirik in an earlier paper, several participants felt that more work needed to be done both on Jelič and on the documents he worked with in European archives before the mystery could be resolved.”⁴⁴
- Professor Vsevolod Slessarev – Professor in the Department of History at University of Cincinnati
 - Paper – “The Great Sea of the Tartars and the Adjacent Islands”
 - Slessarev “presented a learned account of the frequent parallels – more numerous than had been noted in *The Vinland Map and the Tartar Relation* – between the text of the Tartar Relation and the captions on the Vinland Map itself. Slessarev, following a suggestion he made at the conference, was able to obtain from a Polish scholar information which may well explain the mysterious caption that mentions the Bishop’s

⁴² From “The Proceedings of the VM Conference” – W. Washburn (p.xi-xii)

⁴³ From “The Proceedings of the VM Conference” – W. Washburn (p.xii)

⁴⁴ From “The Proceedings of the VM Conference” – W. Washburn (p.xii)

return to Europe from Vinland *ad orientem hiemale* to report on his visit to Vinland.”⁴⁵

- Professor Boleslaw Szczesniak – Professor in the Department of History at the University of Notre Dame
 - Paper – “The Tartar Relation and the Vinland Map: Their Significance and Character”
 - Szczesniak, who “looked on the Vinland Map with some skepticism, used his considerable knowledge of the Orient to discuss the meaning of terms used in the Tartar Relation. Szczesniak challenged Skelton’s view that little knowledge of Chinese cosmography filtered back to Europe through the medium of the missions of Carpini and Rubruck to the Mongol Court.”⁴⁶
- Professor Gwyn Jones – Professor in the Department of English at the University College of South Wales (Cardiff)
 - Paper – “The Western Voyages and the Vinland Map”
 - Jones “discussed the saga evidence for the discovery of Vinland and related it to the slightly different story provided by the legends on the Vinland Map.”⁴⁷
- Professor Erik Wahlgren – Professor in the Scandinavian Section of the Department of Germanic Languages at the University of California at Los Angeles
 - Paper – “The Companions Bjarni and Leif”
 - Wahlgren “reviewed the traditional sagas and analyzed the peculiar Latinized forms of several of the Scandinavian names recorded on the Vinland Map.”
 - Wahlgren and Reichardt felt that the caption writer could not have understood fully the Scandinavian forms he was dealing with or he would not have written, for example, *leiphus erissonius* for Leif Eiriksson, which literally means Leif, the son of Eirikr, or *filius Erics*, as the caption writer might more logically have Latinized it.”⁴⁸
- Professor Oystein Ore – Professor of Mathematics at Yale University (interests outside of mathematics included collecting ancient maps, to the point he was considered an expert. He was also fluent in several foreign languages)⁴⁹
 - Paper – “A Hypothesis for the Vinland Map”
 - Along with Professor Einar Haugen, “applied knowledge of Scandinavian linguistics to a consideration of the many problems raised by the map captions”.⁵⁰
- Professor Einar Haugen – Professor of Germanic Languages and Literature at Harvard University

⁴⁵ From “The Proceedings of the VM Conference” – W. Washburn (p.xii)

⁴⁶ From “The Proceedings of the VM Conference” – W. Washburn (p.xii)

⁴⁷ From “The Proceedings of the VM Conference” – W. Washburn (p.xii-xiii)

⁴⁸ From “The Proceedings of the VM Conference” – W. Washburn (p.xiii)

⁴⁹ From <http://www-groups.dcs.st-and.ac.uk/history/Biographies/Ore.html>

⁵⁰ From “The Proceedings of the VM Conference” – W. Washburn (p.xiii)

- Paper – “Bishop Eric and the Vinland Map”
 - Along with Professor Oystein Ore, “applied knowledge of Scandinavian linguistics to a consideration of the many problems raised by the map captions”.⁵¹
- Dr. Melvin H. Jackson – Associate Curator, Section of Maritime History, Division of Transportation, Department of Science and Technology at the Smithsonian Institution
 - Paper – “The Vinland Map and the Imperatives of Medieval Form”
 - Jackson’s paper “dealt with the shape and frame of the Vinland Map. Noting the unusual ellipsoid form of the map in an era dominated by circular or rectangular maps, Jackson suggested the possibility of a post-Columbian origin for the map in response to an unrecorded diplomatic struggle to assert exclusive rights over the newly discovered areas of America.”
 - “Jackson’s paper was vigorously questioned by Skelton and others, who denied that the scarcity of ellipsoid frames in the medieval period had the significance Jackson attributed to it”⁵²
- Dr. Thomas Goldstein – Professor of History at City College, City University of New York (CCNY/CUNY)
 - Paper – “Some Reflections on the Origin of the Vinland Map”
 - Goldstein “attempted to pull the production of the map south from Basel to Florence, and postulated a possible connection with the circle of Paolo Toscanelli, the Florentine scholar whose advice greatly encouraged Columbus. Goldstein’s principal point was, however, that the Vinland Map was the first world map in which the oceans were as important as the land and in which the water did not merely form a circumambient girdle around the traditional *oikoumene* [ancient Greek term for the known world].”⁵³
- Ib Rønne Kejlbo – Librarian at the Division of Maps for the Royal Library of Denmark
 - Paper – “Claudius Clavus and the Sources of the Vinland Map”
 - Kejlbo’s paper “elevated [Claudius] Clavus [the famous cartographer/liar] to a significant position among the possible precursors to the maker of the Vinland Map.”
 - “Mr. Skelton, however, stuck to his view, expressed in *The Vinland Map and Tartar Relation*, that Clavus had little influence on the Production of the map or its models.”⁵⁴
- Paul Fenimore Cooper, Jr. – Physicist and Arctic Explorer/Consultant to Canadian Government on matters concerning the Arctic⁵⁵

⁵¹ From “The Proceedings of the VM Conference” – W. Washburn (p.xiii)

⁵² From “The Proceedings of the VM Conference” – W. Washburn (p.xiii)

⁵³ From “The Proceedings of the VM Conference” – W. Washburn (p.xiii)

⁵⁴ From “The Proceedings of the VM Conference” – W. Washburn (p.xiii)

⁵⁵ From <https://lccn.loc.gov/n90666053>

- Paper – “The Representation of Greenland on the Vinland Map”
- Cooper discussed “the role of the Eskimo as a possible source of the remarkable rendition of Greenland on the Vinland Map” in his paper, and in the discussion that followed.
- “A number of noted anthropologists and Eskimologists, as well as cartographers, participated in the discussion, and the case for the theoretical possibility of Eskimo aid in forming the outline of Greenland on the map was strongly put, though some of the professors of linguistics remained skeptical.”⁵⁶
- Professor Armando Cortesão – From Coimbra, Portugal, and the only holder of an endowed chair in the history of cartography in the world
 - Paper – “Is the Vinland Map Genuine?”
 - “remained somewhat skeptical and suspicious of the map while, at the same time, conceding the good faith of the buyer, Mr. Witten, and the good sense of the authors who produced *The Vinland Map and the Tartar Relation*.”⁵⁷
- Professor Robert S. Lopez – Professor, Department of Medieval Studies at Yale University
 - Paper – “The Case Is Not Settled”
 - Lopez, “while avoiding a positive assessment, concluded that the map was probably “a most clever counterfeit”⁵⁸
- Theodore Layng – Head of the Map Division, Public Archives of Canada
 - Layng “pointed out that he knew of no fifteenth-century map that had stood so well the pounding the Vinland Map had received during the two days of the conference.”⁵⁹
- John Parker – Curator of the James Ford Bell Library (special collection), University of Minnesota
 - Paper – “Authenticity and Provenance”
- Konstantin Reichardt –Director of Graduate Studies in Germanics at Yale University
 - Paper – “Linguistic Observations on the Captions of the Vinland Map”
- Other participants of the conference who didn’t present papers but took part in discussion included:
 - Thomas R. Adams – Librarian at the John Carter Brown Library at Brown University
 - Dr. Manoel Cardozo – Head of the Department of History at The Catholic University of America
 - Dr. Henry B. Collins – Archaeologist in the Division of Cultural Anthropology at the Museum of Natural History, Smithsonian Institution

⁵⁶ From “The Proceedings of the VM Conference” – W. Washburn (p.xiii-xvi)

⁵⁷ From “The Proceedings of the VM Conference” – W. Washburn (p.xvi)

⁵⁸ From “The Proceedings of the VM Conference” – W. Washburn (p.xvi)

⁵⁹ From “The Proceedings of the VM Conference” – W. Washburn (p.xvi)

- Professor Bailey Diffie – Department of History, City College of New York (CCNY)
 - Dr. Dana B. Durand
 - Herman R. Friis – Senior Specialist in Cartographic Archives, National Archives and Records Service
 - Dr. Arch C. Gerlach – Chief of the Geography and Map Division of the Library of Congress
 - Mr. Frederick R. Goff – Chief of the Rare Book Division of the Library of Congress
 - Dr. Bernard Hoffman – Department of Sociology and Anthropology at the University of Maryland
 - Reverend Mathias Kieman – Academy of American Franciscan History
 - Professor George Kish – Department of Geography at the University of Michigan
 - Professor Ursula S. Lamb – Department of History at Yale University
 - Mrs. John U. Nef
 - Dr. John H. Parry – Department of History at Harvard University
 - Dr. Norman Holmes Pearson – Chairman of the American Studies Program at Yale University
 - Dr. Walter W. Ristow – Associate Chief of the Geography and Map Division at the Library of Congress
 - Dr. Peter H. Sawyer – Department of History, University of Minnesota
 - Professor Franklin D. Scott – Department of History, Northwestern University
 - R.A. Skelton – Superintendent of the map Room at the British Museum
 - Mr. Henry C. Taylor
 - Willis Vandevanter
 - Dr. Wilcomb E. Washburn – Chairman of the Department of American Studies at the Smithsonian Institution
 - Dr. Louis B. Wright – Director of the Folger Shakespeare Library
 - The Right Reverend Monsignor A.K. Ziegler – The Catholic University of America
- **Was there a general consensus that came from this conference?**
 - Though there was much back and forth between all the scholars present at the conference, there wasn't one conclusion that everyone walked away with. There were still skeptics, and there were still staunch believers.
 - Up to this point, all discussion that took place focused on the studies of the map through the lens of the humanities – the handwriting, how it fit in with other maps of the time, the Latin text, use of primary and secondary Scandinavian sources, etc.
 - The overall consensus was "We need to study it further". There were several proposals that came up during and directly after the conference for further,

more comprehensive physical (scientific) testing of the map⁶⁰. Yale agreed that further scientific testing should be carried out.

4.5: Public Response of Italian Americans (and others)

- **What was the reaction of the Italian American community?**
 - The reaction to the Vinland Map from the Italian American community (both locally and nationally) was incredibly strong and incredibly negative. There were outcries from just the man on the street all the way up to prominent leaders of the Italian American community. So many expressed that they felt that the claims Yale made about the map was an affront not only on Columbus Day, but on Italian heritage and culture in general. The choice for the announcement of the map the day before Columbus Day was just a way to rub more salt in the wound.
 - **Michael Musmanno**
 - Pennsylvania Supreme Court Justice
 - Volunteered to serve on the defense team for the Sacco-Vanzetti case
 - Presiding Judge at the Einstzgruppen Trial of the US Nuremberg Military Tribunal
 - Chief prosecution witness against Nazi Adolf Eichmann
 - Proud Italian American
 - Passionate Columbus Scholar
 - Musmanno wrote a book titled *Columbus Was First* – a book that comes across as a legal defense in favor of Columbus being the first European to reach America, and a plea being made to the public (similarly as a lawyer would make to a jury) in an attempt to persuade them of such.^{61, 62}
 - Musmanno was very upset that the authors who presented their findings on the VM & TR presented them as proven fact with no room for further examination.
 - With regards to why he felt the need to write this book, Musmanno said:

“So long as there are theorists who dress the legend-enshrouded figure of Leif Ericson with the mantle of Finder of America, so long as archaeological ambiguities and maps of dubious pedigree are flaunted as new “proofs” of their theories by the daily press, so long as these “proofs” are accepted unquestioningly by a large portion of the public, satisfied that the “experts” have spoken – then I feel this book has its *raison d’etre*.”

⁶⁰ From “The Proceedings of the Vinland Map Conference” – W. Washburn (p.xvi)

⁶¹ From “Columbus’ American Lawyer: Musmanno & The Vinland Map” – Cliff Tuttle

⁶² Also from “Columbus Was First” – Michael A. Musmanno

http://www.efootage.com/stock-footage/86954/Vinland_Map_Controversy_-_HD/.

■ John LaCorte

Photo of LaCorte tearing up copy of the VM

- President of the Italian Historical Society of Brooklyn
- Campaigned for Columbus Day, beginning with celebration in Brooklyn in 1939, and eventually leading to a Columbus Day parade in Manhattan
- Founded the Italian Historical Society of America
- Helped to get a postage stamp created that commemorated Giuseppe Garibaldi
- Also claimed Antonio Meucci (Staten Island) invented the telephone before AG Bell, that the first Italian settler in NY came in 1635, and the founding of the FBI should be credited to Charles J. Bonaparte
- Had the Verrazano Monument created in the early 1900s pulled out of storage and placed in Battery Park, and eventually saw the designation of Verrazano Day on April 17th. This eventually led to the naming of the Verrazano-Narrows Bridge.

→ Strong opposition to Yale Map, publically attacked the map in the NY Times and railed against Yale University as an institution.⁶³

- A 1965 quote from John Lindsay, as New York City mayoral candidate, to the Yale Daily News said: **“To say Columbus didn’t discover America,” he told the news, “is to say that Joe DiMaggio was not a great baseball player, Toscanini not a great conductor, and Enrico Fermi not a great scientist and that’s just ridiculous.”**⁶⁴

- Lots of mail sent to Yale, both the Library and the University as a whole. The mail seemed to form into 3 camps: people inquiring about more information, people wanting to share their own stories of knowing that the Vikings were here first and wanting to give information to the university, and those who were incredibly upset. Though some opinions that expressed anger were clearly from complete nuts, the vast majority said things such as the following (pulled from letters in Yale Archives):

→ **“Not only are you people a pack of filthy bums, but you are also the best bunch of liars in the USA. We need you, however, for laughs.”**⁶⁵

⁶³ From John LaCorte obituary <http://www.nytimes.com/1991/11/23/nyregion/john-n-lacorte-81-champion-of-italians-and-columbus-day.html>

⁶⁴ From Yale Daily News, 10/13/65, see PDF in VM folder

⁶⁵ Anonymous postcard, 10/12/1965, from unknown location. Yale Archives, RU120/B29/F580. Image can be seen here:

- “Let me tell you that before a man can land on the moon they will have to send an Italian because Italians are by heredity discoverers of new worlds. From a proud Italian, one of vast numbers, so I say that you will forever regret your stupid statement and you had best take it back to save face. Justice for all and all for Justice.”⁶⁶
- “We know why you bulldogs are barking (Italians and Spain Catholic). So you K.K.K. muslims or what ever you are, want the Catholics out of this country. What are you Anglo Saxon (Bulldogs.) Why don’t you throw us out. Why don’t you bulldogs get on one side of the world and the Christians on the other and fight hand to hand combat. Know you rather do it in newspapers, or killing our good President from the back.”⁶⁷
- “The map you have is evidently a map copied from maps drawn by Christopher Columbus himself. He drew these maps so that others could find their way to America [...] About Leif Ericson – he was born long after Christopher Columbus discovered America. All you have is a map, others have facts. P.S. In Springfield Mass there was a parade in honor of Christopher Columbus on Sunday Oct 10, which was attended by 60 thousand viewers and the parade last for 2 hours and 30 min. It was beautiful.”⁶⁸
- “I read your article on Maps Shows Erikson did find America, for which I do not approve of. Neither Erikson or Columbus discovered America. But if you want the answer, you will have to read the book of Mormon to know, who it was that discovered America.”⁶⁹
- “The news tells us every once in a while some nut will turn up to tell us some one other than Columbus discovered the Western Hemisphere or America. But I didn’t think the nuts would come

H:\Vinland Map\LRN - Vinland Map Research\Yale Archives at Sterling\RU 120 - Librarians, Yale University Archives\B29_F580 - Crank Mail

⁶⁶ Crank Mail from unknown location, 10/12/1965. Yale Archives, RU120/B29/F580. Image can be seen at above location.

⁶⁷ Anonymous mail, unknown location. Most likely 1965/1966. Yale Archives, RU120/B29/F580. Image can be seen at above location.

⁶⁸ Crank Mail, unknown location, 10/15/1965. Yale Archives, RU120/B29/F580. Image can be seen at above location.

⁶⁹ Crank Mail from Kent, WA. 10/16/1965. Yale Archives RU120/B29/F580. Image can be seen at above location.

from the Universities. Why find a map at this late date when Columbus isn't there to defend himself?[...] What do they teach at Yale University, to take Honor away from Men that made History and aren't here to defend them-selves?"⁷⁰

→ "The recent controversy created by your historians of your school is in my opinion, and no doubt many others as unethical, irresponsible, and shamefully degrades the standard of your fine university. [...] Such tactics as recently shown is similar to historians stating that Christ didn't exist, and announce this at Easter or Christmas time."⁷¹

- Even students at Yale seemed to have a strong reaction to the map – On October 12, 1966 (one year after the unveiling), a group of Yale law students who claimed dedication to "re-establishing public faith in Christopher Columbus as the true discoverer of America" stormed the Beinecke Library, emerged with the "map" (a replica effigy), and burned it while standing on the plaza outside the library in front of a crowd.⁷²

Photo of Lieberman burning the "map" outside Beinecke

- **Why did they react as strongly as they did?**
 - Many people, specifically Italian Americans, felt this was a personal attack on them.
 - Italian American community had spent years trying to move themselves as an ethnic group away from "otherness" with their immigrant status, and more to accepted and integrated members of an American society.
 - Immigrants from Southern Europe (Italians, Poles, Greeks, Armenians, Slovenians, Croatians, Slovaks, etc.) went out of their way to try to integrate themselves into American society in the early part of the 20th C.
 - "Our parents 'began to go out of their way in order to act American'"⁷³
 - "To Ethnic, America is almost a religion"⁷⁴
 - These "ethnic" immigrants found themselves being the center of prejudices by the "Nordic" immigrants (that is, German, Scandinavian, English, Irish, etc.). "Nordic" immigrants were seen as the 'Old Americans' – the nativists. This Nordic-Nativist vs. Ethnic-Other played

⁷⁰ Crank Mail, Los Angeles, CA. 10/22/1965. Yale Archives, RU120/B29/F580. Image can be seen here: H:\Vinland Map\LRN - Vinland Map Research\Yale Archives at Sterling\RU 120 - Librarians, Yale University Archives\B29_F580 - Crank Mail

⁷¹ Crank Mail, East Orange, NJ. 10/13/1965. Yale Archives, RU120/B29/F580. Image can be seen at above location.

⁷² Yale Daily News, 10/13/1966 – "Columbus-Day Feud: Pickets Burn Viking Map in Effigy"

⁷³ From "Unmeltable Ethnicity" – M. Novak (p.78)

⁷⁴ From "Unmeltable Ethnicity" – M. Novak (p.77)

out in race relations (including Italians)⁷⁵ Also, can be identified as WASP (White, Anglo-Saxon Protestants)

- Italian immigrants to the US had created a deep connection to the romanticized notion of Columbus as the “first” Italian immigrant, and used his image and sanitized story to help them integrate themselves into the greater American WASP society.
 - Beginning with the mass immigration to the US by Italians in the late 19th Century, Italian Americans had long been viewed with suspicion by WASP/Nativist Americans – fears over these ethnic immigrants coming for their jobs, their threat to “American Values”, the Red Scare and fears of anarcho-communist uprisings, etc.
 - To combat these fears and attempt to assimilate, Italian Americans characterized Christopher Columbus as hypermasculine, individualistic, and an explorer who succeeded on his merit – all qualities that were (and are) greatly valued by the greater, elite American society.
 - In presenting him in this way, Italian American’s were able to use him as a stand-in for themselves, and presenting as someone who is viewed as acceptable in dominant WASP culture, and meshes with what the “mainstream” American ideals and dreams were constructed of
 - This, in turn, helped shape other’s views of Italian immigrants, placing them in a more favorable (and relatable) light, working as a direct foil to what the general views of Italian immigrants were at this time (criminals, aggressive, unintelligent, etc.)⁷⁶
 - Italian immigrant families were able to use the image and idea of Columbus as a shield to hide their own “suspect invasion” of the US.⁷⁷
 - **“In the country clubs, as city executives, established families, industrialists, owners, lawyers, masters of etiquette, college presidents, dominators of the military, fundraisers, members of blue ribbon communities, realtors, brokers, deans, sheriffs – it is the cumulative power and distinctive styles of WASPS that the rest of us have had to learn in order to survive. WASPS have never had to celebrate Columbus Day or march down Fifth Avenue wearing green. Every day has been their day in America.”⁷⁸**
 - In 1965, only 3 people were celebrated with a national holiday – Washington, Lincoln, and Columbus. This holiday presented Columbus as an American hero, and something firm that Italian Americans could

⁷⁵ From “Unmeltable Ethnics” – M. Novak (p.92-104)

⁷⁶ From <https://www.neh.gov/humanities/2015/januaryfebruary/feature/what-sets-italian-americans-other-immigrants>

⁷⁷ From “Silencing the Past: Power and the Reproduction of History – M-R. Trouillot (p.131)

⁷⁸ From “Unmeltable Ethnics” – M. Novak (p.135-136)

associate with that helped to keep their distance from the label of “other” they had worked so hard to overcome.⁷⁹

- For years, WASP/Nordic-nativist Americans were seen as the carriers of academic intellect, placing other ethnic immigrants (including Italian Americans) in direct contrast to this⁸⁰
 - **“The mother family of them all consists of ‘paleface’ intellectuals at Ivy League schools: honored; established; accomplished; serene; mostly white, Anglo-Saxon, and Protestant.”⁸¹**
 - **“More than one person has noted that anti-Catholicism is – or perhaps was – the anti-Semitism of the Intellectuals”⁸²**
 - Additionally, the news of the map came about during a period of time when the generation was typically the 3rd to have been living in America at the time, and were challenging this assimilation idea and asserting their own ethnic identity⁸³ ...this announcement seemed like a slap in the face to all they were working towards
 - Announcement came in the midst of a massive “ethnic revival” – Black Power, AIM and Indigenous Movements, Chicano pride, etc. Italians were definitely a part of this too⁸⁴
 - **Include image of “white men of authority” in the library at Yale? Either in this section or somewhere in general area...decidedly not ethnic, very white/WASP/Nordic/Nativist**
- These prejudices in conjunction with the announcement of the map lead to a big backlash against academia/intellectualism, hostility towards Yale
 - **“Who shall speak for the people?
Who has the answers?
Where is the sure interpreter?
Who knows what to say?”
-Carl Sandburg, *The People, Yes*, 1936**

- What came of this response?

1.3: Response of Others (Internationally)

- Public response of Norway?
 - Though Norwegians had no direct historical connections or involvement related to the Viking’s voyages to Vinland other than a small connection between Erik the Red and Norway, they have always viewed Viking/Norse history as a source of cultural pride and heritage. It was this attachment that lead Helge and Anne Stine Ingstad to take up their archaeological work that lead to the uncovering of

⁷⁹ From E.E. talk with Bruce Schulman, June 27, 2017

⁸⁰ From “Unmeltable Ethnics” – M. Novak (p.92)

⁸¹ From “Unmeltable Ethnics” – M. Novak (p.161)

⁸² From “Unmeltable Ethnics” – M. Novak (p. 163)

⁸³ From E.E. talk with Bruce Schulman, June 27, 2017

⁸⁴ From E.E. talk with Bruce Schulman, June 27, 2017

L'Anse aux Meadows (and this site only added to the pride that the Norwegians had linking them to this history).⁸⁵

- Yale decided to have Chester Kerr (the director of Yale University Press) fly to Norway to host a gala event on October 8, 1965 – 3 days prior to the announcement of the map to the press. Helge and Anne Stine were two of the guests at this presentation, along with other individuals and members of the Norwegian press. Kerr took the time to explain how Yale came to acquire the map, and answer questions they may have so that they wouldn't be surprised by the announcement. The university felt this "courtesy visit" would be helpful in smoothing over any questions the Norwegian Press may have, and that they owed it to the homeland of Erik the Red to give them a small heads up about the impending news.⁸⁶
 - More than anything, this visit had to do with the Ingstad's discovery of L'Anse aux Meadows. National Geographic had already published a 27 page article in their November 1964 article discussing the Ingstad's work. Yale felt that this site that confirmed Norse contact in North America could potentially minimize the presumed importance of the Vinland map, relegating it to secondary, supporting confirmation of what was already known.⁸⁷
- **Public response of Iceland?**
 - Oddly enough, Yale didn't extend their courtesy visit to Iceland. The University only had the London office of the Yale University Press inform the local newspaper *Morgunblaðið* on the same day the announcement was made in Norway.
 - The reception of the announcement in Iceland ended up being very indifferent. The response was typically that they had already know for many years that the Norse had reached North America long before Columbus as that is what it said in their sagas. That wasn't news to them. And as for the thoughts on whether or not the map was genuine or needed questioning, they seemed to take the stance of "we'll just wait and see what comes of this".⁸⁸
 - In 1967, a series of short overseas shows were planned for the map, including locations in England, Amsterdam and Norway. However, Iceland was not originally on the list.

⁸⁵ From "Maps, Myths and Men" – K. Seaver (p.150)

⁸⁶ From "Maps, Myths and Men" – K. Seaver (p.149)

⁸⁷ From "Maps, Myths and Men" – K. Seaver (p.150)

⁸⁸ From "Maps, Myths and Men" – K. Seaver (p.150-151)

- Letter written January 17, 1967 from Don R. Torrey, the Public Affairs Officer to the Foreign Service of the USA in Reykjavik wrote a letter to James Tanis, Yale University Librarian. In his letter, Torrey states:

“We have learned from newspapers and other sources of the opening of the exhibition featuring the original Vinland Map at the British Museum later this month. It is then scheduled to open at the University Library in Oslo.

As you know, there was a tremendous interest in Iceland in the Vinland Map. Having suffered along with their Scandinavian brethren, a sense of frustration over the lack of recognition of Viking explorations, Icelanders lauded the map discovery. They did, however, feel disappointed that news of the event and subsequent stories on it ignored the Icelandic interest. Leif Erikson is considered by Icelanders to be one of their earliest and most distinguished sons. Icelanders also feel that archives at the University of Iceland are extremely valuable sources of information on the discovery of America in A.D. 1000.

I review these facts with the following in mind: that you and your colleagues interested in “The Vinland Map and the Tartar Relation” might be willing to consider showing the exhibition in Iceland, either following the Oslo appearance or at another suitable time. If so we should be happy to make such approaches as you may deem fitting to the Icelandic Museum and the University of Iceland, leading to their possible sponsorship.”⁸⁹

→HAVE INTERVIEWS WITH RAY AND KIRSTEN IN THIS AREA

→ALSO IN THIS AREA – LARGE WALL GRAPHIC: “What’s Wrong with This Map?”
(OPPOSITE OF GRAPHIC IN SECTION 2)

SECTION 5: SCIENCE EVIDENCE AND TESTING

5.1: Intro Panel – 100ish words... “when no one could agree, they turned to science”

→VIDEO INTERVIEW OF KEN TOWE AT THE START

5.2: 3 MAJOR SCIENCE TESTS (to highlight)

⁸⁹ Letter from Yale Archives dated 1/17/1967 – RU 120/B29/F582

- **First round of Testing – Black Light Testing**

- First round of testing was completed by David Baynes-Cope at the British Museum (back when the map first visited the museum after its release in 1966)
 - Baynes-Cope was an expert in his field of document examination and conservation
- **Results?**
 - Baynes-Cope tested how the ink of the map interacted with the background of the map while under black light testing, and then compared how the results of this test on the map compared to those of the TR & SH, which were both tested under the same results.
 - As explained in 1974 at the Royal Geographical Society Symposium:

“Iron compounds quench the fluorescence induced in the background by ultraviolet light and for this reason, faded iron gallo-tannate ink, yellowish brown by daylight, will appear black against bluish or yellowish fluorescent background under this form of lighting. The inks used in both the “Tartar Relation” and the *Speculum Historiale* showed this phenomenon whereas the ink used for the outline of the map itself and for the text on the leaf did not show this phenomenon.”⁹⁰
 - Baynes-Cope considered other alternatives, such as perhaps the ink used was another form of medieval ink, such as sepia, but they were not able to definitively decide this was a fake by observation alone, and therefor suggested that more testing should be done using more accurate micro-analytical techniques.

→ ACTIVITY: REPLICATE THE BLACK LIGHT EXPERIMENT

- **Second Round of Testing – McCrone/Ink Test (microscopes)**

- **Why was McCrone chosen to do this test?**
 - Dr. Walter McCrone was known for his pioneering use of the microscope in forensic analysis. His group, the McCrone Research Institute in Chicago had been personally chosen to undertake this first major testing by Alexander Vietor.⁹¹ Though they were approached in 1968, McCrone Associates had to wait until 1972, when the tools were finally sophisticated enough to handle this request.⁹²
- **How did they test the Map?**
 - McCrone Associates chose to use the science of microscopy to examine the map’s ink

⁹⁰ From “Maps, Myths, Men” – K. Seaver (p.187-188)

⁹¹ From “Maps, Myths & Men – K. Seaver (p.189)

⁹² From “The Vinland Map Ink” – W. and L. McCrone (1974)

- The use of microscopy is important for many things, including identifying environmental pollutants or contaminants in products, pigment identification in paintings, cross-contamination of drug products, particles in pollutants, etc.⁹³
- Important when chosen by Yale because they wanted to test with no visible damage to the document produced.
- In order to identify a specific particle, multiple microscopes may be used. Testing starts with a light microscope and then progresses to more sophisticated technologies until an analysis is successful
- The order of examination by McCrone Associates was⁹⁴:
 - 1.) Preliminary examination by Stereo Microscope:
 - This preliminary examination disclosed what appeared to be a normal, hand-drawn map
 - Black ink lines were bordered along its length by a yellowish discoloration, originally assumed to be a stain normally seen from the discoloration of ink over time
 - During sampling, however, the yellow discoloration appeared to have body, unlike stains
 - Close examination showed that the black line had been carefully drawn over the previously drawn yellow line
 - 2.) Polarized Light Microscopy (PLM):
 - Initial examination showed that lines had originally been drawn with black ink, but had flaked off over time and left a yellow stain assumed to have been ink that soaked into the parchment.⁹⁵
 - This test looked at the samples of the parchment fiber with the ink adhered to it under higher magnifications
 - Showed details of small white spots and smaller dark particles in the center portion of the fiber
 - High birefringence (property of material having a refractive index that depends on polarization and propagation direction of light) and low refractive indexes infer these white particles are calcite (limestone)
 - The tiny dark particles have a very high refractive index. These particular pigment particles appear dark by transmitted light and why by reflected light, indicating they are most likely titanium white

⁹³ From “Authenticity of Medieval Document Tested by Small Particle Analysis” – W. McCrone (1976)

⁹⁴ From “The Vinland Map” – W. McCrone (1988)

⁹⁵ From “Authenticity of Medieval Document Tested by Small Particle Analysis” – W. McCrone (1976)

(TiO₂). The absence of polarization colors means a low birefringence, and therefore anatase

- Samples taken from 16 areas showed the same 2 kinds of particles
- The PLM also noticed that samples varied in the relative amounts of yellow and black ink, as well as the way the pigments were distributed in the yellow ink
- This shows the difficulty that comes in mixing the particles to produce a uniform dispersion, and explains why when different portions of the same sample were examined by different techniques, they sometimes showed different compositions
- The PLM also noticed something that had to do with the shape of the calcite and anatase particles
 - A regular, uniform shape of calcite would indicate a man-made product available commercially only in the 19th C. and later
 - However, limestone has been used as a ground mineral for hundreds of years
 - The calcite in the VM is ground limestone and not helpful in dating the map...most calcite in modern paintings is the man-made mineral
 - The larger anatase particles, as viewed by the PLM, show rounded crystal-formations – typical of commercial titanium white.
 - This product has only been produced since 1917
 - For a few years after 1917, the color of this anatase (TiO₂) pigment was yellow due to traces of iron
 - **they observed no other yellow particles on the map**
- 3.) X-Ray (XRD):
 - Used to examine samples of the yellow ink which had been assumed to contain anatase and calcite. This was done by examining the powder diffraction patterns
 - This test showed about equal parts anatase and calcite with a small quantity of quartz, confirming the PLM results
 - Though titanium is not an uncommon element to find, Titanium dioxide as anatase is much less common, and in

the modern pigment form has only been around since around 1920

- 4.) Scanning Electron Microscope (SEM)
 - Exam of yellow pigments to attempt to get better understanding of their makeup
 - SEM showed high levels of a titanium component in the ink –ultimately determined to be anatase which had only been produced in a manufactured form since around 1920⁹⁶
- 5.) Transmission Electron Microscope (TEM)
 - Exam to further examine the anatase particles that had been traced by the SEM
 - The anatase found here had an entirely different shape to anatase that is found in nature...much closer to that of a manufactured anatase⁹⁷
 - Jagged, irregular particles with widely varying particle size would signify ground mineral anatase – that which occurs in nature.
 - Well-formed, founded, regular crystal shapes and a narrow variety of size would indicate man-made anatase.

→ INTERACTIVE – USE A MICROSCOPE TO SHOW DIFFERENCE BETWEEN WAYS ANATASE SHOWS UP ON THE MAP VS ON MEDIEVAL VS MODERN DOCS

- 6.) Selected Area Electron Diffraction (SAED)
 - A technique performed inside a TEM, and identifies the atomic and molecular structure (crystallographic phase), and therefore the chemical composition.⁹⁸
- 7.) Electron Microprobes (EMA)
 - Detects and identifies all elements except for the four lightest (Hydrogen, Helium, Lithium and Beryllium)
 - When examining the multiple samples of the yellow ink from the VM, a significant amount of titanium was detected.
 - A single sample examination of black ink and parchment showed little or no titanium⁹⁹
- 8.) Ion Microprobes (IMA)
 - Used to attempt to identify the vehicle in the yellow ink
 - Made comparisons to a number of possible vehicles used during the 15th Century – India ink,

⁹⁶ From “Authenticity of Medieval Document Tested by Small Particle Analysis” – W. McCrone (1976)

⁹⁷ From “Authenticity of Medieval Document Tested by Small Particle Analysis” – W. McCrone (1976)

⁹⁸ From “The Vinland Map” – W. McCrone (1988)

⁹⁹ From “The Vinland Map” – W. McCrone (1988)

- tea, bearberry, sepia, tannin, celandine, gall, and iron gallotannates.
 - The vehicle in the yellow ink was unlike any of these, and was completely different from all others that would have been available at the time
 - Further comparison to modern vehicles showed it most closely resembled a suspension of pigment particles in an alkyd resin
 - This is consistent with the modern origin of the ink pigment, since alkyd resins were first made in the 1920s¹⁰⁰
 - **What were their results?**
 - The presence of a double ink line strongly suggests that the VM was made to appear ancient
 - Yellow line was intentionally added to simulate staining that would be seen on a document of old age that had discolored over time.¹⁰¹
 - One of the pigments present is the modern anatase “titanium white”.
 - The pigment is identical in composition, crystal structure, size and shape with commercial titanium white that was only available since 1917.
 - The identification of the titanium white as anatase was determined by the use of several different microscopes (the PLM, the SEM, the EMA, the IMA, both X-Rays and SAED).
 - They conclude that the Vinland Map is a forgery; the presence of a yellow underline is used to deceive; presence of anatase as a precipitated pigment places ink post-1920.¹⁰²
- **5th Round of Testing (3rd Major Test) – Carbon 14 testing for the parchment:**
 - **How was this test carried out?**
 - This round of testing was carried out by D. Donahue, J. Olin and G. Harbottle in 1995, but results weren’t published until 2002
 - Removed a tiny strip of parchment from the VM to test the carbon-14 content
 - All living things contain carbon in some form, and all of the carbon in living things contains the radioactive carbon isotope, carbon-14. When we die, the carbon input ceases, and our carbon-14 content begins to decrease in a standard, understood way. By measuring the carbon levels in matter that is no-longer living, we can determine when it died based on the carbon-14 content.¹⁰³

¹⁰⁰ From “Authenticity of Medieval Document Tested by Small Particle Analysis” – W. McCrone (1976)

¹⁰¹ From “Authenticity of Medieval Document Tested by Small Particle Analysis” – W. McCrone (1976)

¹⁰² From “Authenticity of Medieval Document Tested by Small Particle Analysis” – W. McCrone (1976)

¹⁰³ From <http://vinland-map.brandeis.edu/explore/material/donahue.php>

- The Vinland Map was created on parchment that was created from the skin of a dead animal. By conducting the carbon-14 testing, Donahue, Olin, and Harbottle were able to determine when the animal was slaughtered for the parchment

→ Video loop here of the cutting and testing of the map

- **What were the results?**
 - This testing dated the parchment to somewhere between AD 1411 and 1468 to a 95% confidence level (almost certain)
 - However, the parchment sample used was cut into several smaller pieces which after the first test had to undergo extreme acetone cleaning due to the presence of some unknown contaminant (that happened to be more radioactive than the living matter)¹⁰⁴
 - The contaminant found was determined to be “post bomb” - that is, contaminated by carbon-14 that had been produced in the atmospheric testing of nuclear devices between 1950 and 1963.¹⁰⁵
 - Unknown how this contaminant found its way onto the VM
- **Did this impact the overall opinion of the map’s authenticity?**
 - Their final report stated that **“Our dating research does not prove that the Vinland map is authentic”**, but that **“In short, a forger would have had no reason to choose a piece of parchment to insure the date we have found. In light of the above, we are convinced that the precise ¹⁴C date of the parchment is significant to the question of the Vinland Map’s authenticity.”**¹⁰⁶

5.3: Other science tests

- **Third Round of Testing – Thomas A. Cahill and the Battle over Anatase/Iron Gall Ink**
 - **What process did Cahill and the UC Davis team use to test the VM?**
 - Cahill, who led the Vinland Map’s second round of testing at UC Davis used the PIXE milliprobe to examine the map.
 - PIXE stands for Particle Induced X-Ray Emission, and this type of testing is harmless to materials that are fragile, such as paper, as particles can be analyzed without removal.
 - PIXE milliprobe is used to determine the elemental make-up of material or sample.
 - The material is exposed to an ion beam
 - Atomic interactions occur that give off electromagnetic (EM) radiation wavelengths that are specific to different elements. By matching the given EM wavelength to a pre-

¹⁰⁴ From “Radiocarbon Dating of the Vinland-Map Parchment” (2002) – Donahue et al.

¹⁰⁵ From “Radiocarbon Dating of the Vinland-Map Parchment” (2002) – Donahue et al.

¹⁰⁶ From “Radiocarbon Dating of the Vinland-Map Parchment” (2002) – Donahue et al.

determined chart, one can determine which elements are present in the sample being tested.¹⁰⁷

- At UC Davis, the VM, SH and TR underwent 2 days of study and analysis.
- 32 colored microphotographs from over 100 locations microscopically studies on the map.
 - For the VM, 159 elemental analyses of parchment and ink were made, and for the TR & SH, 45 elemental analyses of the parchment and inks were made.
 - During this process, each standard was run twice to ensure consistency and accuracy.
 - An analysis was also completed of a standard parchment sample from around 1180 AD for reference.
- Cahill and the UC Davis team also used 3 sources of titanium pigment that had been diluted by solvents into inks (2 oil-based artist paints and 1 modern error correction fluid).
 - These inks were used to draw 15 lines onto a piece of 17th C. parchment that they had made sure was elementally similar to that of the map.
 - Part of one line was erased deliberately to the point where it was no longer visible to the naked eye.
 - All lines were then measured by the PIXE milliprobe. All lines showed much higher levels of Ti or Ti + Zn detected. Even the sections of the line that had been erased showed much higher levels than those that had been measured on the map.
- **What were his results?**
 - With regards to the testing of the lines and erased lines vs. the levels of Ti found on the map, Cahill et al. stated:
 - **“Thus, we find it inconceivable that erasure or wear can reduce any titanium pigment from the minimum titanium value as seen in the Vinland Map.”¹⁰⁸**
 - With regards to the testing of the elemental analysis of the VM parchment, they found that it showed similar levels of trace elements to other parchment that had been studied at UC Davis from similar time periods (12th C, 13th C., 1457 and 1470).
 - No titanium had been found other than that occurring in the parchment.
 - Both the SH and TR inks were similar to each other, but different from that used on the VM.
 - Most ink in these was most likely carbon with organic binders (common in typical iron gall inks of this time).¹⁰⁹

¹⁰⁷ From “The Vinland Map, Revisited: New Compositional Evidence on Its Inks and Parchment” – T. Cahill, et al (1987)

¹⁰⁸ From “The Vinland Map, Revisited: New Compositional Evidence on Its Inks and Parchment” – T. Cahill, et al (1987)

- Caption below a graph showing the iron and copper levels in the inks of the SH and TR: **“Relationship of copper to iron in the inks of the Tartar Relation and the *Speculum Historiale*. Great similarities are seen in these inks, favoring a hypothesis of a common source for these two documents.”¹¹⁰**
 - Overall Verdict: Cahill et al. aren’t saying that the map is NOT a fake, but rather that additional scientific testing should be done.
 - They suggest doing carbon-14 dating on the parchment
 - This, however, wouldn’t really matter, unless the results came back that the parchment was modern, as a forger could easily use 14th C. parchment.
 - They do not claim that the map is authentic, nor do they claim it’s fraudulent. They only claim that more testing needs to be done on it.¹¹¹
 - **“In the light of these results the prior interpretation that the Map has been shown to be a 20th-century forgery must be reevaluated.”¹¹²**
- **What was the response to other tests? What did Cahill and McCrone go back and forth about?**
 - McCrone testing argued that the presence of anatase crystals were in what they assumed to be modern in origin found in the yellow-brown ink, thus rendering the map a 20th century manufacture.¹¹³
 - Cahill’s reports found that 1/3 of all ink lines had no titanium at all above the minimum detectable limit, and yet the yellow-brown ink is visible.
 - McCrone said that the two lines were drawn separately, first the yellow-brown one, and then then black one. Then, the black line was chipped away to show “wear” and lend more authenticity to the map.¹¹⁴
 - Cahill says that the hypothesis they came up with was that the lines are actually a single application that separated into two layers over time, and whose black film on top chipped off as was widely seen in vellum manuscripts.

- **Fourth Round of Testing – UCL’s Laser Testing**

¹⁰⁹ From “The Vinland Map, Revisited: New Compositional Evidence on Its Inks and Parchment” – T. Cahill, et al (1987)

¹¹⁰ From “The Vinland Map, Revisited: New Compositional Evidence on Its Inks and Parchment” – T. Cahill, et al (1987)

¹¹¹ From “The Vinland Map, Revisited: New Compositional Evidence on Its Inks and Parchment” – T. Cahill, et al (1987)

¹¹² From “The Vinland Map, Revisited: New Compositional Evidence on Its Inks and Parchment” – T. Cahill, et al (1987)

¹¹³ From “The Vinland Map, Revisited: New Compositional Evidence on Its Inks and Parchment” – T. Cahill, et al (1987)

¹¹⁴ From “The Vinland Map, Revisited: New Compositional Evidence on Its Inks and Parchment” – T. Cahill, et al (1987)

○ **How was the test carried out?**

- The tests at UCL were carried out by Katherine L. Brown and Robin J. H. Clark at the University College London.
- This round of testing was conducted using Raman microprobe spectroscopy.
 - Raman microprobe spectroscopy identifies the molecular makeup of a specimen to almost complete certainty.
 - Each molecule has its own characteristic Raman spectrum, and is identified by matching the results against standard spectra.¹¹⁵
 - This technique often makes it possible to identify common pigments and their whereabouts even in incredibly small quantities.¹¹⁶
- Using this non-invasive laser test, several areas on the map were used to obtain Raman spectra data
 - The areas studied were chosen based on the pigment density or a specific feature of interest¹¹⁷

○ **What were the results?**

- Clark and Brown determined that the ink lines appear to be composed of two parts – the yellow line which is strongly adhered to the parchment and the overlaid black ink which has mostly been flaked off.
- Analysis of the black ink showed the presence of carbon (with the conclusion that the black ink is carbon-based ink)
- Analysis of the yellow ink showed the presence of anatase, as well as in areas where the black and yellow lines were overlaid. However, anatase was not detectable anywhere else on the parchment.¹¹⁸
- Clark and Brown said that these results confirm that the VM is a modern forgery.
 - The ink from the VM was identified as being carbon-based – a very stable ink. On the map, the black ink is surrounded by a yellow-ish color. However, only unstable iron-gall ink produces a yellow-ish coloration, as the material decays and breaks down over time. Therefore, it's concluded by Clark and Brown that the yellow color has been added to give the appearance of old ink, and therefore an old map.¹¹⁹

¹¹⁵ From <http://vinland-map.brandeis.edu/explore/material/clark.php>

¹¹⁶ From "Analysis of Pigmentary Materials on the VM and TR by Raman Microprobe Spectroscopy" – R.Clark/K. Brown (2002)

¹¹⁷ From "Analysis of Pigmentary Materials on the VM and TR by Raman Microprobe Spectroscopy" – R.Clark/K. Brown (2002)

¹¹⁸ From "Analysis of Pigmentary Materials on the VM and TR by Raman Microprobe Spectroscopy" – R.Clark/K. Brown (2002)

¹¹⁹ From <http://vinland-map.brandeis.edu/explore/material/clark.php>

- However, the inks used for the Tartar Relation were also tested, and it was concluded that they were entirely appropriate for the period of time that it was created in.¹²⁰
- **Did they line up with other tests?**
 - The evidence of anatase found during this testing confirms McCrone's findings of anatase in the VM ink.
 - It was concluded that the anatase cannot be a contaminant, as it's not distributed about the rest of the map in a uniform nature.

5.4: Science vs. Humanities

“Humanism appealed in its own bankruptcy to science, which gave the right answers to the wrong questions” - George D. Painter, 1995¹²¹

- **What was the response to the science testing from the humanities field?**
 - In 1974, G.D. Painter responded to McCrone's testing, challenging the science against his knowledge as an expert.
 - Painter doesn't deny that McCrone's analysis of the ink is correct, but feels that other documents need to be tested and analyzed for comparison to see if they have similar findings, as this was one of the first times this test was performed.¹²²
 - “I do not dispute Mr. McCrone's results; but it is paradoxical that the Vinland Map is so far the only medieval map to have its ink investigated by this method.”¹²³
 - In Painter's mind, McCrone's ink analysis proves one of the following:
 - This ink formula was actually available in the 15th C.
 - A genuine, but faded original map was cosmetically “fixed” with modern ink years ago
 - A genuine original was undetectably copied, and wormholes were fraudulently supplied.¹²⁴
 - Painter pushes back against various cartographers' claims that argue that the map is a modern forgery, by saying “They are based on the proposition that any features in which the Vinland Map differs from other medieval maps constitute evidence of forgery, while conversely any features in which it resembles other maps are equally proof of forgery. How can the Map win against such two-way logic?”¹²⁵
 - Painter concludes that “I accept the microchemical findings, but not the inference drawn from them.”

¹²⁰ From “Analysis of Pigmentary Materials on the VM and TR by Raman Microprobe Spectroscopy” – R.Clark/K. Brown (2002)

¹²¹ From “New Edition of Vinland Map & Tartar Relation” – p.xvii, G.D. Painter

¹²² From “The Strange Case of the Vinland Map” – G.D. Painter, 1974 (p.192)

¹²³ From “The Strange Case of the Vinland Map” – G.D. Painter, 1974 (p.193)

¹²⁴ From “The Strange Case of the Vinland Map” – G.D. Painter, 1974 (p.193)

¹²⁵ From “The Strange Case of the Vinland Map” – G.D. Painter, 1974 (p.192)

- Others responded with their views in 1974, including the re-emergence of G.R. Crone, who still is not convinced that the map is authentic.¹²⁶
 - He feels that the VM doesn't match up with other medieval cartographic examples, specifically through the absence of a title, date, or name of the draughtsman.
 - He also takes particular issue with certain topographic features – specifically Greenland – saying that it seems too accurately represented for the time the map was supposedly created.
 - Crone also mentions that though found bound with the Tartar Relation, the map differs from the TR in the depictions/descriptions of Asia
 - In the TR, Asia is situated at the very end of the world, with only ocean beyond. However, in the VM, islands are shown beyond Asia
 - The TR also has no mention of Greenland or Vinland, which Crone concludes means that the VM was NOT drawn to illustrate the TR – though, if not based on the TR, what is the source for the Great Sea of Tartars that is depicted on the map?
 - Crone then points to diagrams from 1912 by Bjørnbo which match up with the VM's representation of the Sea and Islands off of Asia, meaning that the VM had to be fabricated sometime after 1912. Crone argues that a forger would only need a reproduction of the Bianco world map, Bjørnbo's diagrams, and a modern atlas to create the VM.¹²⁷
 -
- Why do some people view science as being more accurate than the humanities?
- If so accurate, why did all of these tests vary so widely on their results?

Section 6: Artifacts & Interactives

6.1: Introduction

- 100 word intro panel

6.2: Portolan

- Text panel to be written

ARTIFACT: PORTOLAN TO BE BORROWED FROM YALE

WALL PROJECTION: MAPS OF SIMILAR PERIOD (CURATED BY YALE STUDENTS)

6.3: “the Documents”

- Text panel for *Speculum*

¹²⁶ From “The ‘Sources’ Of the Vinland Map” – G.R. Crone, 1974 (p.205)

¹²⁷ From “The ‘Sources’ of the Vinland Map” – G.R. Crone, 1974 (p.208)

- Text panel for The Vinland Map
- Text panel for the Tartar Relation

TOUCH SCREEN INTERACTIVE BY YALE STUDENTS

WORLD MAP-- "THE WELL-TRAVELED MAP" GRAPHIC

TOUCH SCREEN INTERACTIVE BY YALE STUDENTS

Section 7: THE DEBATE CONTINUES (EXHIBIT CONCLUSION)

7.1: What are the views on the map today?

- Though some disagreement still exists, there is a fairly clear consensus among experts from all fields that the map is, in fact, a forgery.

GRAPHIC PANEL: RESULTS OF NEWEST ROUND OF SCIENTIFIC TESTING, FEBRUARY 2018

These new tests (conducted in February 2018 by Dr. Aniko Bezur, Wallace S. Wilson Director of Scientific Research, Technical Studies Laboratory, Yale Institute for the Preservation of Cultural Heritage

- 1) Initial examination or "reconnaissance", close looking with stereomicroscopy (Conservation Lab and possibly science lab).
- 2) Multiband imaging w/ modified DSLR camera (visible, infrared image, UV fluorescence, UV reflectance) and texture imaging (RTI: reflectance transformation imaging)
 - Conservation Lab imaging studio & Digitization lab
 - The use of the RTI dome may be quite photogenic (<https://ipch.yale.edu/imaging-reflectance-transformation-imaging-system-rti>) and we also plan to use a miniature dome ("monkey brain") to image the texture of the ink lines.
- 3) Stereomicroscopy/imaging
 - Conservation Lab or Science Labs
- 4) Begin x-ray fluorescence spectroscopy (XRF) with Artax unit in X-ray room, Conservation Lab
 - This elemental analysis technique is quite photogenic and results are produced and visualized quite quickly (though thorough data analysis is truly a must before definitive statements can be made)
- 5) Artax XRF, continue analysis, do mapping
- 6) Possible sampling day for parchment analysis (by peptide mass fingerprinting method) – timing/permissions need to be confirmed
- 7) Raman spectroscopy

7.2: QUOTES/WHY PEOPLE HAVE SUCH STRONG CONVICTIONS AS TO WHETHER OR NOT MAP IS REAL

7.3: Authenticity/How do you know what you know/Visitor Interactive/Response

The Vinland Map Exhibition
Proposal: Digital Programs for the Mystic Seaport

Participants: Gina M. Hurley (PhD Candidate, Yale University), Meredith Ringel-Ensley (Lecturer, Southern Connecticut State University), Burton J. Westermeier (PhD Candidate, Yale University)
CV's attached.

1. Modes of Medieval Ethnography

Through this program, visitors will learn about the content of the *Tartar Relation*, one of the texts bound with the Vinland Map. This manuscript relates 13th c. Friar John of Plano Carpini's travels to the Mongol Empire, and through exploring these texts visitors can learn more generally about medieval modes of ethnographic and geographic writing. Visitors will approach a touch screen on which there is a map of Europe and Asia (present-day political boundaries included for ease of reference). Various locations on the map will be marked as points described in the *Tartar Relation*. Locations will be marked with icons, and visitors will be able to click on each icon to bring up a pop-up window. The new window will include a quotation from the *Tartar Relation* and a brief critical commentary on the location's historical significance. It will also include an image relevant to that location, whether from a medieval manuscript or a photograph of a corresponding topographical detail or archaeological site.

Image requirements: up to 10 images

1. Title : Illumination. Tractatus de septem vitiis (?? fols.), fol. 13 sup r : court of the Tartar Khan.

Folio number: fol. 13 sup r

Shelf Mark: MS. Add. 27695.

Repository: British Library

Link to Image: http://library.artstor.org/#/asset/IBWA_DB_10313298230

Contact for Image Request/Rights Coordinator: dhamilt@fas.harvard.edu (Dell M. Hamilton)

2. Franciscan Martyrdom: detail of Tartar and Mongol Spectators

Fresco (no shelfmark)

Location: Chapter House, Basilica di San Francesco

Link to Image: http://library.artstor.org/#/asset/SCALA_ARCHIVES_1039779328

Image Information (for pre-existing high quality image):

http://www.scalarchives.com/web/dettaglio_immagine.asp?idImmagine=0018876&posizione=32&inCarrello=False&numImmagini=157&

Image Request Information: <http://www.scalarchives.com/web/richiesta.asp>

3. Title: Marvels of the East
Folio: fol. 38v-39r

Shelfmark: Bodleian Library, University of Oxford

Link to Image: http://library.artstor.org/#/asset/BODLEIAN_10310372540

Image Request Form/Image Permissions Form:

http://www.bodleian.ox.ac.uk/using/imaging_services

4. Mongolian artifacts: Bronze/brass Scale or tweezer, fragment
Repository: Peabody Museum of Archaeology and Ethnology
Link to existing image:
http://library.artstor.org/#/asset/AHARVARDIG_10313859995 (Image Info)
Image request form: <https://www.peabody.harvard.edu/node/2120>

5. Mongolian warriors on horseback (page from Rashid al-Din, Jami' al-tavarikh

Repository: BNF

Link to existing image:

http://library.artstor.org/#/asset/LESSING_ART_10313455512 (image info)

Link to ordering form for existing image:

Art Resource Ordering Page (click “cart” on bottom of page) :

http://www.artres.com/C.aspx?VP3=ViewBox_VPage&VBID=2UN3652EPL438&IT=ZoomImageTemplate01_VForm&IID=2UNTWAFNRWFY&PN=4&CT=Search&SF=0

6. Image: Illumination in *Liber secretorum fidelium cruces*
“Armenia, requesting aid, is surrounded by four beasts representing the Tartars, the sultan, the Turks, and the privateers.”

Repository: Vatican Library

Shelfmark: Vat. Lat. 2972

Folio: 14

Link to existing Image: http://library.artstor.org/#/asset/IBWA_DB_10313301081

Contact for rights to existing image: dhamilt@fas.harvard.edu (Dell M. Hamilton)

7. Title: Among the Tartars, Men and Women Dress Identically, Distinguished Only by Hair Styles

Image D Number: 8381.1481/1110
SCHRAMM, 21.504

Link to image: http://library.artstor.org/#/asset/BARTSCH_1440035

Source: The Illustrated Bartsch. Vol. 83, German Book Illustration before 1500:
Anonymous Artists, 1481-1482
Retrospective conversion of The Illustrated Bartsch (Abaris Books) by ARTstor nc.
and authorized contractors

*Unclear who owns the image, but I assume ArtStor has rights?

8. Title: Livre des Merveilles

Repository: French National Library

Shelfmark: BNF Fr., 2810

Folio: f. 38

Link to image: http://library.artstor.org/#/asset/YALE_102710711153

Contact information/Copyright info:
http://www.bnf.fr/en/collections_and_services/reproduction_how_order.html

(**Also Available in Yale's Digital Resource Collection):
<http://findit.library.yale.edu/catalog/digcoll:2141454>

Image Permissions Contact (Yale): art.library@yale.edu

9. Title: A Tartar Soldier in Fighting Position

Repository: Museum of Fine Arts, Boston

Image ID #:BMFA.14.543

Link to Image: http://library.artstor.org/#/asset/AMICO_BOSTON_103830050

Image Permissions Contact: Debra LaKind, Head of Rights & Licensing, Museum of Fine Arts, Boston, 465 Huntington Avenue, Boston, MA 02115, (617) 369-4386 (ph), (617) 369-4340 (fax), dlakind@mfa.org.

10. Title: Kiev: Hagia Sophia: Int.: south section of of choir
Collection: ARTstor Slide Gallery
Link to image: http://library.artstor.org/#/asset/ARTSTOR_103_41822000044550
Source: Data from: University of California, San Diego

Visitor interface: large, flat touchscreen

2. Interactive Version of Vinland Map

This program will allow visitors to interact with the Vinland Map in digital form and learn more about the various locations mentioned on the map. Using a large, flat touchscreen monitor, visitors will click on locations highlighted on the map to open pop-up boxes containing information and/or images with captions. Types of information provided may include: transcriptions and/or translations of the map's Latin text; quotations from relevant medieval texts (particularly the *Tartar Relation* or *Speculum Historiale*); or summaries of secondary scholarship written by the project designers. Images will be drawn primarily from medieval manuscripts.

Image Requirements: up to 10 images

Visitor Interface: large, flat touchscreen

- 1) Title : Norse long house recreation, L'Anse aux Meadows, Newfoundland and Labrador, Canada

Link to Image:

https://en.wikipedia.org/wiki/L%27Anse_aux_Meadows#/media/File:L%27Anse_aux_Meadows,_recreated_long_house.jpg

This image is Creative Commons, so we will just need to include attribution in the exhibit.

- 2) St. Brendan on Jasconius the Whale

Folio number: 179 v.

Shelf Mark: MS Cod. Pal. Germ. 60

Repository: Universitätsbibliothek Heidelberg

Link to Image: <http://digi.ub.uni-heidelberg.de/diglit/cpg60/0370/image?sid=1cb4386257739b84897f4e2c8c4e2b48>

Contact for Image Request/Rights Coordinator: digitalisierung@ub.uni-heidelberg.de

3) Prester John

Shelfmark: Florence, Biblioteca Nazionale Centrale.Port. no. 1.

Contact: <http://www.bncf.firenze.sbn.it/allegatonotizia/447.pdf>

4) Departing Danes

Folio 15 r

Morgan Library MS M.736

Link: <http://www.themorgan.org/collection/Life-and-Miracles-of-St-Edmund/29>

Contact Info: <http://www.themorgan.org/research/photo-application>

5) Gog and Magod

Detail from Ebstorf Mappa Mundi

Contact: presse@kloster-ebstorf.de

6) Pope sending friars to Mongols

Folio 148v

British Library Royal MS 19 D I

Link: http://www.bl.uk/manuscripts/Viewer.aspx?ref=royal_ms_19_d_i_f148v
http://www.bl.uk/manuscripts/Viewer.aspx?ref=royal_ms_19_d_i_f148v

Contact Info: customer-services@bl.uk

3. Side-By-Side Comparison of Vinland Map with Other Medieval/Early Modern Maps

This program will allow visitors to compare the Vinland Map with other contemporary maps such as a medieval T-O map, the Hereford map, the Catalan World Atlas, the 1436 Bianco Map, the Martellus Map (1491) and Canerio's 1503-1505 World Map. Using a large, flat touchscreen monitor, visitors will be able to click on a menu of different medieval and early modern maps and see them side by side with the Vinland Map. The images of the other maps will be accompanied by informational captions written by the project designers based upon secondary scholarship.

1. Title: Martellus Map (Yale)

Repository: Beinecke Rare Book & Manuscript Library

Existing image from Yale Digital Collections: <https://brbl-dl.library.yale.edu/vufind/Record/3435243>

Permissions Info: <http://beinecke.library.yale.edu/research/permissions-copyright>

2. Title: Hereford Mappa Mundi(c. 1300)

Repository: Hereford Cathedral Library

No copyright info:

library@herefordcathedral.org

3. Title: T-O Diagrammatic Map, in *Etymologies*

- **Repository: British Library**
- Author: Isidore, Saint, Bishop of Seville
- Production: 12th century
- Repository: British Library
- Record Number: c5933-06
- Shelfmark: Royal 12 F. IV
- Folio Number: f. 135v

4. Title: Ibn al-Wardī Map

Repository: Library of Congress

Author: Ibn al-Wardī, Sirāj al-Dīn Abū Ḥafṣ ‘Umar, -1457.

Uniform Title: Kharīdat al-‘ajā’ib wa-farīdat al-gharā’ib

Shelfmark: G93 .I17 1500z

Folio Number: 6b-7a

Copyright Info: <https://www.loc.gov/legal/#copyright> Repro: <https://www.loc.gov/duplicationservices/products-pricing/>

*Note: this item will be out of copyright

5. Title: Catalan World Atlas

Title: Abraham Cresques , Atlas de cartes marines , dit [Atlas catalan].

Repository: French National Library

Shelfmark: Bibliothèque nationale de France, Département des manuscrits, Espagnol 30

Folio Number: 6v-7r

Link to image: <http://gallica.bnf.fr/ark:/12148/btv1b55002481n>

Contact information/Copyright info:

http://www.bnf.fr/en/collections_and_services/reproduction_how_order.html

6. Title: Cantino planisphere 1502(?)

Repository: Biblioteca Estense

Contact Information/Copyright

<http://bibliotecaestense.beniculturali.it/info/info/ripro.html>

Image Requirements: up to 6 or 7 images (some will come from Beinecke)

Visitor Interface: large, flat touchscreen

4. Decoding the Manuscript Page

This program, which could easily be connected to a tactile exhibit with blank vellum and quills, will offer visitors the chance to explore the elements of the manuscript page (specifically, one from the *Speculum Historiale*, which is probably the most striking and varied example in the exhibit). Clickable icons will indicate, for example, rubrics that marked the beginning and end of each text, or the extenders that embellished the top line of text on the page. This will allow readers to explore the many ways that scribes communicated how the audience ought to read a manuscript. Possible inclusions include glosses (which identified the section of the text), running titles (which will be familiar to today's audience) and touched letters (which were embellished with red ink for decoration).

Image Requirements: All images will be derived from a page of the *Speculum Historiale* (no outside permissions necessary).

Visitor interface: Large flat, touchscreen

Mystic Seaport
Summer Admission Fees*

Adult – \$28.95
Senior (ages 65+) – \$26.95
Youth (ages 4-14) – \$18.95
Children (3 and younger) – Free
Museum Members – Free

*Museum entry includes access to temporary exhibitions

Proposal for Three Vinland Map Exhibit Kiosks

27 January 2018

David Caldwell

Phase I. January–15 March 2018

Design, build, and style a web page template, using JavaScript, for displaying the content on the kiosks with interactive content popups. We imagine this presenting the visitor with an interface similar to a ThingLink story map (<https://www.thinglink.com/edu>) but nicer, and delivered using local files on each kiosk so that no Internet connection will be needed when operating the kiosks in the gallery. Advise during gathering and creation of content for the three content modules. Mock up the modules using the template.

23 hour x \$75/hr = \$1,725.

Phase II. 15 March–30 April 2018

Build the content (images and text) into a template for each of three content modules. Use the museum's existing licenses for Kioware kiosk software to install the content on a touchscreen computer set up by museum staff. Configure this test kiosk and create any navigation wrapper needed for the content modules.

30 hours x \$75/hr = \$2,250.

Phase III. May–June 2018

Obtain the third license for kiosk software (KioWare). Install all software and all three content modules for each kiosk on touchscreen computers set up by museum staff. Lock down the kiosk software and operating system, test, and prepare the kiosks for public use. Prepare basic instructions for exhibit docents and museum IT support staff. Support museum staff with any issues with the kiosks through the final setup and opening of the exhibit.

43 hr x \$75/hr = \$3,225.

Total

Phase I	\$1,725.
Phase II	\$2,250.
Phase III	\$3,225.
<hr/>	
Total	\$7,200.

Mystic Seaport and Museum The Vinland Map Exhibition

Summer 18 Summative Evaluation Plans and Associated Costs

Karen Wizevich, 1/29/18

Overall Calendar

May 1: visit MSM, develop evaluation tools; KW train EH

May 18 to 20: Opening Weekend: data collection begins (KW & EH)

May 18 to June 16: data collection (EH)

June 16 to June 29: analyze data, write report (KW/EH)

Data Collection Goals

1) Tracking and Timing observations and dwell time for the entire exhibition (25 full sets of T & T data; and 100 timed observations in which we hand visitors a stamped time card and collect them at the end, or use the electronic data*)

2) Face-to-face Exit Interviews (n = 80)

Data collection

EH will work three half days/ week X 4 weeks on this project. Aim for 20 interview/week.

Data entry

EH will do as much of this as she can; KW will complete

Analysis & report Writing

KW will do most of this; EH can review.

Costs:

Planning/designing /testing tools – 2 Karen Wizevich

Data collecting opening weekend – 1 Karen Wizevich

Data entry – Emma Hodges

Most data collection – Emma Hodges

Data analysis – 1.5 Karen Wizevich

Report writing - 1.5 Karen Wizevich

= \$3,600