

# *Ordering the Unknown*

{ European Maps from 1600-1850  
*an exhibition Fall 2014*

# *Ordering the Unknown*

*The European Mapping Tradition from 1600 to 1860*



Fall 2014

History Department, Stokes Hall, South Wing  
Reception: Thursday, September 23, 2014, from 4-6pm

Sponsored by the History Department and the Brown College Library

# Ordering the Unknown

*The European Mapping Tradition from 1600 to 1860*



Map from *A New Geographical, Historical, and Commercial Atlas* by Willem Blaeuw, London, 1715. Digitized by *British Library*. Source: *British Library*.

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| <ul style="list-style-type: none"><li>● The Chesapeake Bay</li><li>● The Hudson River</li><li>● The Delaware River</li></ul> | <ul style="list-style-type: none"><li>● The Chesapeake Bay</li><li>● The Hudson River</li><li>● The Delaware River</li></ul> | <ul style="list-style-type: none"><li>● The Chesapeake Bay</li><li>● The Hudson River</li><li>● The Delaware River</li></ul> | <ul style="list-style-type: none"><li>● The Chesapeake Bay</li><li>● The Hudson River</li><li>● The Delaware River</li></ul> | <ul style="list-style-type: none"><li>● The Chesapeake Bay</li><li>● The Hudson River</li><li>● The Delaware River</li></ul> |
|--|--|--|--|--|

Textual content on the right side of the map, likely providing historical context or details about the map's creation and usage.



Small photograph showing a group of people standing on a set of stairs, possibly a museum or historical site related to the map's theme.

# Familiarizing: George Sandys the Ethnographer, a Man Before His Time



George Sandys was an English explorer, diplomat, and writer. He was the first Englishman to visit the Chesapeake Bay region in 1607. He was also the first to describe the Chesapeake Bay as a "great bay" and to describe the people of the region as "Indians".



The map shows the Chesapeake Bay and the James River. The bay is labeled 'THE BAY' and the river is labeled 'THE RIVER'. The map also shows the locations of Jamestown and other early settlements. The map is a historical document that provides a visual representation of the Chesapeake Bay region in the early 17th century.

## Familiarizing

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## Familiarizing: Cornelis de Bruyn's *Russia*



In the world of early printmaking, through the color and block processes, an image of reindeer being used for transportation. These three reindeer are used to pull a sled or sledge, a mode of transport used by the people of the north. In the background, a small town or village is visible, suggesting a settlement in the north. The scene is set in a snowy, open landscape, typical of the regions where reindeer herding and sledging were common.

The image is a woodcut illustration from the book 'Russia' by Cornelis de Bruyn, published in 1675. It depicts a reindeer sled, a mode of transport used by the people of the north. The sled is pulled by two reindeer, and a person is seated on it. The background shows a small town or village, suggesting a settlement in the north.

Reindeer sleds were used for transport in the north of Russia and other parts of the world. The sleds were pulled by reindeer and were used to transport goods and people. The image shows a reindeer sled being pulled by two reindeer. The sled is loaded with goods, and a person is seated on it. The background shows a small town or village, suggesting a settlement in the north.

How the image is used to depict the reindeer sleds in the north of Russia and other parts of the world. The image shows a reindeer sled being pulled by two reindeer. The sled is loaded with goods, and a person is seated on it. The background shows a small town or village, suggesting a settlement in the north.

W. H. Miller



This image shows two figures in traditional Russian clothing. The figure on the left is wearing a long, flowing dress and a tall, pointed hat. The figure on the right is wearing a long, flowing dress and a tall, pointed hat. The background shows a landscape with hills and a small town or village.



This image shows a group of people in traditional Russian clothing pulling a sled on a snowy landscape. The sled is loaded with goods, and a person is seated on it. The background shows a landscape with hills and a small town or village.

## Classifying: Mapping Russia's Ethnicities

Major ethnicities from the 1989 Census in the Russian Republic. The Russian census and the corresponding map (see pp. 46-47) of *Classifying: Mapping Russia's Ethnicities* were published in 1993 and have since been used in a wide variety of classrooms and classrooms.

In the 1970s, cartographers and their students, ethnographers, tested the use of maps to represent ethnic diversity. Several theories were put forward to explain the patterns of ethnic diversity in the Soviet Union. The most common was the "ethnographic theory" which stated that ethnic diversity was a result of geographical conditions and the process of human migration. Ethnographic maps of ethnic diversity could be used to explain the patterns of ethnic diversity in the Soviet Union and to predict the patterns of ethnic diversity in the future. The "ethnographic theory" was also used to explain the patterns of ethnic diversity in the Soviet Union. The "ethnographic theory" was also used to explain the patterns of ethnic diversity in the Soviet Union. The "ethnographic theory" was also used to explain the patterns of ethnic diversity in the Soviet Union.



The map shows the distribution of ethnic groups in the Russian Republic. The map is color-coded to represent different ethnic groups. The legend in the bottom left corner identifies the groups. The map shows a high concentration of Russians in the western part of the country, with other ethnic groups concentrated in specific regions like the Caucasus and Central Asia.

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## Classifying

Mapping the world of ethnic diversity is a complex task. It requires a careful selection of ethnic groups and a clear understanding of the geographical conditions that influence their distribution. The map of Russia's ethnicities is a good example of this process.

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## Classifying: Alexander von Humboldt and the Mapping of New Spain

Reproduced by permission of the Trustees of the British Library, London, UK. Humboldt's *Atlas de la Géographie Physique et Politique de la Nouvelle Espagne* (1803) was the first scientific atlas of the Americas.

When Alexander von Humboldt, a Prussian explorer, sailed across central and northern South America, he mapped the continent's geography and biological diversity. He published his findings in a series of scientific papers, including the *Atlas de la Géographie Physique et Politique de la Nouvelle Espagne* (1803), a landmark work in the history of cartography and scientific exploration.

In a field of exploration, Humboldt's progress was the science and cartography of the world. He was the first to map the continent of South America, and he was the first to map the continent of North America. He was the first to map the continent of Europe, and he was the first to map the continent of Asia. He was the first to map the continent of Africa, and he was the first to map the continent of Australia.

In his "Map of New Spain" in particular, Humboldt reveals the wealth of resources of the newly discovered land. He includes the names of the various languages (Latin, Spanish, and others), the local flora, fauna, and other plants, and the various local customs, traditions, and other aspects of the culture. Humboldt's work is a landmark in the history of cartography and scientific exploration.



The illustration by Pierre-Thomas LeClerc, a French engraver, depicts the mountain range of the Andes in the region of New Spain. The mountain range is shown in a perspective view, with the peaks and valleys clearly visible. The illustration is a fine example of the artistic and scientific collaboration between Humboldt and his contemporaries.



With this work, Humboldt's scientific contributions to cartography and exploration are well-documented. He was the first to map the continent of South America, and he was the first to map the continent of North America. He was the first to map the continent of Europe, and he was the first to map the continent of Asia. He was the first to map the continent of Africa, and he was the first to map the continent of Australia.

# Possessing: Legitimizing New Spain

These maps all come from *The General History of the West Indies and Islands of America, Commonly call'd the West-Indies, from the First Discovery thereof, with the Best Accounts the People could give of their Antiquities by Antonio de Herrera y Tordesillas and translated into English by Cap: John Stevens at 1725.*

Herrera y Tordesillas was the royal chronicler of Spain and is famous for his historical account of the Spanish conquest of the Americas in what is commonly referred to as *The Decade*. These maps and engravings appear in John Stevens' translation of that work and act as reference tools for the reader. The "New Map of North and South America" is used to show much of the region that is described in *The General History of the West Indies and Islands of America*. The "Hydrographical Draught of Mexico as it Lies in its Lakes" is a map of the Aztec capital of Mexico Tenochtitlan. This particular map originates from a Spanish traveler named Carlos de Sigüenza Góngora who reportedly copied it from a Native American respondent.

In writing a historical account of this crucial era in Spain's history, one of Herrera y Tordesillas' tasks was to justify the conquest of an entire population of people in which Spain claimed possession of all of Mexico and Central America. One way of justifying their actions was by portraying the native people as savages or even subhuman creatures. Perhaps the most effective way of doing that was by describing the religious practices of the native people. The polytheistic worship of multiple gods and the practice of human sacrifice were especially disturbing for many of the Catholic Spanish explorers. The engraving of the "Vinciguahuitl, the Principal Idol of the Mexicans" shows an example of this idol worship that Spaniards found as appalling. This idol would have been located in one of the great temples of Tenochtitlan. The engraving of "The Great Charnel House in the City of Mexico" shows a display of human skulls from victims of the sacrificial rituals of the Mexica people. Images like these reinforced the Spanish descriptions of heathens within the native religions. The idea that the native people were heathens was useful in justifying their conquest and solidifying their claims of possession because they could act in the name of civilizing and Christianizing the Native Americans.

The two maps were added to the translation of Herrera y Tordesillas' work more than a century after the original *Decade* was first published. They were used as reference tools in order to assist readers in understanding the historical account of Spain's conquest of the New World. After they had already established and justified their possession, they were able to create these maps and include images of their lands that reinforced the locations of native and native names after Spanish claims. It was clear that they claimed to control and possess this land.

Classroom



"A New Map of the North and South America as it particularly appears in this first Vol. of the History of the West Indies"



"An Hydrographical Draught of Mexico as it Lies in its Lakes"



"Vinciguahuitl, the Principal Idol of the Mexicans"



"The Great Charnel House in the City of Mexico"



# Possessing: The Wilkes Expedition



Map of the Fiji Islands from May of 1840. Wilkes and his crew killed 90 Fijians on the island of Viti Levu after negotiations between the natives broke down and two of Wilkes' crew were killed while attempting to board the land. Wilkes was attempting to make a U.S. whaling port on the island.



Map of America's West Coast, January of 1846. Note the various geographic names and the various territories as well as the name of the country. Some of the expedition's maps. In the area of the expedition on Sumatra's N. Borneo island public work, the French colonists discovered this continent. A small island named and another part named in honor of the United States. A small island named and another part named in honor of the United States. A small island named and another part named in honor of the United States. A small island named and another part named in honor of the United States.



Map of the Oregon Territory from April of 1846. Note the countries that had their claims on the territory of this map and the river area of the Columbia River. Also note the various and names that Wilkes gave along the Columbia River.

Map of the "Territories of the United States Exploring Expedition during the Years 1838, 1839, 1840, 1841, and 1842 along the Wilkes Expedition between 1839 and 1842 and the Lewis and Clark Expedition between 1804 and 1806, a map of the Oregon Territory from April of 1846.

In 1841, Charles Wilkes published a volume of travel accounts titled *Narrative of the United States Exploring Expedition during the Years 1838, 1839, 1840, 1841, and 1842*. These travel accounts covered the entire United States Exploring Expedition between 1838 and 1842 which was led by the author of the travel accounts, Lieutenant Charles Wilkes. As the Lewis and Clark Expedition between 1804 and 1806 was significant in mapping the Louisiana Purchase and the Pacific Northwest, the U.S. Exploring Expedition for "The Wilkes Expedition," as it has been called that occurred thereafter more often Lewis and Clark was equally monumental as it was the first government-funded circumnavigation by the United States. Wilkes was told by the government that he was to conduct an expedition "for the purpose of exploring and surveying the Southern Ocean as well to determine the existence of all islands, led winds and drifts, as to discover, and preserve in the possession of those which they find it at near the track of our vessels in that quarter, and brought home except the observation of scientific navigation."

Some forms of possession occurred before the mapping of government lands. Spanish did not map Mexico until roughly one hundred years after the supposed earlier "discovery." But the maps for the Wilkes Expedition reveal a different approach. In this case, a map publisher would work the claim of possession. Though the Wilkes expedition mapped the Islands of Fiji, the continent of Antarctica, and the Oregon Territory, only the last was a U.S. possession. And yet the travel accounts and the mapping of Antarctica and Fiji claim otherwise. In the travel accounts, Wilkes mentions that he was not only able to map and describe the indigenous people of Fiji when a battle occurred and only two crew members were killed while eight Fijians were killed. And while no stamps exist on Antarctica, some countries have made territorial claims recognized by other nations. Unfortunately for the United States was not one of those countries, especially when they looked to the same area of Antarctica that was previously explored by the British in connection with their three voyages of Antarctic. Upon arrival in Antarctica, Wilkes claimed and named the British territorial claim "Wilkesland." As the Wilkes Expedition reveals, possession was never both before or after the actual mapping of the area. In some cases, possession can be not an action but a claim made on paper.

Joseph Bevilacqua

# Extrapolating: Herman Moll, Enlightenment Geographer



**1. Moll's** *Cartographicae* (1747) and *Tabulae Geographicae* (1748) were the first atlases to show the Americas as a continent, rather than as a collection of islands and archipelagos. Moll's maps were the first to show the Americas as a continent, rather than as a collection of islands and archipelagos. Moll's maps were the first to show the Americas as a continent, rather than as a collection of islands and archipelagos.

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## Extrapolation

Extrapolation is the process of extending the range of a known function or set of data beyond the range of the original data. It is often used in science, engineering, and economics to predict future values based on current trends. However, extrapolation can be risky, as it assumes that the underlying pattern will continue indefinitely, which may not be the case in real-world situations.

# Extrapolating: Uniformity of Heights and Depths in Flacourt's Madagascar



Map titled *La Vallée de Carcanosse de Madagascar* created around by Étienne Flacourt. The map's work created by the author shows between 1698 and 1714 and published in 1718 in Paris.

In 1692 the French East India Company was granted a charter to establish a colony on the Southeast coast of Madagascar. After an unsuccessful effort in establishing a permanent trading outpost in the now French colony of Fort Dauphin, Étienne Flacourt was appointed as first governor of the colony. The original mission was to establish a trading network with the local Malagasy population, but lack of cooperation from the locals and subsequent support of the colony from France caused Flacourt to abandon this mission. He turned instead to documenting and mapping the island around him.

Flacourt published *La Vallée de Carcanosse de Madagascar* in 1718, a 50-page work that was the first European in-depth account of Madagascar. Included in *La Vallée de Carcanosse* are descriptions of the island and some details of the local Malagasy people and the climate, plants and animal life in Madagascar.

Here, Flacourt maps the sections of various forests of Madagascar using extrapolation. The assumption that Flacourt uses is particularly evident as he notes that in one section of forest, but elsewhere one finds of various types ranging from its heights and depths. With little scientific information of the true topography of the region, Flacourt explained his knowledge gap with an assumed and constant topography. Flacourt explains that many such mountains, such as nearly equal heights and depths. When compared to accurate topographic data, his method of height and depth extrapolation seems accurate. This method, however, allowed Flacourt to create a sense of order and familiarity with a completely foreign and distant land.

Willa Kovic

Presented in these two images are Flacourt's method of assessment of the local Madagascar plant and animal life. Shown here are 21 of the 100 plant representations included in *La Vallée de Carcanosse* and 11 of the 74 animal representations shown. The 100 plants Madagascarian plants number 21, but one of the few common plants to be documented in *La Vallée de Carcanosse*. Flacourt also documented several animal species more before, such as *Antelope*.

The detail and complexity of these sketches demonstrates how Flacourt was able to capture an accurate and comprehensive of Madagascar's local plant and animal life. The lack of extrapolation in these sketches contrasts with the use of such in his maps.



Prof. Sylvia Sellers-Garcia and Ben Shapiro class of '16

## *Native Science, Mapping, and Navigation in the Caribbean*



This map fragment illustrates the use of celestial navigation and the grid system in the Caribbean region.



This illustration depicts the natural environment of the Caribbean, highlighting the importance of local knowledge in navigation.



This illustration shows the diverse flora of the Caribbean, which was a key component of the local scientific knowledge.

The text in this panel discusses the traditional navigation techniques used by Caribbean peoples, including the use of the stars and the sun to determine direction and distance. It also mentions the importance of local knowledge in understanding the currents and winds of the region.



This map illustrates the complex network of trade routes and navigational paths that were established in the Caribbean region.

### *Native Science*

The text in this panel discusses the traditional scientific knowledge of the Caribbean peoples, including their understanding of the natural world, navigation, and the use of local resources. It highlights the importance of this knowledge in the development of the region.



# Extrapolating: Uniformity of Heights and Depths in Flacourt's Madagascar



Map titled *Carte de Carcanosse Vallée d'Ambovle*, a cartographical document by Étienne Flacourt. The map is also contained in the volume *Journal de l'Isle de Madagascar*, 1668 and 1671 and published in 1688 in Paris.

In 1668 the French East India Company was granted a charter to establish a colony on the Southeast corner of Madagascar. After an unsuccessful effort in establishing a permanent trading outpost in the new French colony of Fort Dauphin, Étienne Flacourt was appointed as new governor of the colony. His original mission was to establish a trading network with the local Malagasy populations, but lack of cooperation from the locals and Madagascar support of the colony from France caused Flacourt to abandon this mission. He turned instead to documenting and mapping the island around him.

Flacourt published *Le Histoire de la Grande Ile Madagascar* in 1688, a 500-page work that gave the first European topographic account of Madagascar. Included in *Le Histoire* are some maps of the island and some sketches of the local Malagasy people and the island's plant and animal life in Madagascar.

While Flacourt maps his system of various heights on Madagascar using extrapolation. The mountains that Flacourt plots are particularly good for extrapolation as they are a continuous line, but does not use other cartographic extrapolation techniques like heights and depths. With little accurate information of the true topography of the island, Flacourt replaced that knowledge gap with an assumed and uniform topography. Flacourt's topographic line was not continuous, such as nearly equal heights and depths. When compared to accurate topographic information, this method of height and depth extrapolation seems accurate. This extrapolation technique allowed Flacourt to create a sense of order and familiarity with a completely foreign and distant land.

Melissa Kozicki



Presented in these two images are Flacourt's accurate depictions of the local Malagasy plant and animal life. Flacourt lists out 20 of the 130 plant representations included in *Le Histoire*, and 17 of the 37 animal representations. The 130 Malagasy animals plant number 13 has one of the few representations shown to be documented by a European. Flacourt also documented several animal species never before seen by Europeans.

The level and complexity of these sketches demonstrates how Flacourt was able to capture an accurate representation of Madagascar's local plant and animal life. The lack of information on how these sketches compare with the use of such as he maps.



Kathy Clark, class of '15

# Maple, European Beech, and During Industrial Times



The European larch was introduced to Great Britain in 1827, and to Ireland in 1831. It was first planted in the Forest of Dean, Gloucestershire, and in the Forest of Bowland, Lancashire. The larch was introduced to the Forest of Dean by the Duke of Devonshire, and to the Forest of Bowland by the Duke of Devonshire and the Duke of Devonshire.

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This map shows the distribution of European Beech and European Larch in the Forest of Bowland, Lancashire. The map includes a legend, a scale bar, and a title 'Map of the Distribution of European Beech and European Larch in the Forest of Bowland, Lancashire'.



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Prof. Sylvia Sellers-Garcia, Christian Dupont, Head of Burns Library,  
and Kevin Kenny, chair of the History Dept.



Tom Wall, University Librarian, Prof. Ginny Reinburg and Prof. Lynn Johnson, both of the History Dept.





Tom Wall, University Librarian and Justine Sundaram of Burns Library

