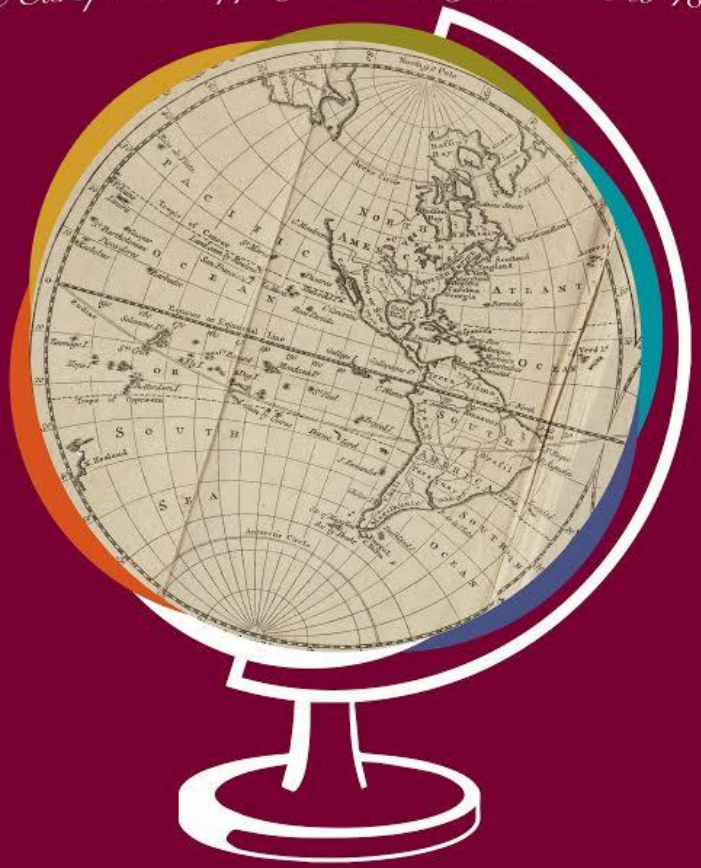
Ordering the Unknown

European Maps from 1600-1850

an exhibition Fall 2014

Ordering the Unknown

The European Mapping Tradition from 1600 to 1860



Fall 2014

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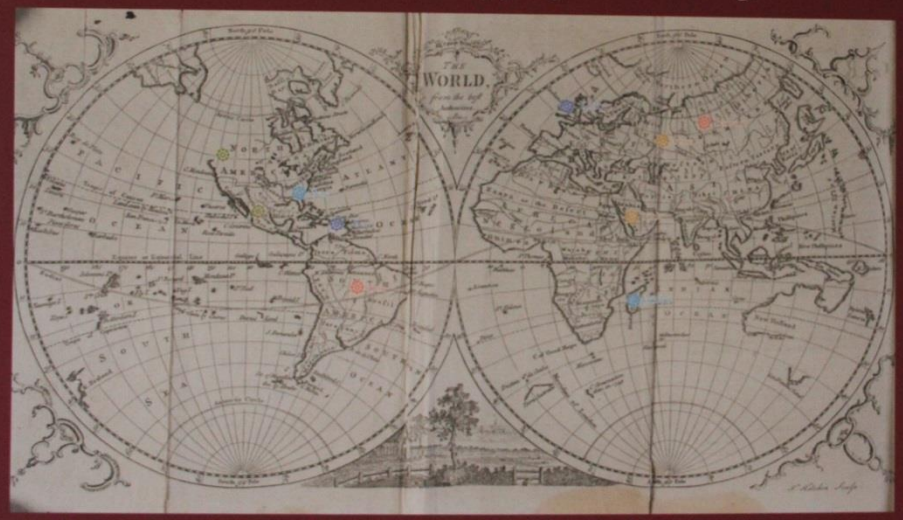
The European Mapping Tradition from 1600 to 1860



Map from *A New Geographical, Historical and Commercial Grammar* by William Guthrie. London: J. Knox, 1774. General Collection, John J. Burns Library, Boston College.

Maps allow us to navigate paths, to locate points, to describe landscapes, and to demarcate boundaries. In so doing, they present themselves as objective depictions of the world. But maps are not objective; deeply subjective, suppressing more than they reveal, maps are arguments.

Maps are not just maps.

They tell stories; they claim territories; they suggest identities. They reflect the values, priorities, blind spots, and ambitions of their makers.

Many maps created in Europe between 1600 and 1860 familiarized what was unfamiliar, classified what was disordered, preserved what was viewed as unclaimed, extrapolated what remained to be learned, and made accurate what already had. In all of these ways, maps ordered what was unknown to early modern Europeans.

The Making History Public Class of Spring, 2014 presents here maps from the Burns Library that order the unknown along these lines. Covering more than two centuries and five continents, these maps offer insights into the ordering impulses of their age.

Over time, the perceived unknown changed, and ways of ordering changed. In the early seventeenth century, placing the world into familiar narratives was a driving imperative. By the mid-nineteenth century, detailing gradients of difference was the guiding principle.

Many other mapping traditions have flourished before, after, and during the European era of cartographic ordering. To many, mapping did not primarily serve the purpose of ordering. And to many people the places depicted here were not unknown.

Nonetheless, the maps collected here represent a tradition that has exerted a significant influence on global mapping conventions. The conceit of accuracy, the implicit claim of possession through knowledge, and the illusion of familiarity created by maps will all be immediately recognizable. As the Wilkes expedition's maps demonstrate, ordering the unknown through maps has remained a vital tool for later empires eager to draw the world as they wish to see it.

Mirko Kruse, Nicholas Cochran-Cuginino, Mark Bolster, Peter Haskin, Conor Morris, Sylvia Sellers-Garcia, Hazel Quick, Joseph Barker, Lauren Boyer, Benjamin Shapiro, Katherine Clark

Photo Credit: Jenine Sanderson

Mark - George Bundy the Ethnographer, a Man Before His Time
Lauren - Mapping Russia's Ethnicities
Conor - Legitimizing New Spain
Pete - Herman Moll, Enlightenment Geographer
Mirko - Mapping and Misconstrue in the Caribbean
Mark - Cornelis de Bruyn's Russia
Dan - Alexander von Humboldt and the Mapping of New Spain
Joe - The Wilkes Expedition
Mirko - Uniformity of Heights and Depths in Flaccourt's Madagascar
Kathy - Creating Certainty During Turbulent Times

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

The accompanying images aid greatly in the analysis of the text. These brief images provide insight both into what the artist actually saw, as well as what they perceive. The image of the Turkish man is an honest attempt at capturing the perceived exoticism of the "Orient" but also serves as a caricature of sorts. These types of images reinforce, and in some cases establish, the corpus of literature describing the people of Asia and the Middle East.

Likewise, the landscape drawings capture the perceptions of George Sandys. The details that he chooses to emphasize or downplay give insight into his perception of the relative importance of facets of his journey.

The maps and other images come from a 1627 revised edition of George Sandys' Relation of a Journey begun An Dom 1610.

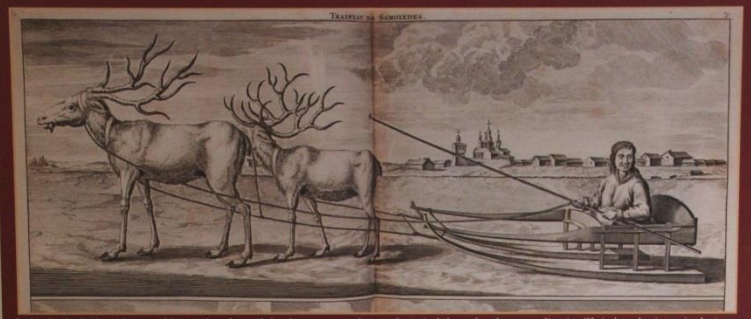
George Sandys was the seventh and youngest son of Edwin Sandys, archbishop of York for the Church of England. Sandys' Relation was a seminal work at the time, detailing the cultures of the Ottoman Empire as well as the circumstances Christian travelers in Jerusalem for Easter. Sandys was also a poet and noted translator of Ovid's Metamorphosis in both Classic and poetry councilled to the structure of his stories as did his upbringing in a noted Protestant family. Sandys went on to become treasurer of The Virginia Company and was a member of the council of state and his majesty's council for Virginia.

The well-educated readers of Sandys' Relations, nobles and church-men, would be well acquainted with Rome and Italy if not from travel then from considerable reading. By beginning his account in Rome and then Venice, Sandys drew in the readers with something familiar. From here on out, the reader would be lured in a familiar framework and, as such, able to better comprehend the foreign. The use/misuse of familiar notions is present throughout much of the book, with Sandys using classical allegory and myth as a means of connecting his readers to an otherwise exotic foreign area.

The fold out map from the beginning of Sandys' travels is both typical for the time and notable for its idiosyncrasies. Quite naturally the regions travelled by Sandys are expressed in greater detail, but there is something to be said for the gaps in the map, the "silences." Remnants of Christendom, and the Holy Land, are represented in great detail; regions where Islam is prevalent are sketched in with minimal detail. This is likewise the case for the perceived backwaters of Christendom. The North and East of Europe, spreading into Asia, remains comparatively sparse. Some of the perceived idiosyncrasies are simply matters of convention for the day. The moniker "Part of ....." appears at first to be an insult to the Africans and the Arabians. This, however, is a commonly usage in contemporary maps of the city, demonstrating a lack of detail on the regions considered beyond the scope of the map's focus.

Nicholas Cardascia/Capstone

Familiarizing: Cornelis de Bruyn's Russia



In this sketch of eighteenth century Moscow, the palace and church structures are degrees of magnitude larger than the surrounding city. Their sheer dominance in physical presence suggests a nation defined completely by its czar and patriarch. In de Bruyn's day, many western Europeans thought of Russia as a backwards, uncivilized land where the czar was the only man attempting to cure Russia of its barbarism. This sketch aligns with this view by heavily emphasizing the power and architectural accomplishments of the czar at the total expense of the nearly forgotten townsfolk.

Also the city is framed almost entirely by empty space; Moscow appears to be the only feature of the landscape for miles around. Combined with the general absence of human figures, this makes Russia seem an immense wasteland punctuated with only isolated bastions of human civilization, another common western European stereotype.

Images taken from Travels into Muscovy, Persia, and Part of the East Indies, a travel account by Cornelis de Bruyn, *a Dutch painter and traveller from the turn of the eighteenth century. Images are from engravings and sketches done by the author. Images were drawn in 1701, and published in 1737.*

Often, the images brought back by famous travellers like Cornelis de Bruyn and published in their travel accounts would be the only exposure the average person would have to vast expanses of the globe. While not exactly "maps" in the traditional, navigational sense, these sketches and drawings wielded enormous power in defining a space and shaping the reader's understanding of their world. However, these images would more often reflect the various authors' interpretations of that space rather than hard and fast objective fact, as can be seen in these three images. Here, the selected images display the cultural biases at play in the mind of the traveller Cornelis de Bruyn. These images and the larger travel narrative they come from helped familiarize the far off lands of Russia to citizens of the west. However, de Bruyn's Russia is heavily distorted by his own personal judgments and larger western stereotypes.

Mark Relation

This is one of a number of portraits of individual rural Russians de Bruyn met along his journey. The man with the rather large hat is an interesting example of the conflicting cultural distance observed by de Bruyn. While his hat may be immediately striking for its unusual proportions compared to modern hats, de Bruyn portrays him as not quite as culturally distant from western civilization as his garb might suggest. The dignity of his pose, the strength of his features, and the calm composure of his expression are all markedly similar to traditional subjects of western portraiture. These conflicting messages serve to paint the picture of a generally "normal" man to western standards participating in an "odd" culture.

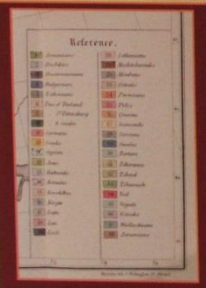
This sketch of a sledge drawn by reindeer is an example of de Bruyn's highlighting of "oddities" in Russian culture. De Bruyn notes in his text that the heads of the reindeer have been enlarged so the viewer may take better note of their features. Reindeer, despite having been domesticated for longer than horses, would not be familiar to western audiences, and so merit special attention as a curiosity. In both cases, de Bruyn uses these images both as a picture of Russian people and their practices and as a judgment of their relative cultural distance from western Europeans. These images familiarize the country by offering visual examples of "authentic" Russian life, and yet also place Russia clearly outside of what the author believed to be cultured society.

Classifying: Mapping Russia's Ethnicities

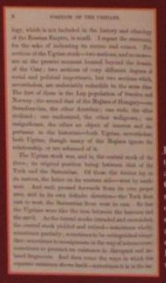
Images taken from The Native Races of the Russian Empire, *by Robert Latham and the accompanying map titled , by the St. Petersburg Geographical Society. Robert Latham's text was published in 1854 and relies on his own study as well as the Petersburg map which was drawn in 1852*

In the 1850s, when this map and book were created, ethnography looked like an empirical version of anthropology, focused around statistics and labeling of cultures as a way of classifying and comparing the foreign ethnic groups in a region. In this way mapping and anthropology were related as ethnographers sought to catalog peoples in various countries. Ethnography grew out of colonization and European empires' wishes to organize and understand their new territories, including the people living there. Though many travel accounts had already recorded the various non-European ethnic groups across the globe by the time Latham and the St. Petersburg Geographical society were writing, new scientific ideas and imperial competition spurred ethnographers to re-evaluate foreign cultures. As an ethnographer and philologist, Robert Latham focused much of his ethnographical research in *The Native Races of the Russian Empire* on the racial origins and linguistics of the various ethnic communities in Russia. This method differed from earlier accounts of foreign peoples in that it stressed a more "scientific" approach to the study of origins rather than a descriptive approach, suggesting that the ethnographic community in the mid-nineteenth century viewed their work as progressive. Latham was not looking to mold his own research to popular ideas at the time. Therefore his exact theories should not necessarily be taken as the majority opinion. Nevertheless, his work and that of the St. Petersburg Geographical Society reflect a larger trend towards ethnography and, to an extent, philology, as the most progressive forms of classification of people and places outside Europe in the mid nineteenth-century.

Lauren Bever



This map fits into the larger context of Europeans' idea of classification and ordering as a primary means of gaining, digesting, and presenting information, specifically about non-European cultures. Because the existence of these diverse groups of people had already been recorded in previous anthropological explorations, the goal of this map in particular was to scientifically categorize the different communities of people living across the land which Russia had recently claimed as its empire. The St. Petersburg Geographical Society catalogued using colors, numbers, and naming. While the colored spaces on the map indicate ethnic populations, the white spaces on the map are interesting silences which promote the image of "the other" in the European mindset. If the colored areas on the map represent the "ethnic" people, the white spots represent the "non-ethnic" people, which in this case are non-Russians. The white/colored dichotomy promotes a rigid world view of ethnicities in which Russia is the norm and the colored groups are "the other." Thus classifying and categorizing were a way to reinforce European concepts of cultural and imperial dominance.



Just as the map reduces ethnicity to a color, Robert Latham reduces ethnicity to three stocks of origin through language, culture, and migration. Both the map and accompanying text define ethnicity exclusively by origins. The fact that the Geographical Society and Robert Latham calculated different "amounts" of ethnicities in Russia demonstrates that their act of cataloging is arbitrary and is based on their world view as Europeans. Nevertheless, the fact that this map exists and ethnologists wanted to make information available regarding unfamiliar cultural groups suggests a true drive to understand the world outside of Europe. However, the act of picking, choosing, labeling, and studying groups more so reveals the European position as a dominant, educated culture with the ability to determine who can be classified as whom.

Classifying

Nearing the end of the seventeenth century, Europe underwent a broad cultural and intellectual shift known as the Enlightenment. With this intellectual revolution came an ever-growing emphasis on human reason and individualism as cornerstones of an ideal society. Throughout most of the eighteenth century, the intellectual framework established by Enlightenment thinkers substantially influenced advances in science, philosophy, and politics. As these priorities spread into scientific thought, they ushered in the scientific method, a set of scientific practices that promoted direct, repeatable observations and logically consistent deductions as the foundations of scientific thought.

Following Enlightenment principles, scientists and philosophers understood the natural world as being fundamentally comprehensible by the application of reason; that is to say that, if applied properly, human reason could grasp the truths of nature and fully understand how the world functions. This perspective created in scientists a drive to properly classify the whole of the natural world. Enlightenment scientists believed that if they could observe the world around them and, using human reason, divide what they saw into the proper categories, they could come to a deeper understanding of the most basic mysteries of the world. To that end, cartographers from post-Enlightenment Europe understood their purpose to be the collection of as much scientifically accurate data as possible.

Global exploration had opened Europeans' eyes to the many different types of lands and peoples in the world, while colonialism required empires to understand new territory and the people in it. Collecting, cataloging, and classifying information became a modern and scientific way to order the unknown. Just as Alexander von Humboldt organized the flora and fauna of an established Spanish colony to gain information, Robert Latham and the St. Petersburg Geographical Society classified Russian ethnic groups to better understand human diversity. Though the lands of New Spain and Russia had been thoroughly explored, the two scientists nonetheless saw in those regions important new information yet unknown to European scientists for them to record.

Classifying: Alexander von Humboldt and the Mapping of New Spain

Images taken from Political Essay on the Kingdom of New Spain, *a scientific and statistical survey of modern-day Mexico by Alexander von Humboldt, a Prussian scientist. Images are from drawings done by the author, drawn in 1804 and published French in 1811.*

When Alexander von Humboldt, a Prussian naturalist widely considered one of the brightest scientific minds of his era, set off on a voyage to South America, the Spanish colony of New Spain (modern-day Mexico) was not high on his list of priorities. Upon witnessing the geographical and biological diversity in the region, he quickly rearranged his proposed journey of circumnavigation in favor of a comprehensive study of the social and geographic landscape of New Spain. The results of that labor, recorded in his *Political Essay on the Kingdom of New Spain*, comprise nearly 2000 pages of statistical analysis and some of the most comprehensive cartography in the Americas to date.

As a child of the Enlightenment, Humboldt projects into his science and cartography a strong belief in the need for a total understanding of the environment that he studies. As he explains in the personal narrative resulting from this journey, "it would hinder the advancement of the sciences to postulate general ideas by neglecting particular facts." To that end, the *Political Essay*, and his "Map of the Kingdom of New Spain" in particular, includes an astonishing breadth of information about a variety of significant aspects of colonial life. Because of Humboldt's understanding of the volume of information yet unknown about New Spain, he found himself driven to advance a scientific understanding of an important part of the Spanish Empire by observing and categorizing a vast quantity of data about life in the region.

In the "Map of New Spain" in particular, Humboldt reveals the deeply human priority of his scientific perspective. By including elements of the human landscape (cities, churches, and towns), the economic landscape (mines and military posts), and the scientific landscape (astronomical observations and mountains), Humboldt seeks to fully encompass the essence of New Spain, to understand the ways that people interact with their environment. Proceeding from the Enlightenment perspective that nature can be fully understood with the application of logic and human reason, Humboldt's attempt to map the unknown comes in the form of broad and far-reaching scientific calculation.

Daniel Quick

This drawing of the Pico de Orizaba, the highest mountain in Mexico, demonstrates again the primacy that Humboldt's science gives to the human perspective. Just as with the cross-section that Humboldt compiles, Humboldt's depiction of this prominent geographical feature is presented from the point of view of an individual looking at the mountain from a specific point in the forest. Instead of applying an abstract, objective perspective to describe the size, shape, or position of the mountain, Humboldt chooses to depict the mountain the way that he directly experiences it. This individual perspective highlights the importance that Humboldt's science grants to direct observation of the natural world, while simultaneously demonstrating that scientific classification and artistic expression are not mutually exclusive.

With this chart, Humboldt demonstrates a combination of cartographic advancement and science emerging from the human perspective. To assemble this cross section, he recorded measurements of barometric pressure on his paths from one city to the next, culminating in comprehensive and accurate charts of the elevations of various locations and landmarks along the way. By centering the analysis on the roads from one major city to the next, rather than a series of abstract data points, Humboldt highlights the fundamental influence of the human perspective in shaping and ordering scientific knowledge. Though charts of this nature had previously been attempted, they had never been compiled using the scientific instruments that Humboldt used. This style of data organization would be widely imitated by future cartographers, and is still in use even today.

Possessing: Legitimizing New Spain

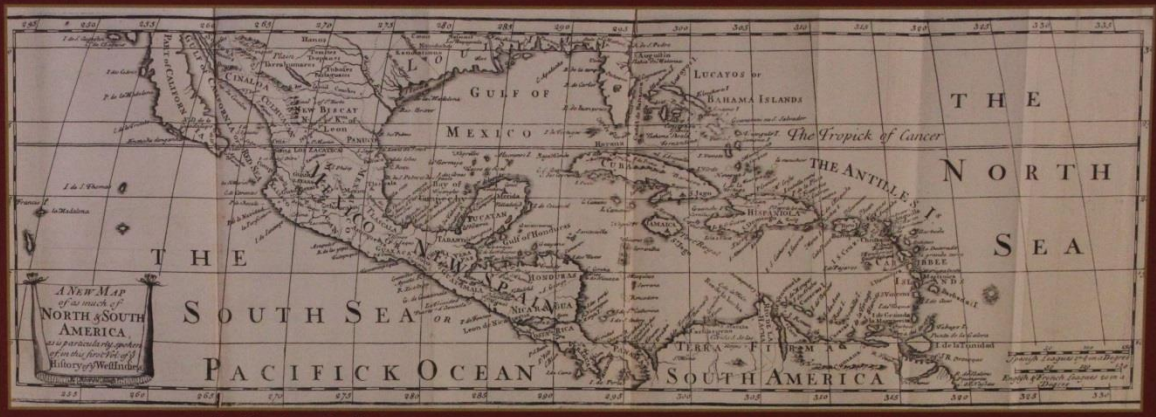
These images all come from The General History of the Vast Continent and Islands of America, Commonly call'd the West-Indies, from the First Discovery thereof: with the Best Accounts the People could give of their Antiquities *by Antonio de Herrera y Tordesillas and translated into English by Capt. John Stevens in 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 Décadas*. 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 Vast Continent and Islands of America*. The "Hidrographical Draught of Mexico as it Lies in its Lakes" is a map of the Aztec capital of Mexico Tenochtitlán. This particular map originates from a Spanish traveler named Carlos de Sigüenza Góngora who reportedly copied it from a Native American mapmaker.

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 practices of human sacrifice were extremely disturbing for many of the Catholic Spanish explorers. The engraving of the "Vitzilipuztli, the Principal Idol of the Mexicans" shows an example of this idol worship that Spaniards found so appalling. This idol would have been located in one of the great temples of Tenochtitlán. The engraving of "The Great Charnel House in ye 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 heathenism 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 Décadas 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 solidified and justified their possession, they were able to create these maps and include images of churches that signified the locations of towns and cities named after Spanish saints. It was clear that they claimed to control and possess this land.

Conor Morris



"A New Map of as much of North and South America as is particularly spoken of in this first Vol. of ye History of ye West Indies"

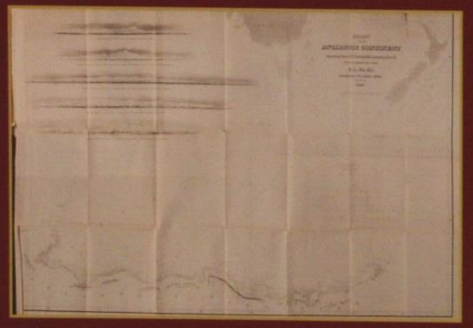
"An Hidrographical Draught of Mexico as it Lies in its Lakes"

"Vitzilipuztli, the Principal Idol of the Mexicans"

"The Great Charnel House in ye City of Mexico"

Possessing: The Wilkes Expedition

Map of the Fiji Islands from May of 1840. Wilkes and his men killed 80 Fijians on the island of Ovalau after negotiations between the natives broke down and two of Wilkes' men were killed while attempting to barter for food. Wilkes was attempting to make a U.S. whaling port on the island.



Map of Antarctica from January of 1840. Note the various given water and air temperatures as well as the view of the coastline from two of the expedition's ships. At the time of the expedition in Antarctica Wilkes crossed paths with the French who were also exploring the continent. A standoff ensued and neither party wanted to leave the area and give claim to the particular location to the other country. Wilkes finally backed off and moved further down the coastline.

Map of the Oregon Territory from April of 1841. Note the extensive detail that went into the creation of this map and the cut away of the Columbia River. Also note the advice and warnings that Wilkes gives along the Columbia River.

Maps from the Narrative of the United States Exploring Expeditions during the Years 1838, 1839, 1840, 1841, and 1842 *during the Wilkes Expedition between* 1838 *and* 1842 *include a map of Antarctica circa January* 1840, *a map of Fiji Islands circa May* 1840, *a map of the Oregon Territory circa April of* 1841.

In 1844, Charles Wilkes published a volume of travel accounts titled *Narrative of the United States Exploring Expeditions 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 North West, the U.S. Exploring Expedition (or "The Wilkes Expedition," as it has been called) that occurred thirty-five years after 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 doubtful islands and shoals, as to discover, and accurately fix, the position of those which [lay] in or near the track of our vessels in that quarter, and [might] have escaped the observation of scientific navigators."

Some forms of possession occurred before the mapping of possessed lands. Spaniards did not map Mexico until roughly one hundred years after the supposed military "conquest." But the maps for the Wilkes Expedition reveal a different approach. In this case, a map publication itself made 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 his crew was easily able to overpower and overwhelm the indigenous people of Fiji when a battle ensued and only two crew members were lost while eighty Fijians were killed. And while no country owns Antarctica, some countries have made territorial claims recognized by other nations. Unfortunately the United States was not one of those countries originally when they landed in the same area of Antarctica that was previously explored by the British in connection with their then territory of Australia. Upon arrival in Antarctica, Wilkes claimed and renamed the British territorial claim "Wilkesland." As the Wilkes Expedition reveals, possession can occur both before or after the actual mapping of an area. In some cases, possession can be not an action but a claim made on paper.

Joseph Busdice

Extrapolating: Herman Moll, Enlightenment Geographer

"Carolina" appears in the third edition of Thomas Salmon's 1739 publication Modern History, or the Present State of all Nations, *but it was probably drawn in the 1720s. Herman Moll, the cartographer responsible for it, died in 1732.*

Working as a printer, engraver, and geographer in London, Herman Moll made the acquaintance of some of the leading thinkers of the English Enlightenment, including John Locke, Robert Hooke, and Jonathan Swift. The Dutchman's contemporaries valued his works for both their accuracy and their aesthetics. Moll must have admired their work as well, for he adopted an attitude characteristic of the Enlightenment in his mapmaking – an attitude that is particularly conspicuous in the extrapolated features of "Carolina."

The traditional historiography of the Enlightenment has stressed the intellectual optimism of the period. Two recurring traits in Moll's works suggest that he, like Locke, Hooke, and Swift, subscribed to a progressive notion of human knowledge and power: an emphasis on the rightful British possession of the region depicted and an idealized, resource-oriented view of nature. "Carolina" exhibits both features. But it is Moll's willingness to extrapolate from imagination, amplified in those regions of the Carolinas whose topography Europeans were yet to chart in detail, that offers the clearest link between his work and the optimism of the Enlightenment.

Although few Englishmen ventured as far west as the Appalachian Mountains before the late eighteenth century, Moll confidently arranges them in neat rows and columns so as to provide a natural basis for the division of British and "Charakey" settlements. The Carolinas' rivers, according to Moll, make uniform bends as they carry the European explorer deeper into the continent; even their tributaries seem to be conveniently arranged to offer clean water and ease of transportation to every region on the map. This apparent cartographic optimism mirrors similar Enlightenment attitudes in politics, science, and literature.

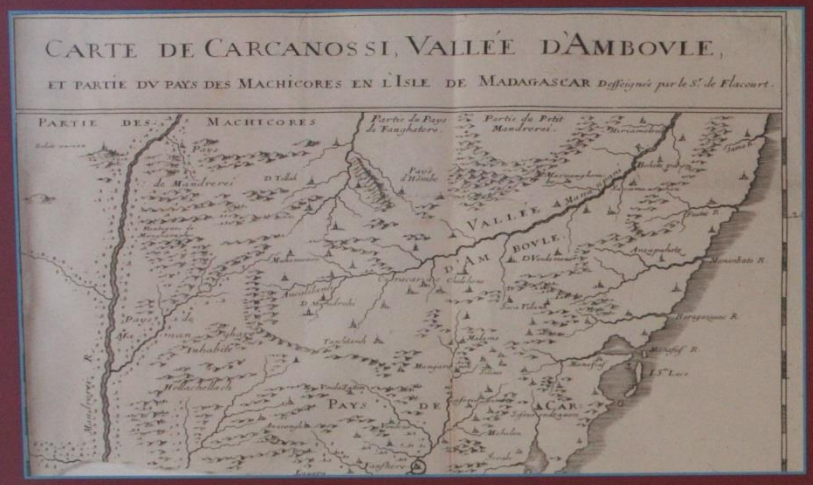
Represented by their names and a single, repeated, fort-shaped stamp, the English coastal settlements signify a form of extrapolation of their own kind: the overemphasis of urban density. Moll's cartographic confidence seems to have been so strong as to have given him license to extrapolate in even those regions inhabited by, and thus well-known to the English. Again, the Enlightenment's conceptual influence on Moll comes across in his extrapolation in "Carolina."

Peter Hoskin

Extrapolation

Cartographic extrapolation is the visual representation of assumed or imagined physical features of the earth and is pervasive in the history of European mapmaking. Lacking precise information about the spatial relationships of geographic features on a given piece of land, the cartographer often extrapolates from the information he does have to fill in the voids of what he does not know. A classic example of this phenomenon in early European maps of North America is the representation of California as an island. Given that the Pacific Ocean lies to the west and separates Baja California from Mexico in the east, it seemed reasonable to conclude that this waterway continued northwards and isolated California as an island from mainland America. While this particular form of extrapolation does not appear on the maps shown here, they do exhibit other forms of the technique – especially in their displays of mountains, rivers, and heights and depths.

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



Map taken from La Historic de la Grande Isle Madagascar, a travel account by Etienne Flacourt. The map is a sketch created by the author, drawn between 1646 and 1658 and published in 1658 in Paris.

In 1642 the French East India Company was granted a charter to establish a colony on the Southeast corner of Madagascar. After six unsuccessful years in establishing a prosperous trading outpost in this new French colony of Fort Dauphin, Etienne Flacourt was appointed as new governor of the colony. His original mission was to establish a trading network with the local Malagasy population, but lack of cooperation from the locals and inadequate 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 Historic de la Grande Isle Madagascar* in 1658, a 354-page work that gave the first European in-depth account of Madagascar. Included in *La Historic* are seven maps of the island and nine sketches of the local Malagasy people and the distinct plant and animal life in Madagascar.

Here, Flacourt maps this section of current Southeast Madagascar using extrapolation. The mountains that Flacourt plots are particularly uniform in height—this is not a coincidence, but showcases one idea of cartographic extrapolation in heights and depths. With little accurate information of the true topography of this region, Flacourt replaced this knowledge gap with an invented and uniform topography. Flacourt populates this map with mountains, each of nearly equal height and shape. When compared to accurate topographical depictions, this method of height and depth extrapolation seems senseless. This extrapolation, however, allowed Flacourt to create a sense of order and familiarity with a completely foreign and distant land.

Mirko Kruse

Presented in these two images are Flacourt's anatomical treatment of the local Madagascar plant and animal life. Shown here are 30 of the 140 plant representations included in *La Historic* and 12 of the 18 animal representations. The *Nepenthes Madagascariensis*, plant number 43, was one of the first carnivorous plants to be documented by a European. Flacourt also documented several animal species never before seen by Europeans.

The detail and comprehensiveness of these sketches demonstrate how Flacourt was able to capture an accurate representation of Madagascar's local plant and animal life. The lack of extrapolation in these sketches contrast with the use of such in his maps.

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

Making Accurate: Mapping and Mercantilism in the Caribbean

As a region of tropical islands, the Caribbean represented both a land of treasure and despair for the numerous ships that scoured its waters. With fresh water a rarity, ship captains needed to know the location of water sources and islands where crews could anchor and rest during their travels. In the illustration, Jefferys indicates the location of a place in the Bahamas where shipping crews could rest and refill their fresh water stores.

The image, taken from one of the first few pages of the atlas, illustrates a European perspective of the Caribbean. An angel, surrounded by a multitude of objects, is portrayed standing on a tropical beach, with a European ship in the background. In conjunction with more unlike themes of the colonial era, the image likely represents an idealized European view of colonization and exploration.

In a tropical climate such as the Caribbean, Europeans discovered a wide variety of physical features and wildlife exotic to those within amongst their small settlements and plantations. Ranging from the tropic of jungles of Cuba to the flat swamplands of South Florida, this geography often posed problems for settlement and economic development, but the European settlers on each island utilized the physical features to their own advantage. In this image, Jefferys illustrates the large mountains of the Jamaican landscape, while incorporating the places where settlement was more conducive to a plantation environment.

The images on this and these scenes from an atlas entitled The West Indian Atlas or a General Description of The West Indies Taken from Actual Surveys and Observations *by the Geographer to King George III of Britain, Thomas Jefferys.*

Cartography in Britain, and much of Europe in general, revolved around naval commerce and travel during the early modern period. Cartographers like Jefferys created these maps within a competitive economic context, which eventually came to be known as mercantilism. Jefferys, working within this ideological context, developed *The West Indian Atlas* in the late eighteenth century to help facilitate mercantilist-influenced trade in the Caribbean.

Cartographic accuracy lay at the heart of early modern Europeans ambitions to navigate across land and water. Accuracy covers a broad spectrum of topics when it comes to mapping, from depictions of landmasses to calculations of depth measurements. Because of this, accuracy in mapping subsequently serves another purpose: the development of global economics and exchange around the world. With the growth of commercial exchange and naval commerce beginning in the fifteenth century, development of these maps became a crucial trade tool. In the colonial Caribbean, a land of narrow waterways, tropical storms, isolated coastlines, and erratic ocean currents, this accuracy became even more critical for success by merchants. Ships, large and small, with cargo holds full of sugar, tobacco, rum, gold and silver, became the means of conveyance for this trade to the Caribbean and around the world.

In Jefferys' atlas, he takes care to refer to currents, places where ships could anchor and take on water, and depth measurements to assist the captains of these ships. However, Jefferys goes beyond these elaborations and even makes references to the climate and inhabitants of the region to provide insights into the lifestyle of the Caribbean. He indicates the dominance of the Caribbean sugar plantations, making sure to note their property borders and construct on the sugar production for almost every island. *The West Indian Atlas* truly embodies the context of mercantilism, and while it makes no specific statements for the ideology, it goes to an extreme length to ensure the success of the agenda through accurate mapping.

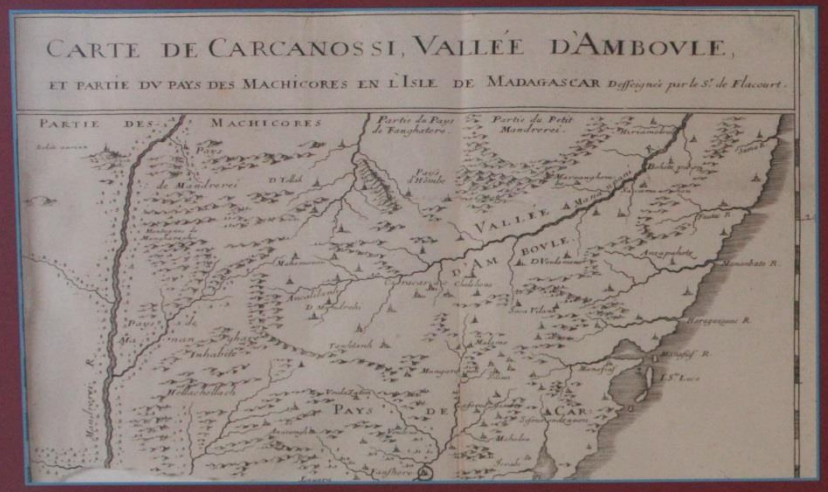
Benjamin Shapiro

Jefferys clearly realizes the centrality of shipping throughout the Caribbean during the period of Triangular Trade, and he decorates many of his maps with illustrations of his ships on the open seas. These ships, as pictured above near the Spanish-held island of Cuba, seem to concentrate around regions where shipping is at its highest volume in different channels or straits. Throughout the maps, some of these pictured ships follow the directions of the small "darts" which represent the currents on the open seas.

Making accurate

Many maps found in the atlas have the intention of representation as accurate. By the design of the European mercantilist framework of colonial trade, accurate depictions of "resources" were important for ensuring a continuing flow of wealth to the mother country. Because of this, accuracy in mapping subsequently serves another purpose: the development of global economics and exchange around the world. With the growth of commercial exchange and naval commerce beginning in the fifteenth century, development of these maps became a crucial trade tool. In the colonial Caribbean, a land of narrow waterways, tropical storms, isolated coastlines, and erratic ocean currents, this accuracy became even more critical for success by merchants. Ships, large and small, with cargo holds full of sugar, tobacco, rum, gold and silver, became the means of conveyance for this trade to the Caribbean and around the world.

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



Map taken from La Historie de la Grande Isle Madagascar, a travel account by Etienne Flacourt. The map is a sketch created by the author, drawn between 1646 and 1654 and published in 1658 in Paris.

In 1642 the French East India Company was granted a charter to establish a colony on the Southeast corner of Madagascar. After six unsuccessful years in establishing a prosperous trading outpost in this new French colony of Fort Dauphin, Etienne Flacourt was appointed as new governor of the colony. His original mission was to establish a trading network with the local Malagasy population, but lack of cooperation from the locals and inadequate 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 Historie de la Grande Isle Madagascar* in 1658, a 354-page work that gave the first European in-depth account of Madagascar. Included in *La Historie* are seven maps of the island and nine sketches of the local Malagasy people and the distinct plant and animal life in Madagascar.

Here, Flacourt maps this section of current Southeast Madagascar using extrapolation. The mountains that Flacourt plots are particularly uniform in height—this is not a coincidence, but showcases one idea of cartographic extrapolation in heights and depths. With little accurate information of the true topography of this region, Flacourt replaced this knowledge gap with an invented and uniform topography. Flacourt populates this map with mountains, each of nearly equal height and shape. When compared to accurate topographical depictions, this method of height and depth extrapolation seems senseless. This extrapolation, however, allowed Flacourt to create a sense of order and familiarity with a completely foreign and distant land.

Mirko Kruse

Presented in these two images are Flacourt's anatomical treatment of the local Madagascar plant and animal life. Shown here are 50 of the 140 plant representations included in *La Historie* and 12 of the 18 animal representations. The *Nepenthes Madagascariensis*, plant number 43, was one of the first carnivorous plants to be documented by a European. Flacourt also documented several animal species never before seen by Europeans.

The detail and comprehensiveness of these sketches demonstrate how Flacourt was able to capture an accurate representation of Madagascar's local plant and animal life. The lack of extrapolation in these sketches contrast with the use of such in his maps.

Kathy Clark, class of ‘15

Making Accurate: Creating Certainty During Turbulent Times

These images were taken from John Cumming's book The Traveller's New Guide Through Ireland. *It was published in Dublin in* 1813. *Images are from engravings and sketches done by J. Taylor for* The Traveller's New Guide Through Ireland. *It was originally created to provide travellers to Ireland with a correct guide of the country, but its scope was expanded as an effort to enliven the work and to make it available to businessmen and local people.*

The Traveller's New Guide Through Ireland was published in 1813 when Ireland was still under the control of England and was only a mere 13 years after the Act of Union from 1800 was signed and 17 years after the rebellion of 1798. This was a particularly important time in the history of these two regions because the Irish rebellion had been largely unforeseen and represented a larger French threat to the British Empire.

This map is specifically touted as "new and correct" regarding the roads in Ireland. Roads are important militarily because they provide access from the coastal regions to the interior regions of the island and between the villages. Some of the roads depicted were even constructed particularly for military use in order to provide a means of communication and shelter. It was strategically important to have accurate maps to know the best way to mobilize troops, where resources were, and through what terrain the roads would lead. Maps like this one would show if a possible route would lead through friendly or hostile areas and if the roads were near any resources. Whether or not troops had access to resources or were exposed to politically friendly residents had the potential to dictate victory or defeat and so accurate maps were essential militarily.

Other instances of the concern over accuracy can be seen in the precision with which measurements are taken of the road distances and the exact geographic location of the island. *The Traveller's New Guide Through Ireland* also carefully documents when and where local fairs and markets took place. This scrupulous cataloguing of such events further demonstrates the role that accuracy occupied in cartography.

"Allen's New and Correct Pocket Map of Ireland" and the charts of local fairs and markets contained in *The New Traveller's Guide* exemplify some instances of the importance of maps during military and political uncertainty and transition. The concern with accuracy also reflects the political concerns of the era in which they are made.

Katherine Clark

Table of Fairs held in the County of Dublin each month annually.

Place where held.	Time.	Stock.
Tallagh	1 Tues. of March	Cattle
Lutrels-town	28 March	Horses
Carrickmines 2 days	14 April	
Skerries	28 Do.	
Rush	1 May	Horses
Garristown	5 Do.	
Lusk	5 Do.	Horses
Balrudderry	6 Do.	Cattle
Newcastle	9 Do.	Cattle
Swords	12 Do.	Horses
Kilsallaghan	Ascen. Thurs.	Horses
Fieldstown	Whit. Mon.	Horses
Naggard	1 thurs. after trin. sun.	Cattle
Tallagh	7 July	Cattle
Rathfarnham	10 Do.	Cattle
Lusk	14 Do.	Horses
St. Margarets	20 Do.	Horses-Cattle
Skerries	10 August	
Balrudderry	12 Do.	Cattle
Garristown	13 Do.	
Palmerstown	23 Do.	Horses
Ballymore	21 Do.	
Donnybrook	29 Do.	Horses
Lutrels-town	8 September	Horses
Kilsallaghan	9 Do.	Horses
Tallagh	16 Do.	Cattle
Ballyfagan	29 Do.	
Rush	29 Do.	Horses
Newcastle	6 October	Cattle
Rathmichael	10 Do.	Horses-Cattle
Naggard	11 Do.	Cattle
Carrickmines 2 days	12 Do.	
Ballymore	19 Do.	
Garristown	1 November	
Rush	8 Do.	Cattle
Tallagh	9 Do.	Cattle
Lusk	23 Do.	Horses

Distance from Dublin.

	Miles		Miles
Donnybrook	2	Bray	10
Stillorgan	4	Black Rock	8
Cabinteely	6½	Bray	10

This table lists where, when, and what is sold at various fairs in the county of Dublin throughout the year. Data like this would have been helpful to foreign businessmen and even some of the local people. The table also demonstrates the careful compilation of local information.

This image of Dublin is from "Allen's New and Correct Pocket Map of Ireland." It shows Dublin's importance in the British Empire with all of the main roads radiating away from it, but it also shows awareness of Ireland's proximity to Britain. This awareness is explicitly evident through the inclusion of the stated distance between Dublin and Britain.

Works cited

A. Malotet (Arthur). Étienne de Flacourt : Ou Les Origines de La Colonisation Française a Madagascar, 1648-1661. Paris: Ernest Leroux, 1898.

Alexander von Humboldt. Political Essay on the Kingdom of New Spain: Containing... 3rd ed.. London: Longman, Hurst, Rees, Orme, and Brown, 1822.

Antonio de Herrera y Tordesillas -1625. The General History of the Vast Continent 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. London, Printed for J. Batley, 1725.

Charles Wilkes. Narrative of the United States Exploring Expedition during the Years 1838, 1839, 1840, 1841, 1842. Philadelphia, Lea and Blanchard, 1845.

Cornelis de Bruyn or 7. Travels into Muscovy, Persia, and Part of the East-Indies : Containing, an Accurate Description of Whatever Is Most Remarkable in Those Countries. And Embellished with above 320 Cooper Plates, to Which Is Added an Account of the Journey of Mr. Isbrants, Ambassador from Muscovy, through Russia and Tartary, to China; Together with Remarks on the Travels of Sir John Chardin, and Mr. Kempfer, and a Letter Written to the Author on That Subject. London: Printed for ABettesworth etc, 1737.

George Sandys. Sandys Travells, : Containing an History of the Original and Present State of the Turkish Empire ... : Also, of Greece ... : Of Ægypt ... : Of Armenia ... : A Description of the Holy-Land ... : Lastly, Italy Described, and the Islands Adjoyning ... The sixth edition.. London: Printed for Rob Clavel, Tho Passinger, Will Cadman, Will Whitwood, Tho Sawbridge, and Will Burch, 1670.

R. G. Latham (Robert Gordon). The Native Races of the Russian Empire. London ; New York: HBaillière ; Paris, 1854.

The Traveller's New Guide through Ireland : Containing, a New and Accurate Description of the Roads, with Particulars of All the Different Towns - Villages - Noblemen and Gentleman's Seats - Churches - Monastic Buildings - Antiquities and Natural Curiosities : Also, the Present State of Agriculture Manufactures, and Commerce ; with a Complete List of All the Fairs throughout the Kingdom. Dublin: Published by John Cumming, Lower Ormond-Quay, 1815.

Thomas Jefferys -1771. The West-India Atlas : Or, A Compendious Description of the West-Indies : Illustrated with Forty-One Correct Charts and Maps, Taken from Actual Surveys, Together with an Historical Account of the Several Countries and Islands Which Compose That Part of the World ... London: R. Laurie and J. Whittle, 1794.

Thomas Salmon. Modern History, Or, The Present State of All Nations : Describing Their Respective Situations, Persons, Habits, and Buildings; Manners, Laws and Customs ... Plants, Animals, and Minerals. The 3d ed. With considerable additions and improvements ... also the history and revolutions of each country, brought down to the present time .... London T. Longman et al, 1744.

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Familiarizing: Cornelis de Bruyn's Russia