From Circle to Sphere:
Historic Maps Since Columbus
From Circle to Sphere: Historic Maps Since Columbus

A Catalog of an Exhibition

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Main Exhibition Gallery

by

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Introduction

The quincentenary (1492-1992) of Columbus' first voyage to America provides us with a unique vantage point from which to examine some of the maps that have traced the expansion of Western knowledge of the world. In the midst of today's satellite photography and computer graphics, when good maps are as common as gas stations, it is almost impossible to imagine a time when more of the world was unknown than known—as it was when Columbus lived, approximately 200,000 days ago.

But the maps from that period remain. And they are powerful images—when viewed chronologically—of the cascading force of discovery. The waves of maps that followed in the wake of the explorers washed away, finally and triumphantly, all medieval misconceptions of the world. Corrected and projected upon the cartographer's maps, the world became larger and more diverse than anyone had imagined.

This is an exhibition of cartographers' triumphs (and errors) that, shown here together, guide us back from the dark terra incognita of Columbus' day. Naturally, the older maps are what intrigue us, for they are full of empty spaces that contemporary artists- engravers were compelled to fill with informative and/or imaginative (always decorative) touches—hence, the elaborate cartouches, exotic fauna, and vignettes of national life. They are represented here in abundance, drawn from the "golden age of mapmaking," roughly the 17th century. Included are some of the rarest maps in the world.
Introduction

Yet there is something even more magnetic about old maps than their art that attracts us to them. Probably, there will never be anything like them again—even as we begin to explore distant planets in the universe—for our methods have become too sophisticated and scientific, and the results too instantaneous. The speed of light, images of Venus come back to us last year from cameras mounted on the Magellan spacecraft; no more, the hearth of sailors, the imaginative fabrications of cartographers, the clumsy measurements of inaccurate instruments. Princeton astronomers also made news last year discussing the Digital Sky Survey, which will create the world's largest and most detailed three-dimensional map of the universe; no more, the political placement of territory within papal-established zones. Cartographically, science is already moving on beyond the earth.

But the earth, of course, is where we live and what is due to us, and any man-made images of it from the past become romanticized in our eyes. As time travelers, we will always prefer, I believe, to go backward rather than forward, to experience an earlier history, such as is possible with these maps, than indulge the fantasies of science fiction. (Biographies are perennial bestsellers.) How else to explain the current fascination with Columbus and every detail of his first voyage? What did he look like? Where exactly did he and his crew first set foot? We are interested in real adventure stories and real heroes, and early maps and charts are a perfect medium for storytelling. And no story is larger and more universal, no theme more enduring, than man's evolving concept of his world.

One cannot separate the maps, then, from their historical background, and thus it may be useful to note some of the explorers and explorations that were their sources:

<table>
<thead>
<tr>
<th>Year</th>
<th>Explorer/Event</th>
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<tbody>
<tr>
<td>1492</td>
<td>Columbus' voyage to the New World</td>
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<tr>
<td>1497</td>
<td>John Cabot to Labrador</td>
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<td>1497</td>
<td>Amerigo Vespucci to the New World</td>
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<td>1498</td>
<td>Vasco da Gama to India</td>
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<td>1500</td>
<td>Cabral to Brazil</td>
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<td>1513</td>
<td>Balboa sights the Pacific</td>
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<td>1513</td>
<td>Ponce de Leon discovers Florida</td>
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<td>1519</td>
<td>Cortes' conquest of Mexico</td>
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<td>1519-1522</td>
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<td>1524</td>
<td>Verrazano to North America (East Coast)</td>
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<td>1526</td>
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<td>1534-1541</td>
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<td>1541</td>
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<td>1585</td>
<td>Raleigh's expedition to Virginia</td>
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<td>1605</td>
<td>Discovery of Australia</td>
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<td>1606</td>
<td>Virginia Company founded</td>
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<td>1608</td>
<td>Henry Hudson to Canada</td>
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<td>1620</td>
<td>Sailing of the Mayflower</td>
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<td>1625</td>
<td>Dutch settle Manhattan (New Amsterdam)</td>
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<td>1642</td>
<td>New Zealand and Tasmania discovered</td>
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<td>1675</td>
<td>Greenwich Observatory founded</td>
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<td>1736</td>
<td>Harrison's 1st marine chronometer</td>
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<td>1779</td>
<td>Cook's voyages</td>
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<td>1806-1806</td>
<td>Lewis and Clarke expedition</td>
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<td>1845</td>
<td>Fremont expeditions</td>
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<td>1845</td>
<td>Sir John Franklin to Canada</td>
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<tr>
<td>1903-1906</td>
<td>Amundsen traverses Northwest Passage</td>
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Introduction

The explorers are not the heroes of this exhibition, though, for without cartographers to record what was discovered and to translate it into a visual form anyone could understand, there would be little real discovery. As the London geographer and mapmaker Herman Moll said in 1701:

"The Art of making Maps and Sea-Charts, is an Invention of such vast use to Mankind, that perhaps there is nothing for which the World is more indebted to the studious Labours of Ingenious Men. For by the help of them Geography (a Science so universally useful that no Man pretends to know, of whatever faculty he be, can with any excuse be ignorant of it) is made plain and easy, the Mariners are directed in finding the Commodities of the most distant Parts. And by the help of them, we may at home, with pleasure, Survey the several Countries of the World, and be informed of the situation, distance, provinces, Cities and remarkable places of every Nation. To do this with Exactness, was an Art (to be sure) not easily attain'd; it was not one Man, nor one Generation of Men, that could bring it to any reasonable Perfection..."

To those generations of mapmakers, this exhibition is dedicated.

Acknowledgments

I would like to express my gratitude to William Layce, Associate University Librarian for Rare Books and Special Collections, for giving me the green light for this project, understanding (I hope!) the amount of time it entailed and detracting from other departmental business. Alfred Bueh, Curator of Western Americana and Historic Maps, made some helpful suggestions and opened wide the resources of his unit for my examination and enjoyment.

The maps that illustrate this catalog were photographed by Don Bravich of Photographic Services and John Blauwewijk of the Oakley to Christian Art. Their work is identified by the following page numbers: Don Breza—cover (color), 19, 21, 47 (color), 55, 59, 61, 65, 71; John Blauwewijk)—5 (both), 7, 13, 19, 43, 49, 79, 84, 87, 103. I appreciate the professional manner with which they accommodated my wishes and met my deadlines. Thanks, also, to Nora Lin for the computer clip art of the compass rose (page 76) which she gracefully fashioned for my purposes.

Created with WordPerfect 5.1 software, this catalog was placed via diskette into the capable hands of the University's Printing Services Department. I would like to thank particularly the three men on its staff—Ted, Ann, and Mark—who worked with me from the beginning, offering ideas to keep down costs and to enhance the design. Thanks are also due to my staff for keeping safety (1) out of my way as best they could, and to my family, who saw very little of me during this past holiday season, for their great patience.
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Exhibition Notes

- The organization of the exhibition is essentially chronological within each section: The World, The New World, and the individual parts of North America. The cases on the right side of the gallery are devoted to special subjects: the prime meridian, California as an island, the Northwest Passage, and globes.

- Because some maps are large and others are small in atlases, a strictly chronological order could not be maintained for their display; hence, items in the exhibition are numbered to provide for a chronological route and to make for easy reference in this catalog.

- Names in bold are the ones credited for the maps; they may be cartographers, engravers, or publishers—or all three.

- Dates supplied for maps [in brackets] have been taken from the best available sources. Since so many of the plates for maps were reused in later issues and/or bought and reprinted by other publishers, it is often very difficult to know which version one has, particularly when the map has been removed from an atlas.

Title Case

1662 Visscher, Claes Janszoon (1587-1662) "Orbis Terrarum Typus de Integro Mutatis in Locis Emendatis." Modern color reproduction of his handcolored copperplate map. [Lent by John Deansoney]

The Visschers were an important family dynasty of Dutch cartographers and publishers that flourished in Amsterdam for nearly a century during the golden age of Dutch mapmaking, the 17th century. This world map, by the founder of the business, first appeared in 1638 and was based cartographically on the 1630 world map by Hendrik Hondius [see this map, item 25]. The decoration, though, is totally different. Two celestial spheres—one showing the Arctic sky, the other the Antarctic—occupy the central spaces above and below the map's hemispheres. Seven outer panels [cartes a figures, see item 24] show pairs of figures representing the four elements and the four seasons. The map itself, continues the myth of California as an island.

Beyond tracing the historical development of accurate world and regional maps, this exhibition examines the contributions of other mapmaking families, explores other cartographic myths and fallacies, shows how different cartographers used different formats of map projection, and illustrates the rise (and fall) of map decoration. All of this begins 500 years ago...
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Christopher Columbus (1451-1506)

1493 1. Columbus, Christopher. "The Columbus Letter": Epistole Chrisopoli Colom... (Rome: Bucellarius Argentinus or Silber, 1493). First dated edition. About ten copies are known. [Newville Kane Collection]

When Columbus returned from his first voyage in 1493, the news of the discovery of another world in the western ocean was made public in a Latin translation from the Spanish of his letter describing what he had found. This was in the form of a news sheet, consisting of a single sheet of paper folded twice, to make a small pamphlet of eight pages... The letter of Columbus was printed first in Spanish, at Bascia; the Latin editions at Rome, Basel, Paris and Antwerp; and the Italian paraphrase in verse, by Giovanni Dati, at Rome and Florence. The German translation appeared in 1497.

The exhibited letter, addressed by Columbus to Gabriel Sanchez, treasurer to King Ferdinand of Spain, is dated March 14, 1493, from Lisbon. The letter begins as follows (translated):

Letter of Christopher Columbus, to whom our age owes much, concerning the islands of India beyond the Ganges, recently discovered.... Having now accomplished the undertaking upon which I set out, I know that it will be agreeable to you to be informed

The world in 1992, shown on Goode's projection in which non-critical areas (oceans) absorb the most distortion.
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Christopher Columbus (1451-1506)

of all I have discovered in my voyage. On the 33rd day after I left Cadiz I reached the Indian Ocean where I found many islands peopled by innumerable inhabitants; of all which I took possession without resistance.... These people practice no kind of idolatry; on the contrary they firmly believe that all strength and power, and in fact all good things are in heaven, and that I had come down from thence with these ships and sailors; and with this belief I was received there after they had put aside fear....


This is one of more than 80 likenesses of Columbus that were created posthumously.

1893 3. Photograph of the anchor presumed to have been on the Santa Maria caravel <Columbus>, which was wrecked in the Bay of Cape Hatteras on the 24th of December, 1492. The anchor was obtained by Frederick A. Ober (1849-1913) in Haiti for the World’s Columbian Exposition of 1893. Considering that the Santa Maria was the flagship (<i>u</i>e, the larger of the three ships), one gets a keen sense of the flotilla of the caravels from this photograph. [Archives of Charles Scribner’s Sons]
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1493  S. Lilius, Zacharias. Wooden world map, in his Orbis breviusam (Florence: Antonio di Bartolommeo Miscumini, 5 June 1493). Very rare first edition of a work published in the year Columbus’ discovery was announced. [Greenville Kane Collection]

Exhibited is another example of this early, diagrammatic type of world map known as a “T-O” map: a circular ocean (the letter O) surrounds three continents (Europe, Asia, Africa) that are separated by the arms of a T representing the Mediterranean, the river Nile (Millus), and the river Dan (Tunus). Maps of this sort, depicting a flat world, rejected scientific thought and speculation in favor of religious fanaticism, and put Jerusalem at the center. Above the T-O map is a simple climatic diagram of the world.

The object of this curious and learned geographical work...seems to have been to post up into one little book all the knowledge and all the ignorance respecting our globe that could be collected from the ancients, as well as mediæval writers, so as to start fair with the new light to be let in by Columbus. It is a sort of alphabetical dictionary of Geography, with a good index.*

Lilius was a clergyman in Vicenza and later became titular Bishop of Sebastian, Armenia.

Saint Isidore: First printed map (1472)
Zacharius Lilius: T-O world map (1493)
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Through news of Columbus’ discovery traveled very quickly from Spain to Italy (three Roman editions of the Columbus letter were printed in 1493), word was very slow to reach Northern Europe. Nothing of Columbus’ voyage is mentioned in the following famous work.

1493  o. Schedel, Hartmann (1440-1514), editor. Woodcut world map from the Liber chronicarum [known as the Nuremberg Chronicle] (Nuremberg: Anton Koberger, 12 July 1493). First edition. [Rare Books Collection, gift of Junius S. Morgan, Class of 1888]

Issued nine months after Columbus landed in the New World, the Chronicle presents, to a large extent, a “last” view of the known medieval world as seen by the peoples of Western Europe.” This pre-Columbian view of the world is, indeed, a curious map. Supporting the outdated Ptolemaic world in the corners are Noah’s sons—Japheth, Shem, and Ham—who were responsible for re-colonizing the world after the flood, while twelve deer windbeasts boister the view. The bizarre figures outside the map on the panel to the left represent humanoids, creatures which had been described by classical authors, and in the imaginative tales of medieval travelers: a six-armed man, a furry woman, a six-fingered man, a centaur, a bald but bearded lady, a four-eyed man, and a birdman. Twelve other figures are portrayed on the previous page. The Latin text below the map begins (translated): “The world is said to be round and spherical in shape....”

Nuremberg Chronicle: Woodcut map of the world (1493)
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Claudius Ptolemy, 2nd century

The first world atlas was Claudius Ptolemy's Geographia, a Greek manual on the construction and drawing of maps, which was written in Alexandria around 150 A.D. Not to be confused with Egyptian kings of the same name, Ptolemy lived from about 90-168 A.D. and wrote on such subjects as astronomy, astrology, music, optics, history, and geography. His Geographia was compiled from the works of Marinus of Tyre and other early geographers, as well as from travelers' accounts. What happened to the work for the next thousand years is not known, but fortunately copies of it survived as Greek manuscripts, dating between the 12th and 14th centuries and brought to Italy around the year 1400 on the collapse of the Byzantine Empire. These manuscripts were divided into eight books and contained map-making instructions with the first fully worked out maps, projections, tables of towns and physical features with their latitude and longitude coordinates, and 81 Book VIII's 27 maps: one world map, ten maps of Europe, four of Africa, and twelve of Asia.

The discovery of the Geographia and its subsequent distribution, made possible by the invention of printing, greatly influenced geographical thought throughout Western Europe until the end of the 16th century. Thirty-one Latin or Italian editions with maps appeared before 1600, and three important early cartographers—Waldseemüller, Münster, and Mercator—created maps for specific editions. To humanists and cosmographers, the ancient work continued to speak with authority, even after the voyages of Columbus expanded their world view.

The expansion of the Ptolemaic world by the discovery of America and of the sea route to India did not destroy the Geographia's credit among geographers. They utilized their new knowledge on to the stock of Ptolemy; and the hemispheric division of the globe, into the 'old world' of Ptolemy and the 'new world' to the west, dates from the early 16th century. To the nucleus of 27 ancient maps, much revised, were added modern maps... The growth of the 'modern' section in these editions culminated normally in the atlas of wholly modern maps, the idea of which, conceived by Italian map-makers, was triumphantly realised by [Abraham] Ortelius in 1570.

The death of cartography to Ptolemy is not widely known. Several features of maps that we take for granted come directly from the Geographia: the convention of placing north at the top of the map, the grid of latitude and longitude lines, and the use of mathematical projections.

The following editions of Ptolemy's Geographia illustrate the development of cartographic technique in world maps:

1. 1475 7. Vicenza edition of 1475. Printed by Hermannus Leuthapiz, i.e., Hermann Liechtenstein of Cologne. First
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printed edition of Ptolemy. No maps. The text, translated into Latin from the original Greek by Jacobus Angelus of Scarparia around 1409 and dedicated to Pope Alexander V, was edited for printing by Angelus Vadianus and Barnabos Picardus of Vicenza. [Grenville Kane Collection]

Built on a solid mathematical foundation, the book presents the general principles of mapmaking, including two types of projection, and provides tables of latitude and longitude for important places of the known world. Following the principles and using the tables, a reader could make his own maps.

8. 1502 edition of 1482. Printed by Lienhart Holle. 32 woodcut maps. First Ptolemy edition printed in Germany and first woodcut version. The translation of Jacobus Angelus, edited by Donatus Nicolaus Germanus, who also re-drew, corrected, and improved the maps, and added five new ‘modern’ ones including the first printed representation of Greenland. [Grenville Kane Collection]

The world map is the earliest map signed by an engraver (Johann Schnitzer of Augsburg). Drawn on a spherical projection, the map shows the Ptolemaic world with a rudimentary Scandinavia, covering 180° of longitude and 87° of latitude (and an unspecified northern extension). While the sources of the Nile are quite accurately shown as lakes fed by the Mountains of the Moon, the Indian Ocean is landlocked. Tropics

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Cancrini is repeated for the Tropic of Capricorn. Looking at this map 500 years ago, how did one explain the missing 180°?


The world map of Johannes Roysch is the first map in an edition of Ptolemy to show the discoveries in the New World. Based on a fan-shaped, conical projection, it shows what Vasco da Gama guessed: ships could reach the East Indies by sailing around Africa. The only is the only known in the first state: the island called Cantabria becomes La Dominica in subsequent states. (There are other differences as well.) Newfoundland appears for the first time, called Terra Nova, and Greenland (Groenlandia) is shown attached to North America, which is itself depicted as part of a broad continent. Also, the South American continent is named Mundus Novus for the first time and carries an inscription telling that Portuguese have followed the coastline down as far as 50° south. Japan is completely omitted by Roysch, believing that Spagnola (now Haiti/Dominican Republic) must be the island Marco Polo called Sponigo.
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Very little is known of cartographer Rayusch; he was born in Antwerp of German parents, lived at Cologne, and died in 1533. He is reputed to have sailed in the North Sea and may have accompanied Calvus on his or another New World expedition, so his map may be the first to reflect firsthand knowledge of the area.


Ringed by twelve windheads, this heart-shaped world map is the first in an edition of Ptolemy to show part of North America, called Regalis Domus. It is no longer portrayed as an extension of eastern Asia, as in the Basch map. The map is also the first to show Labrador (Terrae Animatae).

The maps were printed from fresh woodblocks, with the lettering type-pointed in red and black, making the atlas the first to be published in two colors, i.e., exhibiting the first use of true color on a map. But, while the names of mountains and regions are given more significance with the red ink, there is little room left for place-names—hence, the weakness of the map. And though Sylvani states in his introduction that he wants to take account of modern discoveries, he provides less detail than Rayusch did earlier.
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1513 11. Strassburg edition of 1513. Printed by Joannes Schott, 47 woodcut maps, including 20 new maps. Considered now as the most important of all the Ptolemy editions, it was begun by Martin Waldeggmiller possibly as early as 1505, and, after much delay, finally edited and published by Jacobus Eisler and Georgius Uebelin in 1513. Twenty new modern maps in a supplement first appear here. [Greenville Kane Collection]

An ambiguous passage in the Supplement's preface attributes this world map to a mariner's chart based on observations of a certain admiral of the Portuguese King Ferdinand. Hence, the map is known as "The Admiral's Map." The evident mistake (Ferdinand was, of course, the Spanish king) renders the reference uncertain, but it has been generally applied to Columbus. While the depiction of Greenland and southern Asia seems out of date, the map adds the 'newly' discovered islands of Cuba (Cuba Eius) and Santo Domingo (Spagnolla). Detail of the north coast of South America derives from the voyages of Cabral. Like many marine charts, the map is crosshatched by direction lines.

1520 [See item 35]
1522 [See item 34]

1540 12. Basic edition of 1540. Printed by Verrius Parli. 48 woodcut maps. First edition of the work edited and revised by Sebastian Münster, who redesigned the maps and added a geographical appendix. [Greenville Kane Collection]

This is the first printed map to name the Pacific Ocean (Mare Pacificum). It was the standard world map until the publication of the Oviedo atlas in 1570 [see item 17]. Forceful wireheads and flowing clouds surround the oval projection. Only the harshest details are provided: names of continents, major regions, and islands. The letterings were printed in movable type and set in rectangular inserts so that they could be changed at will, in other words, while sharing the same wooden maps, notes could be printed in German, French, or Italian, instead of remaining in Latin. North America, almost completely severed, reflects, no doubt, information from the explorations of Yerazano (1522-1524), who mistook the Chesapeake Bay for the Indian Ocean, and Cartier (1534-1535), who sought a Northwest Passage up the St. Lawrence River. In Africa, the twin sources of the Nile are emphasized.

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This volume is the first atlas printed in a hand-size, i.e. the first 'pocket' atlas. The world map is one of the earliest to use the oval format of projection which equated the distance at a point north and south of a central line, the equator; i.e., this is the first world map format with an equator drawn across the center.

1594 14. Cologne edition of 1594. Printed by Godefrudus Kempis. 28 copperplate maps. The text is the Latin version of Bihald Pinckeius, edited by Arnoldus Mylius. This is the first edition of Ptolemy to contain Gerard Mercator's maps, which are dated 1578. [Greenville Rare Collection]

Through his own engravings, Mercator sought to reproduce, as nearly as possible, the maps of Ptolemy's Geographia in their original form, adhering scrupulously to their original lists of coordinates. Hence, there are no 'New World' maps in the editions. The maps of this 'scholastic edition' are considered the finest ever prepared for this work and were reprinted for over 150 years.

Editions of Ptolemy's Geographia continued to appear throughout the 17th century. But it is fitting that the last, published in Amsterdam in 1791, contained the same 28 Mercator maps—only the borders of the plates had been extensively reworked. In 1828, Abbe Thomas published a French translation of the Greek text of Ptolemy. Its introduction and appendices make it one of the best handbooks in the study of Ptolemy's work.

Portolan Charts

We have only the scientific knowledge of navigational methods prior to the invention of the compass, which began to be used in the Mediterranean during the thirteenth century. The compass was decisive in the development of sea charts, first called portolan charts after the word portulan, which was an Italian pilers book or seaman's guide containing sailing directions, descriptions of harbors and sea coasts, and identifications of prominent coastal landmarks and navigational hazards. Before the invention of printing, chart-making was an active industry around the Mediterranean, particularly in places like Venice, Genoa, and Majorca. Because of the very nature of their use, only a very small number of portolan charts have survived; also, the fact that most of them were drawn on vellum, thus hardy animal skin, worked against them, for, once a chart was out of date, the vellum was often put to other use.

The earliest known charts date from around 1300, and manuscript portolan charts were still being used in the sixteenth century because they provided the most accurate navigational information. The first printed atlas of European charts was Spiegel der zeewereld, published in Leyden in 1584 by the experienced Dutch seaman and pilot Lucas Janszoon Waghenuer. His charts became so popular that the anglicized version of their name, Waghenuer, came into use as the English generic term for sea charts of all kinds. [For printed sea charts, see items 64 and 65.]
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[1580?] 15. Olives, Jaume. Portolan atlas attributed to Olives, a member of a well-known chart-making family of southern Italy and Sicily. Four double-page manuscript maps on vellum, decorated in gold, red, and green.
[Greeneville Kane Collection]

The first three maps in the atlas cover the Eastern Mediterranean, the Western Mediterranean, and Western Europe. This fourth shows the coast of West Africa, from Gibraltar to Senegambia, and includes the Cape Verde Islands, the Azores, and the Canaries. As was typical of these charts, place-names are written on the landward side at right angles to the coastline, prominent ports and safe harbors are identified in red, and direction-finding or rhumb lines (32 for the points of the mariner's compass) extend over the whole surface, allowing navigators to plot their courses. Latitude markers are also provided (6° to 41° on this map). When Columbus set sail from Genoa (the small red island nearest the 26° latitude mark in the Canary Islands on September 6, 1492), he headed directly west. It is interesting to think that he may have carried a similar portolan chart aboard.


This compass wind rose shows the evolution of the 32-point compass from Homer's four winds.
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Abraham Ortelius (1527-1598)

Born in Antwerp, Ortelius studied Greek, Latin, and mathematics as a youth and later established a book-selling business with his sister while he also colored maps. As his business prospered, he traveled to many of the great book fairs and established contacts with artists in many countries. He collected maps and was regarded as an authority on historical cartography. His first map, a world map in eight sheets, was published in 1564; only one copy is known as the suggestion of a friend, he compiled a collection of maps from cartographers in many countries and had them engraved in a uniform size. Most of the maps were elegantly engraved by Frans Hogenberg. Two other features distinguished it from previous books of maps: on the verso of each map was a description of the area as well as a list of the names of the original maps. This Ortelius had copied from his sources. Issued in 1570, this atlas of 53 maps, "Tabulae orbis terrarum," was the first collection of uniformly sized maps depicting all the countries of the world—the first real atlas. It was the most successful cartographical work to date—and was issued for over 40 years in as many editions with text in seven languages. With its advent, the Netherlands became the center of European cartography, which they were to dominate for over 100 years.


Abraham Ortelius: "Typus Orbis Terrarum" (1570), world map from the first real atlas
The World

This world map, a simplified and reduced version of Mercator's large world map of the previous year, presents a "common denominating" view of the world for the late sixteenth century. Clearly, a Northwest Passage across the top of North America (and Asia as well) is assumed. In a cartoon off the coast of New Guinea, Ortelius voices contemporary doubts: is it an island or part of Australia (meaning the southern landmass)? No one is sure. South America has a western bulge that is not removed until the 1587 edition.

Displayed prominently on the bottom textual panel is a quotation from Cicero's "In verba spectante, cuncta ma facies mala potest." (De Divinatione, 1.26) "For what would seem important in human affairs to one who has experienced all of eternity and knows the vastness of the universe?" Repeatedly written at a time of general gloom and depression for himself and the Roman state in general 145 B.C., Cicero attempts "to prove by philosophy and the examples of eminent men that, in spite of all doubts and uncertainties of human experience, a calm and contented life is possible." While caught up in the "age of discovery," Ortelius still tempers his marvelous display of the expanding human world with this humbling thought.

1579 | 18. Handcolored portrait of Abraham Ortelius at age 50 engraved by Philip Galle (1537-1612), a member of a famous Dutch family of engravers—in this (1579) and all subsequent editions of Theatrum orbis terrarum. [Rare Books Collection]
The World

of the double-hemisphere type in a "modern" atlas—and really established the use of this projection for world maps. The advantage of the format, beyond the artistic opportunities presented by the open spaces, is that it reduces the east-west inaccuracies of the oval projection. Also, it neatly contrasts the New World with the old. Rumsfeld's map, bordered by elegant strapwork, contains an auxiliary sphere and a compass rose. South America remains the prominent southwest bulge depicted in his father's map.


Based on the previous map, Hondius engraved this world view for the Parisian publisher Jean le Clerc. Among the few cartographic changes is the breaking up into islands of the eastern coast of New Guinea. More striking, however, is the artistic skill that has created a distinctive decorative border, balanced in the corner, with four spheres containing wind names in Dutch and Italian and diagrams of moon phases and climate zones. A celestial sphere and compass rose occupy the spaces between the double hemispheres. In the panel along the bottom of the map, Hondius has chosen one of his favorite quotations from the Psalms (translated): "The earth and its abundance is the Lord's, the world and all who live within it. He founded it upon the sea, etc."
The World

1636

The pair symbolizes one of the most successful and profitable family alliances in the history of Dutch mapmaking.

1636

Speed was a tailor until age fifty, although he had tinkered in maps from an early age. An allowance from Sir Fulke Greville allowed him to devote himself entirely to his cartographic research, and Queen Elizabeth granted him the use of a room in the Custom House where he could continue his efforts. His name is synonymous with the beautiful early county maps of Great Britain, which he compiled for his Theatre of the Empire of Great Britaine (1611). The plates for this work were engraved in Amsterdam by Jodocus Hondius.

and returned to London for printing.

"Drawne according to ye trust Descriptions last Discovered & best Observations yet have been made by English or strangers, this is the earliest obtainable world map to show California as an island. Although it lacks the delicate artistry of Dutch engravings of the period, the map is one of the most sought-after. Surrounding the map are symbolic representations of the four elements (Earth, Air, Fire, and Water), celestial charts, diagrams of an armillary sphere, eclipses, and the planetary system. Included are miniature portraits of the famous world circumnavigators: Ferdinand Magellan (Portuguese, first), Sir Francis Drake (English, second), Thomas Cavendish (English, third), and Oliver van der Noort (Dutch, fourth).

On the verso of the map, in his "General Description of the World," Speed recounts the history of the world from a biblical point of view, in the course of which he gives thanks to him who discovered the virtuous of the loudstone and so the explorers that have "done their parts to joyne a new world to the olde." He continues: "Toues it maye well be called a new worlde for it comprehends in it two Continentes, either of them large, and two parts of the other are. The one is that Western Hemisphere that bears the name America from America Vicinorum..." This is the earliest example of the use of the term Western Hemisphere in English geographical literature.
The World


This voluptuous map was the Hondius/Hoogen revision of the world map that had continued virtually unchanged in the Mercator/Hondius atlas for almost 35 years. The four corners carry portraits of Caesar, Ptolemy, the author’s father, and his mentor (Mercator); between them are representations of the four elements. Following Speed and his contemporaries, Hondius portrays California as an island. New features include Baffin Island (Queen Anne’s forland) completely encircled by water and an extension of the northern Australian coastlines towards (into?) New Guinea.

This atlas was the major source of geographical knowledge for 17th-century English writers; Milton was known to use it extensively.

16357 24. Blaeu, Willem Jansoon (1571-1638). "Nova Totius Terrarum Orbis Geographica ac Hydrographica..." Trained in astronomy and the sciences by the celebrated Danish astronomer Tycho Brahe, Blaeu began his globe and instrument-making business in Amsterdam in 1599. At that time, the city was one of the wealthiest trading centers in Europe, and the Dutch East India Company, founded in 1602, was based there. Blaeu’s business was successful and included topographical works, separate sheet maps, and collections of sea charts which went through many editions. Though he planned a major atlas of the whole known world (Atlas maior), he was able to publish only the first two volumes (1635). He became hydrographer to the East India Company around the same time. Following his death in 1638, his son Joan and Cornelis carried on the business, expanding their father’s ambitious plans. Cornelis died in 1642, but Joan pushed on, finally completing the whole series of six volumes in 1655. Immediately, he began an even larger work, the Atlas maior, which was published in 1662 in 11 volumes. It contained almost 600 double-page maps and 3,000 pages of text! The work was the epitome of fine engraving and coloring, elaborate cartouches and pictorial detail, and beautiful calligraphy—it is, indeed, the most magnificent work of its type ever produced. In 1672, a devastating fire destroyed Blaeu’s printing house; the following year Joan died, and the firm’s stocks of surviving plates were gradually dispersed.
The World

Most would agree that the great age of French cartography began with Sanson. He studied history as a young man and turned, it is said, to mapmaking only as a means of illustrating his historical work. Nevertheless, his beautifully drawn maps caught the attention of King Louis XIII; in time, he became the king's tutor in geography. Of the approximately 300 maps he produced, several were particularly influential, including “Amerique Septentrionale” (see item 70), the first map to show all the Great Lakes.

This map of the ancient (rever) world is an Italian derivative, published in Padua, of his 1657 map. Though the double-hemisphere format of the map gives a “modern” look to it, the eastern hemisphere contains only classical nomenclature, and the western carries only a few mythical names (Atlas Jerusa, for example). And yet California is an island here, which is a much more modern myth (see items 68-73).

1719 25. Moll, Herman (fl. 1678-1732). "A New & Correct Map of the Whole World..." Handcolored copperplate map. (Historic Maps Collection, gift of the estate of Noel B. Fox, Class of 1899)

A Dutch émigré who lived in London after 1680, Moll was a prolific engraver of maps who became the foremost English map publisher after 1700. His work enjoyed a high reputation: some of his North American maps were used by the British government in boundary disputes with France after the War of the
The World

Spanish Succession (Queen Anne's War), 1702-1713. This map, shown on Mercator's projection, was one of the largest world maps to appear in an atlas during the 18th century.


French mapmaker Jalliot began his career as a sculptor. Influenced by his father-in-law, who was a map colorist, he joined the mapmaking profession and became geographer to the king within six years of signing his first map (1667). Jalliot is credited with continuing and improving the Sanson family tradition; he revised and re-engraved Sanson plates in a larger size.


Said to have drawn his first map at the age of nine, the French cartographer Delisle, as he is often called, ultimately earned the highest honor as "Premier Geographe du Roi." His training in mathematics and astronomy gained him early recognition as the first "scientific cartographer." He was regarded as the...
The World

foremost geographer of his age. This world map reflects his concern for accuracy, where information is lacking, the map is blank (the Pacific Northwest, for example). Compare with a so-called ‘theoretical’ map, item 76.


German mapmaker Seutter set up his own business in Augsburg after completing an apprenticeship with J. B. Homann, the successful Nuremberg map publisher. Not surprisingly, he soon became a chief rival to his old employer, and his maps often looked very similar. Typical of the densely detailed German maps of the period, this map is more impressive than useful, for its view of the world has not been upgraded to reflect the geographical information available at the time. Compare it, for example, with the previous two maps: notice how close the Solomon Islands are to South America.


1784), [Rare Books Collection, gift of Elroy Curtis, Class of 1900]

Lotter was the grandson of Georg Matthäus Seutter; his father, Tobias Conrad Lotter (1717-1777) engraved many of Seutter’s maps, succeeding to his business in 1756. Like so many other sons of mapmakers, Matthäus carried on the business after his father’s death. This world map, illustrating the voyages of Captain Cook, is a work wholly his own. By this time, all of the subpolar continents were fairly well-defined.

Certainly by 1800 the general shape of the world was well-known, as well as many of its particulars. As a result, world maps tended to become multi-faceted or more topical—as shown by this 19th-century representative.


Here, the world map serves a more background decoration to the statistics and tables that summarize and compare various geographical and social elements of the earth and its inhabitants. The display of “Female Costumes of the Different Parts of the World” is most prominent, and deservedly so. The comment at the top plugs the transcontinental railroad: “Once built, [it] would become the Great Highway of Nations.”
The New World: Western Hemisphere

Martin Waldseemüller (ca. 1470-1518)

Waldseemüller is best known as the man who named America and placed the name on a map for the first time (item 33) and for his maps in the 1513 edition of Ptolemy's *Geographia* (item 11), which was the most authoritative work of its kind till Münster's *Geographia* (1540) and *Cosmographia* (1544). He grew up in Radoszell, a village on what is now the Swiss shore of Lake Constance, and studied for the church at Freiburg. Eventually, he became a professor of cartography in St. Dié at the court of the Duke of Lorraine, a patron of the arts. In that rich community of scholars, he devoted his life to a study of cartography and cosmography.

1907 32. Waldseemüller, Martin (ca. 1470-1518). *Cosmographiae Introductio*. (St. Dié [Lorraine]: Guadalenus Lul., 29 August 1507). 2nd issue (the first appeared on April 25). (Schedel Library)

This is the book that named the New World America. It is in two parts:

...the first, an essay on cartography designed to accompany the engraved wall map issued simultaneously with it; and the second, an account of the four voyages made by Vespucci. It is in the first part, on the verso of leaf xlv, that Waldseemüller made the

suggestion which in translation reads: 'But now that these parts have been more extensively examined, and another fourth part (after Europe, Asia, and Africa) has been discovered by Amerigo Vespucci, we shall see in the sequel that we should rightly refer to name it America, namely the land of the Amerigo or America, after its discoverer Amerigo, a man of sagacious mind, since both Europe and Asia took their names from Women.'

Later, Waldseemüller tried to withdraw the name America (see item 35), realizing that Vespucci should not be credited with discovering the New World. But, because of the rapid spread of his idea from this book, it was too late.


Printed from 12 separate woodblocks, the only known surviving copy of Waldseemüller's large (52" x 93")
The New World: Western Hemisphere

The world map is in the Schloss Wolfegg in Württemberg, Germany, where it was found in 1801 in a large folio volume that once belonged to Johannes Schöner (1477-1547), a famous astronomer and globe-maker from Nuremberg. It is known from other evidence that 1,000 copies of the map were printed.

This is the first printed map to carry the name America. The map is based on the modified conical projection of Ptolemy and is distinctive for the many legends it contains (from both classical and modern sources) and the number of foreign rulers identified by flags, coats of arms, and other symbols. The arms of Spain (Castilla), for example, are shown planted in the New World, the flag of Portugal around the coasts of Africa, and crescents across much of Asia. Columbus is mentioned in the top left panel, Vespucci in the lower left. Geographical information from their voyages and others has been integrated with Ptolemaic sources to form a marvelous cartographic whole, recognized at the time as a masterpiece.

The twin portraits at the top honor Ptolemy and Vespucci, one the great geographer of the Old World, the other the discoverer, according to Waldseemüller, of the New. In a letter (1504) describing his third voyage which had been circulated throughout Europe as a tract called Mundus novus ("The New World"), Vespucci proposed that the new lands should be called a "new world" because "none of those countries were known to our ancestors...." No doubt Waldseemüller was greatly influenced by this letter.
The New World: Western Hemisphere

The two inset maps established the convention of showing the new and old worlds in two hemispheres. Curiously, the inset map shows North and South America linked, while the large one does not. The large map becomes more of an enigma when one examines the depiction of the terra incognita of North America. How did Waldseemüller know about its nonexistent west coast and an ocean beyond that stretching to Asia? Magellan's great Pacific voyage was still 15 years ahead!

1520 34. Fries, Laurent. "Orbis Typus Universallis Hasta Hydriapohorun Traditionem Excelsissime Depicta." Woodcut map from his edition of Ptolemy's Geographia (Strassburg: Johannes Grüninger, 1522). The 50 woodcut maps are re-engraved on a smaller scale from the 1513 edition, and three new ones are added. [Grenville Kane Collection]

The exhibited world map is the first one in a Ptolemy edition to bear the name America. The outer frame, consisting of banners of wind names linked by rope, offers a nice decorative touch. The map, however, seems even more distorted than earlier ones, with India represented as a double peninsula, England and Scotland accurate to separate islands. The surviving ship of Magellan's circumnavigation expedition did not return to Europe until the early fall of 1522, some months after this publication.
From Circle to Sphere: Historic Maps Since Columbus

The New World: Western Hemisphere

Münster, Sebastian (1488-1552). "Novae Insulae." Woodcut map from his Cosmographia universalis. [Historic Maps Collection]

Appearing first in Münster's 1540 edition of Ptolemy, this is the earliest separate map of the Western Hemisphere and the first map to show North and South America joined together. It is also considered the quintessential map of America of the 16th century. Magellan's flagship Victoria is shown sailing in the Pacific, and Japan is identified (Ziganto) off the west coast of North America surrounded by Marco Polo's 7,448 spice islands. North America is practically split at the Carolinas by the fabled 'Sea of Verrazano'. (In 1526, reaching the Outer Banks of North Carolina, Verrazano mistook Pamlico Sound for the Pacific Ocean.) The
The New World: Western Hemisphere

flag of Spain grows in the West Indies, that of Portugal waves off the coast of Africa.


When Henrik Peut died in 1579, his son, Sebastian, who was named after his famous uncle-grandfather, inherited the business. He thought it was time to revise the maps of the Cosmographia and hired a cartographer, still unknown to us, to rectify the woodcut maps and bring them up to date. Consequently, all the maps were redrawn, most showing the influence of maps from Ortelius' Theatrum, and Gothic German lettering was employed. All subsequent editions of Münter's work, from 1588-1628, bore these maps in which he had no part.

This map makes a nice contrast to the previous one: both show the New World and come from the same work, but the fifty-plus years separating them tell a great deal about the development of geographical knowledge (and cartographic technique) that took place during the sixteenth century.

1598 38. Wytiflet, Cornelis (fl. 1597). "Granata Nova et California." Copper-plate map, in his Descriptio
Prolemaicae augmentum (Louvain: Gerard Rijff, 1598). Second edition. [Rare Books Collection]

Little is known about Wytiflet whose only atlas is the first one devoted entirely to maps of the Western Hemisphere. The first part of the book is a general history of the early voyages and discoveries in America, while the second part contains maps with explanatory text. A double-hemispherical world map precedes the regional ones. The exhibited map is the first to concentrate on the Baja and any part of California. Sir Francis Drake passed this coast on his circumnavigation 18 years before.


Bertius was a professor of mathematics and librarian at Leyden University. A prolific writer, he is known as a cartographer for his editions (1618-1619) of Ptolemy's Geography and for a miniature atlas (1600), Tabulorum geographiarum convolutorum. In 1618 he moved to Paris and became official cartographer to Louis XIII. He was the brother-in-law of Jacques Hondius. This map has an interesting but less formal style of decoration. Note the cartouche in Brazil and the sea monsters.
From Circle to Spire: Historic Maps Since Columbus

The New World: Western Hemisphere

1626 40. Speed, John (1580-1659). "America." Handcolored first edition of this famous copperplate map. [Historic Maps Collection]

This is the first English map of the Americas; it was engraved by a noted Amsterdam engraver, Abraham Gerritsz., employed by the Hondius family. The most significant cartographical differences between this carte à figure map and the following one by Blaeu (item 41) lie in their depictions of the two coasts of North America. This map has obviously been influenced by the Briggs map of California as an island (see item 86) published in England in the previous year. New England, however, has more place-names and better definitions here. The contoured figures on the sides have been copied from illustrations published by De Bry and others.


Issued as a separate map in 1617, which was a reduced version of a 1608 wall map, this map was one of the earliest to depict the western coast of America. Although the geography is
The New World: Western Hemisphere

outdated full-length portraits of native Americans grace the sides, while the parcelled border at top contains oval views of nine major New World cities and ports (the 'hot spots' of the 17th century): Havana, Santo Domingo, Caraguata, Mexico, Cuzco, Potosí, Mocha Island (off Chile), Rio de Janeiro, and Olinda. Not surprisingly, only a few remain major cities today; most additions to the list would be North American.

(1730) 42. Seutter, Georg Matthäus (1678-1756). “Novus Orbis sive America Meridionalis et Septentrionalis...” Hand-colored copperplate map. [Historic Map Collection]

This map is interesting to a late adherent to the 'California as an island' theory. Much attention is given to the Sagasso Sea and two related 'seas', and the tracks of the early explorers of the Pacific are shown. The native scenes depicted in the cartouche—harvesting sugarcane, gathering firewood, sleeping in hammocks, shading the tribal chief—seem to be deliberately contrasted to the more spiritual scene portrayed above, in which natives appear to be learning Christianity from the Europeans.


French teacher to George II's children, Palairet provides, in the clear, factual style that was to dominate maps by the end of the 18th century, an educational summary of European colonial possessions in the Western Hemisphere. The colonies of the English, French, Spanish, Dutch, and Portuguese are identified visually by the use of different colors (and different from the colors specified in the key on the map). Instead of filling open space with decoration, the map uses the space for textual descriptions and historical notes. Intriguing cartographic features of the map include a prime meridian that passes through Peru, one of the Canaries Islands, and the line of demarcation fixed by Pope Alexander VI to divide the New World between the Spanish and Portuguese. Papal confirmation of colonial possessions was usual in the late 15th and early 16th centuries. In 1493, Alexander issued a papal bull establishing a line 100 leagues west of the Azores by the Treaty of Tordesillas of 1494, the line was moved another 270 leagues west, giving Brazil and everything east to the Portuguese and Columbus' discoveries and everything west to the Spanish. As one could imagine, a cartographer's placement of newly-discovered territory was very important. Spain and Portugal wrangled over this line, particularly in locations in the other hemisphere, till 1529.
North America (and Parts)

1720 44. Moll, Herman (fl. 1678-1732). "A New Map of the North Parts of America Claimed by France...." Handcolored copperplate map. [Historic Maps Collection, gift of estate of Nael B. Fox, Class of 1999]

Moll’s map is decidedly political, as he states in the title box: "The French Divisions are inserted on purpose, but those Noblemen, Gentlemen, Merchants &c. who are interested in our Plantations in those Parts, may observe whether they agree with their Proprieties, or do not justly deserve ye Name of Inseminists...." Though he does not name the cartographer whose "French Map Published at Paris in 1718" he has copied, the reference is clearly to Guillaume de l’Isle and his famous map of Louisiana and the Mississippi River [see item 58]. Moll created another map to reflect the English point of view [see item 72].

1779 45. Jefferys, Thomas (ca. 1695-1771). "A New and Correct Map of North America, with the West India Islands." Copperplate map, with outline color; in his The American Atlas: Or, A Geographical Description of the Whole Continent of America... (London: Sayer and Bennett, 1778). [Rare Books Collection, gift of Richard Stockton, Class of 1779]

Jefferys entered the map business as an engraver. His success in the early 1750s with maps and charts of North America led to an appointment as geographer to the Prince of Wales in 1757; when the latter became King George III in 1760, Jefferys rose to be geographer to the king. Though he was regarded as an outstanding cartographer and produced some of the finest maps of North America and the West Indies, the royal position did not guarantee material success. Most of his important works were published after his death by Sayer and Bennett (Sayer had purchased much of his stock), or by his business partner, William Faden.

This was the best known atlas of its time for the North American continent, and it contains very detailed charts of the St. Lawrence River. As one might expect, it proved to be a very useful cartographic source for both sides during the American Revolution. The exhibited map shows how the provinces and colonies were divided up by the Treaty of Paris (1763) that ended the French and Indian War between France and Great Britain. France ceded all of her territory west to the Mississippi River as well as her colonies east of the Mississippi River to the English. This map is a practical document and a vividly colored example of one of America’s most famous maps.
North America (and Parts)

Virginia

1587 46. Hakluyt, Richard (1552-1616). “Nova Orbis.” Copperplate map, in his edition of Peter Martyr’s Decades, De orbe novo Peri Martyris Anglorum Mediterraneis… (Paris: Guillelumum Aversay, 1587), a history of the West Indies covering eight decades. Extremely rare map, one of only two copies known. [Rare Books Collection, gift of Mrs. Marshall L. Brown from the library of Cyrus H. McCormick, Class of 1879]

This is the first map to bear the name Virginia (Virginia).

In the spring of 1607, Captain John Smith and his party landed at Jamestown, Virginia, to establish the first British settlement in North America. Part of their instructions was to find the passage to the East Indian Sea, for the prevalent belief at the time was that the western ocean was near at hand (see the Münster map, item 36). As a result, the exploration of the area began immediately, and various parties explored and mapped the eastern part of the Chesapeake Bay and the rivers emptying into it. Smith returned to England in the late fall of 1609, where he prepared a draft of his map to illustrate a pamphlet that he wrote, A Map of Virginia…. The pamphlet was issued
North America (and Parts)

In 1612, but the map appears to have been in circulation before that. It was not used again until Smith published his "General Historie of Virginia, New-England, and the Summer Islas" in 1624.

[1612] Smith, John (1580-1631), "Virginia." Handcolored copperplate map, included in William Strachey, The Historie of Travell into Virginia, Britannia... (1612). This manuscript account of the discovery and settlement of the Virginia colony, compiled by Strachey, first secretary of the colony (1610-1611), after his return to England, is one of three known extant copies. Though it is in the hand of a professional scribe, the work contains alterations and corrections apparently in Strachey's hand, and the dedication to Henry Percy, Earl of Northumberland, is signed by Strachey. (Northumberland at the time was a prisoner in the Tower along with his friend Sir Walter Raleigh.) The manuscript is often illustrated with a copy of John Smith's 1612 map of Virginia (in the first state) and 27 of De Bry's 1590 engravings of John White's Virginia drawings. [Manuscripts Division, gift of Cyrus H. McCormick, Class of 1879]

This is the first printed map of the Chesapeake Bay. It is remarkably accurate in terms of the bay's shape, proportion, and orientation. Of the four major rivers Smith named, only the name Potomac (Patowmack) has survived. The little crosses on rivers, mountains, and other places mark the extent of actual explorations; the rest of the map's information was gathered from the Indians and set down according to their instructions.
North America (and Parts)

The map identifies ten Indian tribes and 166 Indian villages.

Beyond having geographical significance, the map is also a beautiful example of the engraver’s art. The upper left corner contains an illustration of Powhatan inside his hut as he appeared when Captain Smith was delivered to him as a prisoner in 1607. Balancing on the right is a large standing figure of an Indian warrior holding a bow in one hand with a pig string at his hip—a drawing copied from De Bry’s engravings. A decorative hunting carrouche, a replica of the Royal Arms, a large compass rose, a ship with sails furled, and various species of trees use some of the other decorative features of this widely copied map.


This popular derivative of the Smith map was originally made by Jodocus Hondius, Jr., in 1618. Blaeu bought the plate in 1629 when Hondius died. It appeared in numerous editions of Blaeu atlases from 1630 on. Of all the published versions of the Smith map, this Hondius/Blaeu version was the one most responsible for the diffusion of Smith’s geographical data.

New England


This is the first printed map to concentrate on the New England area and the first to show Indian canoes and several types of North American fauna, such as turkeys, beaver, and otters. (North is to the right of the sheet.) The false placement of Lake Champlain (Lacus Iroquois) in New England follows Samuel de Champlain’s map of 1613. The palisaded Indian villages are reminiscent of Hochelaga, a fortified Iroquois village in Canada (modern Montreal), that was shown over 200 years earlier on maps published by Giovanni Battista Ramusio. First issued in 1635, this map was influential for many years.


This is the first map of any kind to be printed in North America. Like the preceding Blaeu map, this one is
North America (and Parts)

oriented with north to the right. (Among other errors, the later edition of the map, published in the same year, changed "White Hills" to "Wise Hills"—hence, the significance of the trade name.) Foster was a Boston printer; Hubbard was one of the first presidents of Harvard University. Because of its date, the map provides a time-capsule kind of roll call of the most important New England towns of the 17th century, 100 years before the Revolutionary War. Notice that Rhode Island is an island on this map.

The following four maps from part of a series commonly referred to as the Jansson-Visscher map of New England. The first map in the series was issued by Jan Jansson in 1651. The series is an interesting one because of the numerous cartographers represented in it and for the rapid historical developments in the area that their maps reflect. Some of the important dates to remember in this context are: 1664 (New Amsterdam taken by the English and re-named New York), 1673 (Dutch re-capture New York), 1674 (English retake New York), 1682 (Philadelphia laid out). Only a few English settlements are shown, and one of the most notable omissions is Boston, the largest city of the British colonies.

North America (and Parts)

This version of the Jansson-Visscher New England map contains the first appearance of Visscher’s view of New York, omitted “Nieuw Amsterdam op’t Eylandt Manhattan.” It is the third known engraved view of the city. In addition, the map shows the provinces of Pennsylvania and New York marked.


In this version, the Delaware River has been re-drawn, New Jersey and its bounds are shown, and Maryland is named. The title of the Visscher view has been changed to “Nieuw Yorck, eerlijks Genaemt Nieuw Amsterdam op’t Eylandt Manhattan.”


While only two-thirds the size of the others in the series and not usually considered as part of it, the plate is closely copied from the Visscher and represents an important link between the Visscher and later versions. A completely new cartouche showing settlers has been added; in addition, the map is the first

Nicolas Visscher: “Novi Belgii” (1655), with one of the earliest known engraved views of New York City
in the series to give Canada the modern name and to show Providence (R.I.), first settled in 1636.


The cartouche has been replaced with a new one depicting natives and gods presenting tribute to a seated English monarch, probably George II. The view of New York is now called "Neu Jorck sive Neu Amsterdam" and has a Latin key; the change in the city from Visscher is dramatic. This is the first map in the series to show by means of printed lines the boundaries of Massachusetts, New England, New York, New Jersey, and Pennsylvania.

Middle Atlantic


The success of the chart books published by father and son, Jacob and Arnold Colom, forced the Blaeus, who

had held a virtual monopoly in Amsterdam, to revise and enlarge their own competing works. Colom charts were popular with seamen for many years and were issued in great quantities, though few have survived. [For other printed sea charts and notes on their characteristics, see items 64 and 65.]


Following the long period of Dutch domination, Homann founded the most important German map-publishing house in Nuremberg in 1702. After his death, the firm remained under his son till 1730 when it was bequeathed to his heirs. The business continued into the next century under the name Homannische Erben (Homann Heirs). Homann was one of the first to color his maps at origina, although he usually left his cartouches and scroll plain. The exhibited map contrasts an elaborate cartouche, showing colonial traders and Indian natives amidst the bounty of the country, with a simplified, essentially coastal, representation of the Middle Atlantic states. The plan of Philadelphia is shown; New Jersey, a royal province since 1702, is still divided into East and West Jersey; and an exaggerated lake called Apalache is depicted just beyond the Carolina boundary (probably today’s Lake Marion, South Carolina).
North America (and Parts)

Lotter was the son-in-law of Matthäus Seutter, engraved many of his maps, and inherited the business after Seutter’s death in 1756. He became one of the better-known German cartographers of the 18th century. This map’s key exhibits some of the conventional map symbols that were prevalent at the time: church spires or towers for towns, small circles for country communities, tepees for Indian villages. The stylized mountain forms used on the western portion of the map give the area a strange, moon-like appearance.

The Mississippi River (and Basin)

This is the first printed map to show in detail the Mississippi River system and the routes of its explorers (De Soto and others); also, it produces the first time the name Texas is used. (The Mission de los Tejes was

Guillaume de l’Isle, "Carte de la Louisiane et du Cours de Mississippi," (1718), first map to use the name Texas
North America (and Parts)

established in 1766. The location of New Orleans, founded in 1718, is shown fairly accurately, but fictitious mountains are depicted across the Michigan peninsula.

The map also had political implications. Outlined in yellow, the English coastal colonies were reduced in extent, while French claims were expanded to cover most of North America west of the Appalachians as well as Carolina (area bordered by green). The map's first appearance naturally enraged the English.

Widely copied, the map was the most influential— for the area—of its time.

1775


At a scale of about one inch to fourteen miles, this map represents the most detailed British military survey of the Mississippi River. Fort Chartres, passed over in the British under terms of the 1765 Treaty, was the main center of French administration in the Illinois region.

East of the Mississippi

1718

60. Moll, Herman (fl. 1678-1732). "A New and Exact Map of the Dominions of the King of Great Britain on ye Continent of North America." Handcolored copperplate map. (Rare Maps Collection, gift of estate of Noel B. Fox, Class of 1899)

Known as the 'Seaver Map' for obvious reasons, this map with its luxury of scale provides a great deal of detail lacking in other maps of the period. The color pink outlines British territory, while blue encircles French. Much of the popularity (past and present) of Moll's maps, however, lies in their non-map features. See item 72, for example, where a vignette illustrates Newfoundland's cod industry. Here, besides a scene of Niagara Falls and crudely drawn beaver, Moll provides information notes on French fishing rights (the Treaty of Utrecht, 1713), allows there to dry their fish catches on the northern end of Newfoundland and the North American postal schedule: "The Western Post sets out from Philadelphia every Friday leaving Letters at Burlington and Poch Amboy, and arrives at New York on Sunday night..." (Our postal service is still trying to equal this feat!) The map shows the route.
West of the Mississippi

The United States began to mount major government-sponsored explorations of the West after its purchase of Louisiana (defined as that great tract of land lying between the Mississippi River and the Rocky Mountains) from France in 1803. The most famous of these was the expedition led by army captains Meriwether Lewis and William Clark. Clark had been an Indian fighter and explorer and had served together with Lewis in 1795 under Anthony Wayne. Lewis, a Virginia neighbor and friend of Thomas Jefferson, became his private, presidential secretary in 1801. Jefferson had long thought of pursuing a land route to the Pacific Ocean; Lewis had long cherished leading such an expedition. Now, they believed, the time was right, and an expedition was organized, financed by Congress.

Levi chose Clark as his companion officer. Mustering their men, the two leaders joined forces at St. Charles, Missouri, in the spring of 1804. From there, the expedition ascended the Missouri River, crossed the Rocky Mountains, and reached the Pacific, returning to St. Louis essentially the way they had come and arriving on September 23, 1806.

1814 61. Lewis, Meriwether (1774-1809), and William Clark (1770-1838). “A Map of Lewis and Clark’s Track Across the Western Portion of North America from the Mississippi to the Pacific Ocean; By Order of the Executive of the United States in 1804 & 6.” Copperplate map, in their History of the Expedition Under

the Command of Captains Lewis and Clark, to the Sources of the Missouri, Thence Across the Rocky Mountains and Down the River Columbia to the Pacific Ocean. Performed During the Years 1804-5-6. By Order of the Government of the United States (Philadephia: Bradford and Inkehee, 1814). Rare first edition. [Rare Books Collection, gift of Mrs. Marshall L. Brown from the library of Cyrus H. McCormick, Class of 1879]

"Copied by Samuel Lewis from the Original Drawing of William Clark," this map represents a milestone in Western exploration. The expedition of Lewis and Clark achieved and proved many things; perhaps the most important discovery was the great width of the continent—so much wider than anyone had supposed. Their exploration and description of the Oregon Country was largely responsible for the successful claim to this region made by the United States. The Columbia River, previously believed to be a minor outlet to the Pacific Ocean, became a majestic river in its own right, serving a vast watershed. Information gathered from Indians permitted them to estimate the number of "souls" in each tribe. All of this and more is shown.

This was a great map, a milestone of mapping in its time, and countless placenames it gave to the face of America remain today as an ineradicable cultural heritage."
North America (and Parts)

After the success of the expedition, Jefferson appointed Lewis as governor of Louisiana, the territory covering all of the province north of the present state; Clark became superintendent of Indian affairs. Lewis always intended to be the editor of his own travels, and when government matters called Lewis to Washington in the late summer of 1809 he brought his notes, journals, and other records with him on his way, while staying at an inn in Tennessee, Lewis died. In his introduction to the exhibit's work, Jefferson assumes Lewis committed suicide; however, more evidence suggests murder—no money was found on his body and his watch was later recovered in New Orleans. In early 1810, Clark requested the help of Nicholas Biddle, the prominent Philadelphia scholar and financier, to write a narrative of the expedition, using Lewis' notes and journals and Clark's own oral accounts. His first draft was finished in the spring of 1813, when other pursuits forced Biddle to relinquish the editorship to Paul Allen, a journalist and minor poet, who saw the book to press the next year.

On February 20, 1814, 1,417 copies of this first edition went on sale for six dollars per copy.

This is what the definitive account of the most important exploration of the North American continent finally appeared in print nearly eight years after the journey's completion. 

William Clark: "A Map of Lewis and Clark's Track across the Western Portion of North America..." (1814)
From Circle to Sphere: Historic Maps Since Columbus

North America (and Parts)

On January 24, 1848, gold was discovered at Sutter’s Mill, a sawmill on the South Fork of the American River in Coloma, California. News of the discovery set off a mass migration of get-rich settlers from the eastern states. This stampede for gold, known as the “California Gold Rush of 1849,” created a tremendous demand for guidebooks, maps, and descriptions of the West. From 1848 to 1850, the population of California tripled; San Francisco, as the gateway to the gold region, grew from a town to a city overnight.

1849 62. Jefferson, T. H. “Map of the Emigrant Road from Independence Mo. to St. Francisco California.” Lithograph map. (New York: published by the author, 1849). Very rare map, one of only three or four known copies. (Philip Ashton Rollins Collection)

The case for the map contains this interesting promotional text:

This map is original and drawn upon a large scale (in four parts) from the regular survey of the Author who travelled over the entire route in company with a party of Emigrants with wagons and oxen. All the streams of water and springs are delineated as well as the daily courses, distances and camps made by the party. With

As an accompaniment to the map, Jefferson supplied an 11-page guidebook of “Brief Practical Advice [Addressed to the Emigrant or Traveller].” “The journey is not entirely a pleasure trip,” he says, “it is attended with some hardships and privation—nothing, however, but that can be overcome by those of stout heart and good constitution. A small party (10 or 20) of the proper persons properly outfitted might make a pleasure trip of the journey.” One has the choice of using packing horses or wagons pulled by oxen; the former might take up to three months; the latter six. “No dependence can be placed upon game”—so Jefferson proceeds to identify the provisions packers and wagoners should carry. Other sections of the guidebook include “Articles that may be taken,” “Arms and Ammunition,” “Various useful articles,” “Wearing apparel,” “Animals,” “Goods in demand among Indians,” and “Cost of outfit.” He gives a description of Independence, Missouri, and recommends the names of several merchants whose rates are reasonable, and then provides a brief narrative of the trail itself. As the end he exhorts, “We want a good wagon trail across this continent, and we must have one.... Why don’t the government do something immediately that will be of practical utility to the emigrant or traveller across our own territory?”

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Nothing is known of Jefferson except what is revealed by the map and the guidebook; he identifies himself only as "one of a party of emigrants who travelled the road with wagons in 1846." Yet something of his own trip is revealed in his concluding comments: "Upon this journey the bad passions of men are apt to show themselves. Avoid all partnership if possible. Provide your own outfit, and expect to take care of yourself." The creed of the West!

Texas cattle drives after the Civil War moved millions of Texas Longhorns from overstocked ranges in the southern part of the state to Kansas railheads, for shipping to feedlots and packing plants in the Midwest. The Chisholm Trail, extending from San Antonio, Texas, to Abilene, Kansas, was the major route north through the Indian Territory (Oklahoma). Named for Jesse Chisholm, an Indian trader who traveled the route by wagon in 1866, the trail declined in use after 1871 as settlement moved west and other towns, like Dodge City and Ellsworth, became the primary shipping centers.


In an attempt to attract Texas cattlemen with their cattle to its own railheads, the Kansas Pacific Railway Co. freely distributed this map and accompanying guide. The table in the guide shows distances, describes significant aspects of the route—identifying streams, crossings, best camping grounds, availability of wood and water—and names trading posts. Drivers who followed the guide's suggestions as to daily distances and camping locations could expect their herds to cover the 321 miles from the Red River Station in Texas to Ellsworth, Kansas, in five weeks. Here is the description in the guide for the one day's route (11 miles) shown by the arrow on the map:

Trail from head of Pond Creek bears a little west of north to Cox's Crossing of Bluff Creek, about a quarter of a mile west of mouth of north fork. This is the best crossing on Bluff Creek, and is the only place where wagons can cross for several miles up and down the creek. C. H. Steers's store is located here, where drovers' supplies can be obtained. Good camping grounds on north and south side of creek; plenty of wood and water. Take wood here for five or six days' use.

The widespread use of barbed wire, first patented by Illinois farmer Joseph Glidden in 1874, ended the era of the open range that made trails like those possible.
Atlantic Ocean

The following two charts of the Atlantic Ocean illustrate typical features of printed marine or sea charts that evolved from the manuscript portolano (see item 15, an early portolano chart). Each contains a center compass rose (wind rose) of 32 points, from which loxodromes or rhumb lines radiate to a circle of points, each of which also becomes a wind rose extending direction-finding lines. (The fleur-de-lis—or "Prince of Wales' feathers"—as sailors used to call it—that points north on these center compass roses first appeared on 16th-century Italian charts. No one knows for certain what it means. It is possible that Flemish mariners adopted it when they began using Frankish names for winds because the emblem had been associated with Frankish kings.) Ports and coastal cities are indicated at right angles to the shorelines, and little or nothing of the interior parts of the countries is shown. Most charts were printed on thicker paper to prolong their working life.


Mortier was a French cartographer who established a publishing house in Amsterdam around 1685. His

successful business included French, English, and Dutch works, books as well as atlases. After his death, his widow and, later, his son, Cornelis, carried on the business. In 1721 Cornelis formed a partnership with his brother-in-law, Johannes Covens (1697-1774), creating the famous firm of Covens and Mortier, which became one of the most important Dutch map publishers during the 18th century.

This marine chart, drawn on Mercator's projection, was a useful guide for east-west navigating between Europe/Africa and the New World.

[17407] 65. Otten, Reiner (1698-1750) and Joshua (1704-1765). "Terra Neuf...." Handcolored copperplate chart. [Historic Maps Collection]

Once one recognizes that north is to the left on this map, the confusion disappears. In contrast to the previous item, the chart was a useful north-south guide between the two continents of the New World. Only latitude is indicated.

The Otten brothers, carrying on the family print and map-selling business founded by their father, Joachim, produced great collections of maps between 1720 and 1750, made up to order and beautifully colored. They
Ponce de Léon was the first explorer to take notice of the swiftly flowing current off the eastern coast of Florida when he sailed north from Puerto Rico in 1513 in search of Bimini, the island on which the fabled Fountain of Youth was said to be located. By the end of the sixteenth century, Spanish navigators were well aware of the ‘rotary’ nature of the winds and currents of the Atlantic Ocean and took advantage of them in their frequent crossings. Inexplicably, it took 250 years before a chart was printed that showed the most identifiable element, the Gulf Stream.

[1778] 66. Franklin, Benjamin (1706-1790). “Remarques sur la Navigation de Terre-Neuve à New-York afin d’Éviter les Courants et les Basses-Fonds au sud de Nantucket et du Banc de George” (called the “Franklin-Folger Chart” or the “Gulf Stream Chart”). Rare copperplate chart. [Historic Maps Collection]

In a lengthy letter to Sir John Pringle in 1762 (see the letter, item 75), Franklin first uses the term Gulf Stream. While his real purpose in writing is to discuss the Northwest Passage, his letter ranges widely over other maritime observations, including his “variable sea level” theory of the current.
North America (and Parts)

The Trade Wind blowing over the Atlantic Ocean constantly from the East, between the Tropics, carries a Current to the American Coast, and raises the Water there above its natural Level. From thence it flows off thru the Gulf of Mexico, and all along the North American Coast to & beyond the Banks of Newfoundland in a strong Current, called by Seamen the Gulf Stream... [And] so long & so strong a Current... not only be accounted for, by its having a considerable Descent, and moving from Parts where the Water is higher, to Parts where it is lower.

When he was Deputy Postmaster-General for the American colonies in 1768, Franklin had a purely practical interest in the Stream: mail packets from Falmouth (England) to New York were taking two weeks longer than those from London to Rhode Island. The explanation, of course, was the Gulf Stream, and the fact was confirmed by Franklin's cousin, Timothy Folger, a Nantucket mariner. Eager to make English packet captains aware of what American whale hunters had long known, Franklin asked Folger to add a depiction of the Gulf Stream to an available chart, including details of the Stream's dimensions and swiftness. No copies of this 1768 chart were known till two were found in Paris in 1978! The exhibited map, thought now to have been printed in Paris in 1778, is, therefore, the French version of the earliest printed map of the Gulf Stream.

The Prime (0°) Meridian

Latitude and longitude provide cartographers a means of "adressing" geographical entities. Though both are artificial contrivances, the former derives from a natural line: the equator. The rotation of the earth on its axis creates two poles, and it is easy to visualize a middle line cycling halfway between these poles of the spinning sphere, dividing north and south. By using an astrolabe (or quadrant or cross-staff or sextant—as for instrument evolved) to measure the height (i.e., angle) of the sun at noon, a navigator could always estimate his latitude, the number of degrees north or south of the equator.

But longitude, the number of degrees east or west, requires a starting point or prime meridian, and there is none that is natural. Hundreds of years ago, the simplest way to measure longitude was to observe an astronomical event, such as an eclipse, from two different locations; the difference in local time would provide their longitudinal difference (see item 73). Yet if 360° divided by 24 hours meant each hour equaled 15° difference in longitude, then even a half-hour error could mean more than a 7° error in longitude. Needless to say, time and longitude have long been interrelated.

Unfortunately, navigators lacked accurate, portable timepieces till the English clockmaker John Harrison tested his first successful marine chronometer in 1736. The British Board of Longitude had offered a prize of £20,000 for a clock that would keep accurate enough time that navigators could calculate within 30 miles a ship's east-west
The Prime (0°) Meridian

position by comparing the time on the clock (Greenwich time) with noon where the ship lay. Harrison kept perfecting his chronometer, but was not awarded the full prize till 1776! Captain Cook carried the fourth version of the chronometer on his voyage of 1772.

Ptolemy set his prime meridian at the Fortunate Islands (Canary Islands), which were then the western limit of the known world. Jerusalem was customarily regarded as the center of the earth during the Middle Ages; hence, maps of that period (7°-8° east) centered on that city. Later cartographers reversed to Ptolemy’s precedent, but varied between the Canaries, the Azores, or the Cape Verde Islands for their starting point. [See item 46, where Haklay records the prime meridian through Toledo, Spain, on his 1587 world map. The problem is further discussed in detail by William Leybourn in his 17th century work on globes, item 82.]

Nationalism was rampant during the eighteenth and nineteenth centuries, and most cartographers adopted the meridian of their own capital city from which to number their degrees. 15

On maps from that period, one can find London, Paris, Lisbon, Madrid, Philadelphia, and Washington as prime meridians. The triangulation and surveying conducted by the British Ordnance Survey, established in 1791, used a prime meridian based on the Greenwich Observatory near London. Gradually, other countries adopted this line. In

1884, under international agreement, it was recognized as the standard 0° longitude line, and Greenwich Mean Time (GMT)—the time at the prime meridian—became the base time for all other time zones around the world.


This is the first map to use the Greenwich prime meridian.

Regarded as one of the finest English cartographers, Cary used the most recent geographical information on his maps (see his note on the globes offered in his 1818 catalog, item 85), which were finely engraved and attractively lettered. His work covered the whole gamut of geographical and astronomical products, from road maps, canal and town plans, county maps, sea charts, world atlases, and terrestrial and celestial globes, to instruments, planetariums, and accessories, such as magic lanterns.
From Circle to Sphere: Historic Maps Since Columbus

California as an Island

The earliest printed maps of North America consistently show an unbroken western coastline (see, for example, the Hondius map of 1602, item 2), yet in the seventeenth century a geographical misconception developed that greatly influenced cartographers' maps for over 100 years.

The idea of California as an island is supposed to have originated with a Carmelite Friar, Father Antonio de Ascencio, possibly on a misconception of the reports of the Spanish navigators Juan de la Fuente 1592 and Martin de Aguilera 1602, one of whom reported a great opening in the west coast and the other a vast inland sea north of Cape Mendocino.  

Father Ascencio sent a map of California as an island to Spain on a ship around 1600, but the ship was captured by the Dutch and the map was taken to Amsterdam. However, it was in England that the idea was first popularized.


Exhibited is the first printed map to show California as an island, the first map to name Hudson’s Bay, and
California as an Island

In the bottom left legend, Briggs states: "California sometymes supposed to be a part of ye westen continent, but since ye a Spanish Charte taken by ye Hollando'st it is found to be a goodly Island..." Ironically, the purpose of the map was to emphasize the possibility of another geographical misconception, a Northwest Passage.


This is the first Dutch map of California as an island to appear in an atlas. It follows the Briggs model with a flat northern coast. The St. Lawrence is still shown as flowing from one Great Lake. Vignettes of native animals and birds add to the map's appeal.


The 1650 version of this map was the first to show the existence and location of the five Great Lakes. California's northern coastline is now indented, and two names, Tulage and R de Estee, have been added.
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California as an Island

In addition, Sanson places Santa Fe (S. Fe) as the capital of Nouveau Mexique and uses the word Navajo for the first time.


Here, the depiction of California as an island follows the 'indentured northern coastline' model, with a large mass of land, Terre Estranglée, stretching northwesterly above it. Many Pacific islands are shown, including an inset map of New Zealand. The title vignette portrays natives, local fauna, and sugar cane.


California is shown as an island based on the Sanson shape, but several new names and notes have been added. Moll was strongly attached to the myth and once claimed to have had in his office mariners who had sailed around the island. In his map, Moll provides the English reaction to the 1718 Guillaume de L'Isle map (item 58) that showed French claims to most of North America west of the Appalachians. Here, French Louisiana is reduced to south of the Ohio River, and the English name New Britain has been given to Labrador. The title vignette shows Indians and Jesuits paying homage to Lord Somers, President of the Privy Council; an inset illustrates the cod industry of Newfoundland.


This map comes from the major German atlantial atlas of the 18th century, Atlas Novus Celestis, a work by Johann Gabriel Doppelmayr (1671-1750) that was published by Homann’s heirs in 1742. While the point of the map is to provide an astronomical foundation for world geography by listing latitude and longitude coordinates for observed lunar eclipses around the world, it is also an important and accurate representation of the myth of California as an island. Phases of eclipses are shown in the skies above the world map, while inset vignettes depict observers in action.

In 1747, King Ferdinand VI of Spain decreed that California was not an island.
The Northwest Passage

During the 18th century, pursuit of a Northwest Passage was given impetus by an account of a 1660 voyage by Bartholomew de Fonte. His voyage was first described in the form of a letter in a London magazine, Monthly Miscellany of Memoirs for the Curious, in April and June 1708. "A Letter from Admiral Bartholomew de Fonte, then Admiral of New Spain and Peru, and now Prince of Chili, giving an Account of the most material Transactions in a Journal of his from the Island of Lima in Peru, on his Discoveries to find out if there was any Northwest Passage from the Atlantic Ocean into the South and Tartarian Sea." In his letter, de Fonte told of his voyage to the northwest coast in 1660 and claimed to have discovered a passage from the Pacific to the Atlantic. Though he did not sail all the way through, he went far enough to meet two British ships coming the other way, and was able to obtain charts from their commander.

It was all a hoax; Bartholomew de Fonte was a fictional explorer. James Peliver (1662-1718), owner and editor of the London periodical, is now generally believed to have authored the de Fonte letter. Two hundred years ago, however, it greatly influenced geographical and cartographical circles.

1744 74. Dobbie, Arthur (1689-1765). An Account of the Countries Adjoining to Hudson's Bay, in the North-west Part of America: The Whole Intended to Show the Great Probability of a North-West Passage... (London: Printed for J. Robinson, 1744). [Western American Collection]

The Northwest Passage

Appointed surveyor-general in Ireland by Sir Robert Walpole in 1750, Dobbs later became governor of North Carolina in the British colonies (1754-1765). In the intervening years, he took a very active part in promoting a search for a northwest passage to India and China, and was able to induce the Admiralty to send two expeditions (1741 and 1746) to find one. He felt that the Hudson's Bay Company, through its busy-handed dealing with the Indians, had thrown the fur trade to the French in Canada. In his book, he argues for settling colonists near Hudson's Bay to increase British influence and to deprive the French of much of their fur traffic, and he seized upon the de Fonte tale to help support his own argument for a Northwest Passage that would greatly benefit British commerce.

The book revived the dormant de Fonte story.

1762 75. Franklin, Benjamin (1706-1790). Signed autograph letter to Sir John Pringle (1707-1782), dated 17 May 1762. Dr. Pringle, who became physician to King George III in 1774, attained a position of great influence in scientific circles and was elected president of the Royal Society in 1772. [Andre de Coppet Collection, gift of Andre de Coppet, Class of 1915]

Franklin's letter is a detailed examination of de Fonte's "Letter":

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The Northwest Passage

In Compliance with your request, I sit down to give you my Reasons for believing as I do, that De Fonte's voyage is genuine... [It has none of the Features of Fiction.]... After thirteen pages of analysis, Franklin summarizes his view in a postscript:

My Opinion on the whole is this, That though there may probability be no practical Passage for Ships, there is nevertheless such a Passage for Boats as De Fonte found & has described; & That the Country upon that Passage is for the most part habitable, & would provide all the Necessaries of Life.

He appends to his letter a 1752 Guillaume de l’Isle map that illustrates the discoveries of de Fonte, but indicates with red ink where he believes it errs in its cartography: two lines joining Hudson’s Bay to Lake De Fosse are added where Franklin believes a passage exists.

The Northwest Passage

This is a prime example of what is called "theoretical cartography," i.e., mapmaking based more on conjecture than fact that was exhibited by a number of cartographers, mainly French, during the 18th century. Of particular interest here are depictions of a Northwest Passage and a West Sea (today's Puget Sound).

[1775?] Zatta, Antonio (fl. 1775-1797), "America Septentrionale." Hand-colored copperplate map. [Historic Maps Collection]

This is another "theoretical" map of the Northwest—this one by a well-known Italian cartographer of the 18th century.

1793 Goldston, William. "Chart or Mercators Projection, Exhibiting the Tracks of Maedonado and De Fonte, in 1598 and 1640; Compared with the Modern Discoveries." Copperplate map, in his Observations on the Passage between the Atlantic and Pacific Oceans, in Two Memoirs on the Straits of Anian, and the Discoveries of De Fonte Elucidated by a New and Original Map (Porthsmouth: W. Mowbray, 1793). [Rare Books Collection]

Goldston addresses his work to "the Merchants Trading to the North-West Coast of America" and reminds them of the "liberal reward" which the government has offered for the discovery of a link between the Atlantic and Pacific Oceans. In his preface, he states:

De Fonte's report has been the subject of much controversy, in which the opinions have been so various, that the account was gradually falling into general discredit, when the return of Captain Cook, whose authority was considered as being conclusive, led the world to suppose, that the whole was a mere fabrication. But later discoveries have given it authenticity; and that part of the following pages which treats on this subject, is founded on these discoveries.

On his map, Goldston hypothesizes that de Fonte's track and lake are further north than previously thought, hoping to spur new explorations in that area.

In the 19th century, explorers did venture further north, above the mainland of North America, culminating in the infamous voyage of Sir John Franklin in 1845, and the subsequent flurry of ships sent in search of the lost Franklin party. But it was not until the 20th century that the speculations of 18th-century geographers were realized.
The Northwest Passage


Almost fifty years after Leopold McClintock, the British naval officer and explorer, was able to confirm reports that a navigable passage existed linking the Atlantic and Pacific Oceans, Amundsen, with a crew of six men, and with six sled dogs aboard, successfully traversed the route in his herring-boat Gjoa. Departing from Christiania (now Oslo), Finland, 16 June 1903, he arrived in Nome, Alaska, 31 August 1906.


This is an historical novel based on the pre-Revolutionary War exploits of Robert Rogers, the American frontier soldier who raised a courageous force of militia, known as Rogers' Rangers, which won a wide reputation in military campaigns around Lake George by using the guerrilla technique of Indian warfare. Late in the novel, Rogers also attempts to find a Northwest Passage. The novelist's opening statement,

prefacing the first chapter, provides a meaningful commentary on the four centuries men have spent in pursuit of this elusive route:

The Northwest Passage, in the imagination of all free people, is a sheer out-of-the-ordinary and romance—a hidden route to Golconda and the mystic East. On every side of us are men who hunt perpetually for their personal Northwest Passage, too often sacrificing health, strength, and life itself to the search, and who shall say they are not happier in their vain but hopeful quest than wiser, diller fellas who sit at home, venturing nothing and, with sour thoughts, deciding the seekers for that fabled thoroughfare—that panacea for all the afflictions of an irascible world.11
Globes

In 1492, the same year that Columbus sailed the Atlantic, Martin Behaim (1459-1507), a Nuremberg merchant, finished his 70-inch terrestrial globe. Sent by his parents to the Netherlands and Portugal to gain business experience, Behaim returned home for a visit from the Azores, full of tales about Portuguese voyages. The town council was impressed enough to convince Behaim to design a globe that would lend prestige to the town hall. The shell of the globe was constructed of papier-mâché, painted vellum gores designed by Georg Glockendon were glued to its surface, and the whole was mounted on a wooden stand. Behaim’s Atlantic was about 100° narrower than its true width of 220° because his Asia had been extended so far to the east. (Columbus, of course, also grossly underestimated the distance to Asia.) Behaim’s globe is believed to be the oldest world globe still in existence, though the Greek historian Strabo wrote of a world globe ten feet in diameter that Crates of Mallus, a Greek philosopher and scholar, had made and exhibited in 150 B.C.

1509 81. Waldseemüller, Martin (ca. 1470-1518). Globus Mundi... (Strasburg): Ioannes Grüninger, 1509. Extremely rare work. [Rare Books Collection, gift presented by Mrs. Marshall L. Brown from the library of Cyrus H. McCormick, Class of 1879]

This work is ascribed to Waldseemüller and is thought to have accompanied his globe of the same year. It is the earliest work devoted to the globe to name America. The New World (noue Welte) is only hinted at in this woodcut image of a world globe, yet the word America is specifically used in the text to name the “newly discovered fourth part of the world.” Having named America in his pamphlet accompanying his 1507 world map (see items 32 and 33), Waldseemüller has not yet reconsidered the appropriateness of the name as he will in 1522 (see item 35), when he will withdraw it.

Globes

1675 82. Leybourn, William (1626-1700?). An Introduction to Astronomy and Geography: Being a Plain and Easie Treatise of the Globes (London: Printed by F. C. for Robert Morden and William Berry, 1675). Copy owned by Narcissus Luttrell (1657-1732), the noted bibliographer. [Rare Books Collection]

Leybourn was a mathematician and educator as well as a professional land surveyor. He co-authored the first book on astronomy written in English, Urania Britannica (1648). In the exhibited work, before beginning a section devoted to the uses of the globe—finding longitude, latitude, time of day or night, and the distance between any two points—he argues for adopting St. Michael’s Island in the Azores as the prime meridian.

To say the truth, by reason of the variety of Meridians, the Longitudes are grown to such an uncertainty and confused pass... This indeed I have observed, that many Geographers, or rather describers of particular places, tell us that such a place is in so many degrees of Longitude;
Globes

but from what Meridian, others must guess. Some particularly profess to follow Mercator: but what are most men the wiser for this? for Mercator’s Meridian was not always the same; sometimes through the Canary Islands, sometimes through the Azores. 1692

83. Coronelli, Vincenzo (1650-1718). A complete set (12) of copperplate-engraved global gores, from his Corso geografico universale (Venice, 1690). [Rare Books Collection]

Coronelli spent most of his life in Venice, where, as a Franciscan priest, he became Father General of his order in 1699. By then, though, he was already famous as a cartographer and globe-maker and was Venice’s official cosmographer. He taught geography at the University and founded the first geographical society, the Cosmographical Academy of the Argonauts, in 1680. Engraver of hundreds of maps, he was probably better known for his splendid globes, which were even finer than those of Blaeu. His masterpiece was a pair of celestial and terrestrial globes, 15 feet in diameter, that he made for Louis XIV of France; the star map showed the heavens as they stood at the king’s birth.

The exhibited gores, if cut out, would fit a globe of approximately six inches in diameter; spread out, they demonstrate the problem encountered by cartographers trying to accurately portray the world on a flat map.

1717

84. Mead, Bradock (fl. 1736-1757). The Construction of Maps and Globes. In Two Parts... (London: Printed for T. Horne et al., 1717). [Rare Books Collection, gift of Richard Halliburton, Class of 1921]

The first part of this work describes how to create various projections for maps, while the second part explains how to construct all types of globes: magnetic, copper and ivory, and paper.

1818


Cary’s advertisement page for globes in this early catalog is interesting for a number of reasons: the variety of globes available, the costs associated with having them colored by hand, and the emphasis on being geographically current with the latest discoveries. Notice that Lewis and Clark’s expedition is mentioned.

1819

86. Wilson, James (1763-1855). “The American Nose Top Terrestrial Globe, Exhibiting with the greatest possible Accuracy, The Positions of the Principal Known Places of the Earth, with New Discoveries &
Globes

Political Alterations down to the Present Period: 1819.” [Graphic Arts Collection]

Exhibited is the first edition of the nine-inch terrestrial globe of America's first globe-maker. The world map consists of 12 printed paper gores which have been laid down on a papier-mâché globe and then varnished. The wooden stand and brass hardware are original.

A native of New Hampshire, Wilson spent his early adulthood as a farmer and blacksmith, mastering the skill of working with hot metal. He studied copper engraving under Amos Doolittle of Connecticut and mapmaking from Jedidiah Morse, the “father of American Geography.” He made his first globe in 1811, a 13-inch terrestrial globe, the first of any kind prepared and published in the United States.

The exhibited globe shows the boundary between Spanish America and the United States drawn according to the terms of the Adams-Onis Treaty of 1819; hence, the globe may have been created in celebration of that event.

James Wilson: “The American Nine Inch Terrestrial Globe” (1819) by America’s first globe maker
Catalog Notes


2. Eames, Two Important Gifts, 5-6.

3. I have relied, for the most part, on the translation of Eames, The Letter of Columbus, 1-2, 6.

4. Tooley and Bricker, Landmarks of Mapmaking, 45.


6. Moesland and Bamister, Antique Maps, 22.

7. Skelton, Decorative Printed Maps, 35-36.

8. The descriptions for the Ploemey editions largely come from Henry N. Stevens, Ploemey’s Geography, 37-62.

9. Deserving credit goes to Princeton colleagues John Keeney, professor of classics, and Jochen Twelle, general humanities bibliographer, for tracking this quotation down: Cicero Tusculanae disputationes 4.37. The words post est videi are actually the last two words of Cicero’s previous sentence and were apparently printed by mistake (and proliferated by copying); in their place should be the words enim (the rhetorical For) and videatur (the present subjunctive passive tense).


12. Details and dates of the maps have been confirmed by reference to Tony Campbell, “The Janssonius-Visscher Maps of New England,” in Tooley, Mapping of America, 779-294.


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