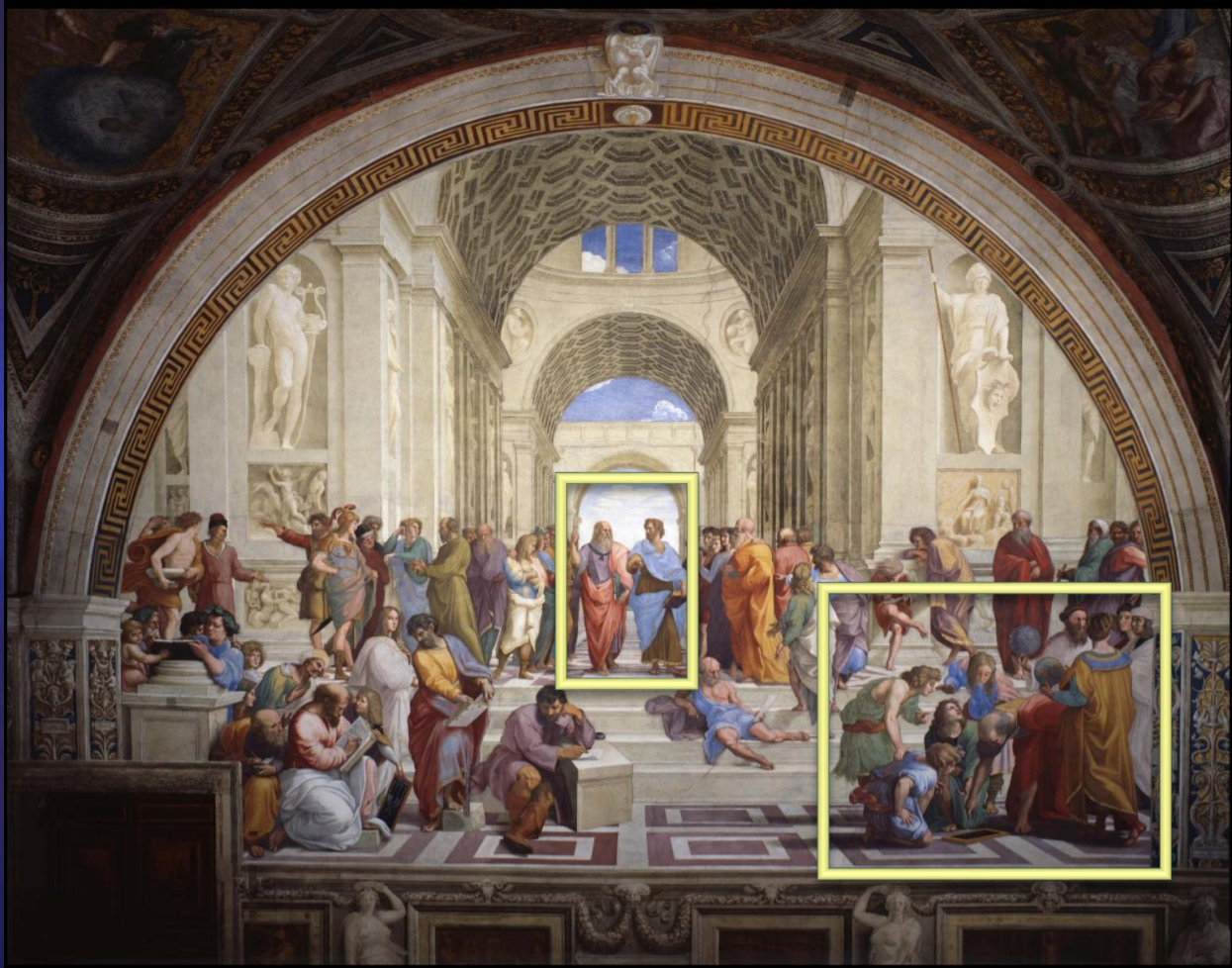


# The Age Of Exploration: A Philatelic Journey

June 12<sup>th</sup> 2025

- Stamps still manage to fascinate us as they represent geography and history, while also being tiny traveling capsules of art and beauty.
- In this talk I hope to highlight some of these features, including the bravery of the early explorers.
- The current ease of travel is based on the discoveries of these early thinkers, navigators and map makers.

# Raphael's Rooms at The Vatican: The School Of Athens



- "The School of Athens," a fresco by Raphael, depicts a gathering of ancient philosophers and thinkers.
- **Plato:** Depicted holding his book, *The Republic*, points to the heavens
- **Aristotle:** Is shown holding his book, *Ethics*, and points towards the earth.
- It is located in the Raphael's Rooms in the Apostolic Palace in the Vatican.
- The painting, created between 1509 and 1511, represents philosophy and is considered a masterpiece of the High Renaissance.



# The School Of Athens



Vatican # Mi-898 1986

Holding a sphere on the right side of the fresco is the mathematician and astronomer Ptolemy. Ptolemy attempted to use mathematical reasoning to explain the movement of the planets. He can be seen talking to Zoroaster, an astronomer, who is holding a celestial globe in his hands. They are holding court with a group of men that interestingly also contains Raphael, in one of his only self-portraits. Raphael can be seen looking directly at the viewers, just over the left shoulder of Ptolemy.



# The Geography of Claudius Ptolemy



The most important work of mathematical geography to survive from antiquity is the Geography of Claudius Ptolemy, written in the mid 2<sup>nd</sup> century AD. It consisted of instructions on how to draw maps of the known world.

[https://digi.vatlib.it/view/MSS\\_Urb.gr.82](https://digi.vatlib.it/view/MSS_Urb.gr.82)



The Sovereign Military Hospitalier  
Order Of St. John Of Jerusalem Of  
Rhodes And Of Malta 2018



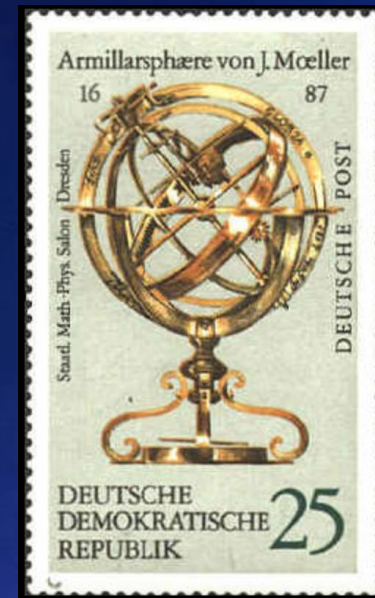
# Claudius Ptolemy :The Almagest And The Armillary Sphere



Ornamental Frontispiece from the Epytoma in Almagestum Ptolemaei (1496), showing Ptolemy and Regiomontanus sitting beneath an armillary sphere

<https://onlineexhibits.library.yale.edu/s/medicalastrology/media/15564>

- The Armillary Sphere was used to determine the celestial latitude and longitude of celestial bodies from a fixed position.
- It helped astronomers understand the heavens, which, in turn, helped navigators use the heavens to determine their locations.



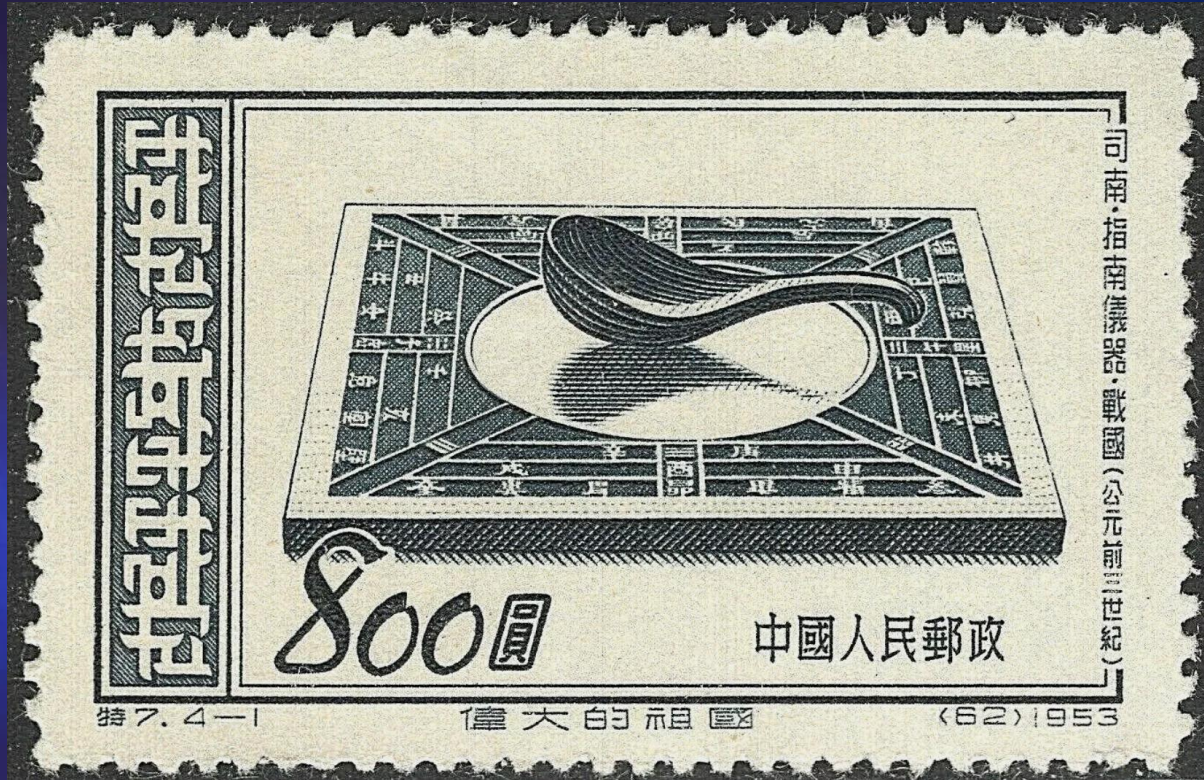
DDR 1972 Scott # 1406



Flag Of Portugal:  
Adopted 30 June 1911



# The South Pointing Spoon



Peoples Republic Of China 1953; S7, Scott 198

- The south pointing spoon is thought to be the first magnetized object ever used to tell direction.
- It was the crucial precursor to the magnetic compass
- The spoon's first mention is in *Lun Heng*, a book of essays on science, myth, and literature written during China's Han dynasty around 60 CE.
- When the south pointing spoon is thrown upon the ground it comes to rest pointing at the south.
- The spoon and plate, sometimes called a *sinan*, may have been used for telling direction for divination and for geomancy.
- By the 11th century, people had noticed that needles rubbed with lodestone also aligned north-south and were suspending magnetized needles on silk string or floating them in bowls of water. When mariners adopted these rudimentary compasses, it helped turn China into a global sea power.



# The Chinese Junk



China 1913 Scott 202  
(London Printing)

Three printings:

The 1913 London printing

The 1915-1919 First Peking  
printing,

The 1923 Second Peking re-  
engraved printing

- Junks were developed in China during the Han Dynasty and have been used for centuries.
- They were essential for maritime trade in East Asia, Southeast Asia, and the Indian Ocean.
- Some of the largest junks were built during the Ming Dynasty, such as those used by Zheng He's voyages.
- The English word "junk" comes from the Portuguese word "junco," which in turn comes from the Malay word "jong"



# The Silk Road



Iran (Yvert et Tellier #BF64): Silk Road, 17 October 2018.

The Silk Road derives its name from the lucrative trade in silk carried out along its length, beginning in the Han dynasty in China (207 BCE–220 CE). The Han dynasty expanded the Central Asian section of the trade routes around 114 BCE through the missions and explorations of the Chinese imperial envoy Zhang Qian, as well as several military conquests. The Chinese took great interest in the security of their trade products, and extended the Great Wall of China to ensure the protection of the trade route.

# The Dhow



Aden 1937 10r olive-green 'Dhow' SG 12

- Dhow is the generic name of a number of traditional sailing vessels with one or more masts with lateen sails used in the Red Sea and Indian Ocean region.
- The dhow stamps of 1937 were recess printed for Aden by Thomas de la Rue Ltd. in London and released on April 1 of that year).



# The Journey Of Marco Polo

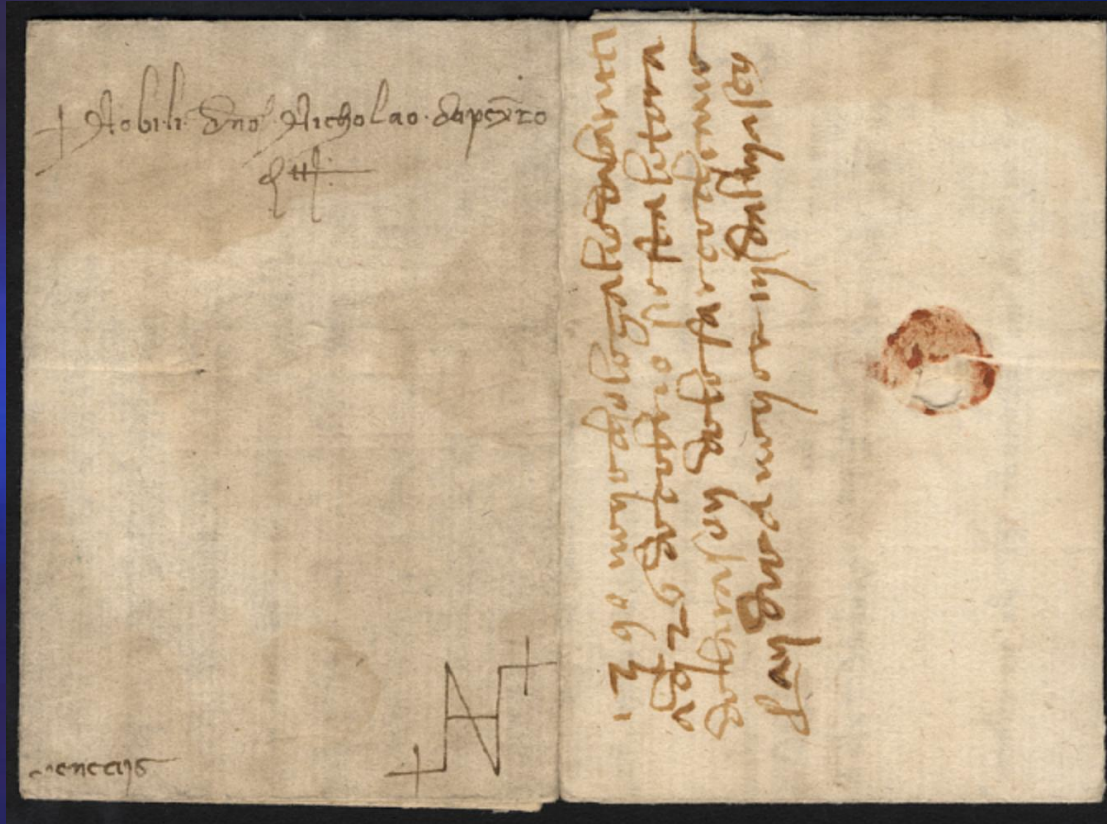


Vatican City Scott Catalog 1008 March 15<sup>th</sup> 1996

- Born in Venice ca. 1254, Marco Polo joined his father and uncle on a journey to China in 1271, entering the service of the Mongol ruler Kublai Kahn.
- Marco Polo went on diplomatic missions throughout the Mongol Empire.
- In 1292, the Polos left China with a delegation escorting a Mongol princess to Persia.
- His sea voyages on a Chinese ship brought him to the east coast of India just south of present day Chennai.
- He then proceeded to Calicut on the west coast and onward to Hormuz in current day Iran
- They continued west, eventually returning to Venice.
- In 1298, Marco Polo was captured in a naval battle between fleets from Venice and Genoa. While in prison, he wrote a detailed account of his travels in Asia.



# Venice and The Silk Road Cover



- This is the oldest paper letter in the National Philatelic Collection.
- It discusses prices of luxury fabrics and spices such as cinnamon and pepper.
- Mailed by a Venetian merchant in Damascus on November 24, 1390, it was carried by courier to Beirut, where it boarded a Venetian galley.
- It arrived in Venice on December 26, having traveled 1,650 miles in one month

<https://collections.si.edu/search/record/ark:/65665/hm84ad8edf3795a47b5b6d54815f5f75aae>

Accessed May 11th 2025

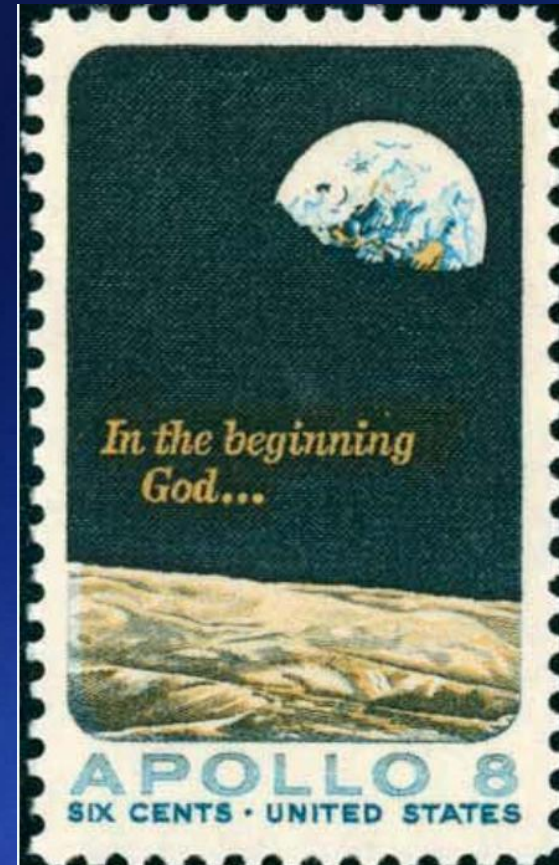


# Oh My God! Look At That Picture Over There! Bill Anders: 1968



Dec. 24, 1968, Apollo 8 astronauts Bill Anders, Frank Borman, and Jim Lovell.

<https://www.nasa.gov/image-article/apollo-8-astronaut-bill-anders-captures-earthrise/#:~:text=On%20Dec.,magnificent%20sight%20called%20%22Earthrise.%22>



United States Scott 1371  
May 5<sup>th</sup> 1969

# Back To The Future



Google Earth  
Data SIO, NOAA, U.S. Navy



# Piazza San Marco Venice Italy



Monaco 1972 Michel 1044



# Fra Mauro Mappa Mundi Venice 1459





# Fra Mauro Mappa Mundi Venice 1459





# Fra Mauro Mappa Mundi Venice 1459



- The map is oriented with the south on the top
- Created by Fra Mauro, a Venetian monk who never set foot outside of Venice in the monastery of San Michele on Murano in the lagoon of Venice
- It is 2.5 meters in diameter and located at the Library of St. Mark in Venice
- It displays all the geographical knowledge available at that time
- Another edition of the map was made for King Afonso V of Portugal.
- The crater Fra Mauro and associated Fra Mauro formation of the moon are named after him.



# Prince Henry The Navigator



Portugal. Scott 862; August 1960

- Born March 3, 1394 in Portu, Portugal, the third surviving son of King John (João) I and Queen Philippa
- In 1415, Portugal invaded and subjugated the Ceuta, a fortified city in Morocco. The invasion was largely carried out by King John's three oldest sons, including Henry, to earn their knighthood.
- Henry learned of trade between North African Muslims and West Africans and Indians. This new knowledge about Africa and Asia sparked Henry's interest in exploration and enterprise.
- In 1420, Henry sent an expedition to secure the uninhabited but strategic island of Madeira.
- In 1431, another Portuguese expedition reached and annexed the Azores.



# Sagres



Portugal. Scott 865; August 1960

- Sagres is the most southwestern point of the Algarve and continental Europe.
- For centuries, it was believed to be the most western part of the world.
- As such, Sagres was also known as the end of the world.
- Prince Henry brought together mariners, astronomers, ship designers, mathematicians, navigators, and cartographers to Sagres, on Portugal's southern coast, which became his base of operations.



# Compass Rose



Portugal. Scott 865; August 1960

- A 16 point compass rose with a fleur-de-lis north indicator.
- This rose also carries a cross on the east point a tradition of 16<sup>th</sup>-18<sup>th</sup> centuries.



# Rhumb Lines



Portugal. Scott 865; August 1960

- The term “rhumb lines” used in context with old maps refers to lines of direction extending from the points of the compass.
- The cardinal direction rhumb lines are indicated in a color.
- They were an aid to navigation added to maps during the age of exploration. By placing several roses on a map and extending rhumb lines from them, a pattern of intersecting lines was set up which enabled the navigator to make a visual estimate of bearing to any point on the map from nearly any other point.
- Rhumb lines bore no relationship to the construction of the map itself but were added after the drawing of the chart



# The Caravel



Portugal. Scott 861; August 1960

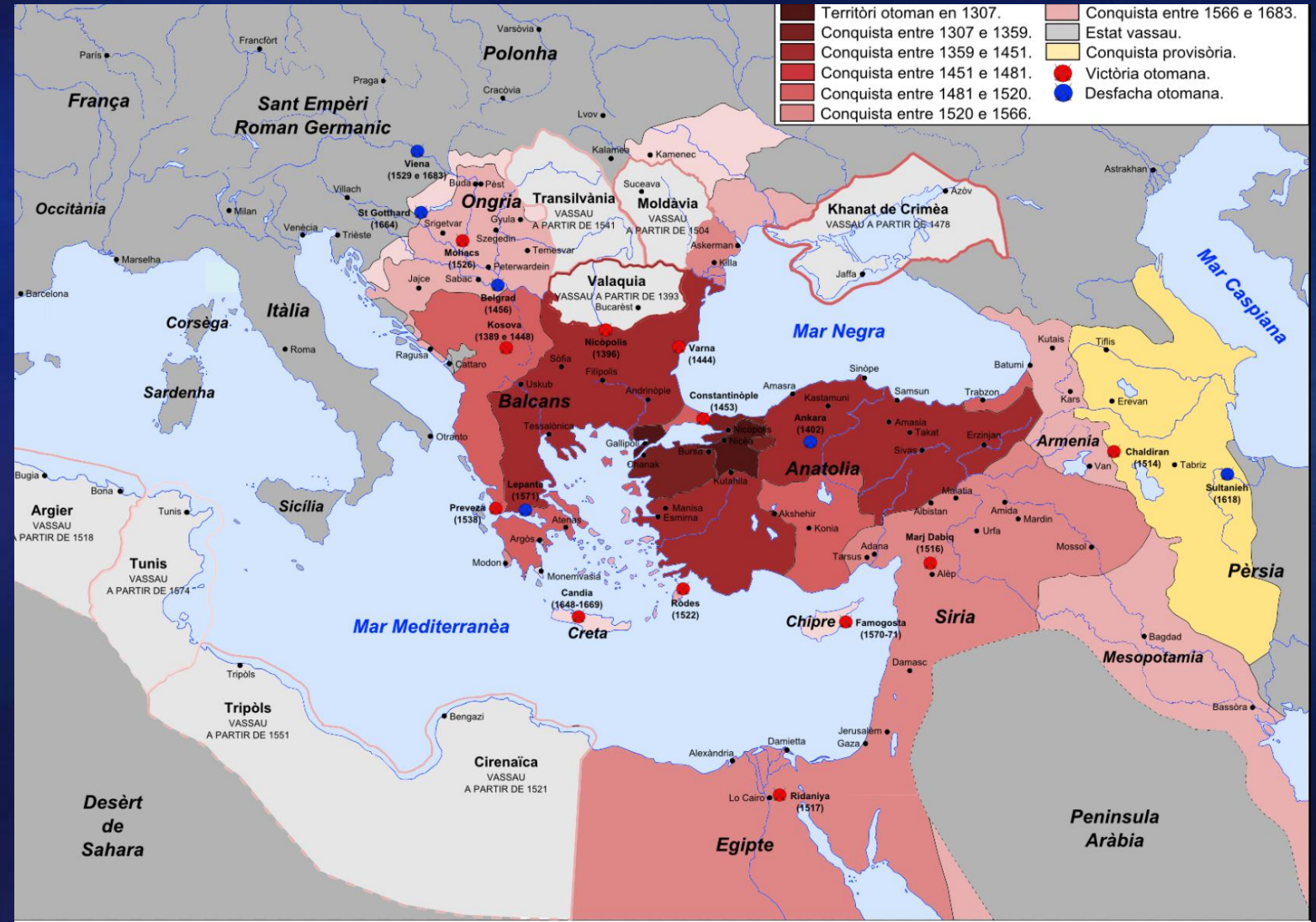
- Unlike other Portuguese vessels which used square sails, caravels used triangular, or lateen, sails. This design, likely of Arab origin, allowed ships to sail against the wind.
- Other instruments adapted for moving in the open ocean were the compass, the hourglass, the quadrant, and the astrolabe.



# Territorial Expansion Of The Ottoman Empire ; Istanbulun Fethi

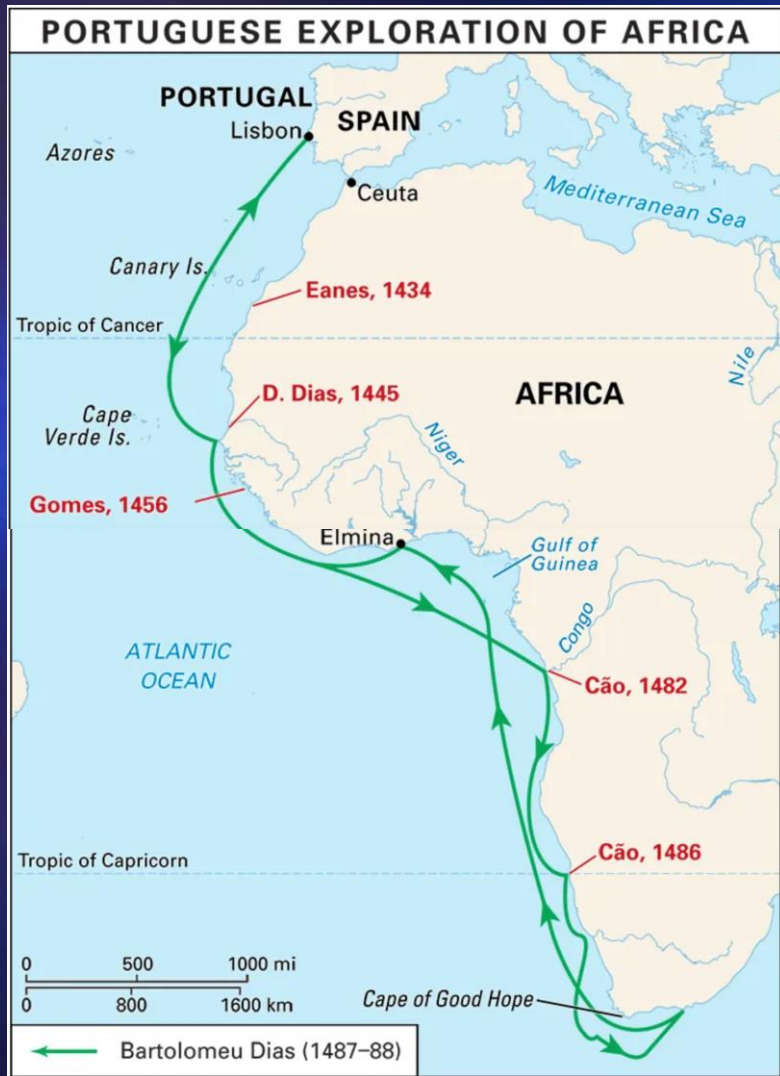


Türkiye Scott 1101 1953





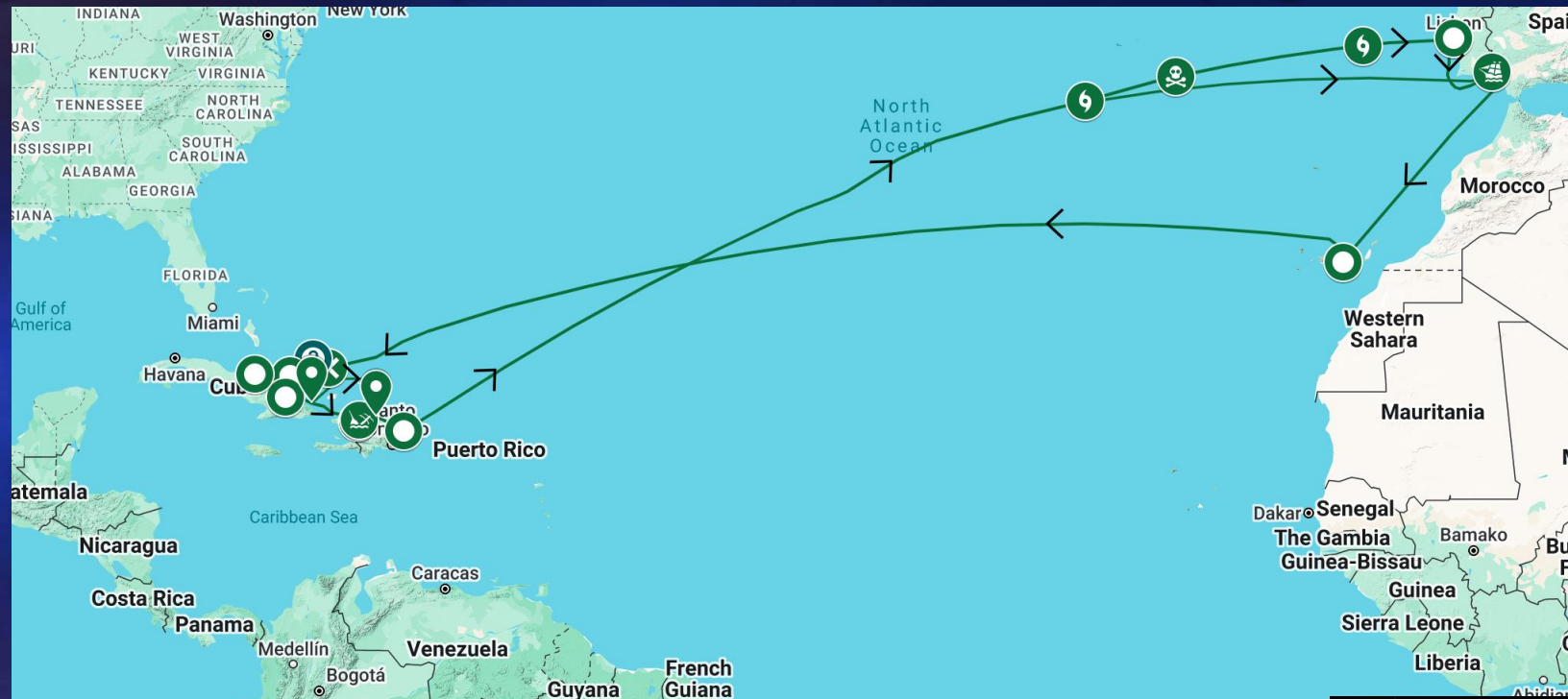
# The Portugese Exploration Of Africa



- Cape Bojador marked the last outpost of the known world. Here violent currents were much feared by sailors, who were convinced that they would never return from the “Sea of Darkness”.
- This obstacle was finally overcome by Gil Eanes, who, in 1435 passed Cape Bojador and returned safely.
- When Henry the Navigator died in 1460, Portuguese caravels had travelled along the African coast as far as Sierra Leone.
- Diogo Cao reached and continued past the mouth of the Congo in the year 1482.
- On his second voyage, Cao sailed up the river to the first rapids before returning to the coast and continuing further south as far as Cape Cross on the coast of what is now Namibia.
- In 1487 Bartolomeu Dias landed in Namibia, rounded the Cape and reached Mussel Bay



# The Voyages Of Christopher Columbus: 1<sup>st</sup> Voyage 1492-1493



<https://www.google.com/maps/d/embed?mid=1wjmmBObq3tS7zgQ9R-i1Z5DYinc&ll=25.587177222011512%2C-62.123266830085925&z=4>



# The Voyages Of Christopher Columbus: 1<sup>st</sup> Voyage 1492-1493



<https://www.google.com/maps/d/embed?mid=1wjmmBObq3tS7zgQ9R-i1Z5DYinc&ll=25.587177222011512%2C-62.123266830085925&z=4>



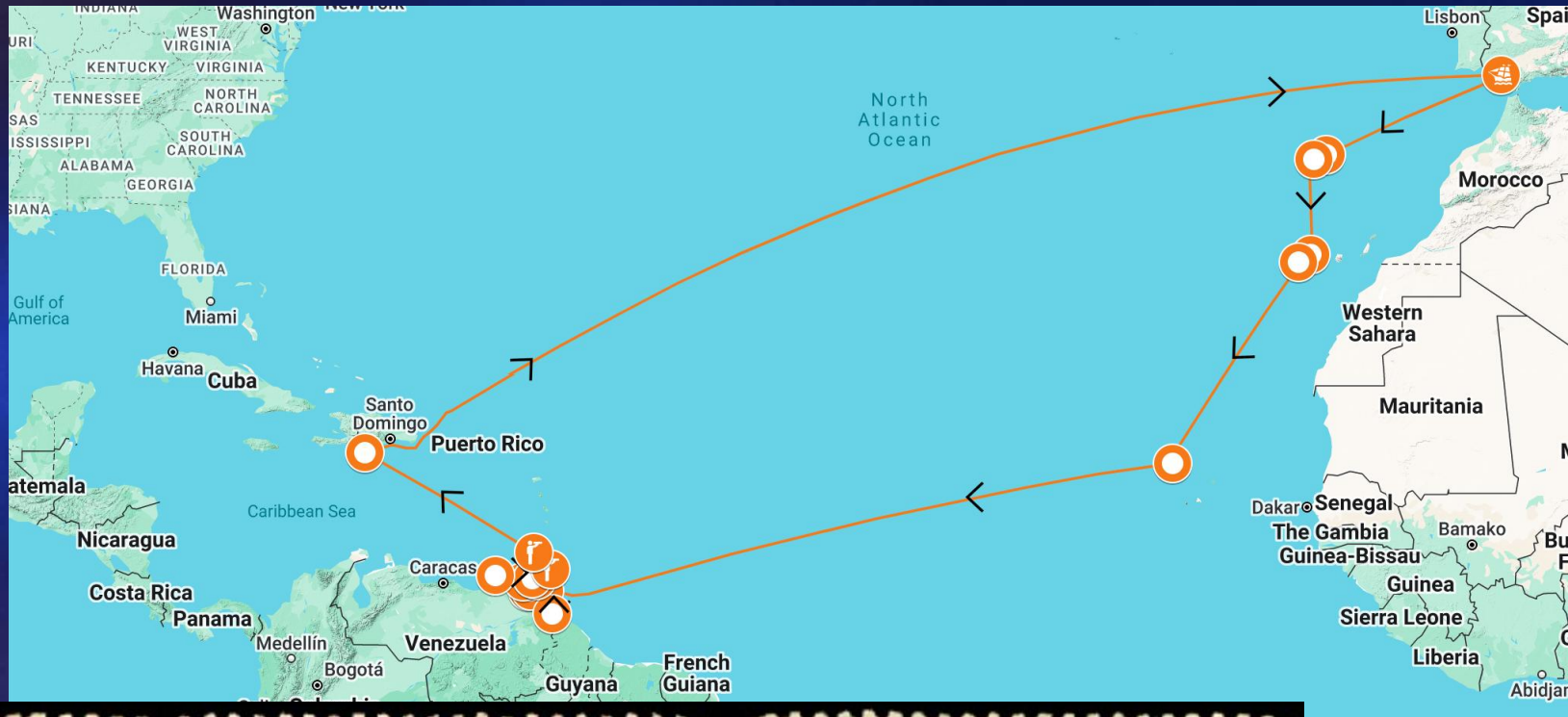
# The Voyages Of Christopher Columbus: 2<sup>nd</sup> Voyage 1493-1496



<https://www.google.com/maps/d/embed?mid=1wjmmBObq3tS7zgQ9R-i1Z5DYinc&ll=25.587177222011512%2C-62.123266830085925&z=4>



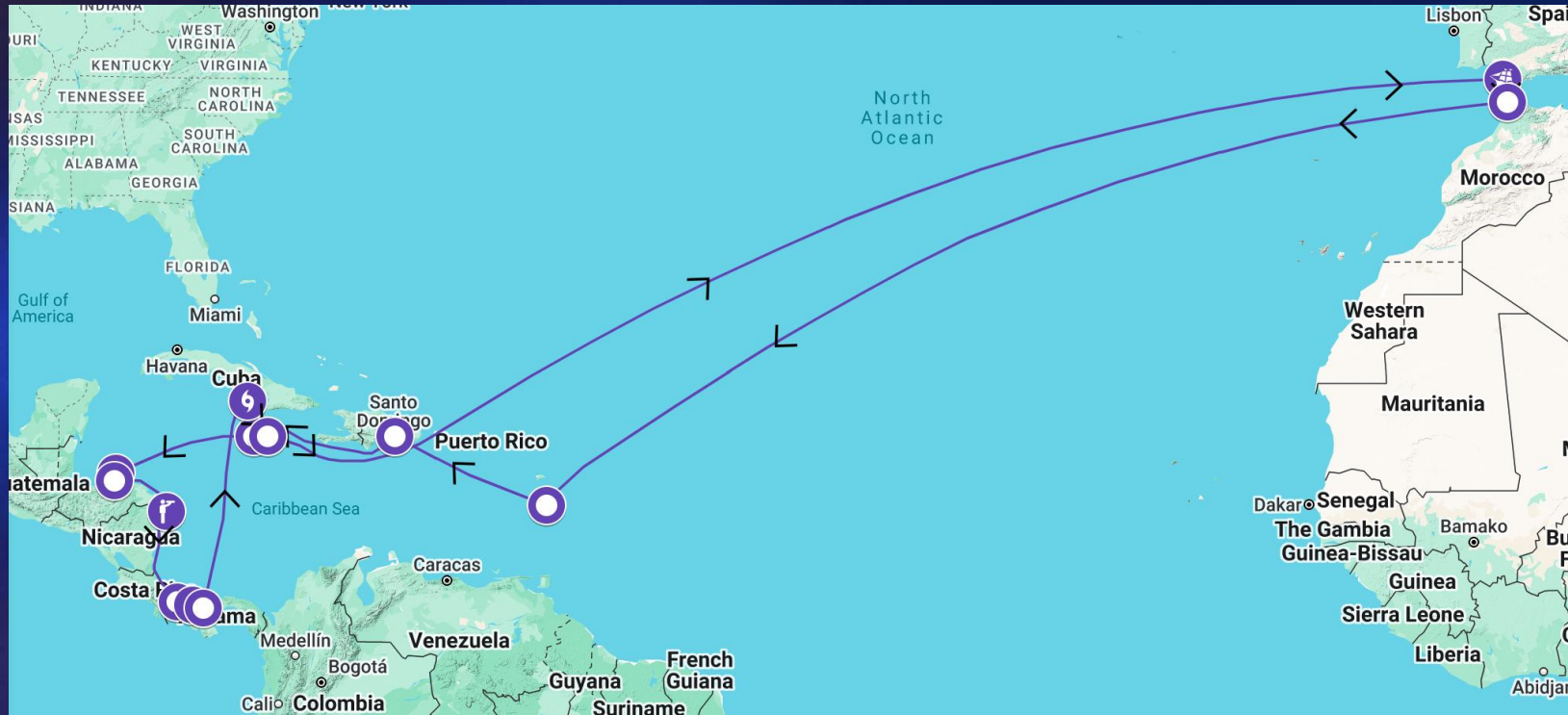
# The Voyages Of Christopher Columbus: 3<sup>rd</sup> Voyage 1498-1500



<https://www.google.com/maps/d/embed?mid=1wjmmBObq3tS7zgQ9R-i1Z5DYinc&ll=25.587177222011512%2C-62.123266830085925&z=4>



# The Voyages Of Christopher Columbus: 4<sup>th</sup> Voyage 1502-1504



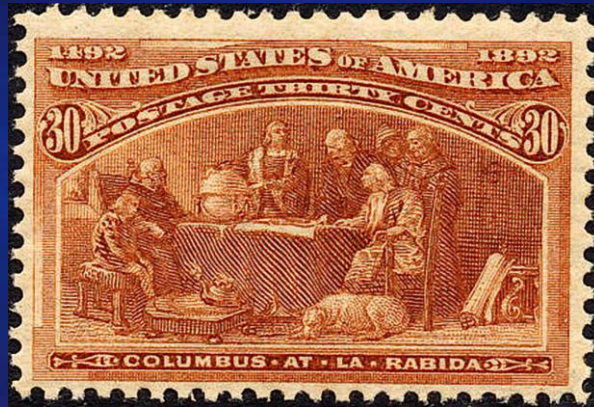


# Columbian Exposition Issues (1893)





# Columbian Exposition Issues (1893)





# Prince Henry The Navigator

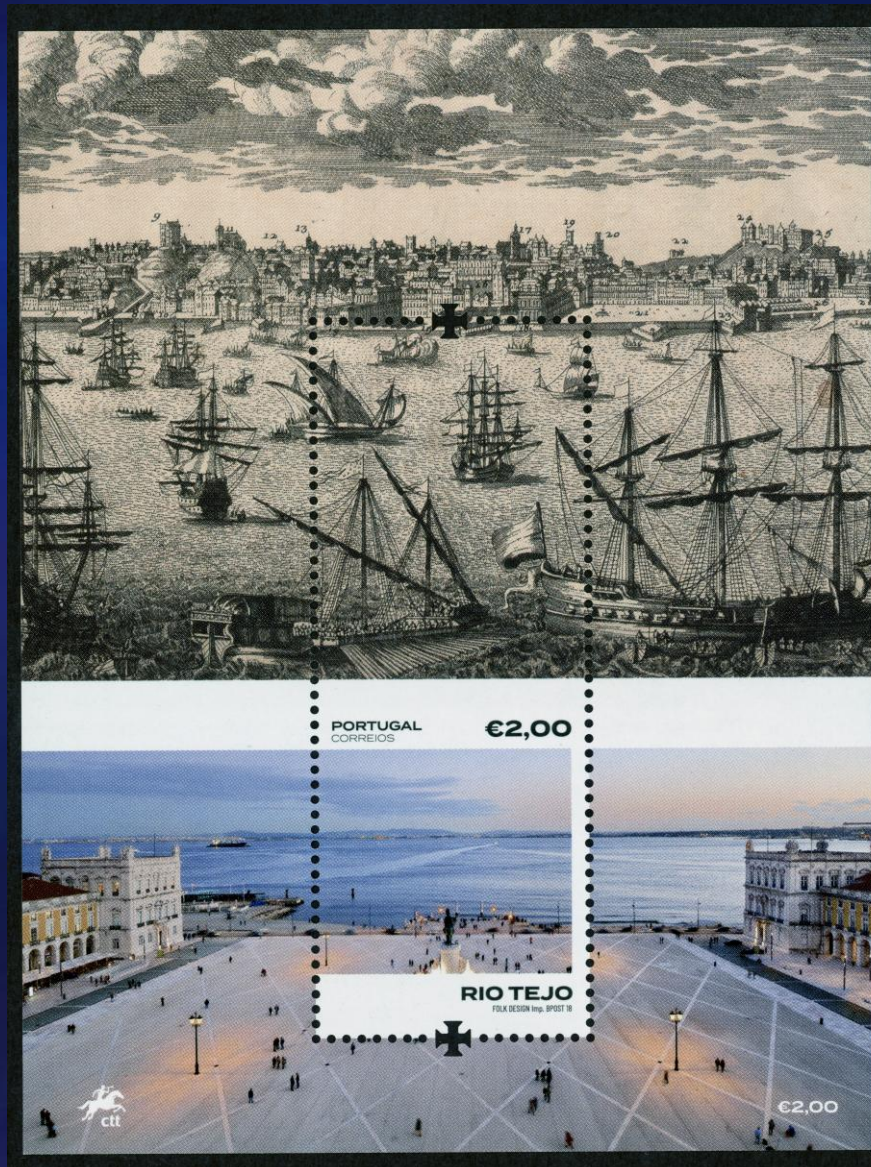


5th Centenary of the Birth of Prince Henry the Navigator Scott 97-109 Issued March 3, 1894

Designer: José Veloso Salgado Engraver: Giesecke & Devrient

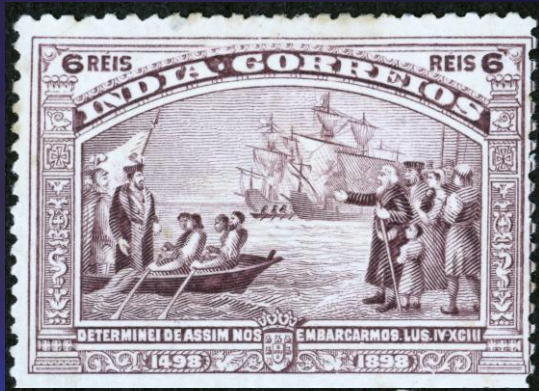


# Lisbon: Ribeira Palace And The Praco Do Comercio





# Portugal Omnibus Issue 1898



The embarkation of da Gama at Restello, near the mouth of the Tagus, where Henry the Navigator had erected a small chapel for the use of sailors, and where, later, Don Manuel I. founded the Jeronimos monastery of Belem.



The fleet of Vasco da Gama, comprising the Flagship St. Gabriel showing in the foreground; the St. Raphael, commanded by Paul da Gama, the brother of Vasco, and the Berrio, commanded by Nicolas Coello .

The ships are represented at their departure from Restello (current day Belem), July 8, 1497



The arrival of da Gama at Calicut, then the chief port of India, in May, 1498



# Portugal Omnibus Issue 1898



The Muse of History inscribing on the roll of fame the great achievements of da Gama and the Portuguese ships.



The flagship encountering stormy seas, and above are miniature medallions with portraits of da Gama and Camões, the greatest poet Portugal has produced and the author of “O s Lusíadas,” in which the adventures of da Gama are celebrated in verse.



# Portugal Omnibus Issue 1898



Shows a winged figure, said to be the Archangel Gabriel, patron saint of the expedition, standing in an ancient galleon.



Depicts the St. Gabriel in full sail in the center opening, with a knight in full armor in each side opening of the triple frame.



# Portugal Omnibus Issue 1898



The admiral standing ; in front of him, a Cross, and the Arms of King Manuel I. ; to his right a mermaid holding aloft an ancient sailing vessel ; on his left a serpent ; in the background is the Cathedral of Belem, which was built as a thanksgiving for the success of the expedition ; and there is also tropical vegetation in the distance.



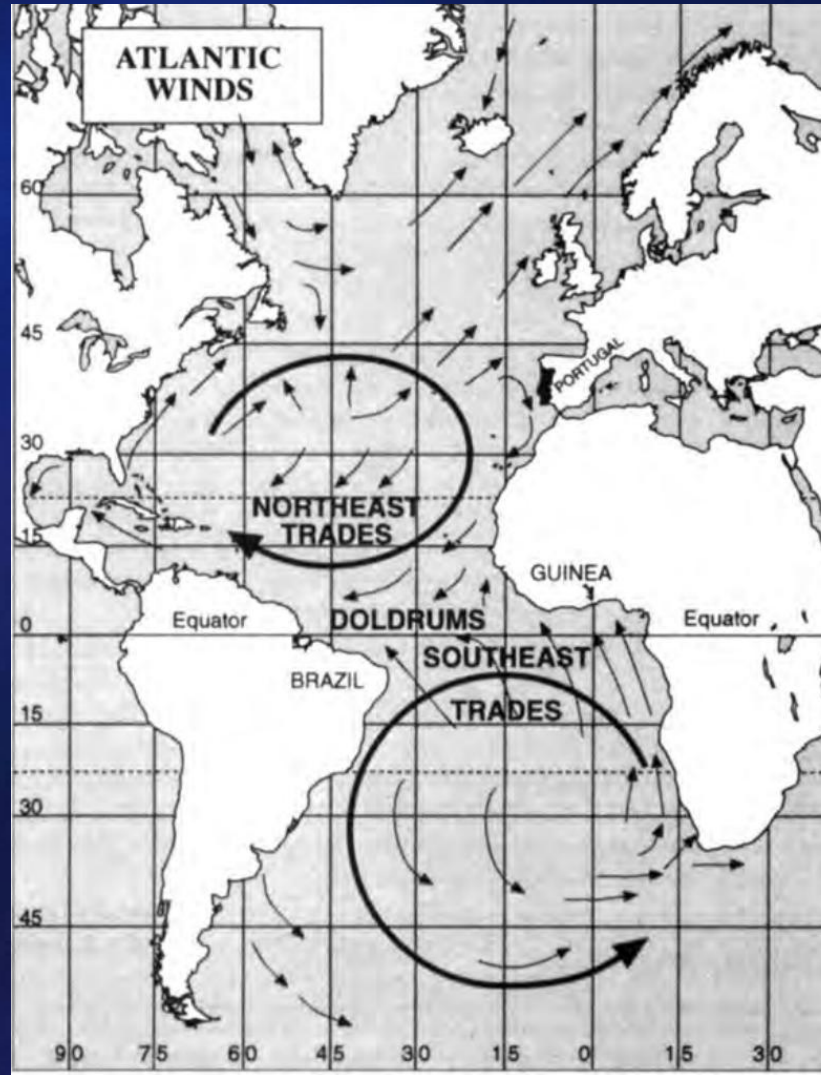
# Vasco Da Gama and The “Volto Do Mar”



- Portuguese captains discovered a way to make the trip around the tip of Africa in far less than the five months it took by arduous coastwise sailing into the prevailing southerly winds encountered below the Equator.
- Using their knowledge of the wind circulation patterns.
- They first sailed southwestward, crossed the equatorial doldrums, and continued nearly to the Brazilian coast.
- They then cut southeast to round the Cape of Good Hope with the wind on their beam



# The Long Ocean Tack





# Vasco da Gama Pillar in Malindi



Stanley Gibbons KE492;  
March 15<sup>th</sup> 1989

- A *padrão* is a stone pillar left by Portuguese maritime explorers in the 15th and 16th centuries to record significant landfalls and thereby establish primacy and possession.
- The Vasco da Gama Pillar in Malindi, Kenya, was erected by the Portuguese explorer Vasco da Gama. It was constructed in 1498 or 1499 during his pioneering maritime expedition from Lisbon to India via the Cape of Good Hope (1497–99). Vasco da Gama first visited Malindi from 15 to 24 April 1498



# Prasasti Padrao: Indonesia





# Pedro Álvares Cabral



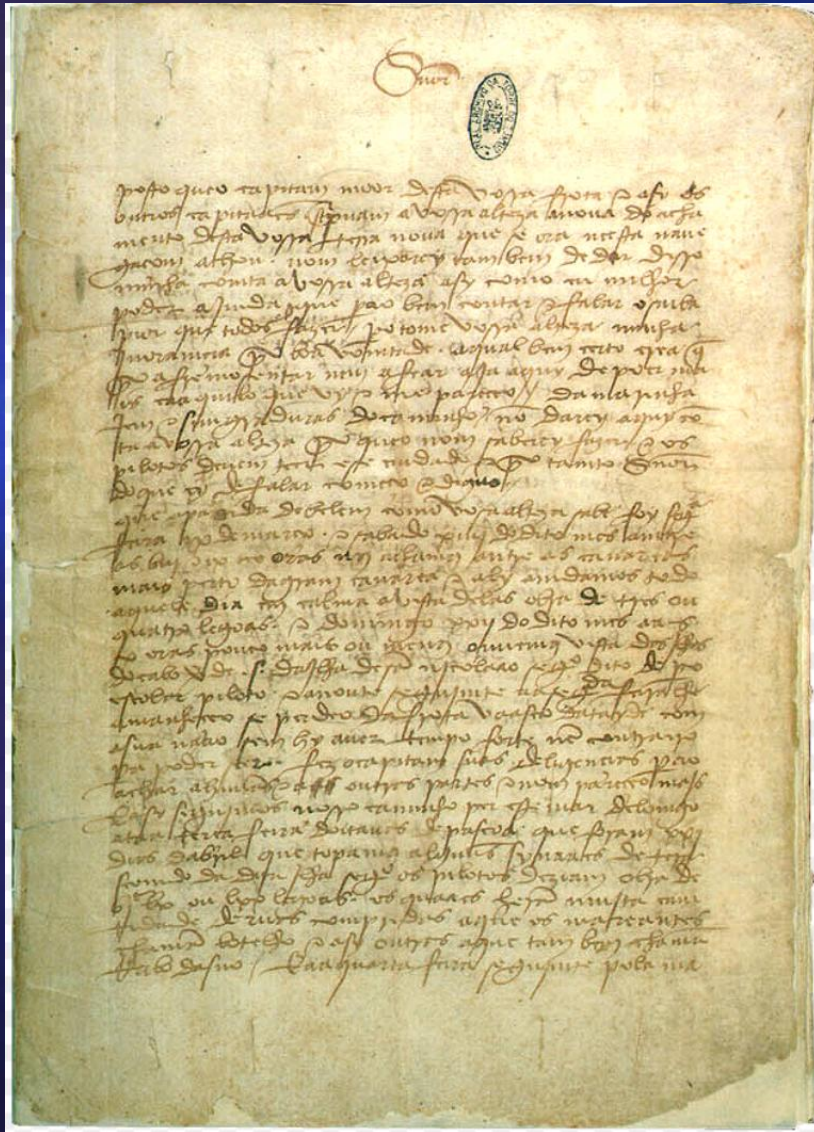
Brazil 1906; Scott 176



Pedro Álvares Cabral was a Portuguese explorer known for his voyage in 1500 that accidentally led to the "discovery" of Brazil. Although his primary goal was to reach India for trade, his route took him westward, and he landed in what is now Brazil, claiming the land for Portugal.



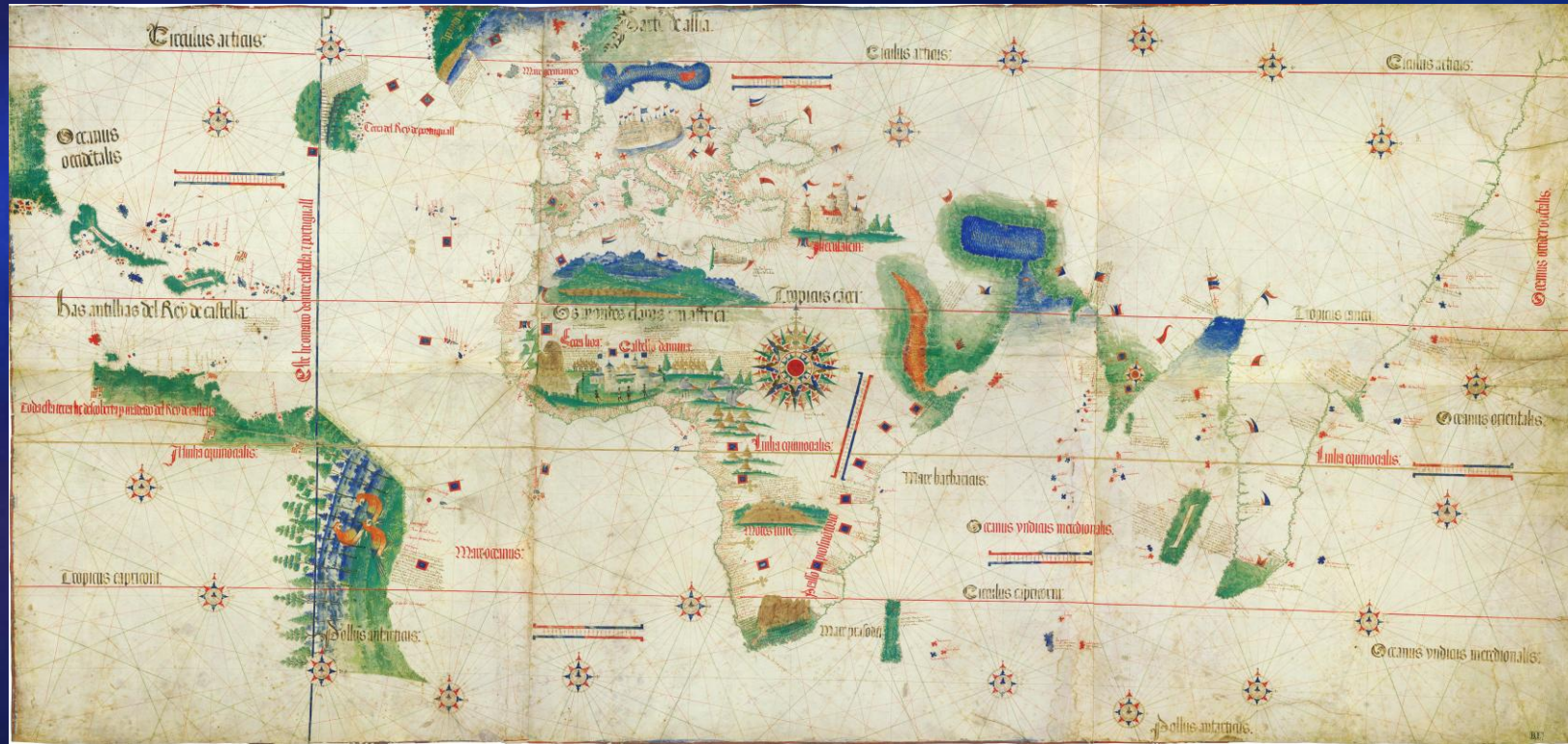
# Letter O Pero Vaz De Caminha



- Pêro Vaz de Caminha was a Portuguese knight who accompanied Pedro Cabral's fleet on its voyage to India in 1500
- In his letter to Manuel I of Portugal, Pero Vaz De Caminha gives what is considered by many today as being one of the most accurate accounts of what Brazil used to look like in 1500.
- Caminha's official report was given to one of Cabral's captains who set sail back to Portugal on a supply ship they had brought along.
- The original of this 27 page document is preserved in the National Archive of Torre do Tombo in Lisbon, Portugal.
- This letter represents probably the first letter sent from the Americas to Europe by ship.



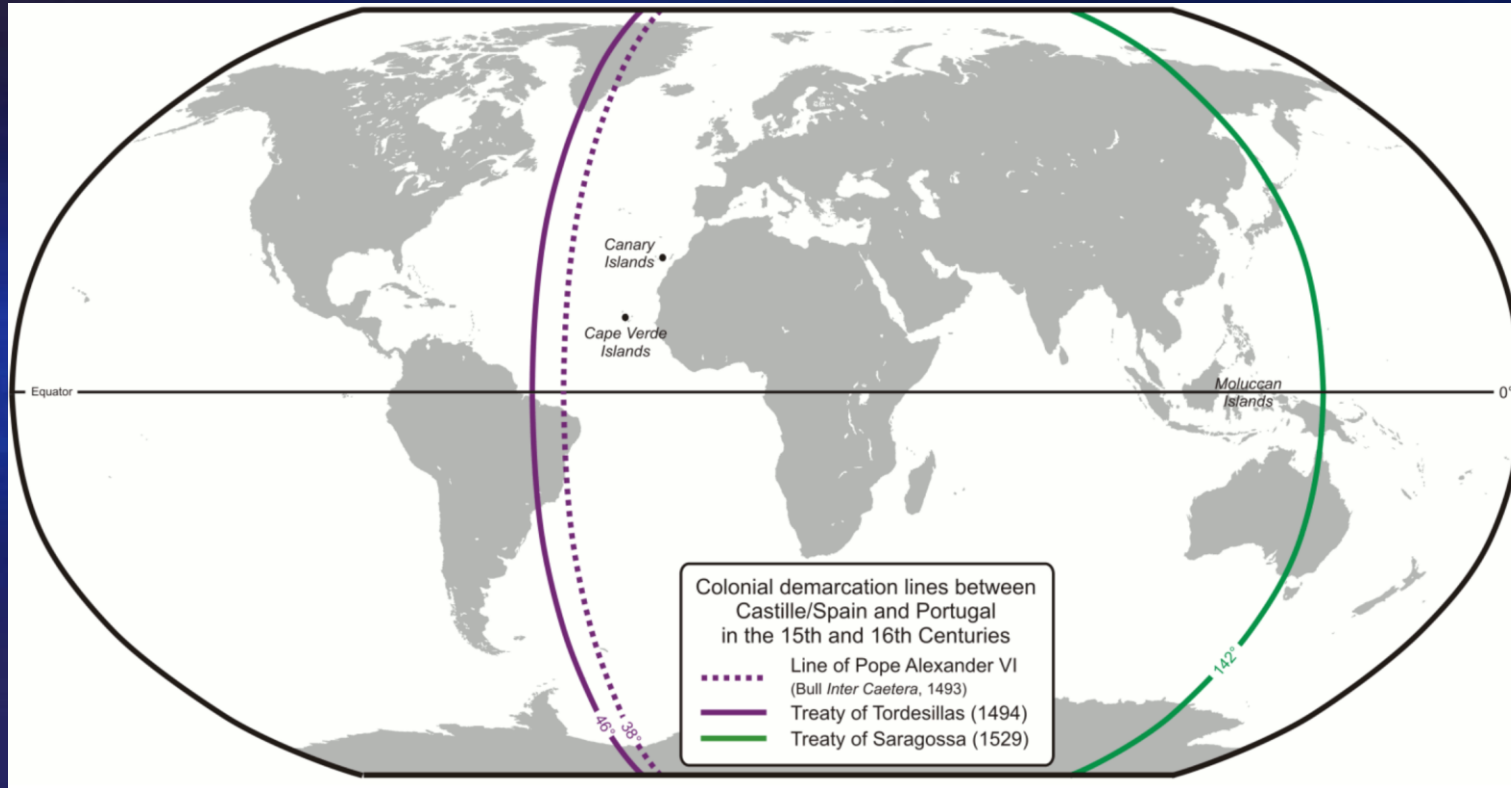
# The Cantino Planisphere



By anonymous Portuguese (1502) - Biblioteca Estense Universitaria, Modena, Italy,



# The Treaty Of Tordesillas



- The Treaty of Tordesillas, signed in Tordesillas, Spain, on 7 June 1494, and ratified in Setubal, Portugal, divided the newly discovered lands outside Europe between the Kingdom of Portugal and the Crown Of Castile along a meridian 360 miles west of the Cape Verde islands, off the west coast of Africa. That line of demarcation was about halfway between Cape Verde (already Portuguese) and the islands visited by Christopher Columbus on his first voyage (claimed for Castile and León), named in the teaty as Cipangu and Antilla (Cuba and Hispaniola).



# The Portolanos



- Portolanos were charts made by and for seamen during the Middle Ages.
- These practical, utilitarian, and remarkably accurate atlases had no gradations, but used a network of rhumb lines – straight lines extending in the direction of the compass points.
- They provided sailing directions and the location of ports and showed various coastal features.
- They even adhered to a systematic rule for traditional coloring. .



# Universalis Cosmographia: The Waldseemüller Map 1507

Ptolemy Portrait

Vespucci Portrait

The Pacific Ocean



- This is one map on 12 sheets, made from original woodcut preserved in the Geography and Map Division, Library of Congress. It was acquired in 2003 by the United States from Prince Waldburg-wolfegg for \$10 million
- This is the only known surviving copy of the first printed edition of the map, which, it is believed, consisted of 1,000 copies. The map measures more than 4 feet by 8 feet when assembled.
- Waldseemüller christened the new lands "America" in recognition of Vespucci's understanding that a new continent had been uncovered as a result of the voyages of Columbus and other explorers in the late fifteenth century.

<https://www.loc.gov/collections/discovery-and-exploration/articles-and-essays/recognizing-and-naming-america/>



# The Waldseemüller Map



Federal Republic Of Germany April 12<sup>th</sup> 2007.

The stamp commemorates the 500th anniversary of Martin Waldseemüller's map of the world.



# The Voyage Of Magellan And Elcano



Portugal 2022

- The fleet of five ships and 260 sailors under the command of captain Ferdinand Magellan left the port of Seville, Spain, in August 1519.
- Three years later, one surviving ship with 18 surviving crew under the command of Spanish navigator Juan Sebastián Elcano returned to the port of departure.
- They overcame mutiny, hunger, tempests and doldrums, boycotts, desertion, battles, disease and death and, against all odds, returned to Seville and made history.



# Acknowledgement

- Library Of Congress Archives, Washington DC
- National Philatelic Collection, National Postal Museum, Washington DC
- National Archive of Torre Do Tombo, Lisbon, Portugal
- Biblioteca Marciana, Venice, Italy