

# GUIDE TO MAPS

## VALDÉS-SALAS CASTLE



Northern Spain from the Al-Idrisi map (1154)

This document can be downloaded from

[www.fundacionValdesSalas.es](http://www.fundacionValdesSalas.es) and [www.aulaValdesSalas.es](http://www.aulaValdesSalas.es)

This exhibition of maps in the Valdés-Salas Castle represents the evolution of the European view of the world since the beginning of the Primitive Pilgrim Route to Santiago (814) until the death of Fernando de Valdés (1568), Archbishop, General Inquisitor and founder of the University of Oviedo.

Fernando Valdes, born in 1483 in this castle, lived in a time of great change in society and in the view of the known world. During his lifetime, the maps begin to serve multiple purposes, some of them already traditional: management, city planning, the resolution of legal disputes, merchant shipping, military strategy, etc. The growing importance of maps during that time can be illustrated by the estimates of maps available: in the period 1400-1472 there were only a few hundreds of maps, in the period 1472-1500 the figure was around 56,000 maps and in the period 1500 - 1600 there were millions of maps already available (*The History of Cartography, University of Chicago Press, available free of charge on the Internet*).

The time of Fernando de Valdés represents a turning point in the convergence of cultures. In 1480, major world sailing communities were separated by large expanses of unexplored sea and landmasses with unknown surfaces areas and shapes. The usual European sailing routes were limited to the North Atlantic, the Baltic and the Mediterranean. In the late 15th Century, the voyages of the Portuguese towards the East and the Spanish to the West, with the discovery of America in 1492, connected separate worlds and encouraged communication between civilizations such as had never occurred before in history.

The discovery of America was the founding event of the scientific revolution. It urged Europeans to break with the medieval period and quickly search for new knowledge (not just geographically, but in all fields of knowledge) to explore the unknown territories. The maps were full of empty spaces, that to Europeans were begging to be filled in, and so the first global empires and truly global trade networks were established. These voyages of exploration and conquest, with which today we are familiar, had never occurred before, and changed the history of the world: from a history of

isolated peoples and cultures to a history of a single global society [Harari, Yuval N. (2012), *From Animals into Gods: a Brief History of Humankind*]

The maps in this exhibition fit into standard periods (*The History of Cartography, University of Chicago Press*), although these classifications overlap and have no clear limits:

- **From the 8th Century to the early 12th Century.**  
This period is known as the Golden Age of ecclesiastical mapmaking, given the rapid profusion of books and manuscripts for the cathedral and monastic schools: Beatus of Girona (ca. 975) and Saint-Sever (ca. 1050).
- **From the early 12th Century to the late 13th Century.**  
This period is known as the 12th Century Renaissance. It is characterized by the influence of Arabic and Greek classics in Western Europe: Tabula Rogeriana of Al-Idrisi (1154) and Hereford (1275).
- **From the early 14th Century to the mid-15th Century.**  
Transitional period between the Middle Ages and the Renaissance, with world maps that incorporate features of both periods: Catalan of Cresques (1375), Circular Catalan (1450) and Fra Mauro (1459).
- **End of the 15th Century and the 16th Century.**  
A period of expansion for exploration and cartography: Juan de la Cosa (1500), Miller (1519), Ribero (1529) and Comocio (1560).

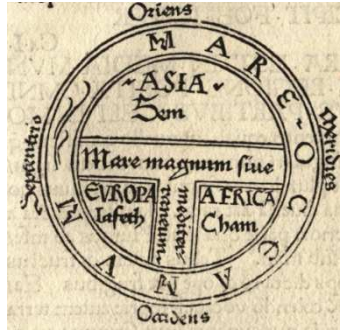
The maps have been selected according to their printing quality or their availability in a facsimile edition, showing the evolution of the European view of the world during this period. Many other maps and related stories can be studied in more detail via the computers and books which are at the disposal of visitors.

## THE BEATUS MAPPAE MUNDI [1] and [2]

The book entitled "Commentary on the Apocalypse of Saint John", written by the Benedictine abbot Beatus of Liebana, 8th Century, was a well-known text in Medieval Christianity. Until the 13th Century, there were many copies of this book, all of them decorated with beautiful miniatures, and in some cases with a world map heavy with religious significance. These copies are usually referred to by the term 'Beatus'.

The Beatus *mappae mundi* (in singular *mappa mundi*, from the Latin *mappa* -tablecloth or napkin- and *mundus* - world) depict a discoidal concept of the World, with geographical ideas based on biblical archetypes. They provide a worldview, but give little geographic insight. Their primary purpose is to instruct the faithful about significant events in Christian history rather than to record their exact locations. They are inspired by the cartographic concept of Isidore of Seville's diagrams, which describe a flat circular world, divided into three parts. These represent the world divided into three continents crossed by waterways in the form of a capital T (associated with the cross of Christ) and surrounded by a ring representing the ocean, the O; hence, the name of T-O maps.

The parts of the T are represented by the three major waterways believed by medieval scholars to divide the three parts of the earth: Tanais (the river Don) dividing Europe and Asia, the Nile dividing Africa and Asia, and the Mediterranean Sea dividing Europe and Africa. Each continent is the inheritance of one of the sons of Noah: Asia is inhabited by Semitic people, descendants of Shem, Africa by the descendants of Ham and Europe by the descendants of Japheth.



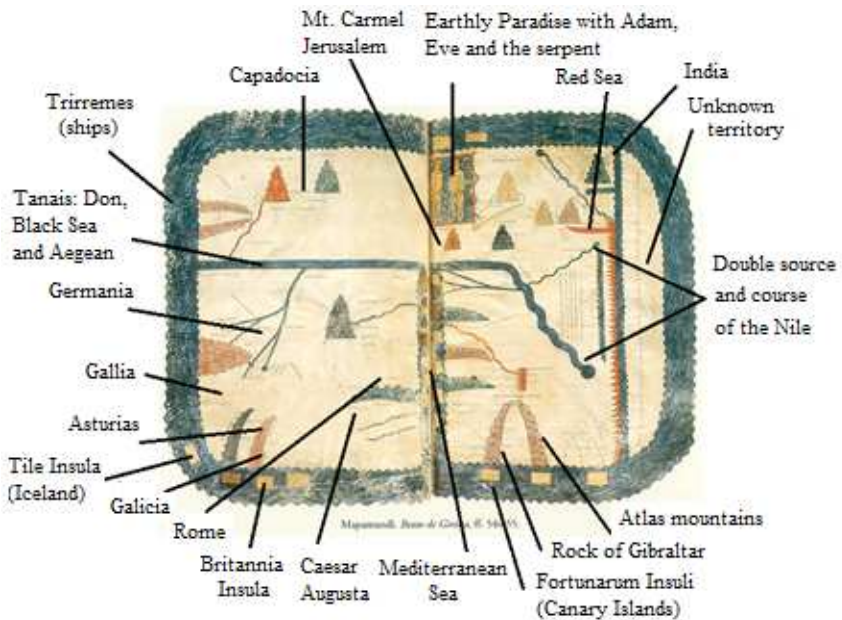
T-O map from Isidore of Seville's *Etymologies* (560-636).  
 This map is reproduced from the 15th Century printed version.

These maps are "oriented" in the sense that at the top is the East, the direction to which Christian prayer is directed. In most cases, the four cardinal points are provided in Latin:

- Septentrio: from the Latin 'septem' (seven), and a variant of the Indo-European root 'ster' (star) changed to 'strio', referring to the seven stars of the Great Bear. Another etymological explanation interprets 'trio -ōnis' as plow-oxen, and therefore would refer to the 'seven plow-oxen' following the Roman belief that seven oxen permanently pulled the celestial sphere, rotating around an axis passing through the Pole Star.
- Meridies: from the Latin 'medius' (middle) and 'diēs' (day) referring to the position of the sun at noon.
- Oriens: from Latin oriens, -entis, active participle of oriri (appear, birth), indicating the direction from which the sun rises.
- Occidens: from the Latin occidens, -entis, active participle of occidere (fall), indicating the direction in which the Sun sets.

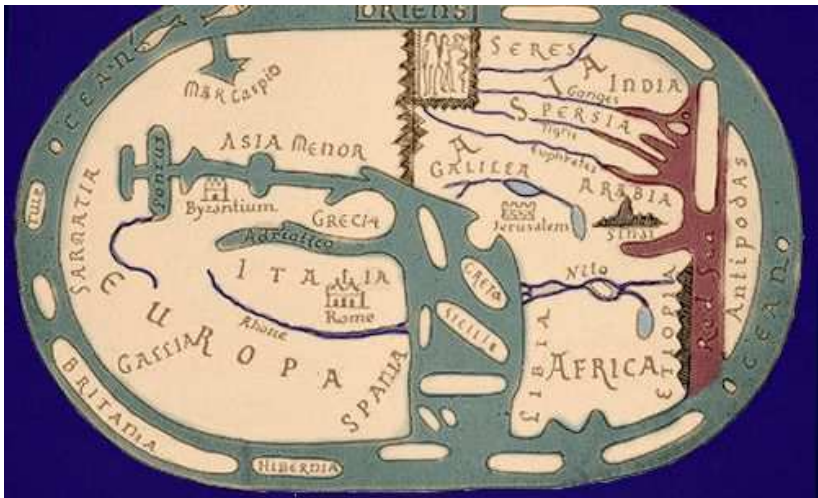
## [1] BEATUS OF GIRONA (975)

The Girona Beatus is an illuminated manuscript, the work by Abad Dominicus. Completed in 975, around 1078 it was sent to the Cathedral of Girona. In what is perhaps the most fascinating inscription, the names of the two illustrators are revealed: Ende, painter and servant of God, and Emeterio, monk and priest. The listing of the names in descending order of relevance was a medieval tradition. Therefore, we can say that the more important of the two illustrators was a woman, one of the few female artists named in the Middle Ages, probably a nun or a noble.



## [2] BEATUS OF SAINT-SEVER (11th Century, ca. 1050)

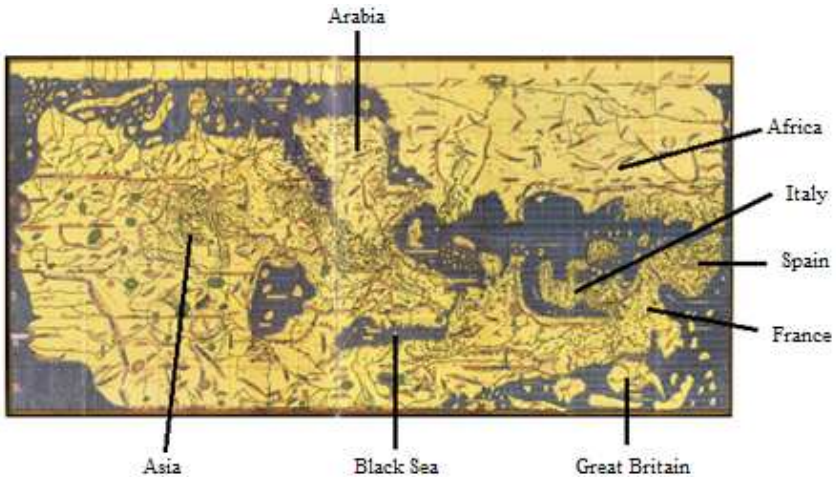
The Beatus of Saint Sever mappa mundi is undoubtedly the mappa mundi which provides most geographical details. It was made around 1050 in the Abbey of Saint Sever, located on the pilgrimage route to Santiago, in Aquitaine (France). The Beatus was copied by order of Gregorio de Muntaner, an abbot of Spanish origin, between 1028 and 1072. With 270 names, it is considered the richest in content and the most carefully executed of all the Beatus mappaemundi. Currently, it is in the National Library of France.



### [3] MAPPA MUNDI OF AL-IDRISI (1154)

This is Konrad Miller's 1929 recreation of Muhammad Al-Idrisi's Tabula Rogeriana from 1154.

Al-Idrisi (1100-1165) was born in Ceuta (Spain, North Africa), then part of the Almoravid Empire. He was a member of the Hammumid family, a descendent of the Prophet Muhammad. He was educated in Cordoba and made several journeys before settling in Palermo (Sicily), in the court of King Roger II of Sicily, where he worked for eighteen years on the comments and illustrations that accompany the maps. Written in Arabic, the mappa mundi describes the Eurasian continent as a whole and the North part of Africa.



In 1154, Al-Idrisi drew up a large world map known as Tabula Rogeriana, accompanied by a book called Geography. The Book of Roger or Kitab Ruyar shows the world divided into seven climatic regions, giving the distances between the most popular cities and describing the traditions, people, products and climate of the

known world. It is not a perfect historical source, because Al-Idrisi, following the medieval tradition, based his knowledge on different sources: besides direct visits to some places described, every time a ship docked in Sicily, its crew and passengers were questioned about the places they had visited.

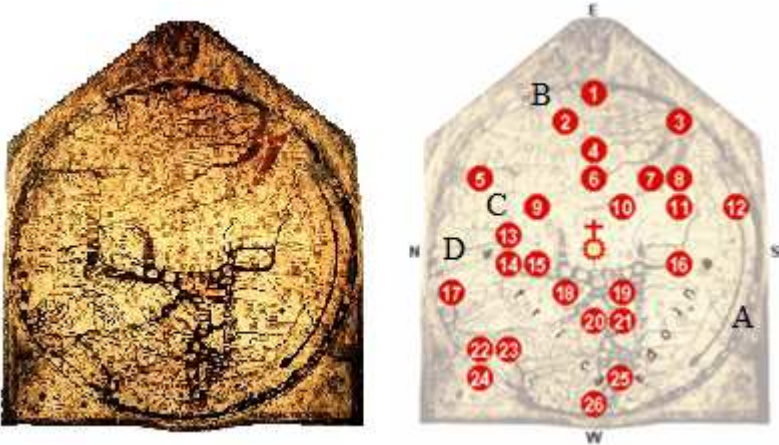
The main inspiration of Al-Idrisi were two mapmakers of the pre-Islamic era: Paulus Orosius, a Spaniard whose popular history, written in the 5th century, included a volume of descriptive geography; and Claudius Ptolemy, the greatest of the classical geographers, whose Geography, written in the 2nd Century, had been completely lost in Europe, but was preserved in the Muslim world in an Arabic translation.

The map is south-oriented (the South is at the top of the map), according to the Arab tradition. There are two possible explanations for this orientation. Firstly, the first peoples conquered by the Arabs were disciples of Zoroaster, for whom the South was sacred. Secondly, many communities conquered and converted to Islam in the 7th and 8th Centuries lived north of Mecca, and so faced South during prayers.

As a curiosity, we can see that Great Britain has the shape of an inverted teapot, and therefore south-oriented.

#### [4] HEREFORD MAPPA MUNDI (ca. 1285)

The world map of Hereford Cathedral (in the west of England near the Welsh border) is an evolved form of the T-O maps. Such maps do not necessarily imply that its creators believed the Earth was flat. That the planet was spherical was known by the ancient Greeks and Romans and the idea was not completely forgotten during the Middle Ages. The circular representation was more a conventional projection. This copy is the exact size of the original. On the map there are around 500 illustrations, including about 420 views or symbols of cities and towns, 15 depictions of biblical events, 33 depictions of plants, animals, birds and fish, 32 pictures of the peoples of the earth and 5 scenes from classical mythology. The names of Africa and Europe are transposed. The Hereford map was included in the UNESCO Memory of the World Register in 2007.



- 0 - At the center, Jerusalem. Above it, the crucifix.
- 1 - Paradise.
- 2 - The Ganges and its delta.
- 3 - The fabled island of Taphana (Sri Lanka or Sumatra).

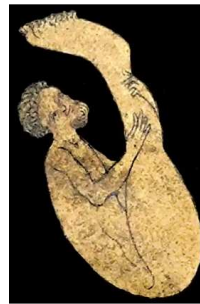
- 4 - The rivers Indus and Tigris.
- 5 - The Caspian Sea.
- 6 - Babylon, the Euphrates and the Tower of Babel.
- 7 - The Persian Gulf.
- 8 - The Red Sea (painted in red) and the Exodus.
- 9 - Noah's Ark.
- 10 - The Dead Sea.
- 11 - Egypt and the River Nile
- 12 - The River Nile (?) or possibly and allusion to the equatorial ocean. Beyond, possibly the Antipodes.
- 13 - The Azov Sea.
- 14 - Constantinople.
- 15 - The Aegean Sea.
- 16 - The Delta of the Nile and the Lighthouse of Alexandria.
- 17 - Norway.
- 18 - Greece with Mount Olympus, Athens and Corinth.
- 19 - Crete with the Minotaur's labyrinth.
- 20 - The Adriatic Sea. Rome with the popular Latin hexameter:  
*Roma caput mundi tenet orbis frena rotundi* ("Rome, the capital of the world, holds the reins of the world").
- 21 - Sicily and Carthage.
- 22 - Scotland.
- 23 - England.
- 24 - Ireland.
- 25 - The Balearic Islands.
- 26 - The Strait of Gibraltar (the Pillars of Hercules)

The following explains some of the symbolic images on the map.

- A. The *Blemmyes*, a war-like race with no head, but with their facial features in their chest. Alexander the Great was thought to have encountered Blemmyes in his campaigns and they are even mentioned in Shakespeare's *Otello*.



- B. The *Sciapods*, a race of people with one very large foot that they used to shield themselves from the sun. Stories told how these people moved extremely quickly on their one leg.



- C. The *essedons*, people that eat the bodies of their parents, thinking that this is better than being eaten by worms. On the right, the golden fleece of the expedition of Jason and the Argonauts.



- D. The *Cynocephali*, men with the heads of dogs and barking voices, are described as 'barbarians', who can be tender one minute, but aggressive and uncontrolled the next.



[5] EUROPEAN SECTION OF THE CATALAN ATLAS OF CRESQUES (1375), [6] CATALAN MAPPAMUNDI (ca. 1450)

At the end of the 13th Century in Europe, the Carta Pisana ushered in a new practical form of cartography which was designed for navigation and made possible by the widespread use of the compass; hence North is at the top of the map. These new maps are known as portolan charts (from the Italian 'portolano', meaning port or harbor), and focus on maritime shipping routes, the details of the shore, the coastal relief and the winds.



The Catalan Atlas of Cresques (1375) is considered the finest of the portolan charts. It represents the zenith of this medieval way of making maps, which will dominate the 14th and 15th Centuries and will be extended until the 18th Century, being already contemporary, in the Renaissance, with more mathematical and scientific mapping. This type of map is conceived as an atlas, a visual encyclopedia containing text and images designed to encompass all geographical, historical, cosmographic and human knowledge.

This map represents the high point of the Majorca School, lead by the Cresques family, Abraham and his son Jafuda, Majorcan Jewish cartographers. They carried out their mapmaking work in the last quarter of the 14th Century. This map was commissioned by Peter IV of Aragon and is preserved in the National Library of Paris. The complete atlas is a richly illuminated parchment containing geographical and astronomical texts, perpetual calendars, etc. The influence of Marco Polo's travels is noticeable.

The map [5] is the European section of the map of 1375. In the 'Ocean Sea' all known islands and landmarks are depicted. Thus, on the island of Tenerife, a white dot can be observed, representing the Teide volcano. The delineation of the coastline of the Mediterranean is very careful, which reflects the hegemony of the Crown of Aragon in that period. One of the characteristics of the Majorcan cartographic school is the presence of many flags and legends with physical, economic and demographic data of interest. The compass rose of this map is the first known cartographic representation with 32 directions. It contains thirty-two directions and the names of the eight principal winds, which reflects the Cresques's mastery of nautical instruments. This prototype of thirty-two directions and eight winds has been preserved until today. The first N-S line crosses the island of El Hierro, incorporating the recovery of the tradition of Ptolemy.

In the lower left part of Africa, the empire of Mali is represented. First, some tents and a rider appear, representing the desert nomads. Then, the Emperor (Mansa) Moussa, considered as the richest king of all time, is depicted with a gold nugget in his hand. It is said that, on his pilgrimage to Mecca, he distributed so much gold that he sank the price of gold for a decade in the East.



The names of the north and south are labeled in opposite directions, an effect very noticeable in the circular *mappa mundi* [6], of anonymous authorship. This orientation suggests that the map was supposed to be placed on a table and examined by walking around it. The most curious geographic feature is the shape of Africa: on the limits of the Gulf of Guinea, a river or strait connects the Atlantic Ocean to the Indian, and a large landmass emerges to complete the base of the map. No name appears for this landmass, and it is unclear if it is considered part of Africa or another continent. The interest of this map lies in its uncertain and eclectic identity: circular, with some religious and legendary motifs, as well as certain Arab influences, it retains the rigor of portolan charts.

## [7] FRA MAURO'S WORLD MAP (ca. 1450)



Fra Mauro's mappa mundi is one of the most beautiful and important works in the history of cartography. Created by the monk Fra Mauro in Venice, it represents a picture of the Earth according to late medieval Christian beliefs. So it depicts the known world at the time of the birth of Valdés-Salas. Venice was a great maritime power, a crossroads of travel and art, between East and West, and found itself at the forefront of international trade and diplomacy. Hence, it was one of the great centres of medieval and Renaissance mapmaking.

This map shows South at the top, rejecting Ptolemy and portolan's northern orientation and the eastern orientation of medieval

mappa mundi. This jewel of medieval cartography is perhaps the last attempt to combine the worldview of the T-O maps with information retrieved from Ptolemaic Geography. Fra Mauro knew about the map of Ptolemy and commented that it was inadequate for many regions of the world, but acknowledged the validity of its extension to the east by removing Jerusalem from the central position it had occupied in previous maps. It is the first European map depicting the islands of Japan, and also known for presenting the Indian Ocean not as an inland sea but as a link to Asia.

The description of Africa is surprisingly accurate, especially if one takes into consideration that, at that time, Portuguese explorers had not gone beyond 12 degrees North. The first European to sight the Cape of Good Hope would be the Portuguese Bartholomeu Dias in 1488. Fra Mauro shows a circumnavigable Africa, something unknown to the ancients, including Ptolemy. One annotation on the map claims that 'around 1420 a ship or junk from India' sailed around what Fra Mauro labels as the Cape of Diab (Cape of Good Hope). Some historians suggest that he knew of the voyages of Chinese admiral Zheng He, who may have reached the cape before any European.

The map is now in the Biblioteca Marciana in Venice.

## [8] JUAN DE LA COSA'S WORLD CHART (1500)

This chart is considered the earliest map of the Americas and also the first 'Padrón Real' (the standard Spanish secret map, which was used as a model for the maps and nautical charts used in all Spanish ships during the 16th Century). It was stolen in Seville and forgotten in Spain up to the death of the last owner in 1853, the Baron of Walckenaer, Dutch ambassador in Paris. The Spanish Admiralty Ministry purchased the document for display in the Naval Museum of Madrid, where it is at present.



Juan de la Cosa was a sailor from Santoña (a port of Northern Spain). He was the captain and owner of the Santa Maria (one of the three ships which discovered America). He was commissioned by Columbus and sailed with him, as master of his own ship, on the first voyage of discovery. He also sailed on the second voyage, and it was his responsibility to map the seas and discovered lands.

The world map of Juan de la Cosa is a portolan chart of the Majorcan school, drawn on two joined pieces of vellum. On the left hand side of the map, under the image of Saint Christopher, it is signed by Juan de la Cosa and dated 1500.

America is represented using two styles. Firstly, the islands of Cuba, La Española, Jamaica, Puerto Rico, the Bahamas and the Lesser Antilles, are listed in detail and in light colors, like the Old World, indicating better knowledge of this areas. Secondly, the continent appears as a dark green blur, which seems to give an idea of grandeur and enigmatic vastness.

The map of Juan de la Cosa represents Cuba as an island. This is an interesting point because Columbus, anxious to prove he had indeed reached Asia, obliged his pilots to confirm that Cuba was a peninsula at the East of a great continent. At that time it was not known whether there were one or two continents. Columbus claimed that, among those landmasses, there was a strait by where you could reach the Indies. In this, he remained faithful to the Asian theory. On the map, Juan de la Cosa does not contradict him. He offers no clear point of view, resorting to subterfuge: he passes the responsibility to Christopher Columbus, painting a picture of Saint Christopher separating North and South America. In 1507, Martin Waldseemüller published the first map to name America as a continent, based on the ideas of Amerigo Vespucci.

The map is what was called an atlas at that time. In addition to the geographical aspects, it represents human beings, palaces, temples, flags, etc. In Africa, it shows up to five kings or sultans of Mauritania and the Tower of Babel; in Arabia, the biblical figure of the Queen of Sheba; and near the word Asia, the Three Wise Men on their way to Israel. In the northeast corner, the monsters Gog and Magog are represented: one with a dog's head and the other one without a head, eyes and mouth in his chest, being of a violent and destructive nature (according to the prophecies of Ezekiel and the Book of Revelation, they would come out of their isolation in the times of the Antichrist to invade and devastate Christianity, before the Judgment Day).

## [9] MILLER ATLAS (ca. 1519)

The Miller atlas illustrates the years that changed the world on the eve of Ferdinand Magellan's voyage around the world. It was made by the cartographers Lopo Homem (nobleman), Pedro and Jorge Reinel (African Portuguese) and the miniaturist Antonio de Holanda (Dutch).



This map is the graphic expression of Portuguese global strategy at odds with Castilian strategy. Its strange conception of the oceans surrounded by land suited the Portuguese around 1519, because it demonstrated that it was not possible to sail from west to east. The "secret" of the Atlas Miller is trying to counteract the idea of being able to sail around the world, the project that, at exactly the same time, was being prepared by Magellan. In a sense, this world map is actually "false" (despite being true); it is a geopolitical fake, where the Portuguese strategy faces is at odds with the Spanish one.

The Miller Atlas is a work of uncommon luxury whose target was Leonor, the sister of Emperor Charles I, who was married to Manuel I of Portugal. Their ultimate goal was to be observed by

Charles I and the Castilians, and it was really an instrument of geostrategic, geopolitical and diplomatic misinformation.

The most astonishing fact is that, over several months in 1519, the best cartographers of that time, Pedro Reinel and his son Jorge Reinel, were involved in two opposing projects (in Lisbon, the completion of the Miller Atlas, and in Seville, preparing the voyage of Magellan), travelling back and forth across the Spanish-Portuguese border. Based on their knowledge, the first circumnavigation of the globe was prepared for the Crown of Castile. And at about the same time, the Miller Atlas was being prepared for the Crown of Portugal, both based on their knowledge. At that time, only Portugal was able to make such an impressive map.

### [10] MAP OF DIOGO RIBERO (1529)

This is a reproduction of a map by Khol, a 19th Century German geographer and writer. It represents the American part of the original map of Diogo Ribero dated 1529.

Diogo Ribero was a Portuguese mapmaker who lived in Seville in the service of Charles I. He was the successor of Sebastian Cabot as Principal Pilot (*Piloto Mayor*) and therefore responsible for maintaining the Royal Registers (*Padrones Reales*). In 1503, the Royal House of Trade (*Real Casa de Contratación de Indias*) was created to promote and regulate American commerce and navigation. The position of Principal Pilot was created in 1508. He was in charge of examining those who wish to study navigation, and also of drawing maps and charts and the *Padrón Real*. The *Padrón Real* (after 2nd August 1527 this was known as the *Padrón General*) was the main Spanish official and secret map, which was



## [11] COMOCIO'S WORLD MAP (1560)

At the end of the life of Fernando de Valdés, who died in 1568, the vision of the world was already quite similar to the one we know today. To illustrate this vision of the world, we have selected the *Cosmographia Universalis* of Comocio, dated 1560 (the copy exhibited is dated 1581), a few years before the death of the inquisitor. Giovanni Francesco Comocio (1501-1575) was an active mapmaker in Venice between 1558 and 1575 and one of the most important exponents of the Venetian School of Lafreri.



Europe, Asia, Africa and America were already depicted quite accurately, but it would take several centuries to reach the perfection of modern cartographic representations. The details of the continents and the distances were far from reliable, as can be seen in the case of the Iberian Peninsula. The landmasses were deformed, as can be seen in South America, Africa or the hugely inaccurate depiction of the Antarctic. But, broadly speaking, the known world was already similar to the present one; the convergence of civilizations had doubled the size of the known world.

A few years after the drawing up of this map, after the death of Fernando de Valdés, some important advances in cartography took place. In 1569, Gerardus Mercator (1512-1594), Dutch mathematician and cartographer, devised the Mercator projection, the cylindrical projection with which we are familiar when we look at a map even today. The following year, 1570, saw the publication of the *Theatrum Orbis Terrarum*, created by Abraham Ortelius (1527-1598), the Royal Cosmographer of Philip II, and which is considered the first modern atlas.

**“Today, maps are regarded primarily as locational or navigational tools ... However, throughout history, maps have served a variety of purposes. In fact, ever since mankind first learned how to make graphic marks on rock up to 40,000 years ago, people have created maps as a way of conceptualizing themselves in relation to their environment. Thus, maps are as much about existence as they are about orientation ... While other animals demarcate their territories, we are the only species capable of mapping ours”**

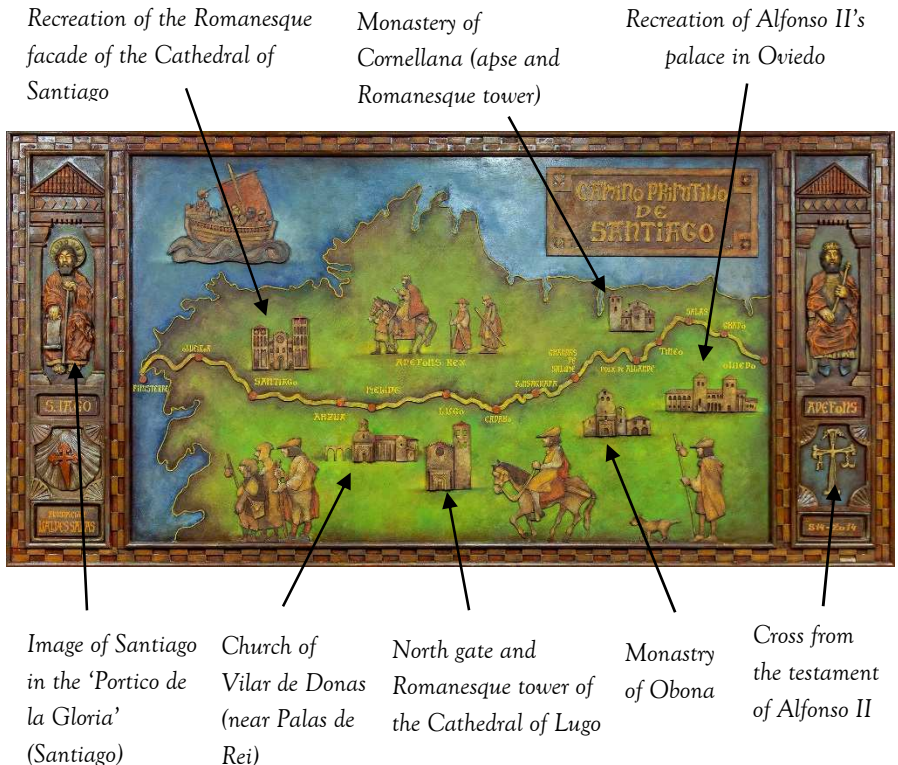
**Brotton, J. (2014), *Great Maps*.**

## References

- Comellas, J.L. (1992), *El mapa de Juan de la Cosa*, Testimonio.
- Harari, Yuval N. (2012), *From Animals into Gods: a Brief History of Humankind*, CreateSpace Independent Publishing Platform.
- Miranda, C., *Beato de Liébana*, Moleiro.
- The History of Cartography*, University of Chicago Press.
- Thomaz, L.F et al. (2006), *Atlas Miller*, Moleiro.
- Westrem, S.D. (2001), *The Hereford Map*, Brepols.
- Websites: [www.fgloriente.org](http://www.fgloriente.org), [www.themappamundi.co.uk](http://www.themappamundi.co.uk).

## ORIGINAL OR PRIMITIVE PILGRIM ROUTE TO SANTIAGO (814-2014)

The Original or Primitive Pilgrim Route to Santiago is the path that the first pilgrim to Santiago de Compostela, Alfonso II, King of Asturias, walked with his court. In the 9th Century, around the year 814, and in order to visit the newly discovered tomb of the Apostle, the Asturian king initiated the pilgrimage to Compostela. He created, 1,200 years ago, a route that strengthened the fledgling European identity, renewing, upgrading and expanding the link between the paths created by the peoples of northern Spain and Europe throughout the millennia. The mural was created by José Legazpi in 2014 and it is inspired by the Romanesque along the Camino Primitivo.





Universidad  
de Oviedo



Fundación  
VALDÉS-SALAS



Ayto. Salas

cajAstur 

CMC  
XXI

Reny  Picot

SabadellHerrero

B S

  
telecable