

Plato - 7 points up b/c his shadow that our world is just a shadow of a higher, truer reality. - School of Athens - Raphael

As merchants' profits increased and governments collected more taxes, funding for the

visual and performing arts, even for popular audiences, increased

Renaissance Art

Literary forms and works of literature in Afro-Eurasia

Shakespeare or Cervantes

Journey to the West

Change and dissemination (spreading widely) of Christianity: Reformation, Jesuits

Ignatius of Loyola

1517-PR

1540

Women -> direct access to God, role in family not

Church

Reformation, Huguon

European technological developments in cartography and navigation built on previous

knowledge developed in the classical, Islamic, and Asian worlds, and included the

production of new tools, innovations in ship designs, and improved understanding of

global wind and current patterns all of which made transoceanic travel and trade possible

The most significant change in global trade in 1450-1750 was the rise and involvement of

the Europeans

Beginning with Portugal and Spain, European countries would commission the

exploration, charting and colonization of a huge portion of the world

The advancements that enabled them to do this, however, did not originate

in a vacuum

Europeans adapted, imported, and synthesized the use of

technologies and knowledge deriving from many cultures

Astrabe

Islamic civilization had long possessed the need for astronomical and geographical

knowledge

muslim schools were expected to pronounce daily prayer times and provide

the faithful with the direction of Mecca for the purpose of prayer

To address these religious matters they developed the astrolabe which

enabled them to solve "300 types of problems in astronomy, geography and

trigonometry"

Through Muslim Spain, the astrolabe entered Christian Europe

The Portuguese created the mariner's astrolabe, an instrument

whose functions were limited to and designed specifically for the

purpose of navigation

at sea the mariner's astrolabe helped ships determine their

latitude by aligning the instrument with the sun or a known

star

Map Making

TO map of the middle ages, qualitative maps intended to make a religious statement

about the world from a Christian point of view

Mariners
astrolabe

Roman (Ptolemy 517)

Roman (Cassini 11054)

Summa (Sylvius 632)

Halayman (300-1000)

Harvard

Women

Religion

the only reality is that we can see by

artists

Religious Statement

describe the

Ships moved more
admiralty w/ ruler

- This changed with European contacts with Byzantine and Islamic influences that had been increasing over the centuries
- Combined with an increased knowledge of Greek cartographer Ptolemy (90-168CE) with the growing desire for trade, navigation and cartography attracted some of the best academic minds of the 15th century

- they began to view the world like Ptolemy, in a quantitative way - *data, measurably - statistical*
- they believed mathematics corresponded with the actual way the world was
- Maps would resemble the features of geography as they actually existed rather than making a theological statement about the world

- Merchants could now use maps to plot new routes to and from desired locations and their experiences and information was in turn applied to the latest maps

- This craft of this new quantitative method of map-making and the training required for the new instruments of navigation were taught in the city of Lisbon, Portugal

Prince Henry's School of Navigation *Port. founded by castle + Aragon*

- Unaffected by the ravages of Europe's 100 Years War and Spain's civil strife, Portugal became the first European nation to embark on a program of exploration

- King John's son, Prince Henry, was motivated by a crusading zeal to convert heathens to Christianity and an economic zeal to gain access to west Africa's legendary sources of gold

- Henry's capture of the Muslim city of Ceuta in 1415 opened the western coast of Africa to Portuguese exploration (right on the tip of the Straits of Gibraltar)

- By the year of Henry's death in 1460, his country had arrived in Guinea on Africa's western coast

- Soon African gold was flowing by sea from west Africa directly to Iberia rather than across the trans-Saharan caravan routes

- Algiers and Tunis in north Africa were economically devastated by this rerouting of trade but Portugal got rich

- After a dispute with his father, Prince Henry returned home to Portugal but avoided the capital of Lisbon where he could have easily gained a comfortable royal job

- Instead he settled in the remote coastal town of Sagres which he turned into a center of navigational studies and cartography

- Equipped with new maritime instruments and knowledge the Portuguese accomplished many "firsts" in global exploration

- 1487 Bartholomew Diaz sailed his caravel around the southern tip of Africa, the first European to do so (his crew refused to press on to India)

- Vasco de Gama became the first to sail all the way to India in 1498

- Europeans had found the lucrative water route to the Indian Ocean trade network the Portuguese strategy in the Indian Ocean was the dominate trade through the use of firepower, intimidation, and brutality

- In the long run, they were never able to completely monopolize this network but did succeed in building a trading-post empire which gave them a significant share of the spice and slave trade

Christian missionaries will follow, 1600s
Japanese rulers outlawed Catholicism

Sagres

Gold

with over 50 trading posts from southeast Asia to Africa's west

coast, they attempted to force merchants to call at these ports and pay duties

they also required merchants to purchase passports from them; sailors caught at sea without one were mutilated and had their cargo confiscated

Despite these grand plans, the Portuguese had neither the manpower nor the fleet to carry out their demands

Many Indian Ocean merchants took their chances and sailed without passports or paying dues at Portuguese trading posts

Zheng He *was* the most extravagant maritime outreach early in this period was that of the Chinese

after the peasant revolt that threw out the Mongols and established the Ming Dynasty, the Chinese commissioned 7 major voyages under the leadership of

Zheng He With an estimated 317 ships and a staff of 27,000 men, Zheng He set out to establish a

reputation of the Ming in the Indian Ocean He sailed initially to southeast Asia and India but his final three voyages reached as far as the Swahili coast of east Africa

Unlike the European voyages that began a few decades later, these Chinese expeditions were not driven by attempts to conquer or win converts

They were diplomatic in nature and intended to impress upon others the prestige, wealth and superiority of Chinese civilization

Once other societies saw this, they would be willing to pay tribute to China for the right to purchase costly Chinese luxury products such as silk and porcelain

On his two year voyage of 1431-1433 alone, Zheng He established for China 20 tributary and diplomatic relations across the Indian Ocean

These Chinese strategy in the Indian Ocean could not have been farther from that of the Portuguese a few decades later

In 1911 a stele was recovered in Galle, south of India (present day Sri Lanka) gives praise to Buddha, the local Hindu incarnation of Vishnu and Allah in an attempt to create peaceful relations between China and the diverse cultures of the Indian Ocean

This is to be contrasted with Vasco de Gama who cut apart the bodies of captured merchants and fishermen and sent their heads to the leader of Calcutta to show them he meant business

Remarkable new transoceanic maritime reconnaissance occurred in this period. refers to information above and below

In 1476, a 25 year old Christopher Columbus washed onto the Portuguese shore with a broken oar he had used as a float

the cargo ship he worked on had been sunk by a French fleet near Gibraltar

modern

diplomatic + tributary

diplomatic

- As fortune would have it, the place were he reached the shore was only a few miles from Sagres, the location of Prince Henry's research center of navigation and cartography
- Having grown up in Genoa, on the Italian coast, Columbus had long possessed a fascination with sailing
- but his time in Portugal, particularly Lisbon, would prove to be the most formative for what he would unwittingly accomplish
- The idea that sailing west would lead one to Asia was not new
 - what was novel about Columbus was his conviction that the distance between Europe and Asia to the west was not significant *distance*
 - Basing his argument on Marco Polo's description of the distance across Eurasia and Ptolemy's longitudinal calculations, Columbus vastly underestimated the distance of the western route to Asia
 - Nevertheless he set out enthusiastically to convince the monarchs of Europe he was right in order to obtain funding for his journey
 - After a series of rejections, Ferdinand and Isabella of newly united Spain decided to pay for Columbus' voyage ★
 - In October 1492 he sighted land in what he believed to
- D. When it was realized that Columbus had not succeeded in finding a route to Asia, the quest did not end. North Atlantic crossings increased as European explorers sought to exploit the wealth of the *New World* and continue to find a way across it. The waters off the eastern coast of North America were teeming with fish and some men made fortunes shipping salt-cured cod to Europe and the Caribbean.^[15] Explorers such as **Champlain** from France earned huge profits by sending beaver pelts back to Europe. But like many others, Champlain's motivation was not merely conquest or profit for their own sake. The furs were used to fund his ongoing obsession--the discovery of a western route to China.^[16]
- E. Despite the drastic expansion of global networks of communication and exchange during this time period, the networks of the Polynesians and Ocean remained unchanged, making this network an important continuity with the previous era.