**THE Y1K BUG**

- From the collapse of the Roman empire through A.D. 1000.

(Nagsh-e-rostam, Iran; http://en.wikipedia.org/wiki/Image:Bas_relief_nagsh-e-rostam_al.jpg, CC-SA)
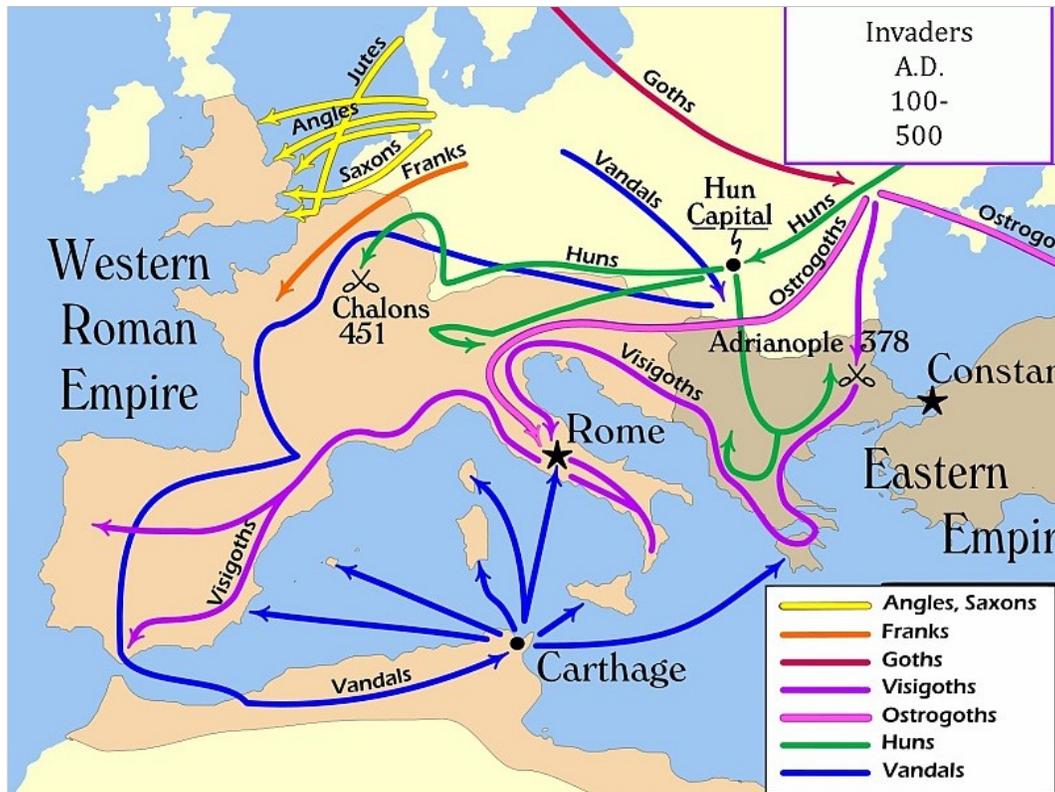
- The Jewish Revolt was the most notable of several internal revolutions; but the Roman empire was also attacked from outside.
- A German invasion in 138 eroded the boundaries set by Trajan.
- From 251 on, the Goths repeatedly invaded.
- The empire had simply grown too large for the technology of the day to defend it (e.g., messages of invasion relayed by runners or riders could not be transmitted fast enough to get timely assistance).

- In the 220's, the Persians (Parthia) revolted and started a new empire.
- In 260, the Persians defeated the emperor Valerian at Edessa.
- Although the Persians withdrew, they returned in the following centuries, and other nations were dragged into what became a world war.

(Hans Holbein the Younger, The Humiliation of Emperor Valerian by Shapur I, 1521, PD)

Byzantine Empire

- One of the first attempts to hold together what remained was the Byzantine Empire, headquartered in Constantinople.
- The striped area was taken by the resurgent Persians between 400 and 600.

(San Vitale, Ravenna, 6 cent., PD)
(http://en.wikipedia.org/wiki/Image:ByzantineEmpire717%2Bextrainfo%2Bthemes.PNG, GFDL)

ROMAN EMPIRE & BARBARIAN EUROPE, AD 500

- This war was the result of a power vacuum throughout Europe and the Fertile Crescent.
- Europe was broken into a series of small kingdoms (most of the "kingdoms" on this map had smaller divisions). Boundaries changed constantly with invasions as numerous rulers sought to take advantage of the power vacuum.

(Justinian, http://en.wikipedia.org/wiki/File:Eastrome480AD.JPG, GNU)
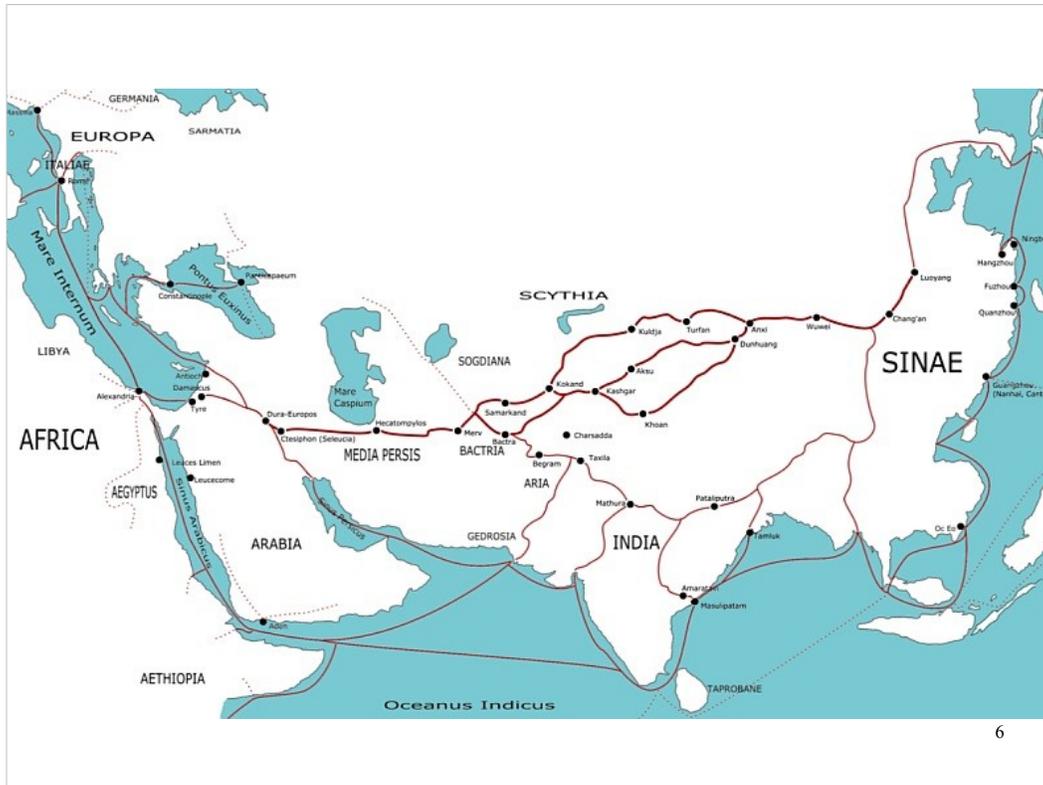
- With the breakup of the empire , resulting wars, and Persian renewal, the "short" overland trading route to China was disrupted.

(http://upload.wikimedia.org/wikipedia/commons/e/ed/Transasia_trade_routes_1stC_CE_gr2.png, GFDL)

- As a result, by the early sixth century, the Arabian city of Mecca became a center point of trade.
- Most of the traders were Bedouin camel nomads, very mobile, and grouped in tribes organized by family. The increase of trade resulted in development of a new group of merchants who were an elite. This social change, and the economic boom worked to weaken the traditional tribal role. Another result was an influx of a variety of religious beliefs, often polytheistic.

**Muhammad ibn 'Abd Allah 570 - 632 C.E.**

vision on Mount Hirâ, 610
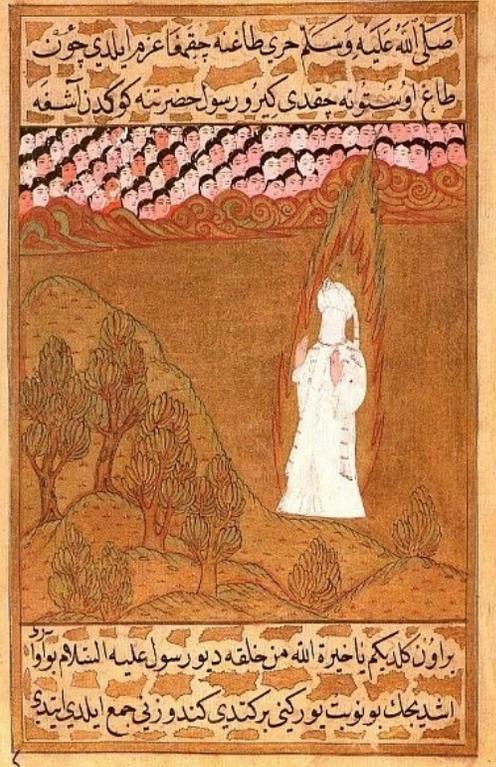
- Muhammad was born here about 570.
- In 610, on a retreat at Mount Hirâ, Muhammad had a vision of *Jibril* (Gabriel) summoning him to worship the one creator God, Allâh.
- This marks the historical origins of Islam, which are detailed further in the World Religions section.

(Muhammad on Mount Hirâ, Siyer-iNebi, Istanbul, 1595)

Caliphs and Abbasid dynasty
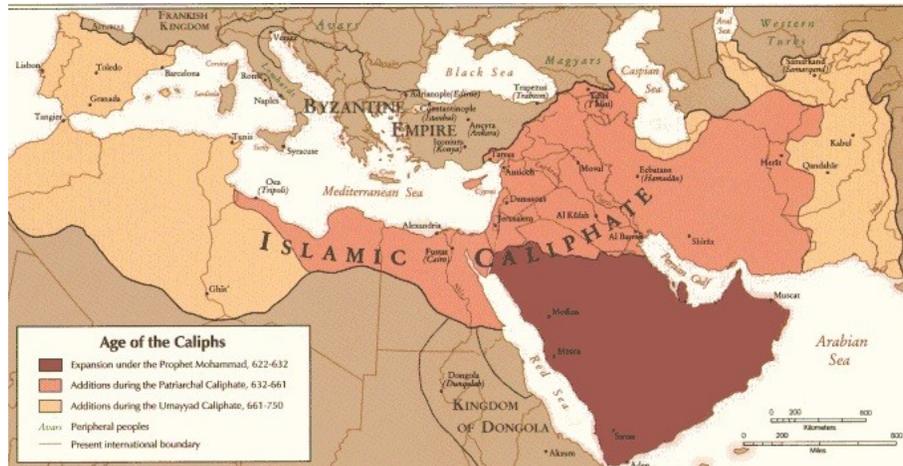
- The territory of the Caliphate in the year 750.
- In a world where Rome's fall had left a vacuum, Islâm expanded rapidly: the middle east, Spain and Portugal, and parts of what are now France.
- The Abbasid dynasty began in 750 C.E., marking a "Golden Age" headquartered in Baghdad.
- This was the foundation of the later Ottoman empire, which reached northern Europe and lasted until WW1.

(US State Dept.)

Holy Roman Empire

A.D. 800

- The increasing power of the caliphs led to an effort to revive the ancient Roman empire.
- Thus on Christmas Day, 800, Charlemagne (Charles the Great) became the Holy Roman Emperor.

(Charlemagne, Jean Fouquet, 1455, PD)
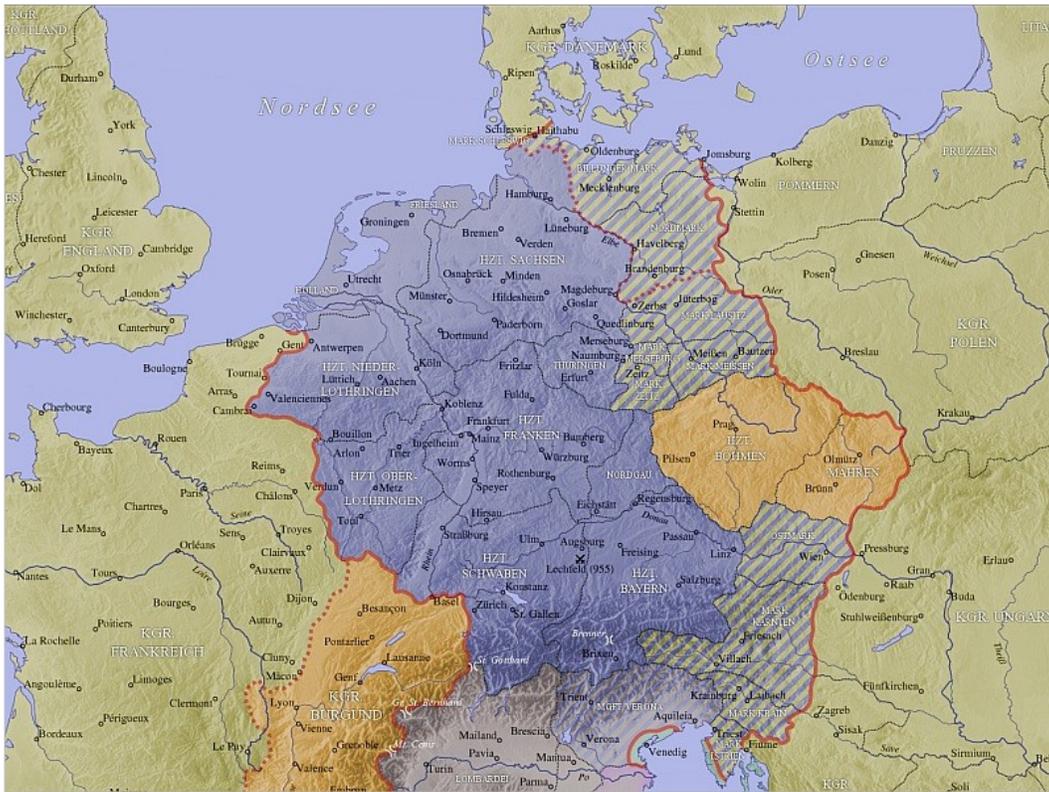
- Sometimes scoffed at as "neither holy, nor Roman, nor an empire," the HRE was an association of various states in central Europe.
- When the Renaissance and Reformation came about in the 1500's, this was still the political structure of Europe.

(Rex Germanus, 2006, GFDL)
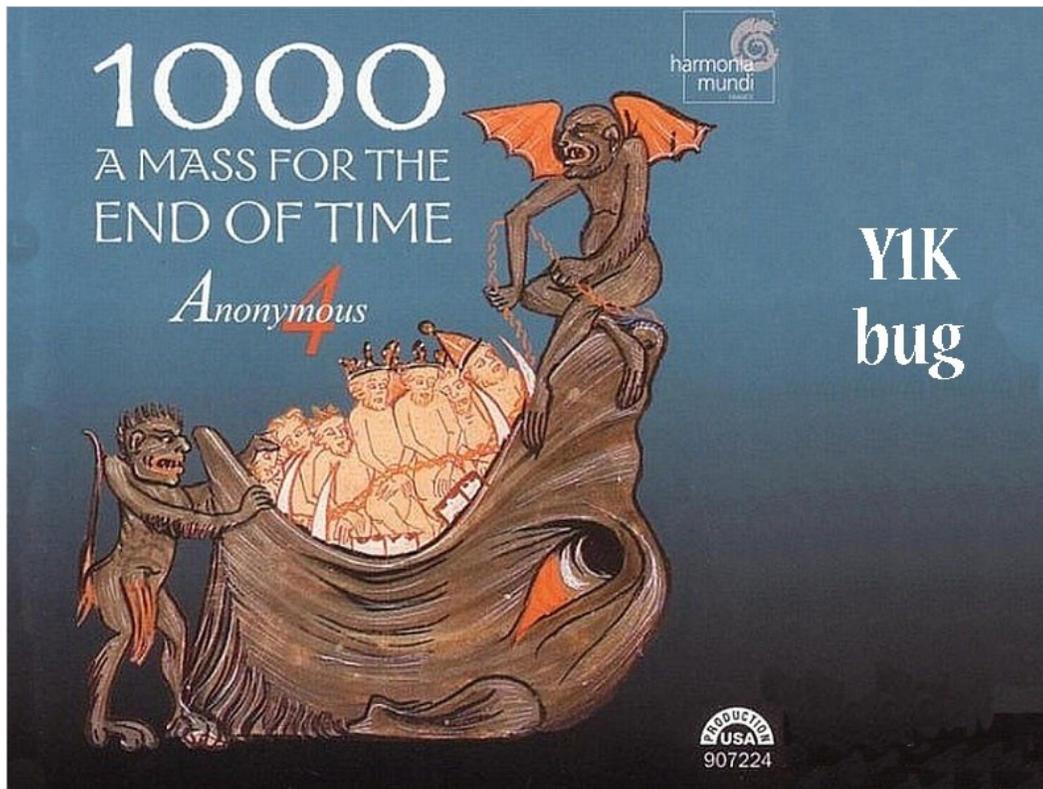
- As the year 1000 approached, many people expected the end of the world: thus this illustration of a demon-monster swallowing the inhabitants of earth.

(A Mass for the End of Time, Harmonia Mundi 907224, illustration from National Library of Russia)

- Events such as Y1K lead many people to conclude that the medieval era was a "Dark Age"-- a time of widespread superstition and general lack of intellectual achievement.
- Clearly, we cannot look at the Middle Ages without mentioning the great churches, which took decades, if not centuries, to construct, and stand a sign of the prominence of religion in life.
- To this writer, nothing is further from the truth. First, today's culture is full of people predicting disaster. And this overlooks the accomplishments of the medieval era.
- Whatever your own opinion of religious belief, the churches stand as great achievements in materials science and architecture.
- There are other artistic peaks which we will explore.

(Didier B, Sainte Chapelle, Paris, CC-SA)

David Macaulay

**Cathedral:
The Story of Its
Construction**
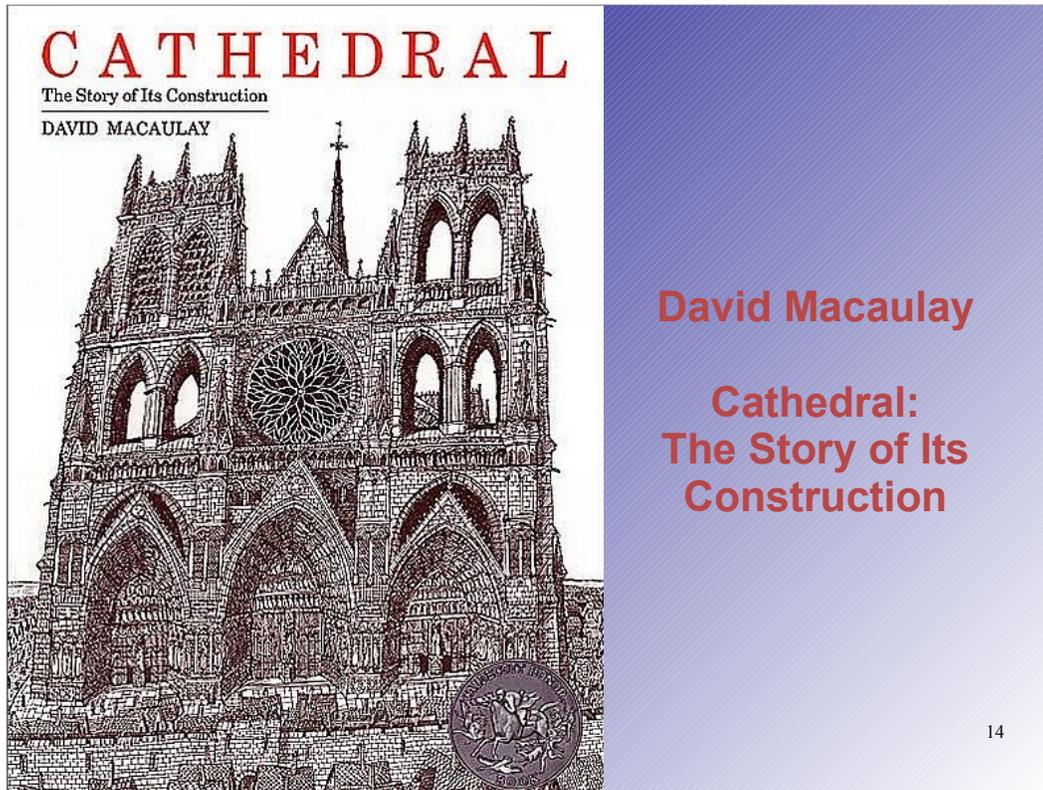
• Few people could read, so churches became gigantic storyboards.
• These massive buildings, which took decades, if not centuries, to construct, stand as a visible reminder of the Middle Ages and the prominence of religion in everyday life.

Feudal System

- Pope
- Church officials

- From an illustrated book dated to 1410, we have a glimpse of medieval life.
- Political, social, and religious life were tied together in the feudal system, which held a strict hierarchy where each level had obligations to the one above.
- At the top of the chain was the Pope, with the church officials who reported to him. The Roman Catholic Church constituted a separate system, the only one that was universal.
- Notice the fashion touches such as differing socks.

(January, Tres Riches Heures)

Feudal System

- Pope
- King
- Baron
- Lord
- Tradesman
- Peasant (Serf)

- On the civil side, there is an hierarchy of personal loyalty.
- At the bottom are peasants or serfs, 90% of the population.
- The basic features of this system were repeated throughout the world, sometimes with different names.
- This is also the social system of the Renaissance and Reformation worlds. It began to fall apart only as a result of the American Revolution.
- While in contrast to many of our modern ideas about social organization (although it's worth asking about our practice), the increasing formalization of the division of labor meant that no longer did everyone have to be engaged in providing food. This opened the path for full-time artists, as well as technological innovation that resulted in our industrial age of consumer products.

(October from Les Tres Riches Heures)

- This division also allowed for an increase in trade. Agriculture generally produces more food than the group can use, so they want to exchange it for something else— different food, perhaps, or goods.
- With the division of labor that is possible, some people start to engage in trade full-time, which allows exploration as well.

(Alfredo Garneiro, da Gama in India, National Library of Portugal, http://purl.pt/6855, PD)

- The 13th century, in particular, was a time of invention, starting with buttons, first made in Italy.
- They were first made of coral, and later brass, copper, or glass.
- This allowed women to wear clothing that showed off their figure.
- Sleeves were detachable, so one could change them as they became dirty, or for fashion.
- Clothing was often layered to show the varieties of cloth one could afford.

(Jorge Barrios, 2007, PD)
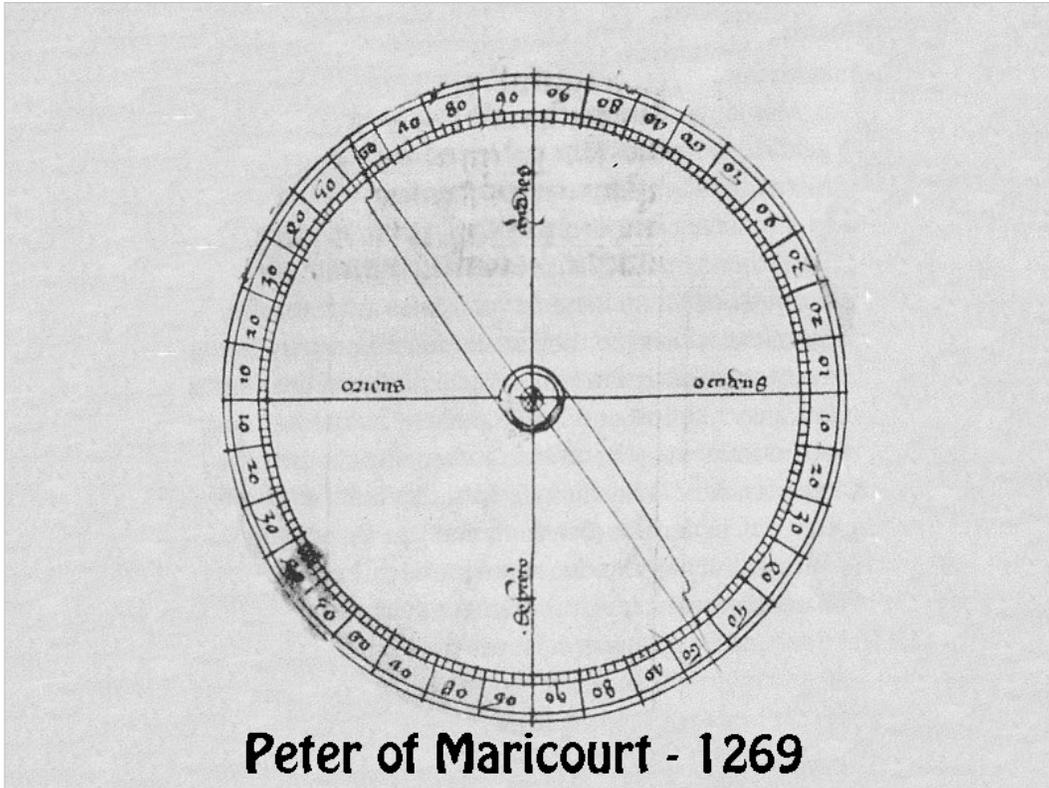
Peter of Maricourt - 1269

- The invention of the compass greatly advanced both land and sea navigation, providing a reliable means of finding direction.
- The idea was known in China in the 4th century B.C.E. The first ones appeared in Europe in the late 1100's, and Peter of Maricourt made what appears to be the first practical one.

(Peter de Maricourt, *Epistola de magnete*, PD)

timekeeping

- The earliest timepieces were sundials and water clocks, known to the Greeks and Romans.
- The church, seeking to know the times appointed for prayer, sought better ways of keeping time. The first improvement was the hourglass.
- Mechanical clocks were known in China around 1000-1100. They reached the Fertile Crescent in 1206 (we haven't even touched the advances of Islamic science), and were found throughout Europe around 1300..

(Abrogio Lorenzetti, Temperance, 1338-1340, Yorck Project)

(al-Jazari, *The Book of Knowledge of Ingenious Mechanical Devices*, 1206,
   http://www.muslimheritage.com/topics/default.cfm?ArticleID=466)

(Richard of Wallingford, Abbot of St Albans, in Thomas Walsingham, Golden Book of St Albans,
   1380)

Nicholas Flamel
and the
Alchemists

- Alchemy is often viewed as a crackpot effort at science, but it had serious purposes.
- The physical action of alchemy is turning lead into gold.
- When completed, the process forms the Philosopher's Stone, which will create an elixir of immortality.
- This is—as is much medieval literature—symbolic of the purification of the soul leading to eternal life.
- Nicholas Flamel (c.1330-1417) and his wife Perenelle, of Paris, were regarded as the best of the alchemists, and the only ones who claimed to have created the Stone.
- His house is now a restaurant: is that a bit of poetic justice?

(Marie-Josephine Vermande, Flamel House, Paris, 2006, by permission)
(Anon, 19 cent., PD)

Dante,   *The Divine Comedy*
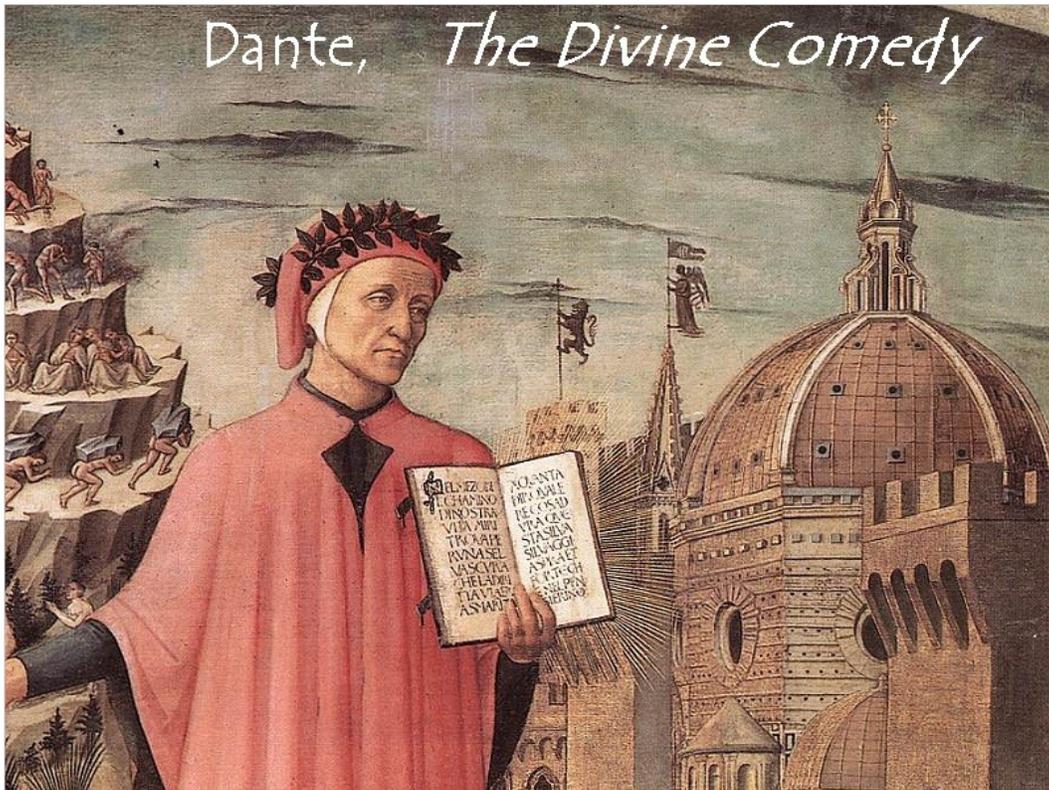
- In Italy, Dante Alighieri (1265-1321) became the first to use his native language as a literary tool.
- The *Divine Comedy*, written between 1308 and 1321, is an epic poem.

(detail from Domenico di Michelino, Florence, http://en.wikipedia.org/wiki/File:DanteDetail.jpg, PD)

THE UNIVERSITY OF TEXAS AT AUSTIN

Welcome to Danteworlds

Inferno
skip flash intro.

Purgatory

Paradiso

• One of the best sources to explore Dante is this site at the University of Texas at Austin: http://danteworlds.laits.utexas.edu/

Dante Alighieri (1265-1321) - The Inferno
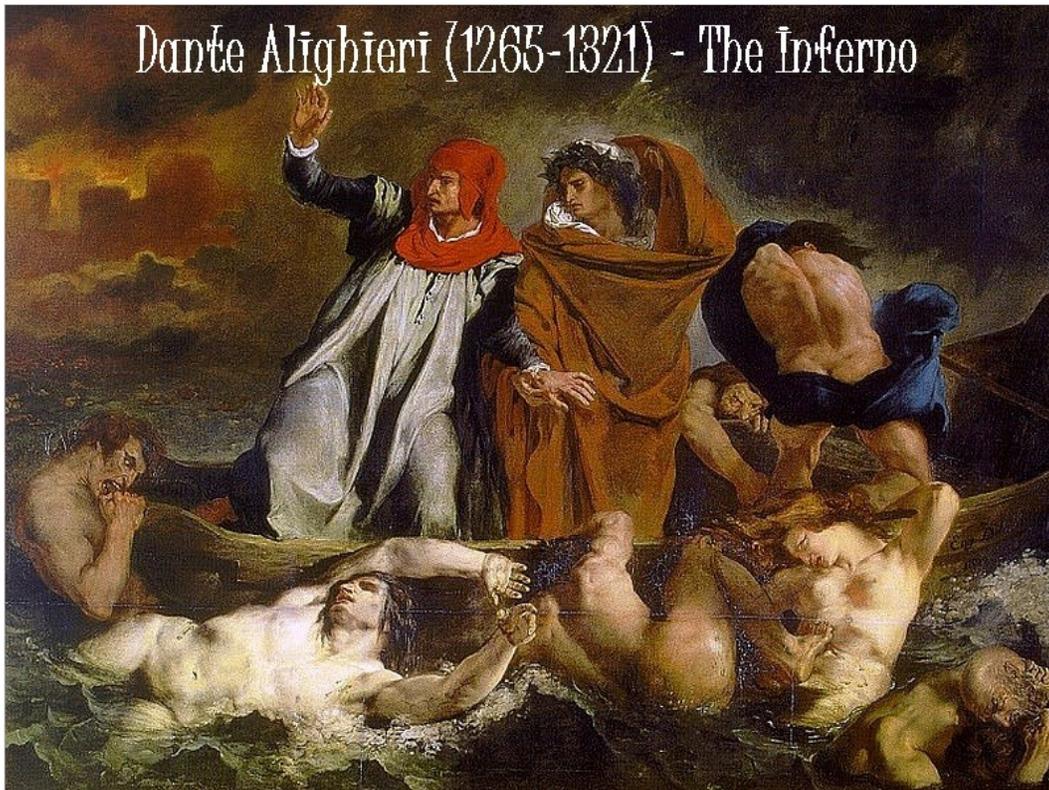
- The first book is a journey through Hell (guided by the Classical poet Virgil), where he saw many politicians of the day. This earned Dante an exile under threat of death.

(Eugène Delacroix, Dante and Vergil in Hell, 1822, Musée du Louvre, from Yorck Project, PD).

Purgatorio

- Next is Purgatory, a mountain island in the Southern Hemisphere of a spherical earth.
- Those who are repentant work out the effects of their wrongdoing.

(Sandro Botticelli, http://danteworlds.laits.utexas.edu/purgatory/gallery/0914fire.jpg)

- Then his beloved Beatrice leads him to Paradise and a vision of God.
- Not only has Dante inspired artistic portrayals, his story of salvation achieved through the love of a woman has remained a strong influence.

•(Gustave Doré, illustration for Paradiso 34, http://www.artpassions.net/cgi-bin/dore_image.pl?../galleries/dore/paradiso34x.jpg)

The Silk Road

- One of the famous trade routes was the Silk Road, which brought spices and silk from the Orient.
- The west end of the 5000 mile Silk Road route was in Italy, which not only became wealthy, but was a center of world culture.

(Wikiality123, GNU)

Niccolo and Marco Polo

© 2002 Justin Odum. Using ESRI DATA [CD-ROM]. Redlands, CA: ESRI, 2002
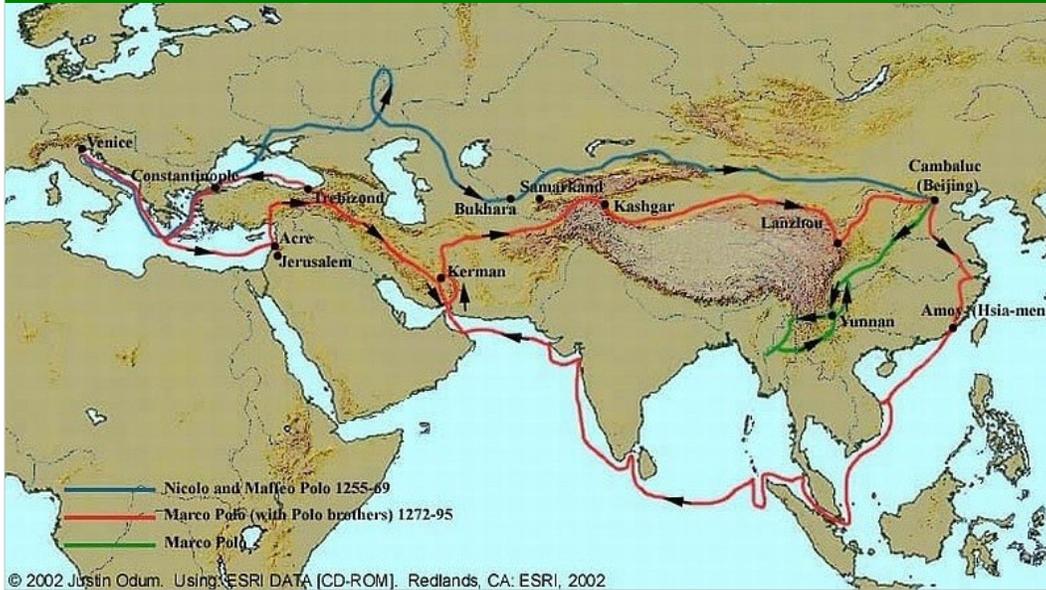
- Niccolo Polo used the route to travel to China, reaching Khanbaliq (Beijing) in 1266.
- He returned in 1274 with his son Marco.

(Justin Odin for Silk Road Seattle, http://depts.washington.edu/silkroad/maps/marcopolo.html, reproduced with permission)

- They stayed until 1291, and were back in Europe in 1295, attracting crowds and composing an extremely popular book.

(The Polos in Bukhara, *Le Livre des Merveilles*, 15 cent.)
(Marco Polo, *Il milione*)

Bubonic Plague (Black Death)
1347
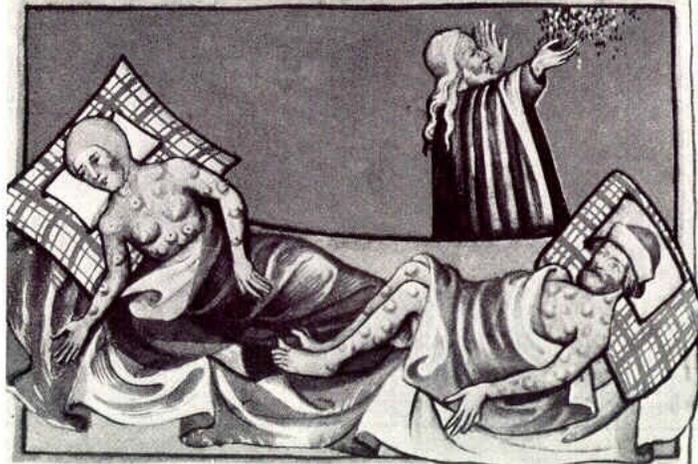
- There was a downside to this trade, however. Bubonic plague, spread by rats (which carry an infected flea; when the rat dies, the flea seeks a new host), appeared along the Volga (Russia) in 1346, and reached Italy in 1347.
- From there it spread throughout Europe.
- It apparently subsided in 1351, but returned in 1357 for another 8 years, and returned about every 10 years thereafter.

(Black Death, Toggenburg Bible, 1411)
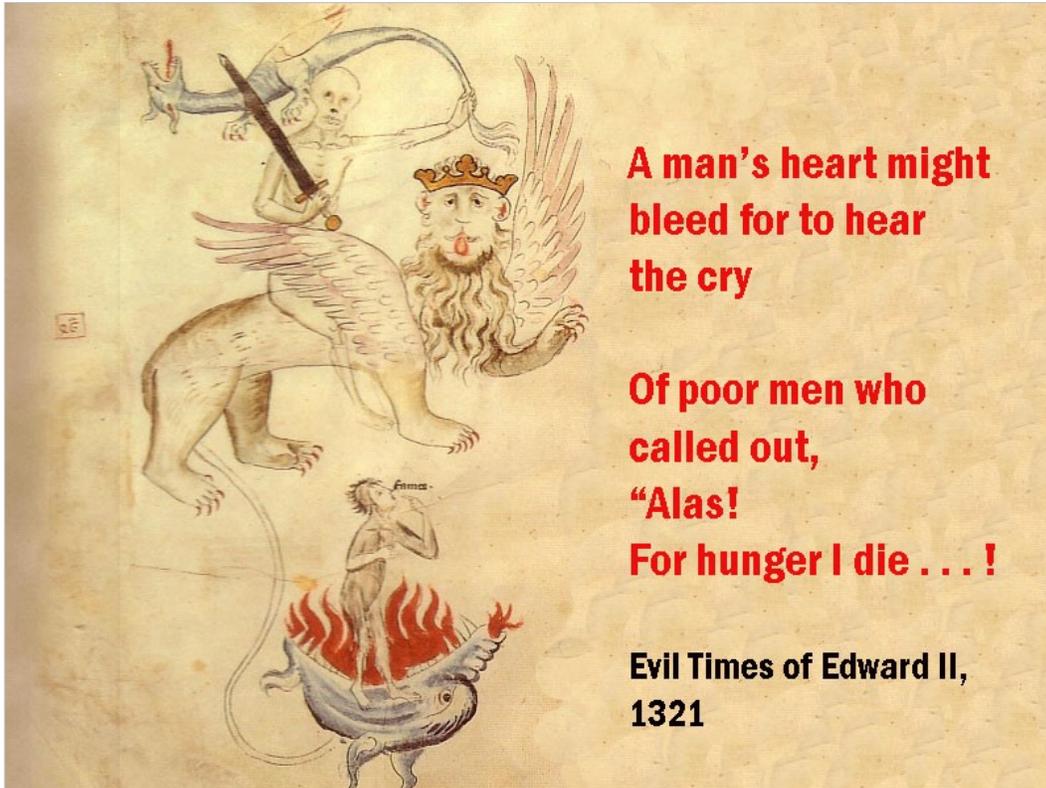
A man's heart might bleed for to hear the cry

Of poor men who called out, "Alas!
For hunger I die . . . !

Evil Times of Edward II, 1321

- Plague was only one of a series of disasters shook the late medieval world.
- 1303, 1306-7 Baltic sea froze, unseasonable cold throughout the world.
- 1315 rains, floods.
- The result was widespread famine.
- This illustration from the book of Revelation in an illuminated Bible shows Death on a lion, with its tail ending in hell's flame, while the hungry seek food ("fames", hunger).

(illuminated Apocalypse, Erfurt, 1315-1317, http://en.wikipedia.org/wiki/Image:Great_famine.jpg, PD)

Great Schism (1378-1417)

- From 1309 to 1377, the pope was French and lived in Avignon.
- In 1378, an attempt to settle dispute led to war, both physical and verbal, leaving the average person with no confidence in the church.
- The Council of Constantinople, 1417, deposed the Avignon pope (who refused to abdicate, but died in 1423) and elected a new one.
- What's the result? The combination of religious unrest from the problems of the papacy, coupled with the inability of church and science to cope with natural disaster and disease led people to question both.
- One result was that they looked to the ancients for knowledge. That puts us on the throes of the Renaissance and Reformation.

(reproduced with permission of Jean-Marc Rosier, 2008, http://www.cjrosier.com/)

The End

(http://etc.usf.edu/clipart/18800/18849/bow_18849.htm)