

# A History of Knowledge

## **Oldest Knowledge**

**What the Sumerians knew**

**What the Babylonians knew**

**What the Hittites knew**

**What the Persians knew**

**What the Egyptians knew**

**What the Indians knew**

**What the Chinese knew**

**What the Greeks knew**

**What the Phoenicians knew**

**What the Romans knew**

**What the Barbarians knew**

**What the Jews knew**

**What the Christians knew**

**Tang & Sung China**

**What the Japanese knew**

**What the Muslims knew**

**The Middle Ages**

**Ming & Manchu China**

**The Renaissance**

**The Industrial Age**

**The Victorian Age**

**The Modern World**

# What the Renaissance knew

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*"I know that I exist.*

*But what is this I that I know?"*

(Descartes)

*“The Army causes Taxes;*

*Taxes cause Discontents;*

*and Discontents make an Army necessary”*

(Lord Bath, 1749)

*To do is to be - Descartes*

*To be is to do - Voltaire*

*Do be do be do - Frank Sinatra*

(Men’w Restrooms, Greasewood Flats, Scottsdale)

*I play the notes, in order, as they are written.*

*It is God who makes the music.*

(Johan Sebastian Bach)

# What the Renaissance knew

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# The world in 1500



(Oxford Atlas of the Medieval World)

# What the Renaissance knew

1501: the Safavid dynasty in Persia

1517: the Protestant Reformation begins (Luther 's "95 Theses")

1517: the Ottoman Turks capture Jerusalem, Syria and Egypt

1521: Spanish conquistador Cortes conquers the Aztec empire

1522: Ferdinand Magellan's expedition circumnavigates the globe

1526: Babur captures Delhi and founds the Mogul empire in India

1536: Spanish conquistador Pizzaro conquers the Inca empire

1555: the Ottomans conquer Mesopotamia from Persia

1557: Portugal establishes a trading post in Macao (first European settlement in the Far East)

# What the Renaissance knew

1571: The Pope, Spain, Venezia and Genova destroy the Ottoman navy, thus halting Ottoman expansion in the Mediterranean

1572: The Polish-Lithuanian Commonwealth is born

1582: The catholic countries adopt the Gregorian calendar

1588: the Spanish Armada is defeated by the English



# What the Renaissance knew

## Foreign invasions and the Rinascimento

1494: France invades Italy and imports the spirit of the Rinascimento

1515: Francois I sponsors the French Renaissance

1527: Germany (Holy Roman Empire) invades Italy and causes the decline of the Rinascimento

# Europe 1600



<http://www.euratlas.com/big/big1600.htm>

# What the Renaissance knew

1619: the Dutch begin the slave trade between Africa and America

1620: English pilgrims board the "Mayflower"

1637: the Teatro Tron opens in Venezia, the first opera house

1644: the Manchus invade China (Qing dynasty)

1618-1648 Thirty Years' war: France, England, Sweden win against Austria and Spain

1648: at the end of the war the population of Europe has declined from 30 to 20 million

1664: England acquires New Amsterdam from the Dutch

1682-1774: 100 Year War between Austria and the Ottoman empire

1688: the Moguls complete the conquest of India

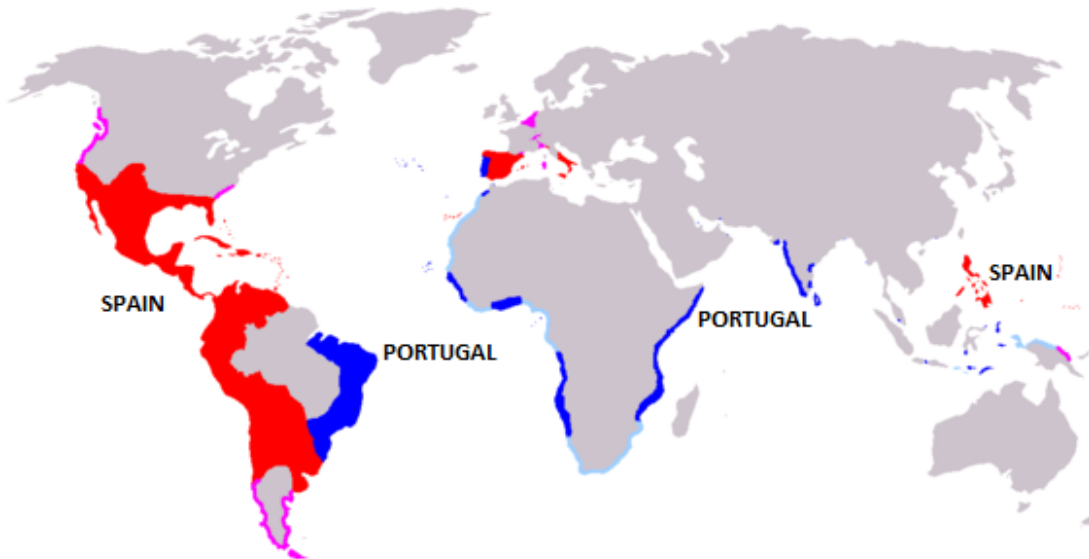
1689: the British Parliament issues the "Bill of Rights"

# 17th century



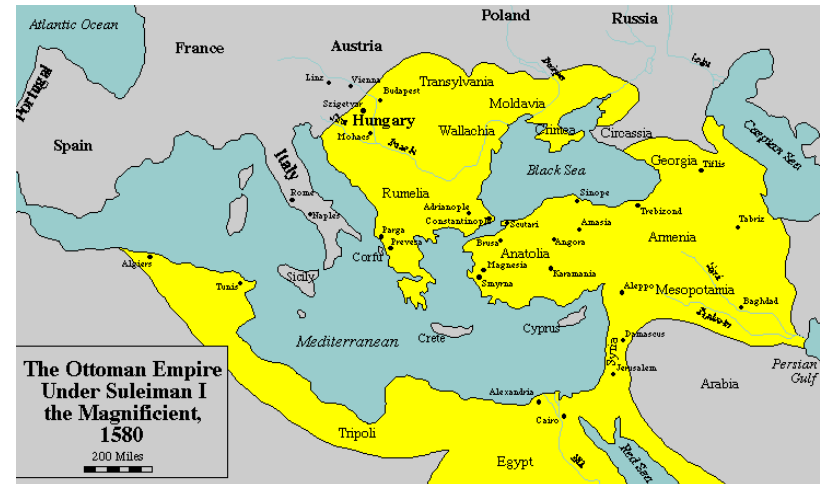
# What the Renaissance knew

- Western Europe
  - 1494-1618 Spanish supremacy
    - 1618-1648 Thirty Years' war: France, England, Sweden win against Austria and Spain
  - 1648-1815 French supremacy
    - 1795-1815: Napoleonic wars: England, Russia, Austria, Prussia, Sweden defeat France and Spain



# What the Renaissance knew

- Eastern Europe
  - 1354-1683: Ottoman expansion
    - 1683: Poland-Lithuania and Austria defeat the Ottomans
  - 1413-1721: Poland-Lithuania expansion
  - 1523-1721: Swedish expansion
    - 1700-1721: Great Northern War: Poland and Russia win against Sweden
  - 1721-1991: Russian expansion



The Growth of Russia: 1300 - 1796



# What the Renaissance knew

- Eastern Europe
  - Poland-Lithuania



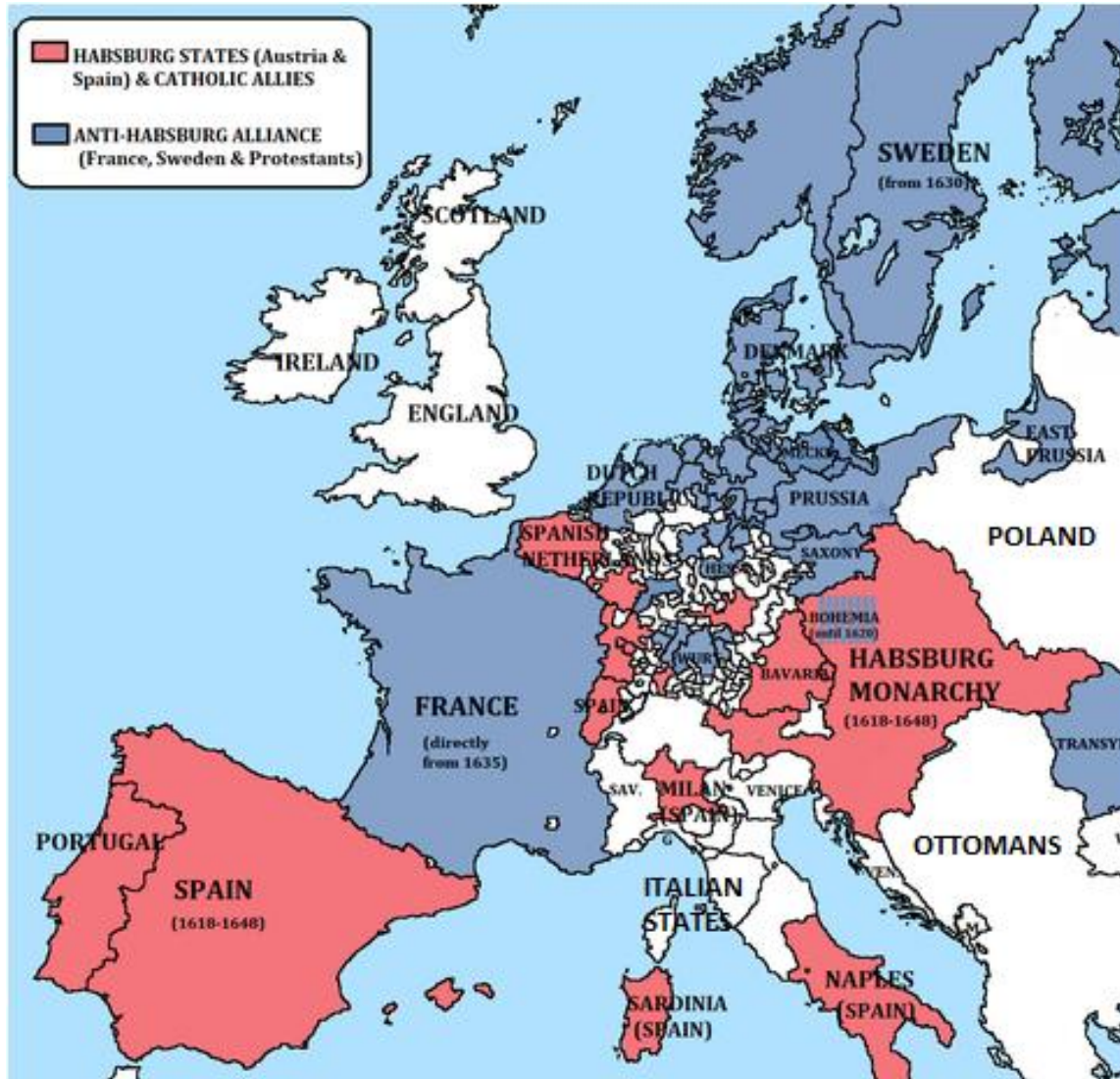
# The Multi-national European Wars

- 1099-1291: Crusades
- 1214: The Pope and France defeat the Holy Roman Empire and England
- 1331-1453 Ottoman expansion: Ottomans win against Constantinople
- 1337-1453: Hundred Years' war between France and England
- 1492 Reconquista: Spain defeats the Arabs
- 1494-1526: Italian wars (France, German empire, Aragon)
- 1521-1526: the Ottomans win against Hungary and Austria
- 1571: Battle of Lepanto: the Pope, Spain, Venezia defeat the Ottomans
- 1587-1588: England wins against Spain (war over the colonies)
- 1618-1648 Thirty Years' war (mostly fought in Germany): France, England, Sweden win against Austria and Spain



# The Multi-national European Wars

- 1618-1648 Thirty Years' war – Prodromes



# The Multi-national European Wars

- 1618-1648 Thirty Years' war – Prodromes
  - A war mostly about religion but also about dynastic and economic issues
  - 1531: Schmalkaldic League of the Protestant princes of the Holy Roman Empire spreads Lutheranism in Germany and confiscates Catholic property while the emperor Karl V is busy fighting France and the Ottomans
  - 1555: Karl V grants Lutheranism and Catholicism equal rights in Germany and grants Protestant princes the right to enforce Lutheranism in their states (“Peace of Augsburg”)

# The Multi-national European Wars

- 1618-1648 Thirty Years' war – Prodrumes - Holland
  - Spain: Inquisition persecutes Jews and Muslims, Conquistadores rape the New World, bankrupt finances
  - 1579: Seven Protestant northern provinces of the "Low Countries" (led by Holland) break away from Spanish rule and proclaim a Calvinist union ("Union of Utrecht"), while the southern provinces accept the Catholic rule of Felipe II ("Union of Arras")
  - 1581: The Protestant Low Countries unite in the Republic of United Provinces (mostly Holland) while the Arras provinces remain loyal to Spain (and will eventually become Belgium)
  - A federation with no head of state, each state with its own parliament, sending delegates to the states-general run (1586)
  - 1618: Maurice of Nassau wins a civil war in the United Provinces, pitting Protestants against other Protestants
  - Golden age of Dutch culture. Thinkers flee to Holland, the most liberal and tolerant country of Europe

# The Multi-national European Wars

- 1618-1648 Thirty Years' war – Prodrumes - Germany
  - 1608: The Protestant states of Germany form the Evangelical Union, led by Fredrick V of the Palatinate and protected by Henri IV of France (a Catholic but enemy of the Habsburg Empire)
  - 1609: German states form the Catholic League, led by Maximilian of Bavaria and protected by Felipe III of Spain, cousin of the emperor Rudolf II
  - 1610: French king Henri IV is assassinated by a Catholic fanatic and succeeded by his wife Maria Medici, who switches side to the Catholic League
  - 1612: Matthias becomes German emperor after Rudolf II goes mad
  - 1617: Matthias points Ferdinand II, advised by the Jesuit theologian Wilhelm Lamormaini , as king of Bohemia

# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - May 1618: Bohemia revolts against the Empire ("Defenestration of Prague")
  - Protestant Europe sides with Bohemia, Catholic Europe sides with the Empire
  - 1619: Matthias dies and Ferdinand II succeeds him, but Bohemia instead recognizes Frederick V of the Palatinate, a Protestant advised by his wife Elizabeth Stuart (daughter of James I of England) and by general Christian of Anhalt
  - Ferdinand II Habsburg allies with Spain, Austria and Catholic league to invade Bohemia

# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - Nov 1620: The Christian army led by Johann Tilly defeats Christian of Anhalt's Protestant army, and Frederick V flees to Holland
  - Richelieu is opposed to Habsburg expansion
  - England finances wealthy Denmark to enter the conflict on the side of the Protestants
  - 1625: Christian IV of Denmark invades Germany to defend the Protestant princes
  - 1625: Treaty among England, United Provinces and Denmark

# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - 1626: The Catholic armies led by Tilly and Wallenstein's mercenary army defeat Denmark and the Protestant army led by Mansfeldt
  - 1628: Sweden enters the war on the side of Denmark and defeats Wallenstein
  - 1629: Ferdinand II's Edict of Restitution returns Catholic property confiscated by Protestants
  - Nonetheless, Catholic France (enemy of the Habsburgs) funds Protestant Sweden's invasion of Germany to defend the Protestant league

# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - 1630: Sweden invades Pomerania, and Magdeburg switches its alliance to the Protestants
  - 1630: Ferdinand II fires Wallenstein, suspected of planning a coup
  - 1631: France funds Sweden's war against Germany while secretly signing a defense treaty with Maximilian of Bavaria, head of the Catholic League
  - May 1631: Tilly's Christian troops take the main Protestant city of Germany, Magdenburg, kill and rape thousands
  - Brandenburg (Berlin) and Saxony (Leipzig) ally with Sweden



# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - Sep 1631: Sweden defeats Tilly's army at Leipzig, and Saxony conquers Bohemia and Moravia
  - Apr 1632: Sweden defeats (and kills) Tilly at Bamberg and conquers Bavaria
  - Ferdinand II recalls Wallenstein who reconquers Bohemia from Saxony
  - Nov 1632: Sweden defeats Wallenstein's army at Luetzen but Sweden's king Gustavus is killed
  - Apr 1633: Protestant princes of Germany form the League of Heilbronn, sponsored by France and Sweden
  - Sep 1633: Wallenstein defeats Sweden at Steinau

# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - Feb 1634: Ferdinand II fires Wallenstein again and Wallenstein is assassinated by his own soldiers
  - Aug 1634: The Empire defeats Sweden and the Heilbronn League at Noerdlingen
  - May 1635: Saxony and Brandenburg sign the Peace of Prague with the Empire that suspends the Edict and ends the civil war in Germany, turning the war into a war between the Empire and the alliance of France and Sweden
  - Mar 1635: France declares war on Spain, and the focus becomes a war between Spain and France
  - Oct 1636: Sweden defeats the Empire at Wittstock
  - Feb 1637: Ferdinand II dies and is succeeded by his son Ferdinand III as emperor

# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - Apr 1639: Sweden defeats the Empire at Chemnitz
  - Oct 1642: Sweden defeats the Empire at Breitenfeld near Leipzig
  - Dec 1642: Richelieu dies but his successor Mazarin continues his anti-Empire policy
  - May 1643: France defeats Spain at the Battle of Rocroy
  - Sep 1643: Sweden and the United Provinces attack Denmark
  - 1644: George Rakoczy revolts in Hungary and allies with Sweden
  - Nov 1644: Denmark surrenders to Sweden and the United Provinces
  - Mar 1645: Sweden defeats the Empire at the battle of Jankau
  - Aug 1645: Sweden and France defeat Bavaria at the second battle of Noerdlingen and Saxony surrenders to Sweden

# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - 1646: France invades Bavaria
  - Jan 1648: United Provinces and Spain sign the peace treaty of Muenster
  - Mar 1648: Sweden and France defeat the Bavarian and Imperial armies at Zusmarhausen
  - Oct 1648: The "Peace of Westphalia" ends the Thirty Years' War
  - War between Spain and France continues until 1659 when Spain surrenders more territories

# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - France, England, Sweden, Holland win against Austria and Spain (the Habsburg)
  - Netherlands and Switzerland are recognized as independent countries
  - France and Sweden acquire German territories
  - It started as a religious war, but it ended as a war between two Catholic dynasties: the Habsburgs and the Bourbons
  - France replaces Spain as the most powerful nation of Europe
  - The population of Europe has declined from 30 to 20 million

# The Multi-national European Wars

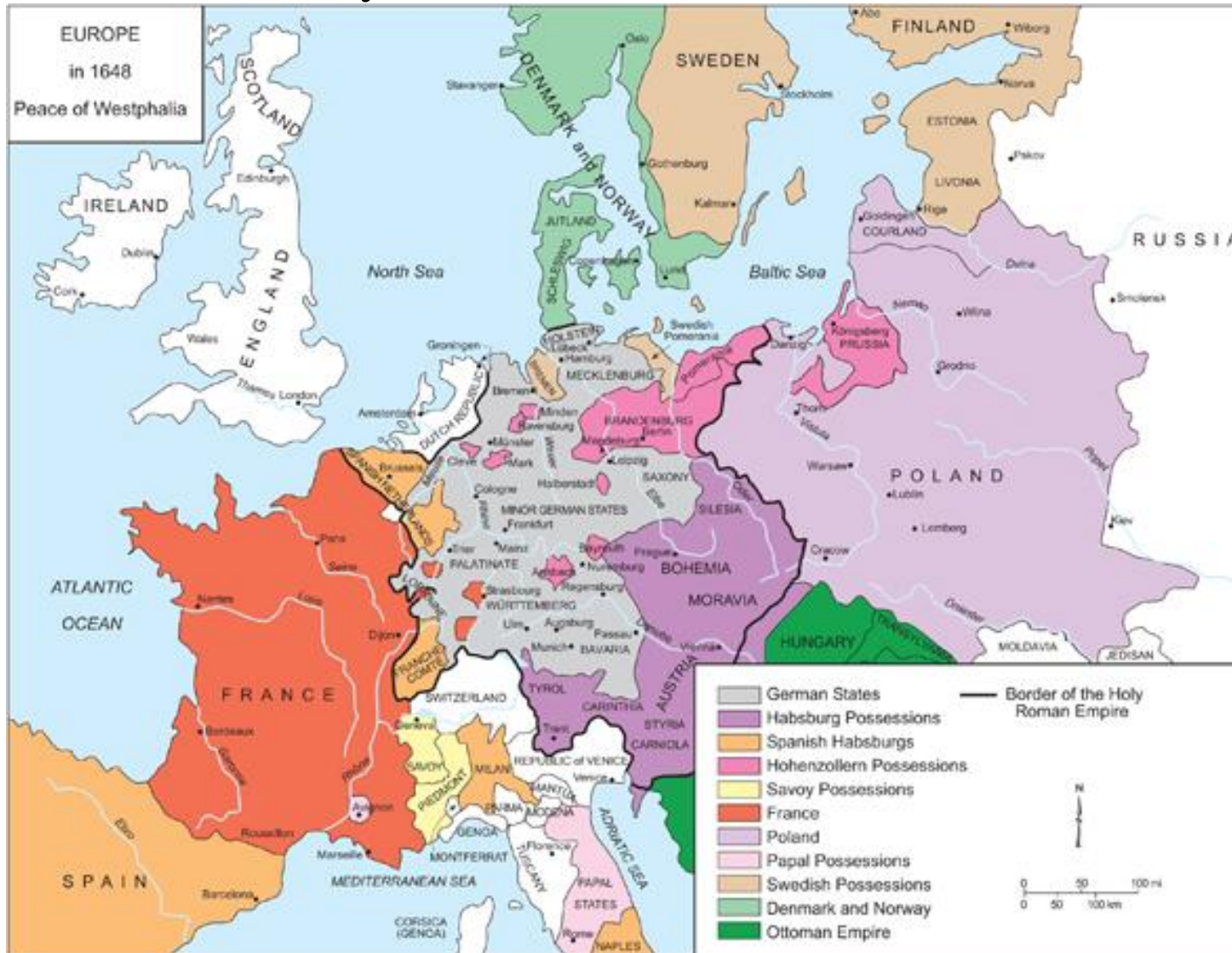
- 1618-1648 Thirty Years' war
  - The Germanic (Holy Roman) empire is reduced to a loose confederation of 300 independent entities (including Austria, Bavaria and Brandenburg/Berlin), which prevents Germany from becoming a national monarchy like France, Spain, England, Sweden, Netherlands
  - Germany is reduced to a wasteland
  - The title of Holy Roman emperor is reduced to a ceremonial title
  - End of the Pope's dream of restoring Catholicism as the Christian orthodoxy
  - Spain financially ruined after fighting on multiple fronts (Netherlands, Germany, Italy) and loses Portugal and the Netherlands

# The Multi-national European Wars

- 1618-1648 Thirty Years' war
  - A war of mercenaries (*capitani di ventura*)
    - Johann von Tilly (Catholic army of the Empire)
    - Ernst von Mansfeldt (Protestant army)
    - Albrecht von Wallenstein
  - The first war fought more by artillery than by men
  - The worst but also the last of the religious wars

# The Multi-national European Wars

- 1618-1648 Thirty Years' war





# The Multi-national European Wars

- 1652- 1667 Anglo-Dutch Wars
- 1655-1661 First Northern War: Sweden invades Poland-Lithuania
- 1655-1659 War of Jamaica: England and France defeat Spain
- 1682-1699: Austria, Poland-Lithuania and the Holy Roman Empire defeat the Ottomans
- 1700-1721 Great Northern War: Poland and Russia win against Sweden
- 1702-1713 War of the Spanish Succession: England, Netherlands and Austria win against Spain and France

# The Multi-national European Wars

- 1652- 1674 Three Anglo-Dutch Wars
  - England and the United Provinces are similar: Protestant, Republican, ruled by the business class, expanding overseas,
  - But they were becoming global competitors precisely because they were implementing the same model of liberal capitalism
  - 1651: Cromwell expels the king of England
  - 1652: England enacts the Navigation Act that basically forbids the Dutch from trading with English colonies, causing military skirmishes
  - Aug 1653: England destroys most of the Dutch navy at the battle of Scheveningen
  - 1660: Restoration of the monarchy in England
  - 1664: England captures New Amsterdam from Holland and renames it New York
  - 1665: Plague in England

# The Multi-national European Wars

- 1652- 1674 Three Anglo-Dutch Wars
  - The king's brother, James, runs the Royal African Company in competition with the Dutch
  - English public outraged by reminders of the Amboyna Massacre of 1623
  - The Dutch control the lucrative trade of sugar and spices into Europe via the Hanseatic cities, replacing the old medieval route via the Middle East
  - Mar 1665: The king's advisor Lord Arlington marries a Dutch woman, Elisabeth van Nassau-Beverweert
  - Mar 1665: England declares war on the United Provinces
  - Jun 1665: Plague panic
  - 1666: Fire of London
  - Jun 1666: The Dutch navy defeats the English navy at the Four Days Battle
  - 1667: The Dutch capture Suriname in South America
  - 1667: The Dutch navy destroys most of the English navy at Chatham
  - Jul 1667: The Treaty of Breda ends the second war
  - Apex of Dutch naval power

# The Multi-national European Wars

- 1652- 1674 Three Anglo-Dutch Wars
  - 1670: England signs the secret Treaty of Dover with France against the United Provinces
  - Apr 1672: England and France declare war on the United Provinces
  - Feb 1674: The Treaty of Westminster ends the wars with William of Orange marrying the daughter of the English king, i.e. becoming a candidate to the throne of England
  - A war fought on behalf of the English business class results in England becoming the dominant power of global commerce
  - The Anglo-Dutch wars greatly advance maritime engineering

# The Multi-national European Wars

- 1700-21: The Great Northern War.
  - Russia, Denmark and Poland defeat Sweden
- 1702-1713 War of the Spanish Succession: England, Netherlands and Austria win against Spain and France
  - The first “world war”
  - 1702: English king William III forms an alliance between England, the Netherlands and Austria against Spain and France ("War of the Spanish Succession") to defend the archduke Karl of Austria's claim of the Spanish throne against king Felipe V of Spain

# The Multi-national European Wars

- 1736-39: Russia and Austria defeat the Ottomans
- 1739-48 War of the Austrian Succession: Austria, Britain and Holland against France and Prussia (no winner)
- 1756-1763 Seven Years' war: Prussia and Britain win against France, Austria, Russia, Saxony, Sweden and Spain
- 1768-74: Russia defeats the Ottomans
- 1775-83: War of American Independence (USA and France win against Britain)

# The Multi-national European Wars

- The endless wars
  - 1530s-1648: Religious wars
  - 1682-1774: 100 Year War between Austria and the Ottoman empire
  - 1689-1783: Global wars between France and Britain
  - Large long wars caused by technological progress in mining and manufacturing
  - Thirty Years' war (1618-1648): one third of the population is wiped out by warfare, famine, etc

# The National Monarchies

- Formation of national monarchies by unification of feudal entities
  - England
  - France
  - Portugal
  - Spain
  - Denmark
  - Sweden
  - Hungary
  - Poland
  - Lithuania



# The National Monarchies

- Consequences of the nation state
  - The sponsors of exploration (and slave trade) are the nation states
  - Multinational wars

# The National Monarchies

- Western Europe's feudal society in 1500
  - Most people still live in the country villages, the successors of the medieval manors
  - The landowner's job used to be to protect the peasants
  - Under the order guaranteed by the national state, the landowner becomes a landlord
  - The peasant is no longer a serf, but a tenant
  - The peasant used to pay with performing jobs for the landowner
  - But now the landowner prefers to be paid money that can be used to hire laborers for those jobs: more efficient (hired laborers are more motivated to do the job than serfs) and more lucrative
  - Any surplus in rent can be invested in towns: many landowners become the first capitalists

# The National Monarchies

- Western Europe's feudal society in 1500
  - The landowner also provides equipment such as ovens and mills, and maintains roads and bridges, i.e. the infrastructure
  - The landowner owns the non-domestic animals: only the landowner can hunt them
  - Peasants raise their domestic animals in the "commons"
  - Sometimes the land is more profitable as pasture for sheep (eg in England) in which case the landowner does not want serfs at all
  - Serfdom still widespread in Germany and eastern Europe
  - Farming tools are the same of ancient times: sickles, ploughs, flails

# The National Monarchies

- Western Europe's feudal society in 1500
  - Both landowner and peasant meet at the church
  - The priest is the most learned person in the manor
  - Poor roads and bandits prevent exchanges between rural areas
  - The advantage of seaside and river cities: travel by boat

# The National Monarchies

- Commercial consequences of the crusades
  - European demand for Middle-eastern novelties increases
  - Nobility and middle class demands spices, precious stones, sugar, silk, porcelain, rugs
  - Italian traders buy these products paying with gold and silver
  - Commerce by road is difficult, dangerous and expensive (tolls and tariffs exacted by landowners, cities and states)
  - Commerce between the Italian cities and the Hanseatic League goes through the Netherlands, notably Bruges

# The National Monarchies

- Commercial consequences of the crusades
  - The goods arrive to Italy from the Far East via Muslim traders
  - Eventually, demand outstrips the supply of eastern goods
  - The Italians and Muslims own the trade routes
  - The new national states (Spain, Portugal, France, England) are left out
  - Another motivation to find ways to circumvent Italy and the Muslim world

# The National Monarchies

- Consequences of Colonization
  - Rise of capitalism to fund long-distance trade
  - A new social class: the capitalistic bourgeoisie
  - Decline of the Italian cities
  - Portugal and Spain replace Italy as the supplier of exotic goods
  - Dutch and German bankers replace Italian bankers (Karl V is Holy Roman Emperors and rule over Spain and Netherlands)
  - Richest banker of Europe in 1500: the Fluggers
  - Banking and trading center of Europe in 1550: Antwerp (the first stock exchange in 1531)
  - Decline of trade with Islam

# The National Monarchies

- Consequences of Colonization
  - Capital flow from the countryside to the towns: landowners invest in commercial towns the profit of renting land to peasants
  - European capitalists begin to invest directly in the colonies



# What the Renaissance knew

- Religious intolerance
  - 83 BC: Jews destroy Pella
  - 1st c AD: Romans persecute Christians
  - 4th c AD: Christian persecute heretics
  - Christians persecute pagans
  - 622: Mohammed codifies Jihad as duty of the faithful
  - 1095: Crusades
  - 1208: The Catholic Church persecutes Catharists/Albigensians
  - 1233: The Inquisition
  - 1492: Christians persecute Jews
  - 1562 Wars of Religion in France

# What the Renaissance knew

- Population:
  - China 100 million
  - Europe 100 million
  - India 70 million
  - Southeast Asia 40 million
  - Middle East 25 million
  - Africa 20 million
  - Japan 15 million
  - Americas 15 million

# What the Renaissance knew

- Christian doctrine of just war
  - Jus ad bellum (permissible reasons for going to war)
    - Just cause
    - A right authority
    - A right intention
    - Proportional amount of force
    - Last resort
    - Peace as its goal
    - A reasonable hope of success
  - Jus in bello (permissible actions during war)
    - The principle of proportionality of means
    - The principle of noncombatant immunity

# What the Renaissance knew

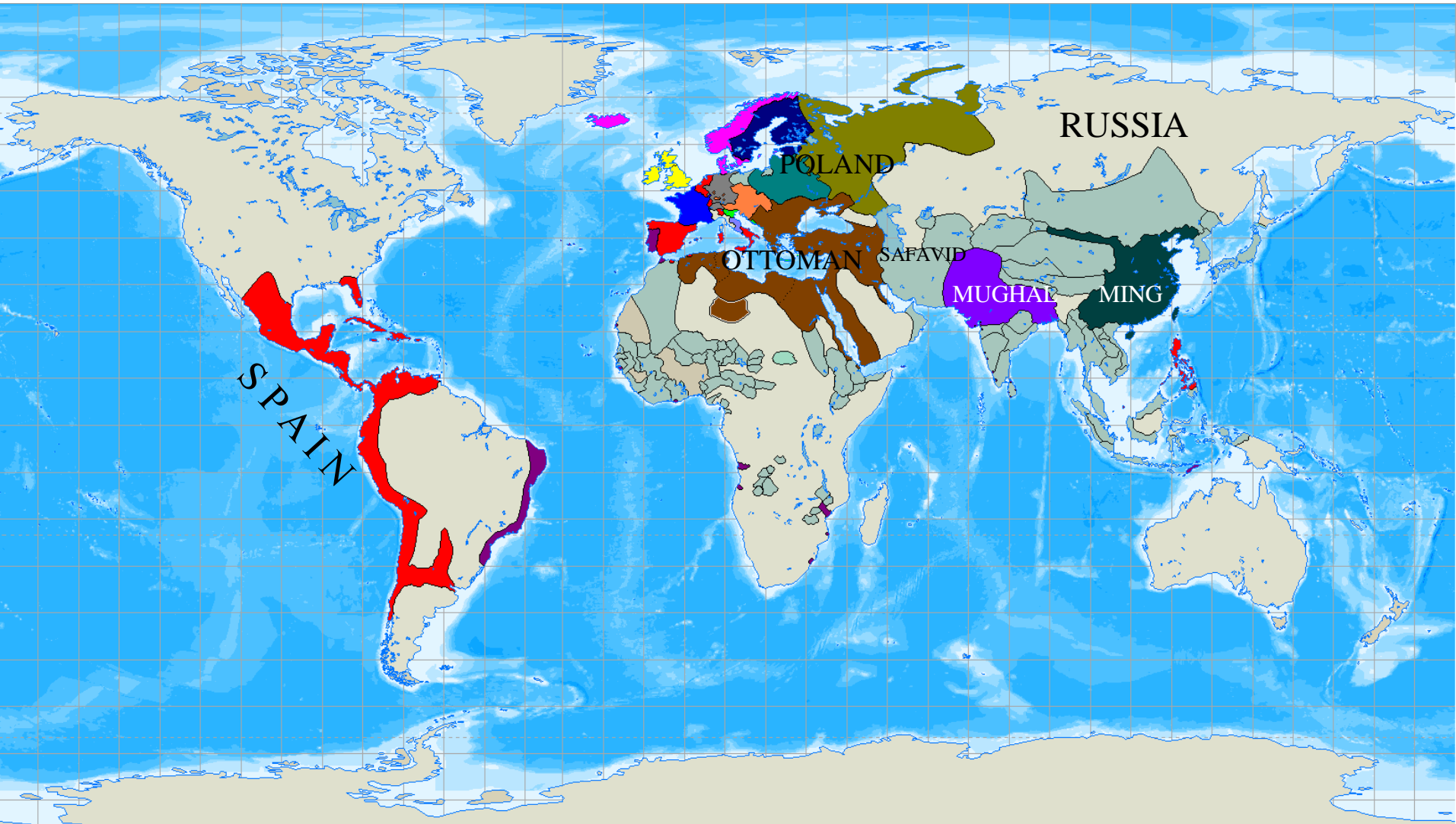
- Treaty of Westphalia (1648)
  - Recognition of multiple states (non-interference into the internal affairs of other states)
  - Recognition of multiple religions (each state free to choose its own religion)
  - But “religions” means: Catholicism, Lutheranism, and now Calvinism
  - The newly independent Dutch Republic becomes a safe haven for European Jews
  - The most influential politician on the treaty: Cardinal Mazarin of France
  - The least happy: Pope Innocenzo X (the treaty is "null, void, invalid, iniquitous, unjust, damnable, reprobate, inane, empty of meaning and effect for all time“)

# What the Renaissance knew

- Gunpowder
- Nation states
- Printing (1456)
- Exploration (1487)
- Reconquista (1492)
- Colonialism (1494)
- World Trade (1500)
- Reformation (1517)
- Copernicus (1530)
- Slavery (1650)

# What the Renaissance knew

- The world in 1600



# What the Renaissance knew

- The gunpowder empires
  - Expensive military, which required capital and proto-industrial infrastructure
  - Reasons for success:
    - Gunpowder
    - Strong, centralized bureaucracy
    - East-West trade based on land transportation (roads, markets)
    - Knowledge (more than medieval Europe)

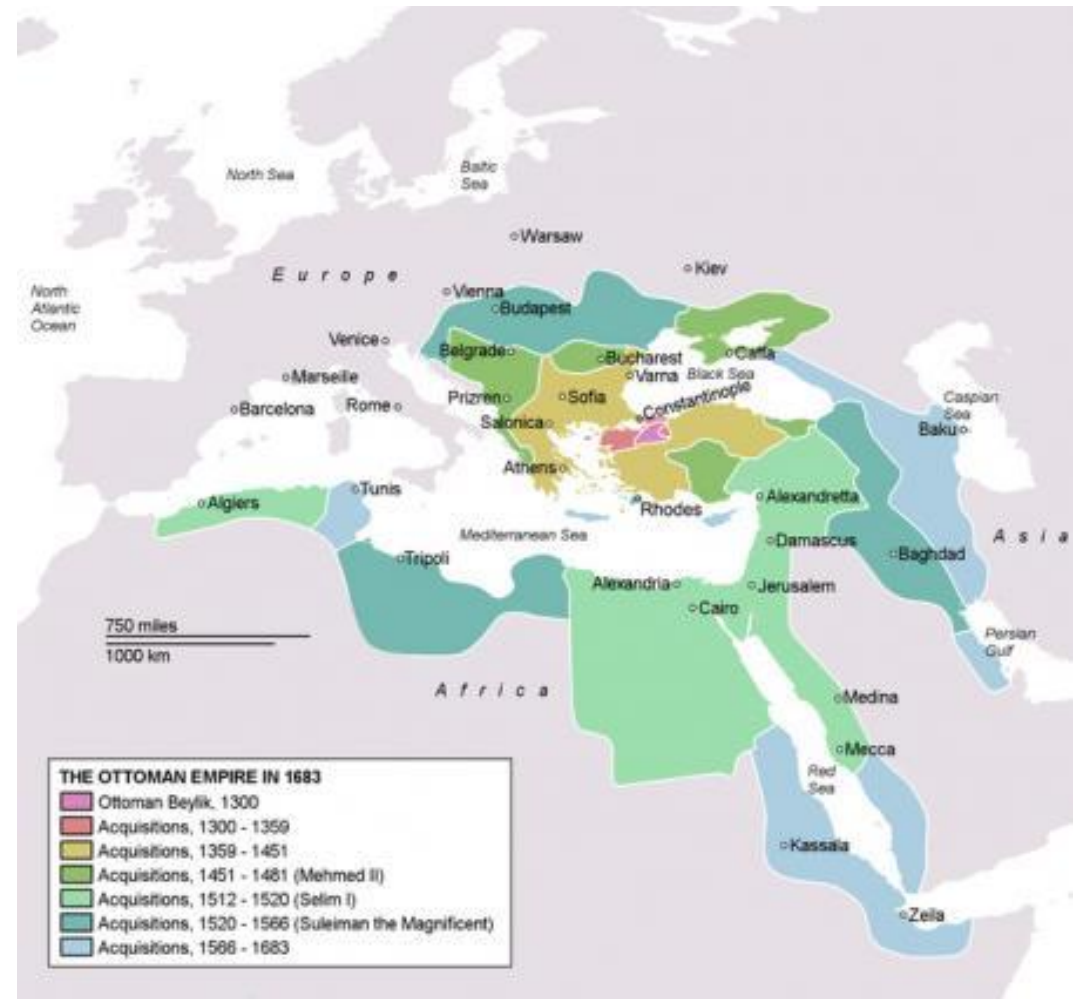
# Gunpowder Empires





# What the Renaissance knew

- The gunpowder empires
  - Ottoman Empire (1301-1827)
    - Ethnicity: Turk
    - Origin: Anatolia



# What the Renaissance knew

- The gunpowder empires
  - Ottoman Empire (1301-1827)
    - 14 million people in 1520 (Spain: 5 million, England: 2.5 million)
    - Constantinople largest city in Europe (500,000)
    - Melting pot of races, languages and religions
    - Tolerance of other races/religions allowed exploitation of skilled Greeks and Jews
    - Janissaries (gun-carrying infantry recruited from Christian families)
    - The Damascus blade (steel)
    - Fleet
    - Muskets
    - Imperial workshops

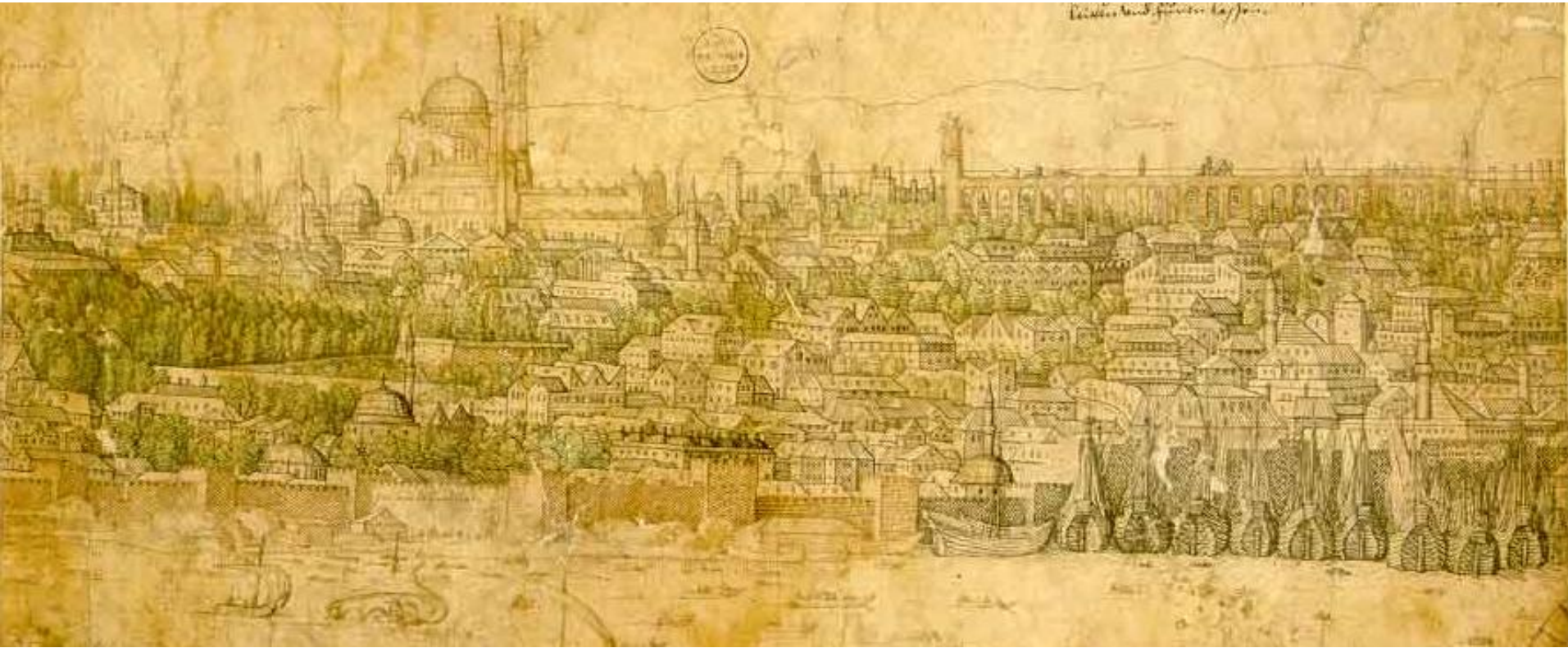
# What the Renaissance knew

- The gunpowder empires
  - Ottoman Empire (1301-1827)
    - Islamic world technologically and culturally ahead of Europe
    - Sophisticated urban society
    - Universities and libraries
    - Mathematics
    - Medicine
    - Industry
    - Islamic state for convenience
    - Salaried Ulama (salary proportional to usefulness to sultan)
    - Slowly enforcing Sunni uniformity

# What the Renaissance knew

- The gunpowder empires
  - Ottoman Empire (1301-1827)
    - 1600: the only standing army in Europe (the Holy Roman Empire still has an army of mercenaries, England drafts men only when needed)

# Istanbul, 1559



Melchior Lorck, 1559

# What the Renaissance knew

- The gunpowder empires
  - Safavid Empire (1501-1722)
    - Ethnicity: Turk
    - Origin: Persia
    - Shiite Islamic state created by a sufi order
    - Homogeneous race, language and religion
    - Control of the silk trade
    - Qanats
    - Only empire to bypass European traders acting as intermediary between China/India and Europe/Ottomans

# What the Renaissance knew

- The gunpowder empires
  - Mughal Empire (1526-1707)
    - Ethnicity: Turk
    - Origin: Afghanistan
    - Islamic state in a Hindu country
    - Melting pot of races, languages and religions
    - Sufi-like approach to Islam (truth can be found in every religion)
    - Karkhanas (royal factories)

# What the Renaissance knew

- The gunpowder empires
  - Russian Empire (1552-1917)
    - Origin: Novgorod, Kiev, Moscow
    - Merging of Rus Vikings (loose federation of warlords and traders) and Slavs
    - Multiple races, languages and religions (Christians, Jews, Muslims, Buddhists, Pagans)
    - Christian Orthodox state: heir to Byzantium after 1453, successor to Roma and Byzantium
    - Monopoly of education under the Christian Orthodox church



# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Western weapons allow to subjugate the Central Asian horsemen
    - Until 1682 foreigners segregated to prevent contagion of western ideas
    - Nomadic agriculture (mobile peasants)
    - Slavery

# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Ivan (1552-1584)
      - Conquest of Kazan and the Astrakhanate
      - Russia becomes a colonizing power
      - The towns of the Eastern frontier do not have an economic function but a border-protection function

# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Boris Godunov (1584-1605)
      - Development of the north-eastern and south-eastern borders of Russia
      - Colonization of Siberia
      - Patriarchate (1589) of Russian Orthodox Church (independence from the Patriarch of Byzantium/ Constantinople)
      - Institution of serfdom (1587): peasantry cannot move from one landowner to another. Feudal agriculture.

16<sup>th</sup> century

SWEDEN

RUSSIA

KAZAN

LITHUANIA

POLAND

ASTRAKHAN

<http://www.ostu.ru/personal/nikolaev/russia.html>



# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Mikhail Romanov (1613-1645)
      - Eastward expansion
        - » 1619: the first Russian envoy reaches the court of China
        - » 1639: Cossacks reach the Pacific Ocean
        - » 1643: Russians discover Lake Bajkal
      - Largest empire on Earth
      - Sweden is the dominant power in Northern Europe
      - Poland-Lithuania is the dominant power in Eastern Europe

# Russian Expansion 1533 - 1894



# THE GROWTH OF THE SWEDISH EMPIRE



# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Mikhail Romanov (1613-1645)
      - Agricultural economy
      - Fur economy in Siberia
      - State monopoly on exports of minerals and furs
      - Trade controlled by foreigners because Russians don't have a merchant marine
      - Manufacturing (metallurgy, glass, textiles) created and controlled by foreigners
      - Limited role of merchants and artisans



# What the Renaissance knew

- The gunpowder empires
  - Russian Empire

- Mikhail Romanov (1613-1645)

- Serfdom

- » Czar grants lands to landowners at his service

- » Not codified in law but de-facto serf belongs to the landowner and can be sold/bought

- » Children of serfs are also serfs

- » Slaves are for large households/estates, serfs are for agricultural land



# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Mikhail Romanov (1613-1645)
      - Mestnichestvo (1475-1682)
        - » The opposite of meritocracy
        - » Hierarchy of political and military power must reflect the hierarchy of family status
        - » Consequence: incompetent military leaders

# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Aleksei Romanov (1645-76)
      - Russia is becoming a fiscal-military state with a huge bureaucracy (the tsar is no longer in direct contact with his subjects)
      - Thirteen Years' War (1654–67) ends the Polish empire and leaves Russia dominant in Eastern Europe
      - Beginning of the integration of the East Slavs into the Russian empire
      - Beginning of westernization (court theater, postal service, historical portraits)

# What the Renaissance knew

- The gunpowder empires
  - Russian Empire before Pyotr
    - A quasi-theocracy (the "Third Rome" of Orthodox Christianity)
    - The czar wears traditional costumes and a long beard
    - Russia cut off from Reformation, Renaissance, scientific revolution
    - No universities
    - No literature, art and music outside religion
    - Foreigners quarantined in the "German quarters" of Moscow



Michael I

# What the Renaissance knew

- The gunpowder empires
  - Russian Empire before Pyotr



# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Pyotr I/ Peter the Great (1689-1725)
      - The Great Northern War (1700-21)
      - The defeat of the Swedish empire leaves Russia dominant in the Baltic Sea (but emergence of Prussia as main rival)
      - Russia obtains an outlet in the Baltic Sea
        - » Estonia
        - » Livonia
        - » Karelia (east of Finland)
        - » Ingria (south of Finland)
      - 1700-21: The Great Northern War.
      - 1717: Poland a protectorate of Russia



# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Pyotr I/ Peter the Great (1682-1725)
      - First czar to travel to Western Europe
      - Westernization of customs (shaving of the beards, Western-style clothes, tobacco made compulsory)
      - New capital, St Petersburg, on the Baltic, a western city compared with Moscow
      - Hires 750 Western experts to import Western technology, science, arts and methods
      - Sends Russian students to study abroad
      - Economic and administrative reforms
      - Foreign trade increases 400%

# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Pyotr I/ Peter the Great (1682-1725)
      - Modernization of the army
      - Western-style Baltic navy
      - The state takes control of the Russian Orthodox Church (like Henry VIII did with the Anglican Church)
      - A Russian version of the absolutist monarchy of Louis XIV (Peterhof Palace modeled after Versailles)
      - 1698: massacre of Streltsy regiments that mutiny against him





# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Pyotr I/ Peter the Great (1682-1725)
      - Multiple identities of Russia
        - » Defender of Orthodox Christian faith
        - » National state of the East Slavs
        - » Great European power
        - » Multi-ethnic empire

# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Pyotr I/ Peter the Great (1682-1725)
      - Transition from agricultural to industrial economy
        - » Foundries
        - » Textile industries
      - Transportation
        - » Canal from the Neva to the Volga

# What the Renaissance knew

- The gunpowder empires
  - Russian Empire
    - Pyotr I/ Peter the Great (1682-1725)
      - Subjugation of the Church to the state
      - Integration of the empire
      - Spread of learning
        - » School of Mathematics and Navigation
        - » Russia's first public library
        - » Russia's first museum
        - » Academy of Sciences

# What the Renaissance knew

The Growth of Russia: 1300 - 1796



Principally of Moscow - 1300	Ivan III (1462 - 1505)	Boris Godunov (1584-1605)	Anna (1730-40)
Grand Principality of Moscow (1462)	Vasily III (1505 - 1633)	Micheal Romanov (1613-45)	Elizabeth (1741-62)
	Ivan IV (1633 - 1684)	Alexis (1645-76)	Catherine II (1762 - 1796)
		Alekseevich (1682 - 1725)	

# What the Renaissance knew

- The gunpowder empires
  - Europe
    - Mining (metal, esp from the German states)
    - Casting (experience in bronze casting of church bells transferred to casting cannons)
    - 1453 (battle of Constantinople and end of 100-years war, both due to cannons)
    - Burgundy (leading gun maker, split between France and Austria in 1460)
    - Ditches around walls (Pisa, 1500)
    - Iron guns, less expensive than bronze guns (mid 16th c, England), hence more guns on ships

# What the Renaissance knew

- The gunpowder empires
  - Reasons for downfall
    - Multi-ethnic nature
    - World-trade based on sea transportation (shipping, ports) controlled by Europeans
    - The printing press (knowledge gap with Europe)

# What the Renaissance knew

- End of the nomadic tribes of the Steppes
  - End of the historic role of the Steppes as source of empire builders
  - The steppes destined to be divided between China and Russia (treaty of Nerchinsk of 1689)
  - Expansion of urban and agricultural cultures
  - Fire-power surpasses mounted army as main military tool
  - Islam
  - Consequence: increased stability for China, Russia, Persia, India and Europe



# What the Renaissance knew

- The miracle of Europe
  - A dis-united Europe
    - Political fragmentation
    - Endless intestine wars
    - Different languages
    - Technologically, religiously and culturally backwards
    - Science, philosophy and technology imported from the Muslims
    - Constantinople and Greece fallen to Asian and non-Christian power
    - Fewer people and resources than the Asian empires

# What the Renaissance knew

- The miracle of Europe
  - A dis-united Europe
    - ...but even a small country like Portugal could achieve conquest on a scale that China never achieved

# What the Renaissance knew

- The miracle of Europe
  - Unified large-scale bureaucracies
    - Ottomans (East and south Mediterranean, 1301)
    - Safavids (Mesopotamia & Persia, 1501)
    - Ming (China, 1368)
    - Mogul (Afghanistan to northern India, 1497)
    - Tokugawa (Japan, 1600)
    - Aztecs
    - Incas
    - Mameluks of Egypt (1260-1517)
    - Morocco
    - Mali
    - Ethiopia

# What the Renaissance knew

- The miracle of Europe
  - Unified bureaucracies are
    - not competitive (heavy taxation, central control)
    - conservative (cultural obscurantism)

# What the Renaissance knew

- The miracle of Europe
  - The far-flung European empires are established initially by private initiative
  - Most of the capital comes from the very fragmented lands of Italy and the Netherlands

# What the Renaissance knew

- Ming China
  - Technologically and culturally advanced
  - Canal system
  - Naval superpower (1350 combat vessels in 1420)
  - Exploration (Cheng Ho, 1405-1433)
  - but...
  - steady decline
    - Conservatism of Confucian bureaucracy
    - 1436: imperial edict bans seagoing ships

# What the Renaissance knew

- Ottoman Empire
  - Territorial over-extension
  - Loss of Asiatic trade due to Sunni- Shiite schism (1501)
  - Merchants and entrepreneurs mainly foreigners
  - Incompetent sultans (1566-1730)
  - Conservatism and obscurantism
    - Printing press forbidden
    - Innovation discouraged

# What the Renaissance knew

- Mogul Empire
  - Small conquering Muslim elite ruling over huge masses of poor Hindus
  - Hindu religious taboos preventing social (local rulers and Brahman priests), hygienic (protection of rodents and insects) and economic (caste system) progress
  - Marathas in the south, Afghanis in the north, British in the east



# What the Renaissance knew

- Japan
  - 1543: Portuguese traders are the first Europeans to reach Japan
  - 1549: Jesuit missionary Francis Xavier introduces Christianity in Japan
  - 1571: Portuguese found the port of Nagasaki
  - Main goods purchased by Japanese: firearms
  - 1575: The first battle in Japan fought with firearms (Nobunaga vs Takeda)
  - 1590: Jesuit set up a Western style movable type printing-press in Nagasaki

# What the Renaissance knew

- Tokugawa Japan
  - Unified in 1600
  - 1638: construction of oceangoing vessels forbidden
  - Rapid decadence of military system

# What the Renaissance knew

- The miracle of Europe
  - Effect of trade with the Americas: hyper-inflation and population boom
  - Effect of the triumph of monarchies: continuous dynastic wars
  - 1659 (Peace of the Pyrenees): France replaces Spain as the most powerful nation on the Continent
  - 1713 (Peace of Utrecht): Austria controls most of Italy

# What the Renaissance knew

- The miracle of Europe
  - Political fragmentation and decentralized power (due to geography: no unifying river-valley center of civilization, lots of mountains)
  - Arms race among local kingdoms and even city-states (no single center of power decisively outpowered the others)
  - Mercenaries competed for war contracts, artisans competed for warface commissions
  - Military-driven economies of scale

# What the Renaissance knew

- The miracle of Europe
  - The evolution of the gun
    - The breechloader (Burgundy, 14th c), easier to reload
    - Barrel rifling (Germany, 16th c), more precise
    - The repeating rifle (17th c)
    - Queen Anne pistols (England, 18th c): a breechloader with rifled bores
    - Cylindro-conical bullets (France, 19th c)

# What the Renaissance knew

- The miracle of Europe
  - The intra-European arms race peaked with the long-range armed sailing ships, which opened the doors to extra-European colonization
    - Oceanic trade routes controlled by Europeans
    - Coastal lands vulnerable to European penetration
    - Imperialism

# What the Renaissance knew

- The miracle of Europe
  - Colonization and imperialism led to widespread wealth
    - Precious metals, spices, sugar, food (maize, tomato, fish), tobacco, rice, timber and later meat, cotton, grain
    - World trade fosters shipbuilding
    - Ports attract artisans
    - Artisans create more demand for technological innovation (science)
    - The printing press spreads knowledge
    - Shipbuilding fosters a secondary industry aimed at making maritime travel less unpredictable (cartography, instruments, metallurgy, astronomy, medicine)

# What the Renaissance knew

- **The miracle of Europe**
  - **What kept the miracle going: continued competition among European powers for supremacy, anywhere anytime**



# What the Renaissance knew

- Most world trade occurred among Asians but the traders were Europeans
  - Chinese silk
  - Indian cotton
  - Chinese porcelain
  - Persian textiles
  - Persian tiles
  - Weapons

# What the Renaissance knew

- Three-masted ("full-rigged") ship (mid 15th century)
  - Before the full-rigged ship, a merchant's ship would wait in the harbor for favorable winds
  - The full-rigged ship is easier to maneuver and larger ships become feasible
  - The required shipbuilding technology was known to the Romans
  - Increased trade is what drove the demand for larger ships

# What the Renaissance knew

- Three-masted ("full-rigged") ship (mid 15th century)
  - Bigger better ships (suitable for ocean trade) are a consequence of increased intra-European coastal trade due to growth of port cities spreading from Italy (12th c) to Holland and north Germany in the 14th century
  - The full-rigged ship is a product of urbanization
  - Carracks and caravels
  - The main means of transport for Western international trade until the steamship of the 19th century



# What the Renaissance knew

- Spices
  - Before the age of refrigeration and preservatives, spices were a necessity
  - The spice trade provides most of the motivation for the early voyages of exploration

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - Reconquista completed by 1250 (by military aristocracy and Catholic church)
    - The capital is moved to Lisbon (1255)
    - Portugal an oasis of stability in the 15<sup>th</sup> century
    - Portuguese exploration: a national enterprise, centrally planned
    - The hero is the whole nation
    - Melting pot: Christians, Muslims and Jews expelled from Spain

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - The court at Sagres (15<sup>th</sup> c) of prince Henrique the Navigator, son of Dom Joan I and brother of the next rulers, becomes a research laboratory for long-distance seafaring, using the port of Lagos for shipbuilding
    - Main invention: the caravel, designed to be able to actually return from a long-distance trip
    - Most important cargo of an explorer's ship: knowledge (about distant lands and how to get there)
    - Henry's exploration of Africa proves the feasibility of the caravel

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - Dom Joao I breaks the Arab monopoly on African gold by capturing Ceuta (1415) and prince Henrique learns about the African sources of Arab gold trade
    - 1419: Two captains of Prince Henrique accidentally discover Madeira, uninhabited but fertile island
    - Sugar plantations of Madeira modeled by Genoese businessmen after Venetian plantations of Cyprus and Crete (slave labor) but using a more productive type of press powered by water
    - By 1500 Madeira produces more than six times sugar than Cyprus

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - 1434: Gil Eannes rounds Cape Bojador on the North African coast



# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - Hundreds of African slaves are imported every year from Muslim merchants into Lisbon (1441-1470)
    - First public sale of African slaves in Europe (1444)
    - Cape Verde (1455) and African slaves and gold trade
    - 1469: King Alfonso V subcontracts the discovery of the world to entrepreneurs

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - Inventions: quadrant (1460), the mariner's astrolabe for navigation in the Southern hemisphere (where the Pole Star is not visible)
    - By accident the Treaty of Tordesillas (1494) assigns Brazil (which was discovered, also accidentally, six years later) to Portugal and assigns the whole of Asia to Portugal.

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - King Joao II (1481) funds journeys of discovery (monarchical capitalism)
    - Pepper, ivory, gold and slaves
    - Elmina, first European trading post in Africa (1482)
    - Diego Cão discovers the Kongo (1482)
    - Sao Tome (1486)

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - Bartolomeu Dias rounds the Cape of Good Hope (1487), sails 1,000 kilometres east of the Cape, returns to Lisbon after 18 months and a total journey of 13,000 kms
    - Pero da Covilhã (a former spy who speaks fluent Arabic) travels to Cairo down the Red Sea coast by caravan, from Aden east to Calicut (south India) by ship, up the West coast of India to Goa, and back via the East African coast (1489-90) having discovered the secret of Arab seafaring

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - King Nzinga/Joao of Congo converts to Christianity (1491)
    - Joao II welcomes Jews expelled from Spain
    - The Treaty of Tordesillas (1494) gives Portugal a virtual monopoly over the supply of labor from West Africa
    - The Treaty also gives Portugal a virtual monopoly to eastern trade in spices

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - Vasco de Gama reaches India (1498) after a ten-month journey, and returns to Lisbon (1499) after 24 months having lost 115 of the 170 men, carrying very little cargo but lots of knowledge (in particular, no naval powers in the Indian Ocean that can stop Portuguese ships)
    - Pedro Cabral sets out with 12 ships and more than 1,000 men to improve on the route to India and accidentally discovers Brazil (1500)

# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - Vasco de Gama hires seafaring expert Ibn Majid who published the "Kitab al-Fawaid" (1490)
    - De Gama's second mission to India (1502-03) with a fleet of 20 ships establishes a permanent factory in south India (Cochin) and on the way destroys Muslim fleets returning to Lisbon with 1,700 tons of spices, almost the entire yearly imports of Venezia
    - The price of pepper in Lisbon is  $1/5^{\text{th}}$  of the price of pepper in Venezia (1503)
    - First European trade outpost in India (1504)

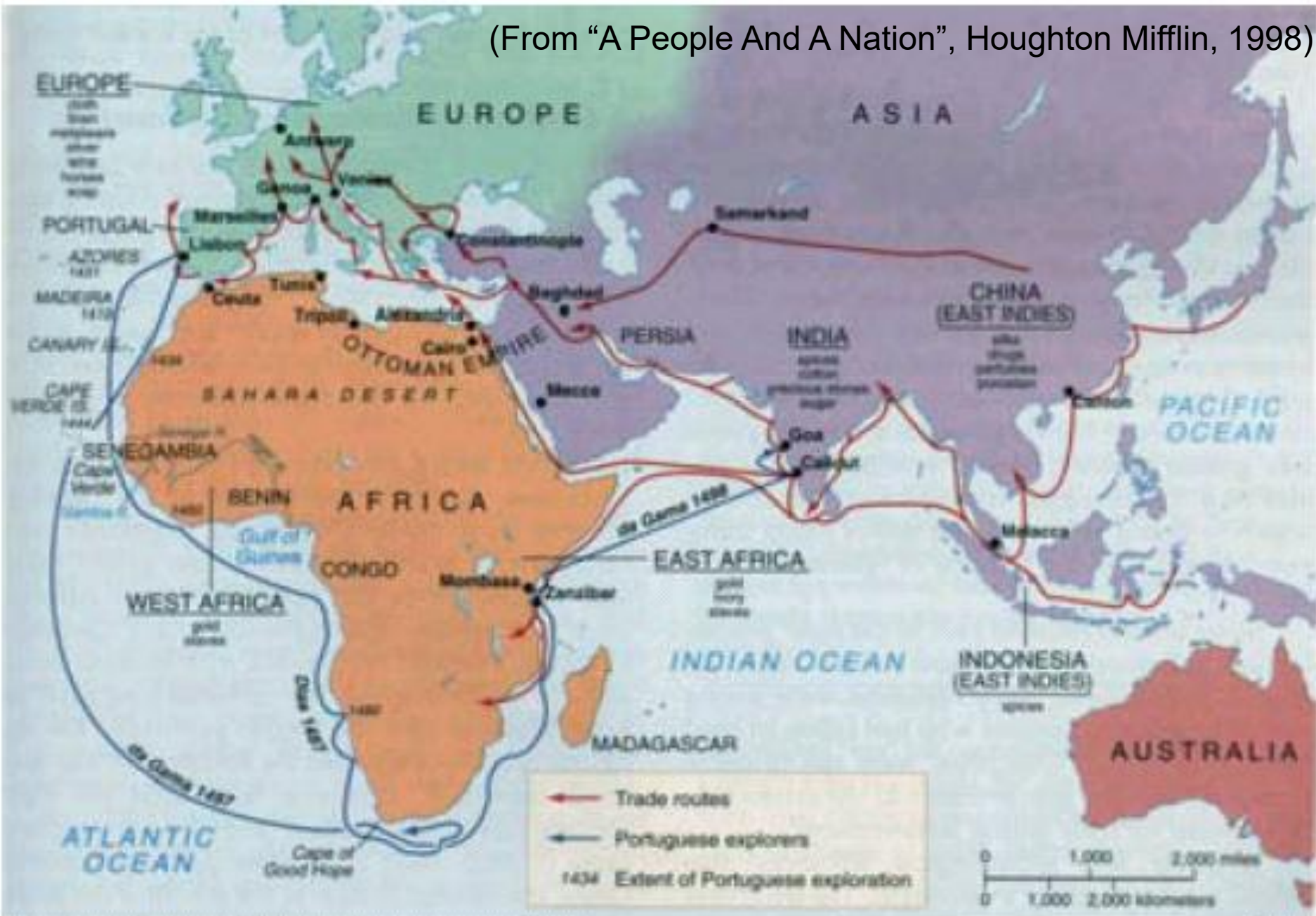
# What the Renaissance knew

- The miracle of Europe
  - Portugal: expansion of spice trade
    - Portugal destroys the Muslim fleet of India (1509)
    - Alfonso de Albuquerque conquers Goa (1510), Sri Lanka, Malacca (1511), thus controlling all the “spice islands”
    - Molucca Islands, the spice islands (1529)
    - Meat can be preserved by salting (a 15th century discovery)
    - Pepper need to salt the meat: increased consumption of meat requires more pepper
    - Lisbon triples in population between 1500 and 1550
    - Holy inquisition in Goa (1560)



# Portugal: Europe's Unlikely Pioneer

(From "A People And A Nation", Houghton Mifflin, 1998)



# What the Renaissance knew

- The miracle of Europe
  - The Portuguese Empire



# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire/ Austria



The Habsburg Duchy in the 14<sup>th</sup> c

# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire/ Austria
    - 796: Charlemagne conquers the Avars (Pannonia) and establishes the East March (Ostmark or Osterreich) that gets colonized by Germans from Bavaria
    - Austria becomes the border march of the Germans against the nomads of the steppes
    - 1156: Osterreich (Austria) becomes a duchy

# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire/ Austria
    - 1273: Rudolf I von Habsburg from southwestern Germany is elected Holy Roman emperor, the first of a long series of Habsburg emperors
    - 1282: Rudolf I von Habsburg becomes archduke of Osterreich/Austria, the easternmost German-speaking state
    - 1477: German king Maximilian I Habsburg inherits parts of Germany, Italy, Spain, and obtains the Netherlands by marriage
    - 1496: Maximilian's son Philip marries Joanna, daughter of Isabella and Ferdinand of Spain

# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire
    - The Holy Roman Empire is virtually limited to the German-speaking states
    - The Holy Roman emperor is chosen by the seven electors and is subject to the Reichstag ("Imperial Diet"), a “parliament” of princes and 65 free cities
    - Neither the diet nor the emperor are given an army or a treasure
    - Diet of Worms (1521): more rights to the princes, attempt to perpetual peace among German states

# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire
    - A “dynastic” empire, created by marital statecraft
    - Natural enemies: Valois France (doesn’t want to be absorbed in it), Ottomans (expanding in the east), Tudor & Stuart England (beginning to meddle in continental politics)

# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire
    - 1517: Martin Luther's Reformation
    - 1519: Carlos I (Karl V) inherits Spain, American colonies, southern Italy, Austria, Netherlands
    - 1526: Eastern Hungary falls to the Ottomans and Ferdinand I Habsburg is elected king of western Hungary (Czechoslovakia and Slovenia)
    - Karl V's empire: 25% of the population of Europe



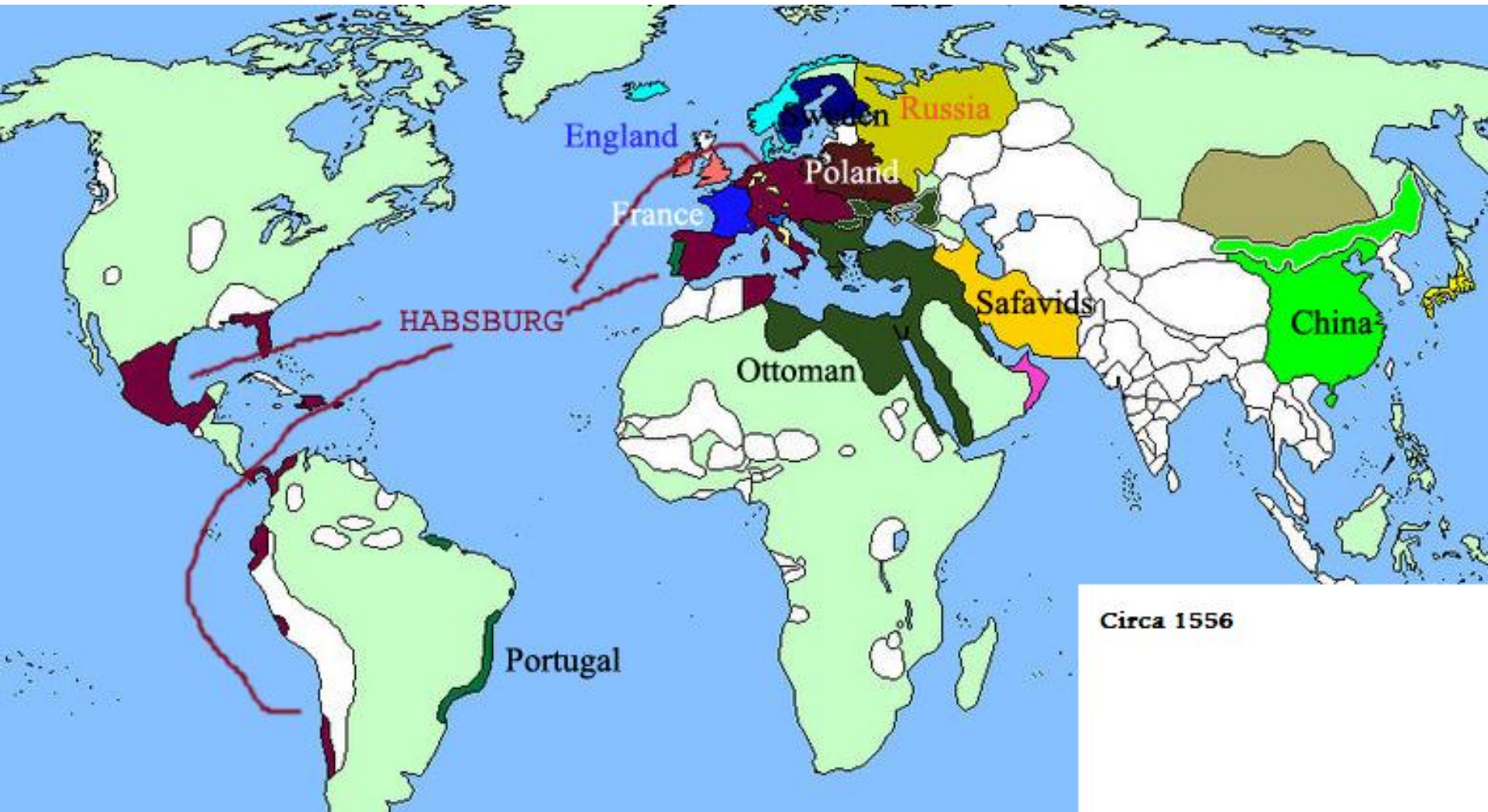
# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire
    - Wealth of American colonies leads the Habsburgs to extend their domination over Europe by war or marriage
    - Goal: to create an autocratic Catholic empire

# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire/ Austria
    - 1556: Karl V abdicates to retire to a Spanish monastery and his empire is divided between his son Felipe II (Spain, southern Italy and the Low Countries) and his brother Ferdinand I (Germany), i.e. Felipe's uncle, who already rules over Hungary and Bohemia

# What the Renaissance knew



# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire/ Austria
    - 1618: the "Defenestration of Prague" (the Habsburg remove Frederick of the Palatinate and install Matthias' cousin Ferdinand on the throne of Bohemia) begins the "Thirty Years' War" pitting the Habsburg empire and Spain against France, England, Sweden, the first war fought more by artillery than by men

# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire
    - Continuous wars:
      - 1494-1529 Italy
      - 1521-1739 Ottomans
      - 1530-1555 Germany
      - 1568-1648 Netherlands
      - 1588-1659 England
    - Chronic budget deficits

# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire/ Thirty years war
    - A league of German Protestant princes (1608) vs a league of Catholic princes backed by the Catholic Habsburg emperor (1609)
    - France, England, Sweden, Holland win against Austria and Spain (the Habsburg)
    - 1648: the "Peace of Westphalia" reduces the Germanic empire to a loose confederation of hundreds of independent entities
    - France replaces Spain as the most powerful nation of Europe

# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire
    - 1683: Poland saves Vienna from an Ottoman invasion and pope Innocent XI organizes the last crusade against the Ottomans (Austria+Poland+Russia+France+Savoy)
    - 1691: the Habsburg empire acquires Transylvania from the Ottomans
    - 1699: the Habsburg empire acquires east Hungary from the Ottomans (Treaty of Karlowitz)
    - 1713: After the war of the Spanish succession, Karl VI obtains Belgium, Milan and Naples (Treaty of Utrecht)

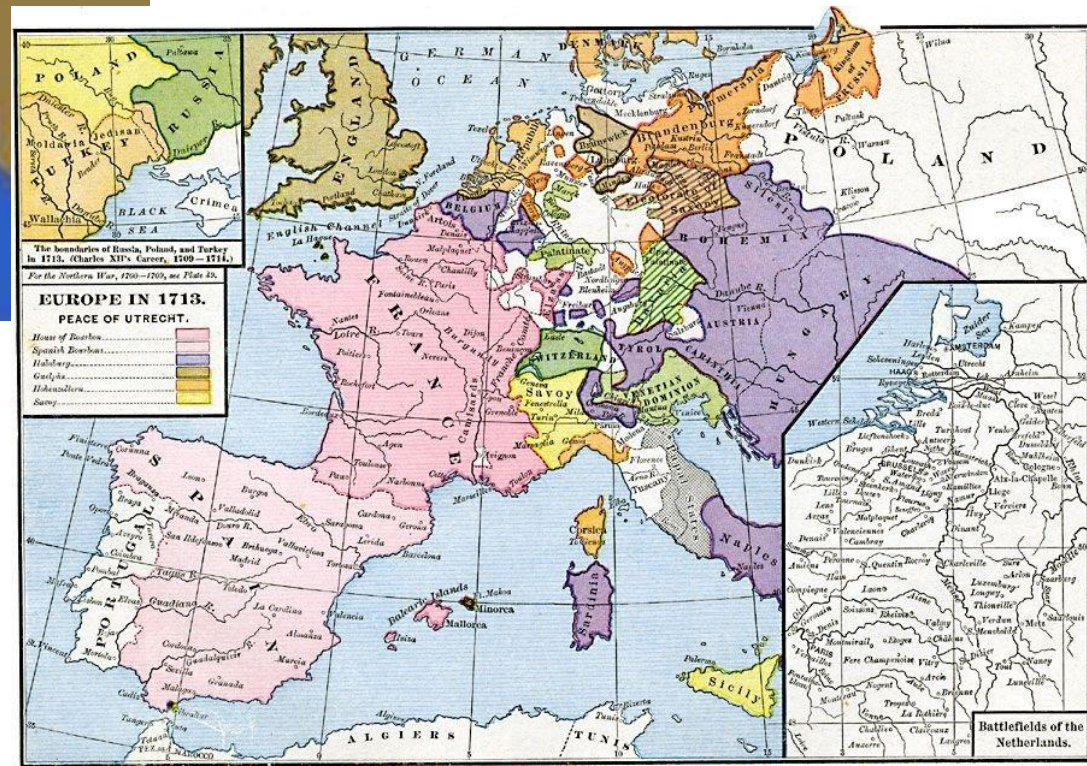
# What the Renaissance knew

- The miracle of Europe
  - Habsburg Empire
    - The Habsburgs are **successful** in cementing an Austrian empire (Austria + Hungary + Bohemia+Belgium+Milan)(Hungary includes Croatia, Slovakia and Transylvania)
    - The Habsburgs are **unsuccessful** in strengthening the Holy Roman Empire
    - The Austrian empire is a confederation, **not a national state** like Spain, France and England
    - Multiple languages and ethnic groups
    - 1740: Maria Theresa, first female ruler of the Habsburgs (not recognized by Prussia)



# What the Renaissance knew

## Habsburg Empire after Treaty of Utrecht



# What the Renaissance knew

- The miracle of Europe
  - Germany
    - After the war, Germany is a wasteland
    - The Hanseatic League virtually disappears
    - The princes are rich (after the confiscation of Catholic assets) while the peasants starve

# What the Renaissance knew

- The Spanish Empire/ Ferdinando (1474-1516)
  - 1469: Union by marriage of Castilla (Isabella) and Aragonia (Ferdinando)
  - 1474: Isabella ascends to the throne and Ferdinando becomes Ferdinando V of Castilla
  - 1492: Fulfillment of the reconquista with the occupation of Granada and the expulsion of Muslims and Jews
  - 1492: Columbus
  - 1494-1504: War with France over Italy (first Castillian war outside of Iberia)
  - 1512: Spain conquers Navarra
  - 1500-1520: 14,118 kgs of gold from the Caribbean<sup>139</sup>

# What the Renaissance knew

- The Spanish Empire/ Ferdinando
  - Limited, local wars
  - Domination of Western Mediterranean
  - Marriage alliances
    - Habsburg (Juana)
    - Tudor (Caterina)
  - Containment of France (Italy, Navarra)
  - Diplomacy (resident ambassadors)
  - Northern Italian bankers (mainly Genoa)
  - Luck (Columbus, the “New World”)
  - 1513: Vasco Nunez reaches the Pacific Ocean

# What the Renaissance knew

- The Spanish Empire/ Ferdinando
  - Before Ferdinando: Spain is the place where three religions (Islam, Judaism, Christianity) meet
  - After Ferdinando: Spain is the model of state religion
  - The state controls the church
  - The church is the main driver of national unity
  - Inquisition, created by Tomas de Torquemada in 1479 to convert Jews and Muslims

# What the Renaissance knew

- The Spanish Empire/ Ferdinando
  - A well-trained army after the wars of “reconquista”
  - But expulsion of Muslims and Jews slows the capitalistic development
  - Marital statecraft
    - Isabella and Ferdinando unite Spain simply by getting married
    - Three daughters: wife of the king of Portugal, wife of Henry VIII of England, Joanna married to a Habsburg (Philip, son of Holy Roman emperor Maximilian I and of Marie of Burgundy, heiress to the Netherlands) has a son Carlos, the future Carlos I/ Karl V

# What the Renaissance knew

- The Spanish Empire/ Carlos I aka Karl V (1516-56)
  - Heir of the Habsburgs of Austria, the Valois of Burgundy, the Trastamara of Castilla, and the House of Aragona
  - 1506: The 6-year-old Carlos/Karl of Habsburg (born in the Flanders) inherits the Netherlands and Castilla when his Habsburg father dies
  - 1516: The 16-year-old Carlos/Karl inherits Spain, the “New World” and southern Italy when his Spanish grandfather Ferdinand dies
  - 1519: The 19-year-old Carlos/Karl inherits Austria when his Habsburg grandfather Maximilian dies

# What the Renaissance knew

- The Spanish Empire/ Carlos I aka Karl V (1516-56)
  - 1520: Elected Holy Roman Emperor (Karl V) by dynastic right (union of Spain and Austria-Hungary)
  - 1526: Marries princess of Portugal
  - 1526: His younger brother Ferdinand adds Bohemia and Hungary by marriage
  - 1529: Empire, Spain and Genoa defeat France for control of northern Italy, and the king of France has to marry Karl's sister
  - 1530: Empire and Pope seize Firenze



# What the Renaissance knew

- The Spanish Empire/ Carlos I aka Karl V (1516-56)
  - The empire is not united: each kingdom has its own ruler, customs, laws
  - There is no imperial government
  - Each kingdom furthermore is fragmented into political entities (eg Aragon includes Naples and Sicily)
  - Constantly at war against France (the only rival in Christian Europe) since 1522 (mostly in Italy) and against the Ottomans

# What the Renaissance knew

- The Spanish Empire/ Carlos I aka Karl V (1516-56)
  - The constant wars between France and Germany/Spain help
    - The Ottoman expansion in eastern Europe (loss of Belgrade in 1526, siege of Vienna in 1529, loss of Budapest in 1541)
    - The Protestant expansion in Germany

# What the Renaissance knew

- The Spanish Empire/ Carlos I aka Karl V (1516-56)
  - Fails to unite Germany in a national kingdom like France and Britain because
    - Carlos' worldwide imperial ambitions are not national patriotic ambitions (mostly absent from Germany)
    - Protestantism splits Germany
    - Wealthy Hanseatic cities are not excited by a national union
    - The antiquated feudal institutions are hated but no alternative emerges
    - Diet of Worms (1521) is the first step towards a union but largely ineffective to preserve domestic peace

# What the Renaissance knew

- The Spanish Empire/ Carlos
  - Long period of peace in Spain
  - 1530-1580: 50% increase in population of Castilla
  - Stability attracts Italian investment (mainly Genoa)
  - Genoa funds the “ingenios” (sugar mills) of the Caribbeans
  - Bankers of the empire: Germany (mainly Augsburg until 1557), Northern Italy (mainly Genoa till 1630s), Low Countries (mainly Antwerp after 1630s)
  - 1516-1556: Genoa alone lent Carlos 11.6 million ducats out of a total of 29 million ducats (all Spanish bankers only 4.3 million)

# What the Renaissance knew

- The Spanish Empire/ Carlos
  - Genoese fleet guarantees Spanish superiority in Western Mediterranean
  - Invasion of Tunis (1535): 18% of fleet from Spain, 40% from Genoa, 42% from other Italian states, and fleet under Andrea Doria
  - Gold from Peru
  - Silver from Mexico and Potosi

# What the Renaissance knew

- The Spanish Empire/ Carlos
  - Navigational tools, ship design, maps/charts (Columbus found the New World by accident, but it was no accident that he returned three times to the same place)
  - 1519-1522: Fernão de Magalhães/ Fernando de Magallanes/ Ferdinand Magellan's expedition (working for the Spanish king) circumnavigates the world (a three-year journey)
  - 1529: Spain surrenders spice islands to Portugal (spices are less important than gold and silver)

# What the Renaissance knew

- The Spanish Empire/ Carlos
  - Conquest of the New World via “encomiendas” (private enterprise) not war campaigns
  - Spanish encomenderos only controlled a tiny part of the Americas (coastal areas, mining towns)
  - 1519-21: Cortes conquers the Aztecs in Mexico (only 2 million survive war, disease and famine, out of a population of 25 million)
  - 1531-36: Pizarro conquers the Incas in Peru
  - 1530s: Slave trade centered on Nicaragua
  - 1545: silver is discovered in Potosi

# What the Renaissance knew

- The Spanish Empire/ Carlos
  - Enormous loss of population in the Americas due to diseases
  - 1510: First import of African slaves into America to man the sugar industry
  - 1550s: Black population vastly outnumbers white population
  - Weakness of imperial control
  - Missionaries: Franciscans (1524), Dominicans (1526), Jesuits (1550)
  - Gold, God and Glory



# What the Renaissance knew

- The Spanish Empire/ Carlos
  - African slaves mine silver in South America for Spain
  - Spain pays silver for Eastern spices, cotton and silk
  - and buys African slaves with cotton

# What the Renaissance knew

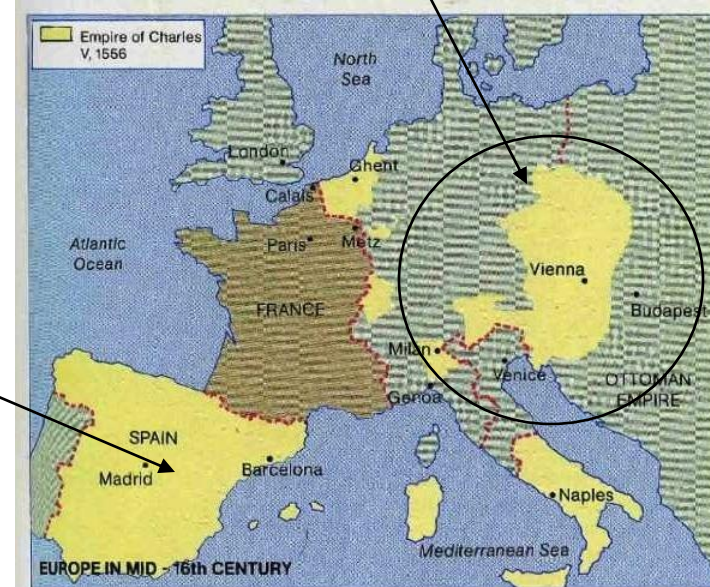
- The Spanish Empire/ Carlos
  - 1535: Antonio de Mendoza viceroy of Nueva Espana (Mexico)
  - 1569: Don Francisco de Toledo viceroy of Peru
  - Audiencias limit the power of the viceroy and define territorial units (Lima -> Peru)
  - Spain succeeds in creating a bureaucracy that empowers the emissaries of the king and checks the colonizers, no matter how rich they become

# What the Renaissance knew

- The Spanish Empire/ Carlos
  - Mendicant friars evangelize the "Indios" (because of apocalyptic vision that Jesus is about to come back)
  - The Pope grants America to Spain in return for Christianization of America
  - (22 bishops in the first 50 years)
  - Religious people learn native languages, native customs, native histories
  - Religious people build churches, monasteries, schools
  - Five million Indios converted by 1536
  - Debate whether Indios are "natural slaves" or Christian souls

# What the Renaissance knew

- The Spanish Empire/ Carlos V
  - Succession (1556):
    - His brother Ferdinando inherits the Holy Roman Empire (German and Austrian possessions)
    - His son Felipe inherits Spain, Italy and Netherlands



# What the Renaissance knew

- The Spanish Empire/ Felipe II (1556-98)
  - 1556: Inherits Spain, Milan, southern Italy, Low Countries, New World (plus son of Isabella of Portugal and husband of Mary Tudor of England)
  - Administrative control of Spain from Spain, not from the Germanic empire or southern Italy
  - Boom of American silver
  - 1559: peace with France after 60 years of war and (third) marriage with Henri II's and Caterina de' Medici's daughter Elisabeth de Valois
  - 1564: Colonization of the Philippines

# What the Renaissance knew

- The Spanish Empire/ Felipe II
  - But
    - Still dependent on allies for capital and warfare
    - Ineffective bureaucracy, treasury, etc
    - Fragmented empire of autonomous regions
    - Army made mainly of non-spanish soldiers
    - The wealth of america controlled by foreigners, not by spain
    - Most land owned by the Church and the nobles, which are both exempt from taxes
    - Alcabala: a 10% tax on all sales

# What the Renaissance knew

- The Spanish Empire/ Felipe II
  - But
    - The persecution of Muslims (“Moriscos”) and Jews impoverishes Spain’s commerce and industry
    - An opulent state on the verge of bankruptcy

# What the Renaissance knew

- The Spanish Empire/ Felipe II
  - Family and moral obligations towards the Holy Roman emperor (a cousin, son of Ferdinand, marries Felipe's sister, and Felipe marries Ferdinand's granddaughter Anne)
  - A very Catholic king, fond of the Inquisition
  - A very patriotic Spanish king, determined to make Spain the greatest imperial power, hence hostile to France



# What the Renaissance knew

- The Spanish Empire/ Felipe II
  - Gold and silver from the Americas cause inflation
  - Inflation makes Spanish products not competitive against Dutch and British products
  - Spanish manufacturing collapses
  - Spanish monarchs overspend because of seemingly endless income from the Americas
  - Spain keeps borrowing money, basically mortgaging the American silver
  - Eventually Spain finds itself to be a country of debtors

# What the Renaissance knew

- The Spanish Empire/ Felipe II
  - Flush with money, Spain buys from the rest of Europe, indirectly funding the boom of manufacturing in England, Holland, etc
  - Overspending leads to bankruptcy of 1557
  - When gold and silver from the Americas decline (mid 16th c), Spain becomes a poor country
  - 1580s: Spain controls most of Europe's silver and gold supply

# What the Renaissance knew

- The Spanish Empire/ Felipe II
  - 1568-1648: 80 years war of the Low Countries
    - Unfair taxation of the provinces
    - Repression of Calvinism, which is popular in the northern provinces
    - Karl V was a native son (born in the Low Countries), but Felipe II was born in Spain and lives in Spain

# What the Renaissance knew

- The Spanish Empire/ Felipe II
  - 1568-1648: 80 years war of the Low Countries
    - William of Orange leads the league of both Calvinist and Catholic provinces against Spain
    - 1579: The Low Countries split in the Union of Utrecht of the Calvinist northern provinces (i.e. Holland) vs Union of Arras of the Catholic southern provinces (i.e. Belgium)
    - 1581: The Calvinist provinces declare independence

# What the Renaissance knew

- The Spanish Empire/ Felipe II
  - 1571: Moriscos (Christianized Muslims) expelled from Granada after a 3-year revolt
  - 1571: Battle of Lepanto, de facto a crusade with volunteers from all over Europe (Spain, Pope Pius V, Venezia and Genova defeat the Ottoman empire, halting Ottoman expansion in the Mediterranean)
  - 1580: Annexation of Portugal, maximum expansion of Spanish empire
  - 1588: the Armada destroyed by England
  - 1589-98 Wars of Religion in France

# What the Renaissance knew

- The Spanish Empire/ Felipe III & IV
  - Family ties with Austria: Felipe III is Maximilian II of Austria's grandson and Felipe II's son; Felipe IV marries the 14-year-old Mariana, daughter of his sister and Ferdinand III of Austria
  - Persecution of Jews by the Inquisition sends Jewish merchants to Holland and kills many
  - 1609: Expulsion of Moriscos results in the loss of skilled traders and artisans
  - England, Holland and France support piracy against Spanish convoys and smuggling of Spanish silver (especially in Buenos Aires) and occupy Spanish islands in the Americas
  - Disruption of coastal trade in the Americas because<sup>166</sup> of piracy

# What the Renaissance knew

- The Spanish Empire/ Felipe III & IV
  - 1618-48: Thirty years war: Spain intervenes to help the Catholics in Germany but the war ends Spanish supremacy in Europe
  - 1640: Portugal and Catalonia rise up against Spain
  - 1655-59: Britain and France defeat Spain

# What the Renaissance knew

- The Spanish Empire/ Carlos II (1665-1700)
  - Bankrupt state
  - Widespread poverty
  - Obsolete infrastructure (roads, ships)
  - Antiquated industry
  - Medieval class hierarchy
  - Traditional agriculture
  - State-driven economy



# What the Renaissance knew

- The Spanish Empire/ Felipe V
  - 1702-13: War of the Spanish Succession leaves a Bourbon as king of Spain, Philippe of Anjou, grandson of the king of France
  - Treaty of Utrecht (1713): loss of Gibraltar, Milan, southern Italy (i.e. of the Mediterranean)
  - 1718-20: War in Italy against the Quadruple Alliance (Britain, France, Austria, Savoy)
  - Reconstruction of Spain after French models
  - Due to the blockade of Spain by England and Holland during the "War of Succession", Spain authorizes French ships to trade with its American colonies and therefore removes the ban on all non-Spanish trade with the American colonies, making the colonies de facto independent from Spain

# What the Renaissance knew

- The Spanish Empire/ Felipe V



Treaty of Utrecht  
(1713)

# What the Renaissance knew

- England
  - Until the 14th century: England is mostly an economic colony of continental Europe, providing wool to the textile industries of Holland and Italy
  - 14th century: England begins to develop its own textile industry

# What the Renaissance knew

- England
  - 1430: The Catholic Church owns about 25% of English land, more than the king (6%)
  - 1453: Loses the Hundred Years' War (and its territories in France)
  - 1455-85: War of the Roses (civil war)

# What the Renaissance knew

- England
  - Henry VII (1485) inaugurates the Tudor dynasty
  - Creates an authoritarian regime to restore order after the War of the Roses
  - Henry VIII converts to Protestantism (1529)
  - Henry VIII: Dissolution of the 825 English monasteries (1536)
  - Monastic Catholicism replaced by Anglican church with no monastic life and married clergy
  - New class of capitalist landowner

# What the Renaissance knew

- England
  - Britain largely immune to religious wars of the 16th century and to the Thirty Years' War - largely at peace until 1648
  - Henry VIII's minister Thomas Wosley (1515-29), a cardinal aiming to become pope, involves England in continental European politics

# What the Renaissance knew



- England
  - Elizabeth I Tudor (1558 - 1603)
    - After 1563: English aristocrats and the state get rich by confiscating Church property
    - Elizabeth enforces Anglican orthodoxy (organization and ceremonies borrowed from the Catholic church)
    - The middle class is attracted by the radical Christians (the “Puritans”) which increasingly influence the House of Commons



# What the Renaissance knew



- England
  - Elizabeth I Tudor (1558 - 1603)
    - Boom of iron industry to produce domestic goods (commodities)
    - Continental European industry: quality (elegance) - England: quantity (utility)
    - Import of iron from Sweden
    - Boom of coal to use as cheap fuel (instead of charcoal and wood, that have become scarce following deforestation)
    - First (wooden) railways (1597) to move coal to rivers

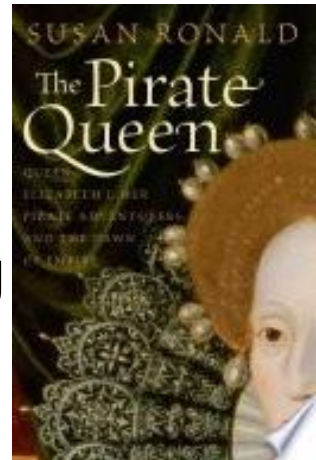




# What the Renaissance knew



- England
  - Elizabeth I (1558 - 1603)
    - England gets rich and becomes a colonial power by piracy, smuggling and slave-trading
    - Privateering forms a key part of Elizabeth's naval strategy
    - A privateer = a privately owned merchant ship equipped at their own expense, commissioned by the queen to raid vessels belonging to enemy governments
    - Proceeds from loot are divided between the shipowners and crew with a fee paid to the government.



# What the Renaissance knew

- England
  - Elizabeth I (1558 - 1603) : the seadogs
    - John Hawkins steals blacks from Portuguese Africa and sells them to Spanish colonists in America (later appointed rear-admiral during the war against Spain)
    - Francis Drake, financed by the queen in person, circumnavigates the world in three years (1577-80) raiding and plundering Spanish and Portuguese posts and ships (later appointed vice-admiral during the war against Spain)

# What the Renaissance knew

- England
  - Elizabeth I (1558 - 1603): the seadogs
    - Thomas Cavendish, third circumnavigation of the world (1586-87), raiding the Spanish ports and ships
    - Humphrey Gilbert burns villages in Ireland and massacres the population but also searches for the “northern passage” to China and India, and founds an English colony in Newfoundland (1583)
    - Walter Railegh explores “Virginia”, named after the “virgin queen”, the coastal region from South Carolina to Maine (1584)

# What the Renaissance knew

- England
  - Puritanism
    - A compromise between Roman Catholicism and Protestantism
    - Thomas Cartwright
    - Calvinist theology of the original sin
    - Westminster Assembly (1643)
    - Call for equality of rights
    - Levellers, Quakers, Millenarians, etc

# What the Renaissance knew

- England
  - James I (1603-25)
    - Beginning of Stuart dynasty
    - King of Scotland as James VI (1567-25)
    - 1603: Union of the Scottish and English crowns
    - Divinely-ordained monarchical absolutism ante litteram (before Louis XIV)

# What the Renaissance knew

- England
  - James I (1603-25)/ First American settlements
    - 1607: Jamestown is the first permanent English colony in the Americas
    - 1607: John Smith founds the colony of Virginia
    - First trading posts in India (Masulipatam, 1611; Surat, 1612)
    - 1620: English pilgrims aboard the "Mayflower" land at Plymouth Rock in North America

# What the Renaissance knew

- England
  - Charles I (1625-49)
    - 1603-42: merchants and industrialists revolt against regulation and taxation and create a lawless system that is more friendly to investment than the law is
    - England: Puritans opposed to Charles I's marriage with a Catholic
    - Scotland: Presbyterian revolt (1638)

# What the Renaissance knew

- England
  - Charles I (1625-49)
    - Royal influence on commerce and manufacturing decreases
    - Decline of economic power of the Anglican Church
    - Decline of the political power of the Monarchy



# What the Renaissance knew

- England
  - Charles I (1625-49)
    - Settlements in North America
      - 1625: Barbados
      - 1630: Boston (Massachusetts)
      - 1632: The colony of Maryland
      - 1636: Providence (Rhode Island)
      - 1638: New Haven
    - Settlement in India: Fort St George (1639 near Madras/Chennai)

# What the Renaissance knew

- England
  - English Civil War (1642–1651) between Parliamentarians (merchants, artisans, small land-holders, Puritans, Presbyterians, Independents) and Royalists (most aristocrats, Anglicans, Catholics)
    - 1645: Charles I's army defeated by Cromwell's New Model Army
    - 1648: Presbyterians expelled from Parliament leaving the Puritans in charge
    - 1649: Cromwell (an Independent) abolishes both the monarchy and the House of Lords (the "commonwealth") and Charles I is executed

# What the Renaissance knew

- England
  - Oliver Cromwell's military and religious dictatorship over England, Scotland, Ireland and Wales (1653)
  - Glorious Revolution (1688)

# What the Renaissance knew

- England
  - Cromwell/ Colonial expansion
    - 1652-67 Anglo-Dutch Wars – New Netherlands to England (New York and New Jersey)
    - 1655-59 War of Jamaica: England and France defeat Spain – Jamaica and Dunkirk to England

# What the Renaissance knew

- England
  - Charles II (1660-85) & James II (1685-88)
    - 1679: Petitioners for a new parliament ("Whigs") vs royalists ("Tories")
    - 1688: Both Whigs and Tories invite the Dutch William of Orange, husband of the Anglican Mary Stuart, to invade England and depose the Catholic James II ("Glorious Revolution")

# What the Renaissance knew

- England
  - William III of Orange (1689-1702) & Anne (1702-14)
    - 1689: The Bill of Rights
    - Britain becomes a constitutional monarchy
    - The king subject to the laws of the parliament
    - The monarch is appointed by parliament
    - Parliament represents an oligarchy of landed aristocrats and capitalists who promote their own economic interests
    - “Revolution” = returning to old aristocratic values

# What the Renaissance knew

- England
  - William III of Orange (1689-1702) & Anne (1702-14)
    - William III is distracted by the war of his native Holland against France and let parliament run Britain
    - William III and Mary have no children
    - 1702: Parliament elects queen Anne, daughter of the deposed James II (Mary's sister) but an Anglican

# What the Renaissance knew

- England
  - William III of Orange (1689-1702) & Anne (1702-14)
    - 1707: The English parliament becomes the British parliament
    - 1714: Parliament chooses Anne's cousin, the German George I of Hanover
    - No colony is represented in parliament
    - Ireland remains Catholic



# What the Renaissance knew

- England
  - Charles II (1660-85) & James II (1685-88)
    - 1687: Isaac Newton publishes the "Philosophiae Naturalis Principia Mathematica"

# What the Renaissance knew

- England
  - Charles II (1660-85) & James II (1685-88)/ Colonial expansion
    - 1662: Mumbai obtained via king Charles II's marriage to a Portuguese princess
    - 1665: Carolina
    - 1674: The Treaty of Westminster ends the war with the Netherlands, making England the dominant power of global commerce
    - 1681: Pennsylvania
    - Anglo-Mughal war in India (1686-90) and establishment of Calcutta

# What the Renaissance knew

- England
  - Colonial expansion after the revolution
    - 1689: England joins the League of Augsburg against France (William III arch-enemy of Louis XIV) - Beginning of a century of hostilities between England and France
    - 1702-13 War of the Spanish Succession: England, Netherlands and Austria win against Spain and France
      - England obtains French Canada and becomes the dominant power in North America
      - England obtains the asiento from Spain (exclusive right to supply African slaves to Spanish colonies) and becomes the main slave-trading power

# What the Renaissance knew

- Valois France
  - Charles VII (1422)
    - Wins the hundred-years war against England (expulsion of the English from France)
    - Creates a professional army
    - But France is still a loose association of feudal and ecclesiastical principalities

# What the Renaissance knew

- Valois France
  - Louis XI Valois (1461)
    - Submits the barons
    - Allies the government with the rising mercantile and financial class
    - France becomes not just a nation but a power
    - Defeats Burgundy at the battle of Nancy (1477)
    - Doubles the territory of France
    - National postal system (1464)
    - More expensive warfare requires a more efficient taxation
    - The landholding nobles and the clergy still refuse to pay taxes
    - Hated by the people who paid a huge price for his expansionist policies

# What the Renaissance knew

- Valois France
  - Louis XI Valois (1461)
    - The king is no longer a military ruler but a political ruler (Louis XI 1461-83 and then Mary and Elizabeth in England)
    - Economy provides the funds for the king to win wars but the king is in charge of neither the economy nor the military

# What the Renaissance knew

- Valois France
  - Charles VIII (1491)
    - Obtains Brittany by marriage
    - Invades Italy and is defeated, but imports the Renaissance to France (architect Giovanni Giocondo, sculptor Guido Mazzoni, woodworker Domenico Bernabei, landscape architect Domenico Pacello, etc)
    - The Battle of Fornovo (1495) debuts horse-drawn artillery
    - Builds the first “chateau de plaisance” (at Amboise)



# What the Renaissance knew

- Valois France
  - Francois I (1515-47)
    - 1522: introduces public debt (practiced by the Italians since the Middle Ages)
    - 1533: The 14-yo Caterina de Medici marries the future Henri II and imports Italian lifestyle to France



# What the Renaissance knew

- Valois France
  - 1557: Bankruptcy but...
  - Immense natural resources
  - Twice the population of Spain and four times the population of England
  - Diversified agriculture

# What the Renaissance knew

- Valois France
  - Francois II (1559-60), Charles IX (1560-74) and Henri III (1574-89)
    - Caterina's influence continues on etiquette and entertainment until 1589
    - Greek-inspired Academie de Poesie and Musique (1570)
    - A six-hour "Ballet Comique de la Reine" (1581) for a royal wedding

# What the Renaissance knew

- Valois France
  - Francois II (1559-60), Charles IX (1560-74) and Henri III (1574-89)
    - Caterina's children have no male heir
    - Bourbons (Protestants) and Guises (Catholics) fight for succession
    - Endless religious wars, with Caterina's support always changing
    - 1572: Massacre of St Bartholomew's Day

# What the Renaissance knew

- Bourbon France
  - Henri IV (1589-1610)
    - A century of civil and foreign wars has turned France into a wasteland, nearly bankrupt, whose aristocracy is increasingly disobedient
    - 1589: Henri IV Bourbon is the legal successor to Henri III (assassinated by a monk)
    - 1593: Henri IV Bourbon converts to Catholicism
    - 1598: France's archenemy Felipe II of Spain dies and the Edict of Nantes pacifies the Huguenots
    - Duke of Sully restores the state's finances and stimulates economic development of the cities

# What the Renaissance knew

- Bourbon France
  - Henri IV (1589-1610)
    - Creation of a French navy to compete with the Spanish and Dutch navies
    - Trading posts in India
    - Exploration of North America (Samuel de Champlain founds Quebec in 1608 and discovers the Great Lakes)
    - 1610: Assassinated by a Catholic fanatic, and succeeded by his wife Maria Medici, regent for their infant son Louis XIII

# What the Renaissance knew

- Richelieu's terror (1624-42)
  - Founder of the absolute monarchy
  - Creation of the nation state
- Annihilation of the political power of the aristocracy and of the Church – the real end of feudalism
- Destruction of the quasi-independence of the Huguenots
- Centralization of power in the absolute monarchy
- Establishment of France as the greatest military power of Europe
- French exploration and colonization in the Americas and Asia
- Practical application of Machiavelli's theories



# What the Renaissance knew

- Richelieu's terror (1624-42)
  - Centralization of administration (taxation, police and justice) via the “intendents”, hired from the middle class, not from the aristocracy
  - The estates-general become an obsolete institution (no meeting between 1614 and 1789)
  - International prestige thanks to the victories in the Thirty Years' War against the Habsburgs (who are Catholic like him)

# What the Renaissance knew

- Richelieu's terror (1624-42)
  - Vision of a technocratic state (Grandes Ecoles)
    - “Rational Reorganization of Government” (1627)
    - Reorganization of the educational system to favor the sciences
    - Founding of the French Academy (1635)
    - The population of France becomes patriotic and loyal to the monarchy



# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV “le roi soleil” (1643-1715)
    - Becomes king at the age of 5...
    - ... but Mazarin is the real ruler between 1642-61
      - 1648: Peace of Westphalia with the Holy Roman Empire
      - 1659: Treaty of the Pyrenees with Spain
      - Religious dogmatism (fanatical Jesuit confessor LeTellier)
      - Persecution of Protestants leads to the exodus of the Huguenots
      - Discredits the aristocracy

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV (1661-1715) “le Roi-Soleil”
    - Chief minister from the middle class: Jean-Baptiste Colbert (first minister of state 1661-83, in charge of finances, commerce, agriculture, transportation)
      - Fosters commerce and industry
      - Academy of Sciences (1666) and Paris Astronomical Observatory (1667)
      - Expands network of transportation (Canal du Midi, 1681)
      - Tariffs to protect national industries
      - Navy that can compete with Spain and Holland

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV (1661-1715) “le Roi-Soleil”
    - Jean-Baptiste Colbert (first minister of state 1661-83)
      - 1635: Purchase of Martinique and Guadalupe
      - Settlements in Canada
      - 1682: Rene-Robert LaSalle conquers the Mississippi basin for France and renames it Louisiana
      - 1718: New Orleans
      - Trading posts in India (1668, Surat; 1672, Chandarnagar; 1674, Pondicherry), Senegal (1659), Madagascar (Tôlanaro, 1642), Mauritius/Reunion (1665)

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV (1661-1715) “le Roi-Soleil”
    - Expands the central government
    - Dispenses with prime ministers to consolidate the absolute monarchy (1661)
    - Moves the government to Versailles (1676)
    - Patron of the arts
    - Revokes religious tolerance for Protestants/Huguenots (1685) and forces exodus of Protestant merchants and artisans to Protestant countries (England, Netherlands, Prussia)
    - Code Noir (1685): legalizes slavery and bans Jews from France
    - Most profitable colony: Saint-Domingue (Haiti)

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV “le roi soleil” (1643-1715)
    - Foreign policy of natural borders: France’s natural borders are the Rhine river, the Alps and the Pyrenees
    - Minister of war: François-Michel Le Tellier de Louvois (1677-91)
    - Generals: Louis de Condé and Henri de Turenne

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV “le roi soleil” (1643-1715)
    - Dutch wars (1667-1697): William III becomes the arch enemy of Louis XIV
    - League of Augsburg (1686): Leopold I Habsburg, Spain, Sweden, Holland and some German states to fight France – all the great powers of Europe have to come together to stop France’s invasion of Germany
    - 1689: England joins the league, becoming an enemy of France

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV “le roi soleil” (1643-1715)
    - The succession of Carlos II of Spain: no children and no brothers, one sister married to Leopold I of Austria and one sister married to Louis XIV
    - War of the Spanish succession (1702-13): Carlos II bequeaths the Spanish empire Louis XIV’s grandson, while Leopold I claims the empire for his son, archduke Karl, and forms an alliance with England-Holland (William III), Portugal, Savoy and some German states (France saved by the death of Leopold)

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV “le roi soleil” (1643-1715)
    - Treaty of Utrecht (1713):
      - Spanish Netherlands (Belgium), Milano and southern Italy (Napoli) to Austria
      - Spanish Sicily to Savoy/Piedmont
      - Spanish Gibraltar to England
      - Felipe V (a Bourbon) recognized as king of Spain
      - For 80 years Spain and France are ruled by Bourbons



# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV “le roi soleil” (1643-1715)
    - Peace of Utrecht (1713):
      - French Hudson Bay to England (England as the dominant force in north America)
      - England obtains the monopoly of the Atlantic slave trade
      - Elector of Brandenburg recognized as king of Prussia
      - Duke of Savoy recognized as a king

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV “le roi soleil” (1643-1715)
    - The Spanish empire before the war: Spain, southern Italy, Milan, part of the Netherlands, Philippines, most of South and Central America, Florida and California
    - The Bourbons obtain Spain but lose all Spanish possessions in Europe
    - The Habsburgs obtain Spanish Italy and Spanish Netherlands (Belgium)
    - England obtains Gibraltar and the asiento to trade slaves in Spanish America
    - Louis XIV focused on land wars neglects the navy

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV “le roi soleil” (1643-1715)
  - Peace of Utrecht (1713):



# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV (1661 - 1715) “le Roi-Soleil”
    - Peak of the veneration of the king
    - He reigns 72 years
    - A divinely ordained monarchy: an absolute power conferred by God in person (theology of Jacques-Bénigne Bossuet’s “Politics Derived from the Words of Holy Scripture”)

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XIV (1661 - 1715) “le Roi-Soleil”
    - The Latin-based humanist civilization of Europe is replaced by French culture
      - France’s divinely-ordained absolutism becomes a model for the other monarchies
      - The splendor of Versailles inspires the other monarchies
      - French becomes the language of diplomacy and of the aristocracy
      - French manners and dress are imitated all over Europe

# What the Renaissance knew

- Bourbon France (1661-1815)
  - French supremacy
    - Declining powers: Ottomans, Spain, Sweden, Poland
    - Old rival: Austria
    - Emergent powers: Britain, Russia, Prussia
    - Centralized military bureaucracy (standing army, royal navy)
    - Size of the army: 30,000 in 1659 - 97,000 in 1666 - 350,000 in 1710

# What the Renaissance knew

- Bourbon France (1661-1815)
  - French supremacy
    - Anglo-French seven wars: 1689-1815
    - 1689-1697: Eight-year War (France against German states, England, Netherlands, Austria, Spain and Savoy)
    - 1702-1713: War of the Spanish Succession to resist French expansion (England, Netherlands and Austria win against France's Louis XIV and Spain's Philip V, grandson of Louis XIV)

# What the Renaissance knew

- Bourbon France (1661-1815)
  - Louis XV (1715-74)
    - Becomes king at the age of 5 but...
    - ... cardinal Fleury (1723-43) runs the state
    - 1745-64: His mistress Pompadour runs the state
    - The royalty lives in isolation in Versailles and hardly knows the population
    - France is wealthy and elegant



# What the Renaissance knew

- Bourbon France (1661-1815)
  - Landowning aristocracy dependent on monarchy
  - Prejudice against making money out of farming
  - No agricultural innovations
  - The monarchy reacts to the rising power of the bourgeoisie by allowing the bourgeoisie to purchase land and titles (by converting the bourgeoisie into aristocracy)
  - Sales of offices strengthens royal absolutism

# What the Renaissance knew

- Bourbon France (1661-1815)
  - France had 40 major famines between 1500 and 1800
  - England had 17 major famines between 1523 and 1623.
  - Louis XVI lifts price controls on grain causing the “flour war” (riots in dozens of towns, 1775)
  - Antoine-Augustin Parmentier promotes the potato to replace bread
  - The potato removes the famine from the history of Europe

# What the Renaissance knew

- Flanders/ Belgium
  - Antwerp in the 16th c
    - A river port of the Burgundian-ruled Brabant (in the Netherlands)
    - England forbids foreigners from buying wool directly from the producers and forces them to buy them through a "staple", the only town through which a certain commodity can be imported or exported
    - 1338: England designates Antwerp as the only town allowed to buy English wool (Calais, ruled by Britain in France, became the next one, in 1363)
    - 1482: Mary of Burgundy dies and her husband Maximilian I Habsburg of Austria inherits the Brabant

# What the Renaissance knew

- Flanders/ Belgium
  - Antwerp in the 16th c
    - 1488: Following a revolt in Bruges, Maximilian orders foreign merchants to move to Antwerp
    - 1502: Antwerp opens its port to Portuguese ships (East Indies spices, Chinese silk and porcelain)
    - A wealthy city
    - A cosmopolitan city: Portuguese craftsmen, Italian bankers, German merchants,
    - A haven for "heretics" (a Protestant enclave in a Catholic empire)

# What the Renaissance knew

- Flanders/ Belgium
  - Antwerp in the 16th c
    - Printing presses (Michael Hillen van Hoochstraten, Willem Vorsterman, Christophe Plantin)
    - The books of Andreas Vesalius, Abraham Ortelius and Gerardus Mercator are printed in Antwerp
    - William Tyndale's English translation of the Bible is printed in Antwerp
    - Art: Pieter Bruegel (from 1555) and Peter Paul Rubens (from 1587), the Cathedral of Our Lady (1518), Bourse of Antwerp (1531), City Hall (1565),

# What the Renaissance knew

- Flanders/ Belgium
  - Antwerp in the 16th c
    - Music: Jacob Obrecht (in 1492-98), musical instrument ("All over the city one sees everywhere weddings, banquets and dancings" - Lodovico Guieciardini in "Descrittione de tutti i Paesi Bassi")
    - 1566: Antwerp leads the Dutch Revolt against the Habsburgs
    - 1585: Antwerp surrenders to Spain and many humanists move to the northern provinces (soon to become the independent Netherlands)

# What the Renaissance knew

- Netherlands/ Holland
  - Long independence struggle
  - 1568: The Dutch-speaking provinces, led by William I of Orange, revolt against Spain
  - 1581: Seven provinces (mainly Holland) form the Republic of the "United Provinces" and declare independence from Spain
  - 1592: Spain closes Lisbon to Dutch ships and Dutch ships start traveling directly to the Indies
  - 1593: Systematic slave-trading in Guinea
  - The herring industry needs salt
  - 1598: Holland loses access to Portugal's salt after Spain's trade embargo (Portugal having become part of Spain)

# What the Renaissance knew

- Netherlands/ Holland
  - 1598: Holland occupies salt-rich Araya (Venezuela) and then expands Caribbean trade to rubber, tobacco, etc while occupying more and more Spanish islands
  - In retaliation, Holland supports piracy against Spain
  - 1602: the Dutch East India Company and the first stock exchange in the world
  - 1609: The Bank of Amsterdam, the first national bank
  - Amsterdam becomes the main international market in the world
  - The Dutch guilder becomes the de facto reserve currency in Europe



# What the Renaissance knew

- Netherlands/ Holland
  - 1619: Jan-Pieterszoon Coen founds Batavia in Java and invites Chinese immigrants to develop it
  - 1621: West India Company

# What the Renaissance knew

- Netherlands/ Holland
  - 1642-43: Abel Tasman circumnavigates Australia and discovers New Zealand and the Fiji islands
  - 1648: Spain recognizes Holland's independence

# What the Renaissance knew

- Netherlands
  - Benefits from the shift of the trade routes to the Atlantic
  - The only booming economy after the age of hyper-inflation
  - The only region at peace between 1625 and 1672 (their wars were fought on the sea)
  - A federal constitutional republic

# What the Renaissance knew

- Netherlands



A 1622 map  
portraying the  
Netherlands as a  
lion

# What the Renaissance knew

- The Dutch renaissance (1568)
  - 1568: Williams of Orange leads an uprising against Spain in the "Low Countries" ("Eighty Years' War")
  - 1597: the Dutch found the colony of Batavia in Java (Indonesia)
  - 1602: the Dutch East India Company is established in Holland
  - 1624: Dutch colons colonize north-eastern Brazil
  - 1625: Dutch colons found a trading post in America, Nieuwe Amsterdam (New York)

# What the Renaissance knew

- The Dutch renaissance (1568)
  - 1641: Holland seizes Malacca from Portugal
  - 1648: the "Peace of Westphalia" ends the Thirty Years' War, and Spain recognizes the independence of the United Seven Provinces (Holland)
  - The Dutch Republic also provided a safe haven for European Jews
  - 1652: the Dutch found a colony in South Africa
  - 1702-13: England, the Netherlands and Austria defeat Spain and France ("War of the Spanish Succession")

# What the Renaissance knew

- The Dutch renaissance (1568)
  - Erasmus' humanism
    - campaign against ignorance and superstition
  - Calvinism
    - Thrift, industry, and hard work are forms of moral virtue
    - Business success is an evidence of God's grace

# What the Renaissance knew

- The Dutch renaissance (1568)
  - Proto-capitalist speculators
    - 1636-37 Tulip mania (\$2,000 for one bulb)
  - The middlemen of Europe
    - Middlemen of culture as well as trade
    - Mediterranean goods, art, mathematics, philosophy
  - A mission to map the world
    - Visual culture (painting, optics and cartography)
    - Art as an extension of the natural sciences



# What the Renaissance knew

- The Dutch century
  - Highly urbanized region that imported much of its food supply
  - Availability of credit
  - A service economy (little agriculture or manufacturing) exporting mostly foreign goods all over Europe
  - Resilient to continuous warfare
  - New trade patterns: shift from luxury goods to commodities (grains, cheap textiles, fish, salt)
  - Cheap efficient freighters (the “flyboat”)

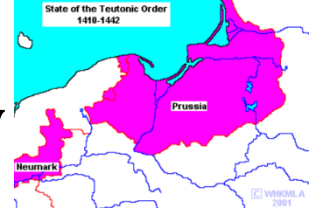
# What the Renaissance knew

- The Dutch century
  - Large bureaucracies of France and England less efficient and competitive than Dutch cities (small specialized mercantile communities)
  - Colonization for economic not political purposes
  - Venezia, specializing in luxury goods, declines to regional market
  - 1700: The tonnage of the Dutch fleet is three times that of England

# What the Renaissance knew

- The Dutch century
  - Causes of decline in the 18th century:
    - War of the Spanish succession (financial burden)
    - Spanish and Portuguese colonies in America (new mass-market goods)
    - Industrial revolution (British competition)

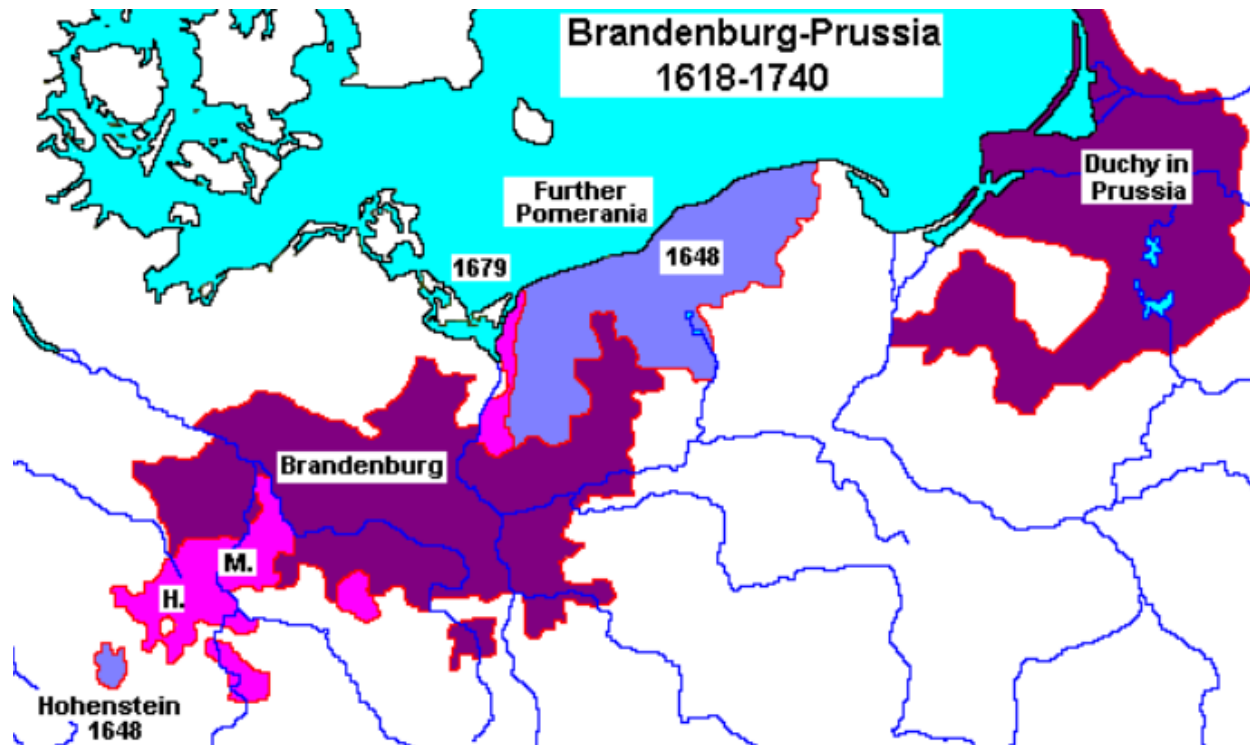
# What the Renaissance knew



- Prussia
  - 1226: The Teutonic Knights conquer Prussia and convert it to Christianity
  - 1454: Poland-Lithuania conquers Prussia
  - 1525: Prussia (Königsberg) becomes a hereditary duchy of Poland under Albrecht Hohenzollern, who also rules Brandenburg (Berlin)
  - 1618: Prussia and Brandenburg are united
  - 1657: Prussia becomes independent from Poland under the Hohenzollerns
  - Friedrich Wilhelm I (reigned 1640-88), a Calvinist, encourages mercantilism and builds canals
  - Edict of Potsdam (1685): Protestant refugees welcome

# What the Renaissance knew

- Prussia
  - 1701: Prussian kingdom founded by Friedrich I
  - Efficient tax collection, bureaucracy and army
  - Collapse of Sweden and Poland



# What the Renaissance knew

- Prussia
  - Pietism, Prussian version of British puritanism
    - Philipp Spener's "Pia Desideria" (1685)
    - There is a reward in this life for moral behavior
    - The Creation can be improved upon
    - Friedrich Wilhelm I (1713) patron of Lutheran theology
    - Reorganization of the military church
    - Decree that mandates studies at Univ of Halle for all Lutheran pastors (1729)
    - August Francke at Halle focuses on religion
    - Meritocracy in the Lutheran church
    - Pietism creates the disciplined mindset of the Prussian people

# What the Renaissance knew

- Prussia
  - Education
    - More democratic than in Britain: sons of poor families can obtain higher education
    - New universities: Halle (1694), Gottingen (1737), etc
    - Halle introduces the “seminar” (research, not just learning)
    - Halle replaces Latin with German as the language of lectures
    - Gottingen shifts emphasis from theology to philosophy, history and philology

# What the Renaissance knew

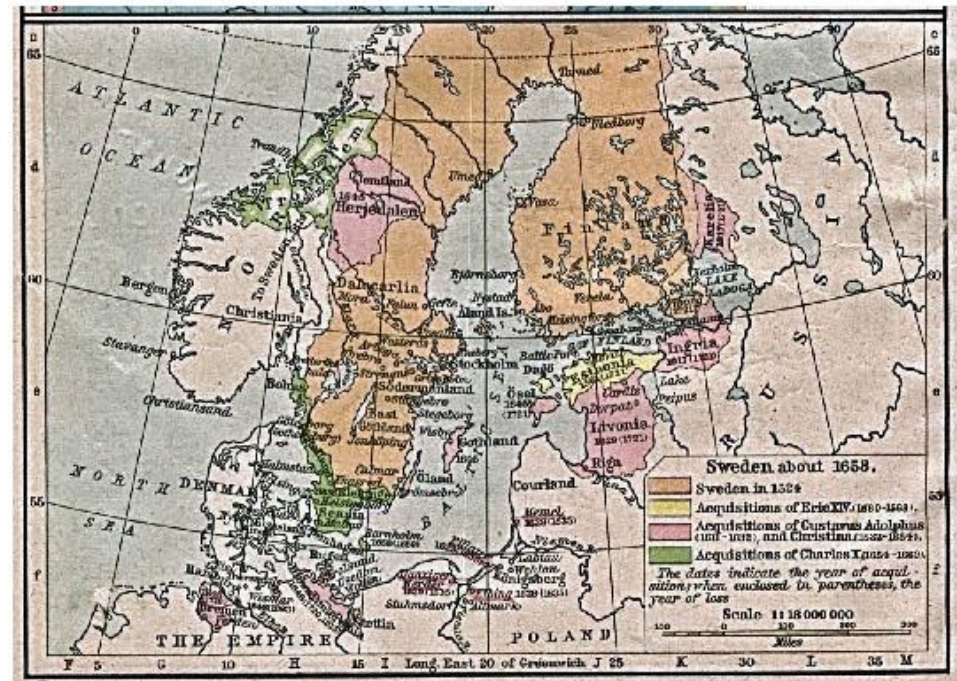
- Sweden
  - Gustavus Adolphus/ Gustav II (1611-32) tries to turn the Baltic into a Swedish lake
    - Finland (1634) and Estonia
    - Wars with Russia and Poland
    - A Protestant empire
    - Nonetheless, Catholic France (enemy of the Habsburgs) funds Sweden's invasion of Germany during the Thirty Years War
    - 1632: Sweden defeats the Catholic league at Luetzen but Gustavus is killed



# What the Renaissance knew

- Sweden

1658



# What the Renaissance knew

- Sweden
  - 1655: Sweden invades Poland-Lithuania ("First Northern War") while Russia, Denmark, and the Empire side with Poland-Lithuania
  - 1658: Sweden now occupies Finland, Estonia, Latvia and parts of northern Germany
  - 1668: "Triple Alliance" of England, Sweden and the Netherlands against France
  - A multi-ethnic empire just like Austria: Finns, Estonians, Russians, Poles, Germans, Danes
  - Monopoly of Baltic trade
  - The Baltic is basically a Swedish lake
  - Conflicts with Denmark, Prussia, Poland and Russia

# What the Renaissance knew

- Sweden
  - 1700: The Great Northern War: Russia, Denmark and Poland against Sweden
  - 1706: Sweden defeats Poland
  - 1721: Sweden is defeated by an alliance of Denmark, Poland and Russia and loses most of its territory on the other side of the Baltic Sea (peace of Nystad)
  - 1809: Russia conquers Finland from Sweden

# What the Renaissance knew

- England/ Henry VII Tudor (1485-)
  - English trade begins to employ English-made ships instead of Italian-made ships
  - The English government protects its ships abroad
  - Direct competition with Hanseatic and Italian cities
  - Cabot's expedition (1496): birth of British imperialism

# What the Renaissance knew

- England/ The Tudor peace (16th c)
  - Tudors inherit a highly centralized bureaucratic state, i.e. a financial and judicial infrastructure
  - Tudors incorporate the peripheries into a unified stable sovereign state
  - The provincial seigneurs transform themselves into local servants of the regime
  - Wool trade booms
  - Independence of landowners from the monarchy
  - Commercial revolution of the towns pressures landowners

# What the Renaissance knew

- England/ The Tudor peace (16th c)
  - Birth of capitalistic agriculture
  - Transition from medieval concept of land as power to the industrial concept of land as investment
  - Agricultural innovation: fertilizers, crop rotation, new crops
  - Concentration of land in fewer hands
  - Decline of the medieval peasant community
  - Tudors: 1485-1603

# What the Renaissance knew

- England/ The Tudor peace (16th c)
  - 1550s: Boom of the iron cannon industry
  - 1560s: Privateering in the Atlantic (e.g. Francis Drake) becomes a major source of revenues for London merchants
  - 1588: Destruction of the Spanish “armada”
  - Coal replaces charcoal (wood) as the main source of energy

# What the Renaissance knew

- England/ Revolution (17th c)
  - The “glorious” English revolution (1688) that installs a Dutch king (a constitutional monarch) abolishes the absolute monarchy
  - Locke’ “Two Treatises of Government” (1689) refutes the divine rights of kings and outlines a society in which all men are equal
  - Toleration Act (1689) to protect all religious beliefs
  - Boom of French immigrants, especially “Huguenots” expelled from France after 1685
  - Boom of political pamphlets after 1694 when the Licensing Act (censorship) expires
  - 1707: Union of England and Scotland



# What the Renaissance knew

- England/ Revolution
  - The revolution (1688) shifts power towards the capitalistic landowners
  - Golden age of great landed estate: English revolution (1688) to USA civil war (1861)
  - Cause of decline of the landowners: steamships facilitate imports of USA grain

# What the Renaissance knew

- England/ Revolution
  - Dutch-style market economy vs state-driven economies of France, Spain, etc
  - Rise of private capital markets in England vs centralized monarchical finances of France, Spain, etc

# What the Renaissance knew

- England/ Revolution
  - 1692: Invention of the national debt: England issues bonds that corporations and individuals can buy and receive annual dividends
  - France taxes the citizens to support wars, England does not need to tax the citizens
  - 1702-1713: War of the Spanish Succession to resist French expansion and break the French-Spanish monopoly on the Mediterranean (England, Netherlands and Austria win against France's Louis XIV and Spain's Philip V, grandson of Louis XIV)

# What the Renaissance knew

- England/ End of the Tudor peace
  - Treaty of Utrecht (1713): Acquisition of a naval base in the Mediterranean (Gibraltar)
  - Treaty of Utrecht (1713): Monopoly of Atlantic slave trade to Spanish America
  - 1714: Britain has 124 ships, almost twice the combined navies of Spain and France

# What the Renaissance knew

- England
  - London:
    - 475,000 people in 1670 - 675,000 in 1750
    - Theaters (1576 the first theater)
    - Coffehouses
    - Clubs (The "Kit Kat Club", 1696)
    - Book and news publishers of Grub Street ("The Spectator", 1711, by Joseph Addison and Richard Steele)
    - Freedom of speech like nowhere else in Europe

# What the Renaissance knew

- England
  - American colonies
    - 1639: The first printing press (John Glover) opens in Boston (before any papermill)
    - 1690: the first papermill in the American colonies, opened in Pennsylvania by William Bradford
    - 1690: Massachusetts prints its own money to finance a war against France
    - 1690: The first newspaper in the colonies, published in Boston by Benjamin Harris (Public Occurrences both Foreign and Domestic)

# What the Renaissance knew

- England
  - American colonies
    - 1697: Bradford opens the first printing press in New York
    - 1704: Bartholomew Green launches the newspaper Boston Newsletter
    - 1725: Bradford starts the first New York newspaper, the New York Gazette
    - 1728: Benjamin Franklin launches the Pennsylvania Gazette (Franklin also invests in papermills)
    - 1769: The first printing press made in the colonies, made by Isaac Doolittle

# What the Renaissance knew

- England
  - American colonies
    - Boston becomes the printing center of the American colonies
    - Philadelphia becomes the papermaking center



# European population and armies in 1700

Power	Population	Army
France	19,000,000	400,000
Austria	8	50,000
Spain	6	30,000
Britain	9	70,000
Russia	18	170,000
Prussia	2	30,000

# What the Renaissance knew

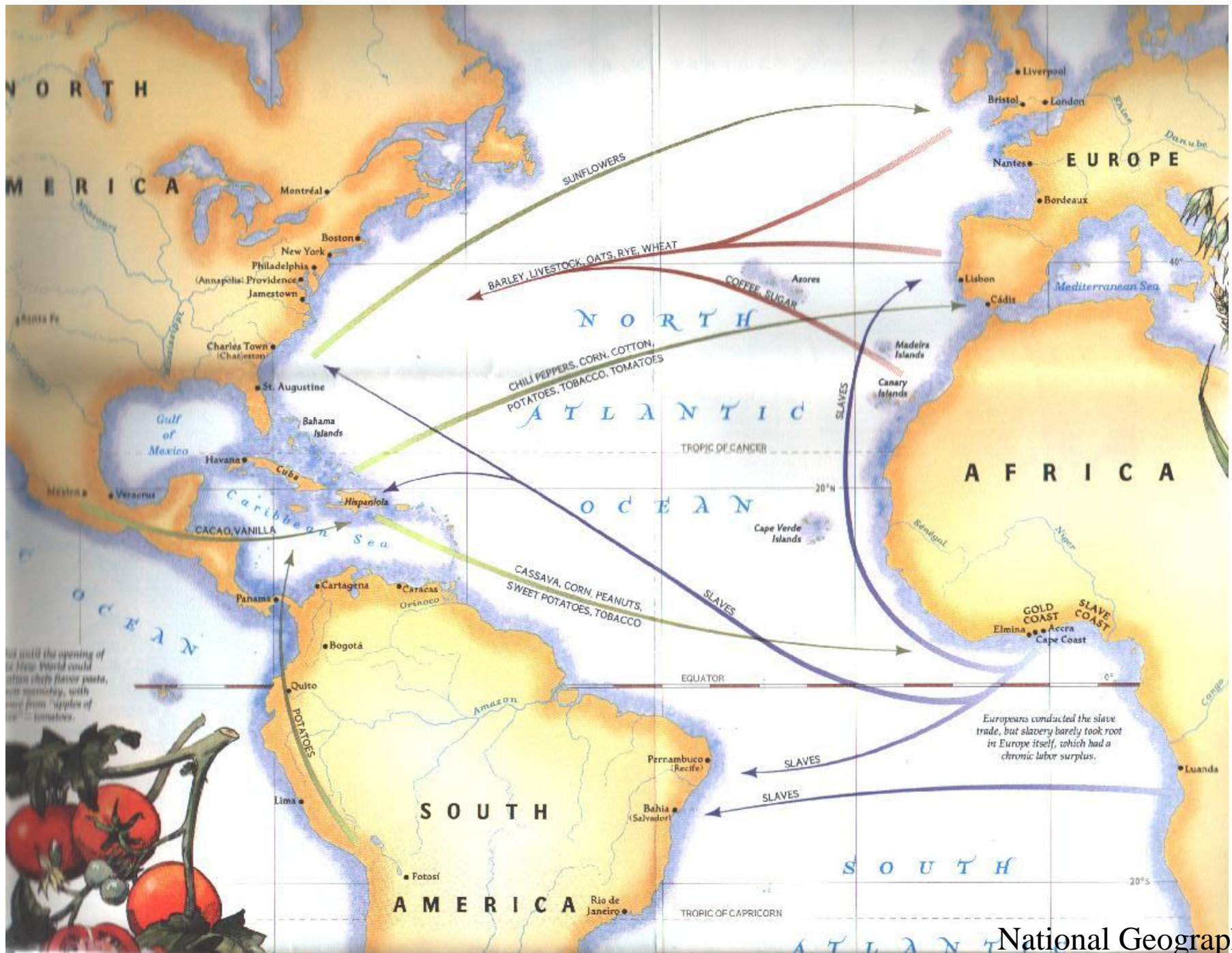
- The cost of warfare
  - Lengthier and recurring wars
  - Larger armies (growth of infantry over cavalry and infantry)
  - More expensive fleets

# What the Renaissance knew

- Naval battles
  - Lepanto (1571): Christians stop Ottomans
  - Armada (1588): England stops Spain
  - Trafalgar (1805): England stops Napoleon
  - Navarino (1827): Christians defeat Ottomans
  - Tsushima (1905): Japan defeats Russia
  - Jutland (1916): Britain defeats Germany
  - Midway (1942): USA defeats Japan

# What the Renaissance knew

- Percentage of state revenues invested in warfare
  - Louis XIV (France, 1643): 75%
  - Petr I (Russia, 1682): 90%
  
  - George W Bush (USA, 2003): 16%



Until the opening of a New World could still chop flavor pasta, eat morning, with rice from 'apples of the' - tomatoes.



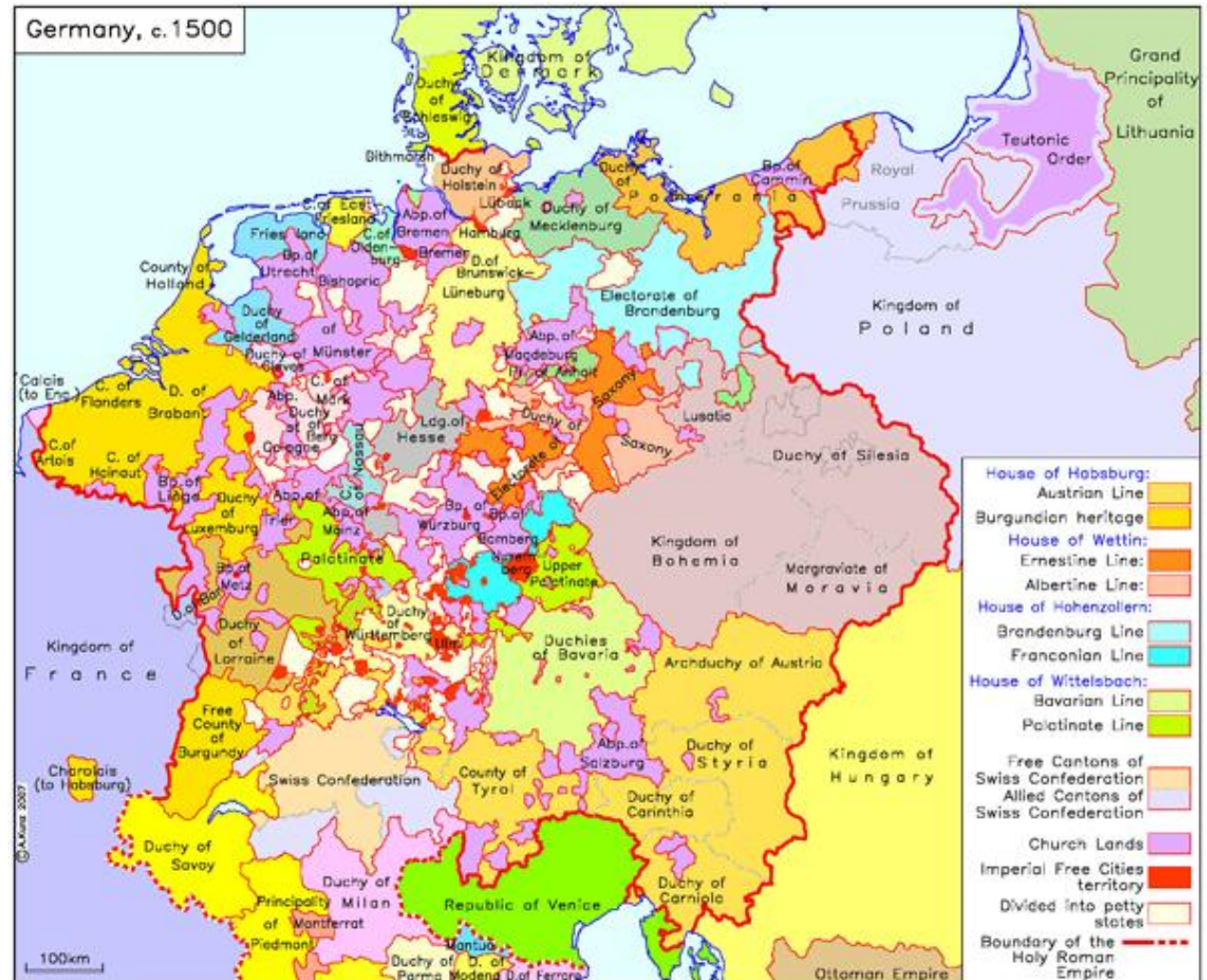
Europeans conducted the slave trade, but slavery barely took root in Europe itself, which had a chronic labor surplus.

# What the Renaissance knew

- Southeast Asia's "age of commerce"
  - Commercial expansion by Javanese, Siamese, Malays, etc traders (15th, 16th centuries)
    - Rice, textiles, ceramics, gold, silver, iron, copper, tin, lead, spices, etc
    - Ports of Pegu (Burma), Ayutthaya (Siam), Malacca (Malaysia), Aceh (Sumatra), Banten (Java), Brunei (Borneo), Manila (Philippines), etc
    - China, India, Japan, Persia, Arabia, Turkey, Western European powers
  - Western trading monopolies (17th, 18th) turning into
  - Western political hegemony (18th, 19th)

# What the Renaissance knew

- Holy Roman Empire



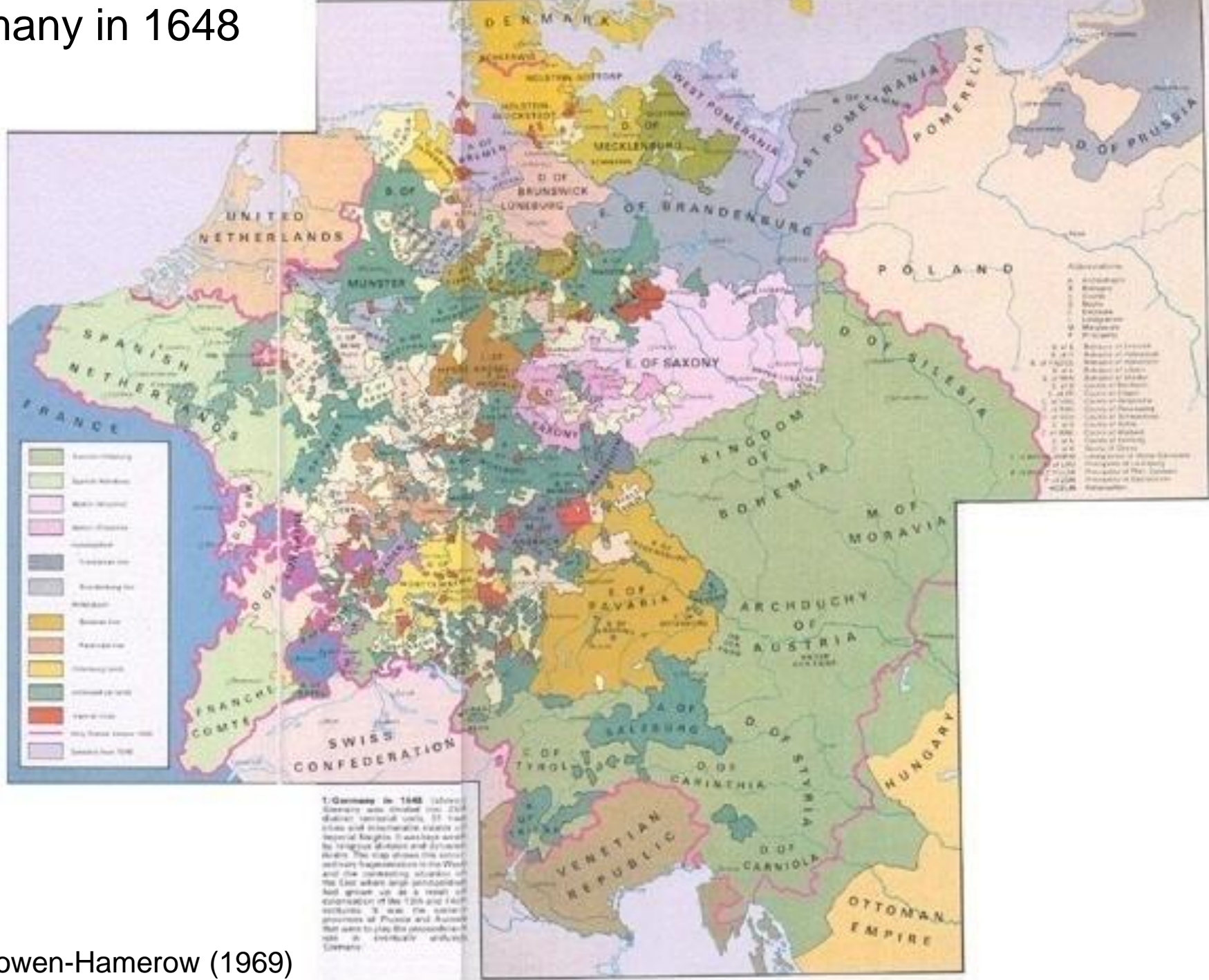
Institute of European  
History, Mainz / © A.  
Kunz, 2007

# What the Renaissance knew

- The miracle of Europe
  - Germany
    - Technically under Habsburg domination 1440-1806 as the Holy Roman Empire
    - Peasants Revolts (1524-26): 100,000 dead
    - Financial collapse of Augsburg (1556-84): 70+ large companies bankrupt
    - Decline of the Hanseatic towns (Baltic market shifts to Holland)
    - Hamburg is the exception: economic boom (trade, shipbuilding, banking)
    - Thirty Years' War (1618–48)



# Germany in 1648



Lyon-Rowen-Hamerow (1969)



# What the Renaissance knew

- Italy
  - Fall of Constantinople to the Ottomans (1453)
  - Discovery of America (1492)
  - Sea routes to the West Indies
  - Financial collapse of Spain (bankruptcies of 1557, 1560, 1569, 1575, 1596, 1607, 1627)
  - Financial collapse of the Habsburgs (1556-84)
  - Loss of the Spanish, German and Byzantine markets
  - Plague of 1630 in Northern Italy

# What the Renaissance knew

- Italy
  - English and Dutch commodities are cheaper because of the power of the guilds (opposed to mechanization and defenders of high wages) and because of taxation (to fund endless warfare)
  - Italy becomes an importer of manufactured goods and an exporter of agricultural goods

# What the Renaissance knew

- From nation states to empires
  - Spain, France, Britain, Russia: the king subdues the vassals, establishes a strong central power (absolutism) and the nation goes on to create a huge transcontinental empire
  - Germany: the vassals subdue the king (emperor), dilute power (feudalism) and the nation never becomes a major transcontinental empire

# What the Renaissance knew

- The mysterious disappearance of the plague from Europe
  - northern Italy (1631)
  - south and east Spain (1652)
  - southern Italy and Genoa (1657)
  - London (1665)
  - Paris (1668)
  - Not a single death recorded afterwards

# What the Renaissance knew

- Why the West?
  - Mercantile revolution of the 13th century
  - Industrial revolution of the 18th century
  - Electrical revolution of the 19th century
  - Digital revolution of the 20th century
  - But why the West?

# What the Renaissance knew

- Why the West?
  - Science and technology? China and Islam led for centuries, and science developed independently of technology until the 20th century
  - China's meritocracy (that drew the best brains into government) actually fostered a system driven by the scholar-bureaucrat at the expense of the merchant (knowledge applied to wise administration, not to progress): pressure on classical learning and contempt for material aspirations (your goal: to pass imperial examinations, not to start your own business)



# What the Renaissance knew

- Why the West?
  - Science was a consequence not a cause of European capitalism and imperialism (first capitalism emerged in the Middle Ages, then Europe started exploring, conquering, industrializing, etc)
  - Industrialization too was a consequence, not a cause (expansion of trade and technological progress predate the industrial revolution)

# What the Renaissance knew

- Why the West?
  - Natural resources? Russia had more; whereas Holland and Japan had very little
  - Wars, colonialism, imperialism? Spain became poor, and the main beneficiary was a former colony, the USA

# What the Renaissance knew

- Why the West?
  - Roman law is rational, capitalists can predict what happens
  - China and Islam continue to have arbitrary unpredictable laws that partly derive from moral values and partly from arbitrary rulers
  - West: medieval system of arbitrary expropriation by the lord replaced by Magna Charta, smugglers and piracy

# What the Renaissance knew

- Why the West?
  - Taxation instead of confiscation
  - Property rights
  - Property rights are rarely conceded by the state without violent revolts
  - Security from arbitrary confiscation greater in England and Holland
  - The Middle Ages began a slow process of replacing the arbitrary law of the lord with a rational system of taxation
  - Full confidence by capitalists in the system reached the 19th century
  - Then large immobile factories become feasible

# What the Renaissance knew

- Why the West?
  - Islam: ban on usury
  - West: merchants circumvent the Church's ban on usury via bills of exchange

# What the Renaissance knew

- Why the West?
  - (Weber's theory)
  - Calvinism sanctifies work, individual responsibility, irrelevance of the clergy
  - But capitalism and mercantilism were born in very Catholic countries first
  - and England was the least protestant of protestant countries
  - Protestant moral values better suited for the emerging merchant/capitalist class
  - Protestantism legitimizes capitalist morality
  - More likely capitalism created Protestantism, not viceversa

# What the Renaissance knew

- Why the West?
  - Feudalism -> weak central state -> city states -> plurality of competing political, economic, military centers (a Darwinian system for survival of the fittest)
  - Vacuum of political power allows merchants to establish a different structure of power
  - Separation of politics and economy. Merchants have freedom to experiment.

# What the Renaissance knew

- Why the West?
  - The revival of trade in the Middle Ages created capitalism, that then funded the industrial revolution, that then created new markets. Technology came after, not before.
  - Technology was initially independent of science. Only after 1870s did science contribute to innovation.
  - Economic growth started with trade, not with industry.
  - In modern times, countries that tried to jumpstart their economy with industry (the communist countries) failed; whereas countries that tried to jumpstart their economy with trade (the Far East) succeeded.



# What the Renaissance knew

- Why the West?
  - Medieval trade by independents could develop because the authority of the state was so weak.
  - Medieval chaos led to loose control by the state on the economy (a separation of politics and economics), which led to innovation in trade and craft, and eventually to the industrial revolution.
  - The post-feudal economy remained autonomous, and inventors were increasingly free from religious and political interference: the reward for the inventor came from the market, not from the state or the church.

# What the Renaissance knew

- Why the West?
  - The medieval world was a world living in a state of constant instability, and so is the capitalist/technological world.
  - The multitude of enterprises that populate a capitalist economy recalls the multitude of competing city states of medieval Italy.
  - Big states engaged in constant military competition the same way that big corporations engage in constant technological competition.
  - Innovation leads to instability and the West, coming out of the Middle Ages, was better at coping with instability than the East

# What the Renaissance knew

- Why the West?
  - Forces that foster innovation
    - Political chaos
    - Greed
    - Culture of risk
    - Culture of exploration
  - Forces that oppose innovation
    - Central state
    - Higher castes
    - Religion

# What the Renaissance knew

- Why the West?
  - The role of political chaos/ Peaks of intellectual exuberance
    - Sumerian city-states before Assyrian unification
    - China's Warring States age
    - Greek city-states before Alexander unification
    - Indian kingdoms before and after the Gupta empire
    - Italian city-states of the Renaissance
    - Britain of the Thirty Years' War, Commonwealth and Revolution: scientific revolution
    - Europe of the Seven-years War and of Napoleon: industrial revolution
    - Russia between Pugachev and Rasputin

What the Renaissance knew  
Piero Scaruffi  
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