

The Scientific Revolution & Absolutism



Science & Politics: The Next Phase of Change

I. Scientific Revolution

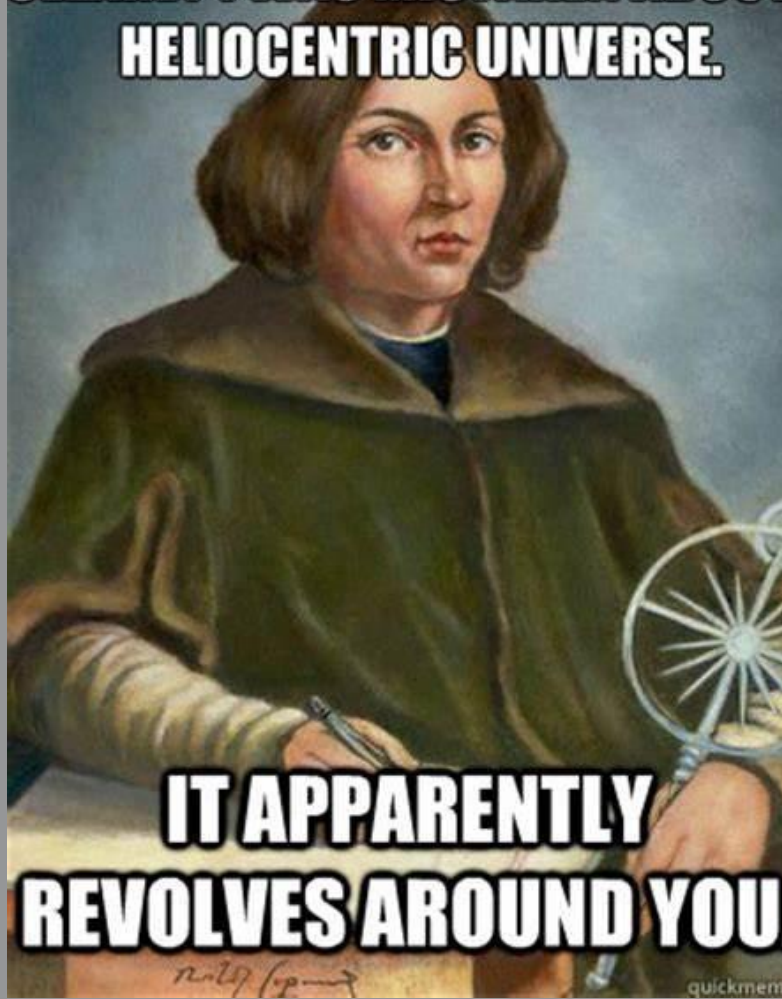
- 17th century
- Promoted changes in intellect and the emergence of a nation-states

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II. Copernicus

- Polish Monk
- Discovered the planets revolve around the sun (heliocentric model of the universe)
- Contrary to the Hellenistic belief that the sun was the center of the universe
- Some question if he copied his theory from the Arab scientists

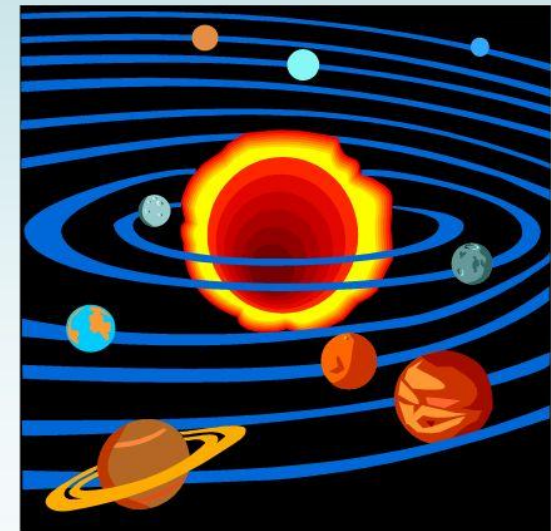
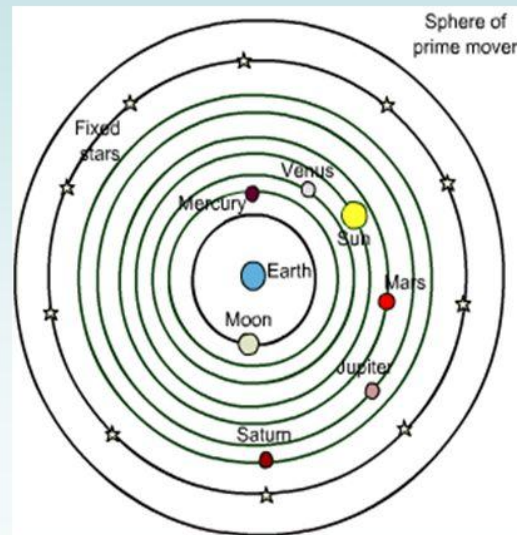
**CLEARLY I WAS MISTAKEN ABOUT A
HELIOCENTRIC UNIVERSE.**



**IT APPARENTLY
REVOLVES AROUND YOU**

Geocentric vs Heliocentric

- “Geo” means Earth
- “Helio” means sun



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- The scientific method, skepticism, and reasoning helped extended scientific possibilities.
- Johannes Kepler
 - refined Copernicus's work on planetary motion
 - Invented eyeglasses



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- William Harvey
 - Studied the circulatory movement of blood
- Francis Bacon
 - Used empirical research and the scientific method
- Rene Descartes
 - Used skepticism & reason

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- Isaac Newton
 - *Principia Mathematica*
 - Natural laws – theory of gravity
 - Started basic scientific method
- John Locke
 - Use of reasoning
 - Said we are molded by experience
- Deism
 - God does not intervene in nature
 - Faith irrelevant

EVEN APPLES

**TRIED TO HIT THIS
GUY**

quickmeme.com

DID YOU KNOW?

Before Isaac Newton discovered gravity in 1687, people could fly.



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IV. Absolute & Political Monarchies

- Feudal monarchies came to an end 17th century
- France:
 - Absolute monarchy
 - Bureaucracies
 - Professionalized army

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- King Louis XIV
 - Kept nobles at court
 - Standardized French language
 - Practiced mercantilism

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- Reasons for the French Revolution
 - Social inequality
 - 3rd Estate – Clergy
 - 2nd Estate – Nobles
 - 1st Estate – commoners/peasants (largest group with the least power)
 - Louis XVI was also a weak monarch
 - Financial bankruptcy
 - Enlightenment ideals

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- In 1789, Louis called a meeting of the Estates-General (Legislative assembly) to discuss the financial crisis.
- The 3rd Estate refused to meet unless they were given equal voice in the Assembly.
- The 3rd Estate declared itself the **National Assembly** and swore the “**Tennis Court Oath**”
 - they would not leave until new constitution for France was written.
- The National Assembly declared France a limited monarchy after Louis XVI was overthrown and taken prisoner.

How was the French society unequal?

The First Estate

It consisted of the Roman Catholic Clergy

Second Estate

It consisted of the Nobles about 2% of the Population & owned 20% of the land

The Third Estate included

- 1) Bourgeoisie – wealthy Merchants & skilled workers
- 2) City Workers – poorly paid servants like cooks & attendants, etc . . .
- 3) Peasants – 80% of the population were farmers

They had little rights & paid half of their Income in taxes

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- The Reign of Terror was a period of violence in France when the French Revolution became more radical
 - All enemies of the revolution were brought to trial.
 - King Louis XIV and his wife were found guilty of treason and beheaded.
 - Order was restored with a new government called the National Convention
 - This government was very weak
 - This paved the way for Napoleon Bonaparte to take power.

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- Napoleon Bonaparte came to power because of his military ability since France was at war with most of Europe.
- In 1799, Napoleon overthrew the government in a coup d'état (military take over)
- He restored order to France and named himself Emperor
- He wanted to rule all of Europe so his conquests were very disruptive to the continent

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- He was overthrown due to:
 - The Continental System
 - He closed off Europe to outside trade
 - He wanted to destroy the British trade system
 - The invasion of Russia
 - His army was not prepared for the harsh geography
 - Resentment of French conquest
 - He was an outsider to the nations he conquered

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- Nationalism (the love/pride in one's country) grew
- New nations were created
- New alliances were formed

- These all led to new problems on the European continent

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- Other absolute monarchies (king holds all the power)
 - Spain
 - Prussia
 - Austria-Hungary
 - All wanted territorial expansion

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- England
 - Centralized state
 - Parliamentary regimes
 - English Civil War
 - Glorious Revolution – Parliament wins sovereignty power over the king

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- Constitutional Monarchy
 - Power comes from the people, not divine right
- Parliament passed the English Bill of Rights to protect the rights of the people.
 - Examples: Right to a trial by jury
 - Habeas corpus (can't hold someone without evidence)
 - The king could be taxed

ENGLISH BILL OF RIGHTS:



- -WE ARE OUT OF POWER- -

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V. The Nation State

- People have common language & culture
- Loyalty linked to cultural & political bonds
 - National songs, literature, foods
 - Common allegiance
- Held the belief that government should act for people
- Both absolute & parliamentary monarchies in the west were nation states

Enlightenment

II. Enlightenment Thought and Popular Culture

- Enlightenment
 - Brought on by Scientific Revolution
 - Chemist gain understanding of elements
 - Biologists develop a classification system for species
 - Development of modern social sciences

Enlightenment

- Thomas Hobbes
 - believed that people were naturally evil and that only the government could keep order
 - People give up their rights for protection
 - Believed the best form of government was an absolute monarch
 - Wrote Leviathan in 1691

Enlightenment

- John Locke
 - Believed people were born with natural rights
 - Life
 - Liberty
 - Property
 - The purpose of government is to protect these rights
 - If the government failed to protect these rights then the people could overthrow the government
 - Wrote Two Treatises of Government in 1690

Enlightenment

- Inspired by John Locke, Thomas Jefferson wrote the Declaration of Independence.

Enlightenment

- Montesquieu
 - Believed the power of the government should be divided into branches
- Each served as a Check and Balance on the Other
- Three branches
 - a. Executive Branch
 - b. Legislative Branch
 - c. Judicial Branch
- Wrote *The Spirit of Laws* and influenced the US Constitution

Enlightenment

- Jean Jacques Rousseau
- Rousseau believed that the only good government was one that was freely formed by the people – a direct democracy.
- People give up some freedom for the common good.
- Rousseau believed that all people were equal – everyone was the same
- Wrote The Social Contract and his writing influenced the leaders of the French Revolution.

▼ The West By 1750

- Feminist thinkers
 - Mary Wollstonecraft
 - Argued for political rights and freedom
 - Addressed the inequalities of the sexes
 - Treatment of women and children change in response

The West By 1750

III. Ongoing Change in Commerce and Manufacturing

- Mass Consumerism
- Professional entertainment
 - Circuses, festivals
- Agricultural change
 - Nitrogen-fixed farming
 - Stockbreeding
 - Swamp drainage for more land
 - New crops introduced EX Potatoes

The West By 1750

- Colonial trade and internal commerce increased manufacturing
- Capitalism spread
- Inventions
 - Flying shuttle
 - Improvements of spinning