



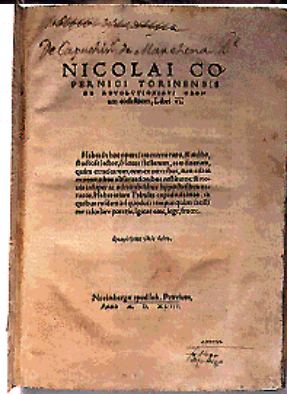
*Scientific
Revolution*

Natural Laws in Motion

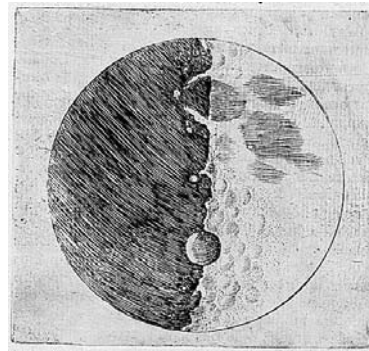
A New Way of Thinking

- As the Reformation caused new thinking about the role of religion, the Scientific Revolution caused people to *rethink about the universe and how it related to mankind using scientific methods*
- Like the Reformation ideas, the Catholic Church tried to suppress these new ideas

I'm Seeing Stars

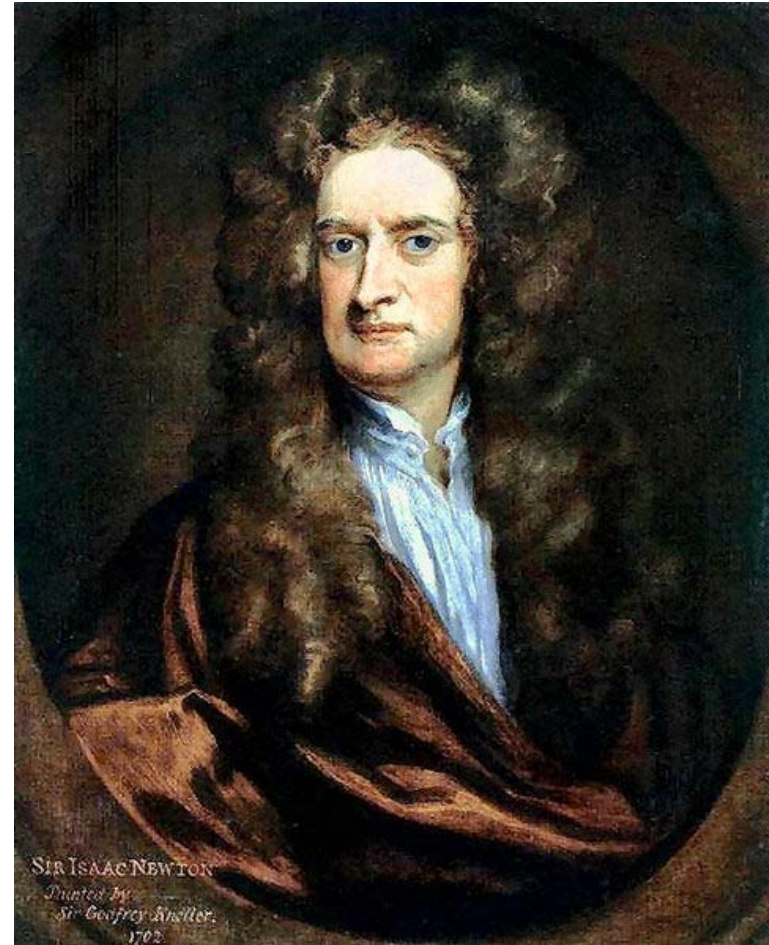


- Copernicus said the Earth revolved around the sun (Heliocentric Model)
- Galileo invented the telescope and observed the heavens, proving Copernicus' theory
- Both men faced ridicule for their ideas
- Galileo was put on trial by the Inquisition



The Great Law Giver

- To explain why things happened in the world as they do, scientist began to develop Natural Laws
- The most famous scientist was England's Sir Isaac Newton
- He developed laws of Color, Gravity, Inertia (1st Law), Momentum (2nd Law), and Force (3rd Law)



$$\vec{F} = m \frac{d\vec{v}}{dt} = m \vec{a} .$$

The Age of Absolutism & Enlightenment

“For every action there is an equal
and opposite reaction”

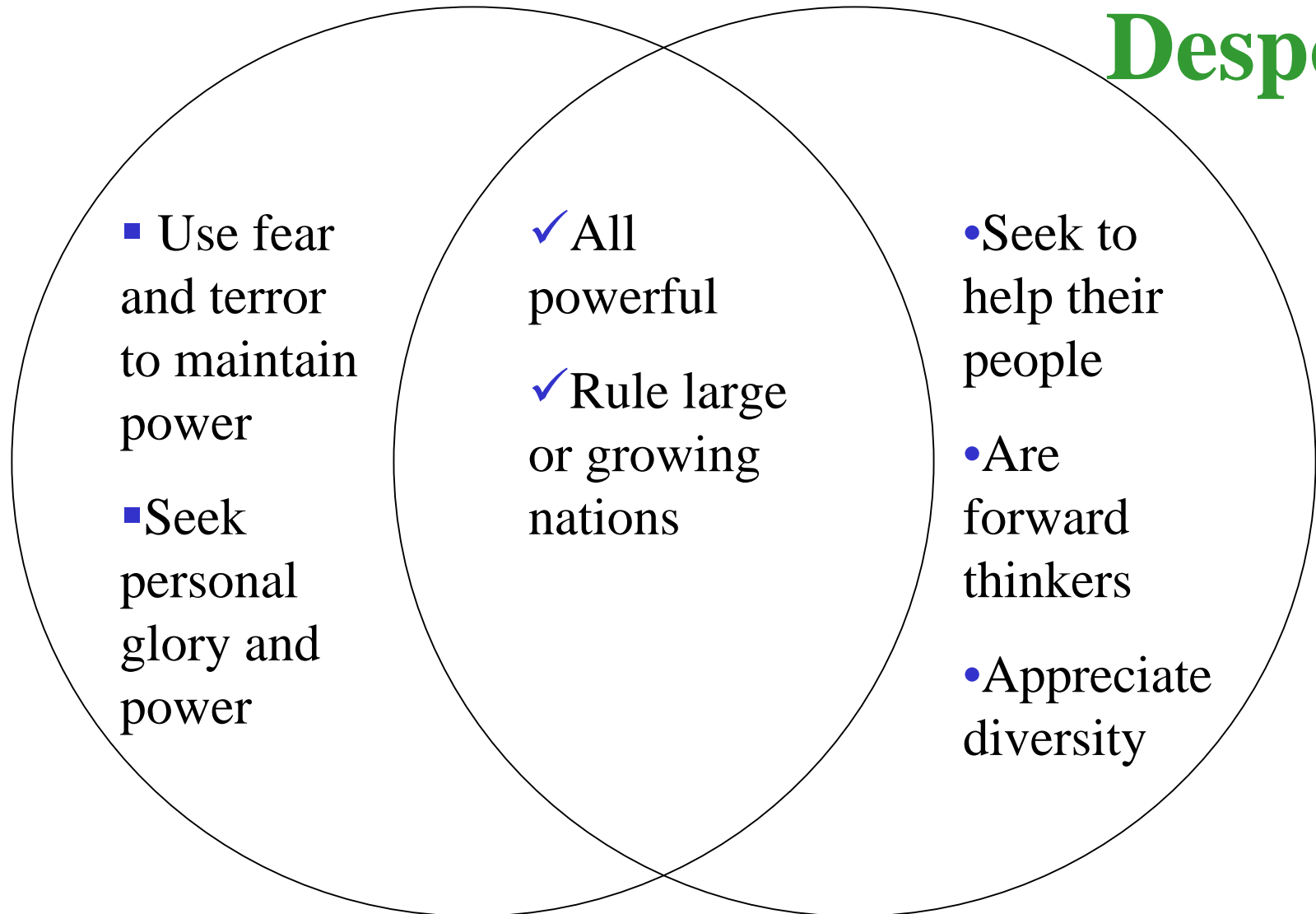
Absolute Monarchs

Enlightened Despots to Monsters

Characteristics of :

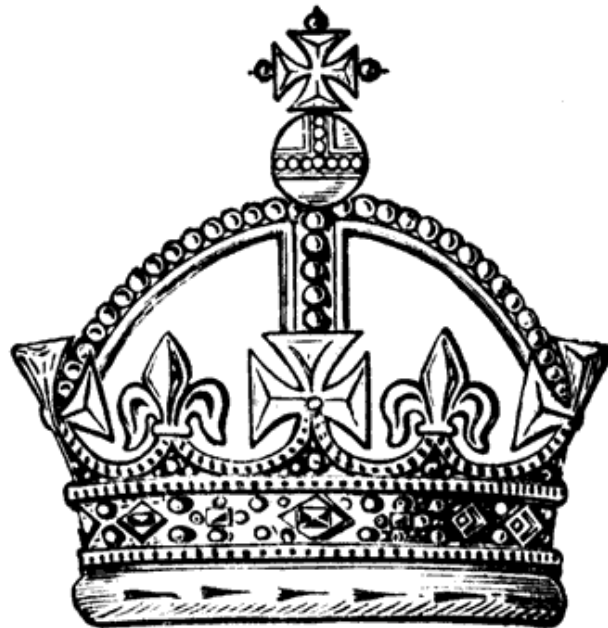
Despots

**Enlightened
Despots**



Absolute Monarchs

- Claimed power came from God (Divine Right)
- Complete power over everything in their country



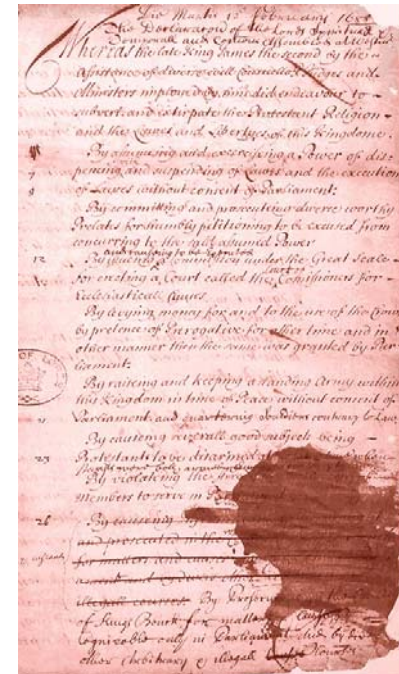
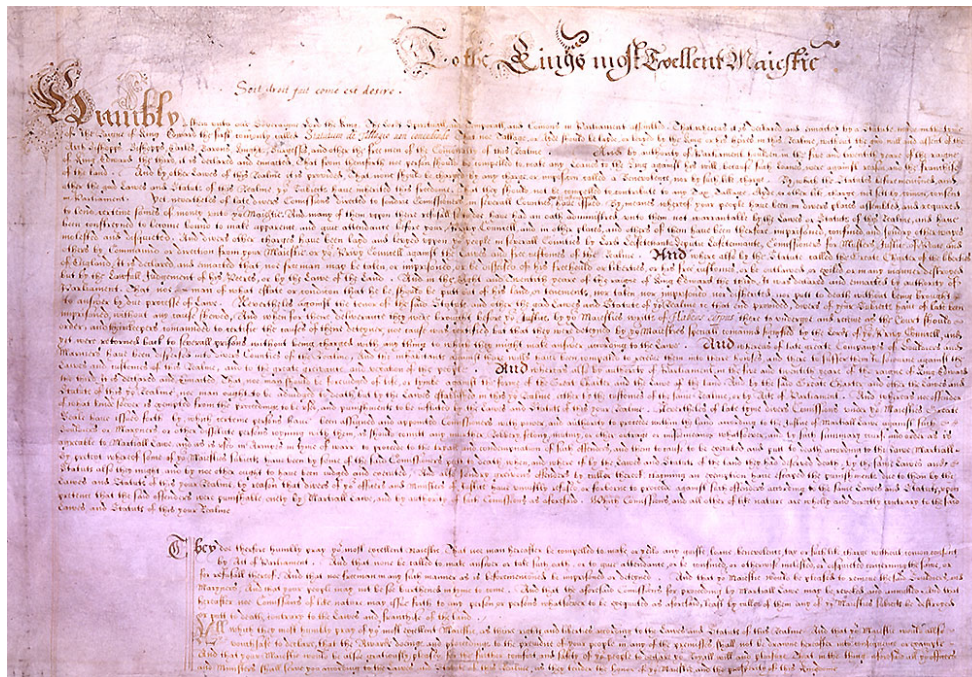
Glorious Revolution



- **Bloodless overthrow of English king who claimed divine right and replaced with by constitutional monarchy**
- **King James II was forced to abdicate**
- **Replaced by his daughter & son-in-law William & Mary**
- **They were forced to sign Bill of Rights limiting their powers**

Magna Carta, the Petition of Right, and the English Bill of Rights:

- These documents limited the power of the English monarchy and created a “constitutional monarchy” while giving power to the people





- ***United Russia***
- Strengthened the power of the Tsar
- ***Decreased the power of the Boyars*** (killed them)
- a VERY cruel czar (Russian for Caesar)

Tsar Ivan IV (the Terrible)

King Louis XIV – “The Sun King”



- *Believed in Divine Right*
- *Versailles*: palace built to show off wealth (like the ¼ mile long hall of mirrors)
- *Control of nobles*: made them move to Versailles to keep an eye on them
- *Expansion of France*: France went to war to expand its' territorial holdings (drains the treasury)



Tsar Peter the Great



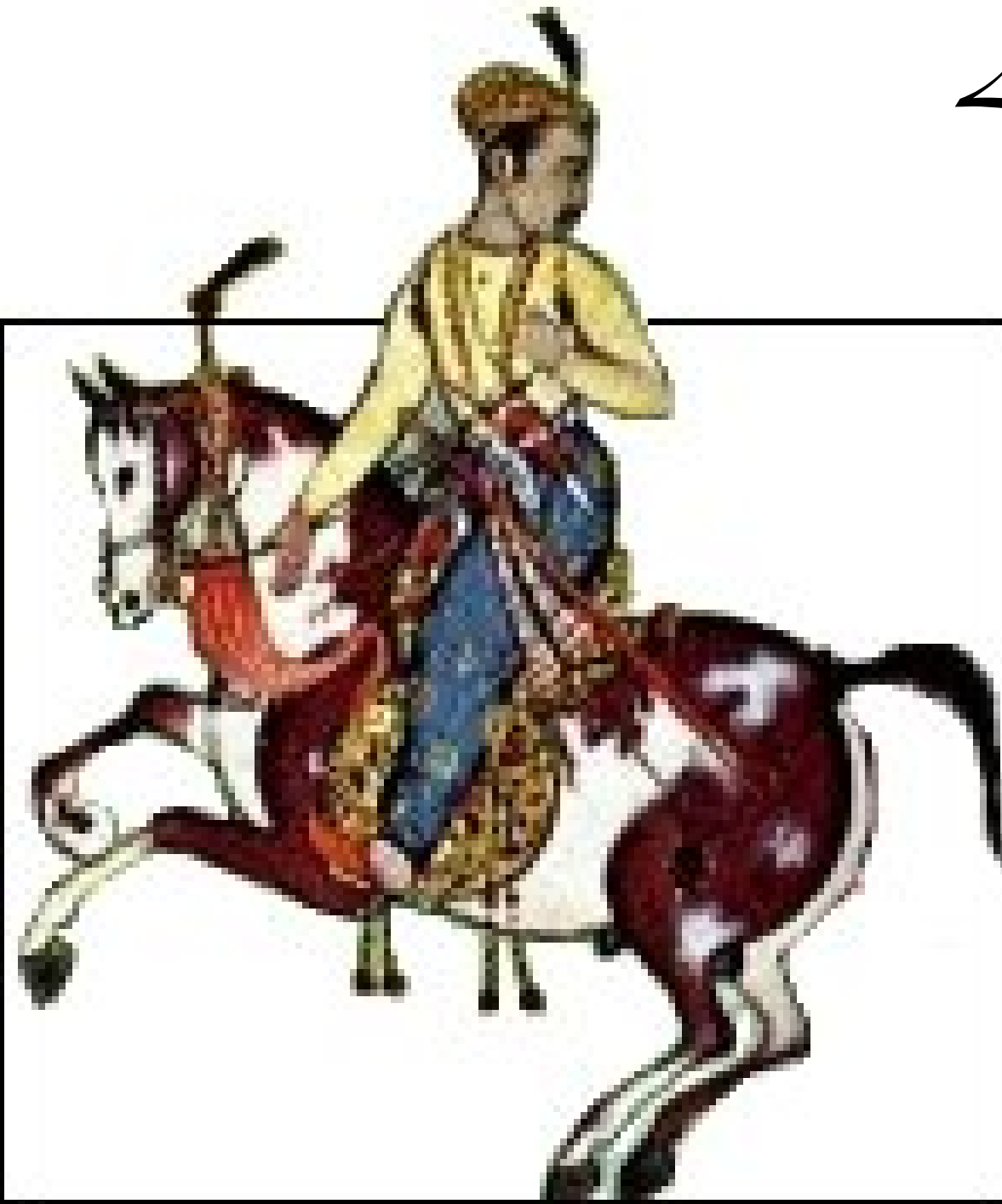
- **Believed in the absolute power of the monarchy**
- **Reforms: “Westernized” Russia** (education, military, industrialized, & society). Even had Russian men shave their beards. **Expanded Russian borders.**
- Achievements of his reign: **Built St. Petersburg** on the Baltic giving Russia its’ *1st warm water port (allowing all-year trade)*



SULEIMAN

- Known as the “Law Giver”
- *Absolute ruler of the Ottoman Turks*
- *Reorganized the government*
- *Improved the justice system*

Akbar the Great

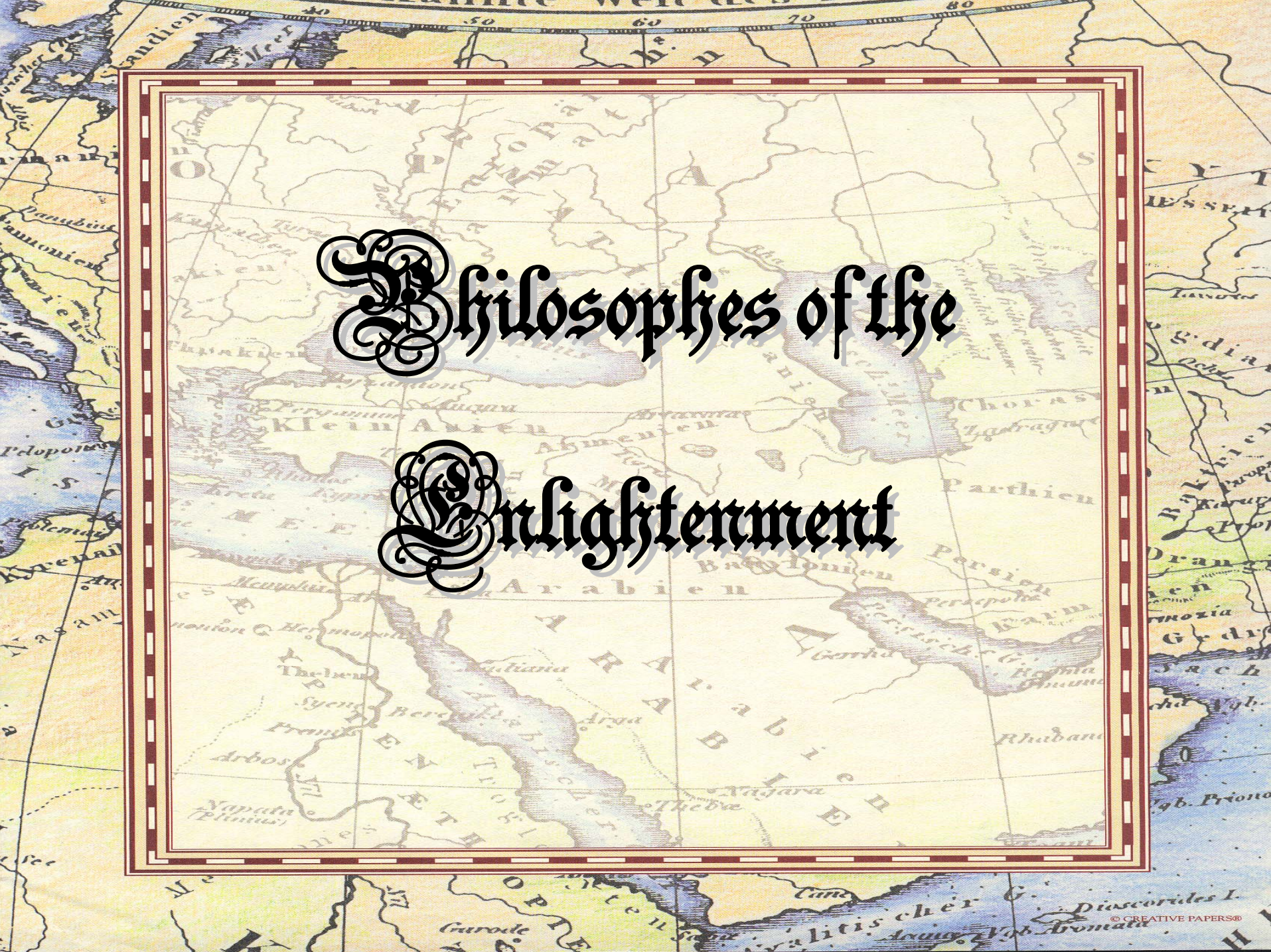


- absolute Mughal ruler of India
- *Developed the “Divine Faith” based many different religions*
- *Gave people religious tolerance*
- *Gave land grants to the people*

Tsarina Catherine the Great



- Absolute ruler of Russia
- **Reforms: “Westernized” Russia** (education, military, & arts). Used Enlightenment ideas.
- Achievements of his reign: ***Expanded Russia toward the Black Sea*** giving Russia its’ 2nd warm water port (allowing all-year trade to the Mediterranean Sea)



Philosophes of the
Enlightenment

The Enlightenment

A time of intellectual thinking based on *reason* about the *roles of government and people* that takes place in Europe during the late 1600's to the mid 1700's.

It first justified the Glorious Revolution and later spawned the revolutions in America, France, and Latin America.



Thomas Malthus

“A great emigration necessarily implies unhappiness of some kind or other in the country that is deserted.”

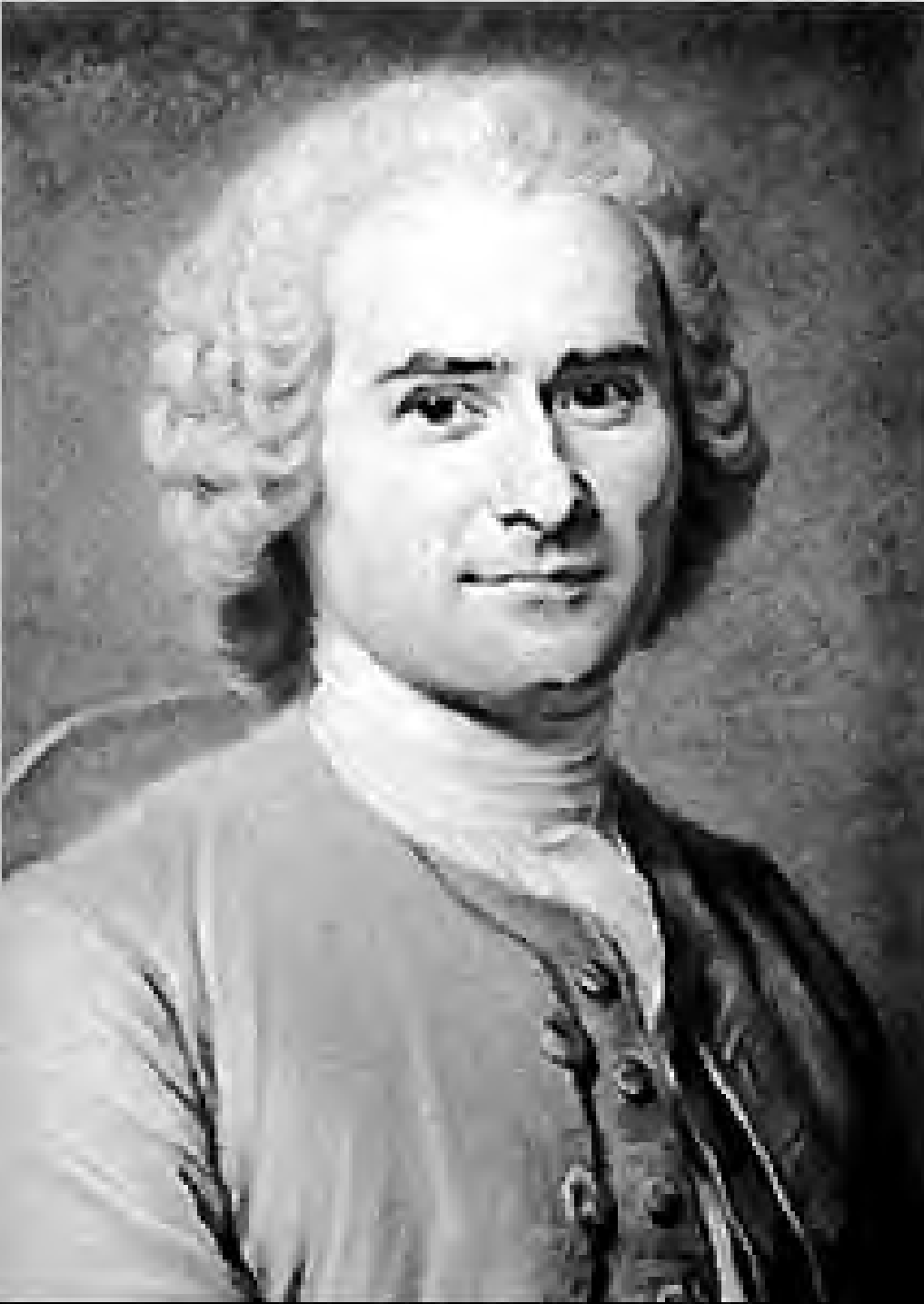
- Said **population growth would outstrip resources** causing famine and war

Thomas Hobbes



“All mankind [is in] a perpetual and restless desire for power... that [stops] only in death.”

- **People are selfish and greedy**
- So a **powerful government was needed** for an orderly society



Rousseau

“Never exceed your rights, and they will soon become unlimited.”

- **Government’s power comes from the people**
- Government is to work for the good of the people

Montesquieu



“In republican governments, men are all equal; equal they are also in despotic governments: in the former, because they are everything; in the latter, because they are nothing.”

- Developed the concept of **Separation of Powers** to prevent government having too much power
- Believed in a “Balance of Power” or **“Checks and Balances”**
- Both used in our Constitution



Voltaire

“Those who can make you believe absurdities can make you commit atrocities.”

- Advocated **Freedom of Speech, Religion, and Press**
- Used in our Bill of Rights



Adam Smith

“Virtue is more to be feared than vice, because its excesses are not subject to the regulation of conscience.”

- Established economics as a science
- Devised the doctrine of **free enterprise** or **capitalism**
- **Wanted little government control over business**



John Locke

“He is willing to join in Society with others for the mutual Preservation of their Lives, Liberties and Estates, which I call by the general Name, Property.”

- Said people have **Natural Rights** of life, liberty, and property
- **Purpose of government is to serve the people.** If it doesn't, the people have the right to replace it (**Social Contract**).
- Justified the Glorious Revolution (why the people can replace a king)

