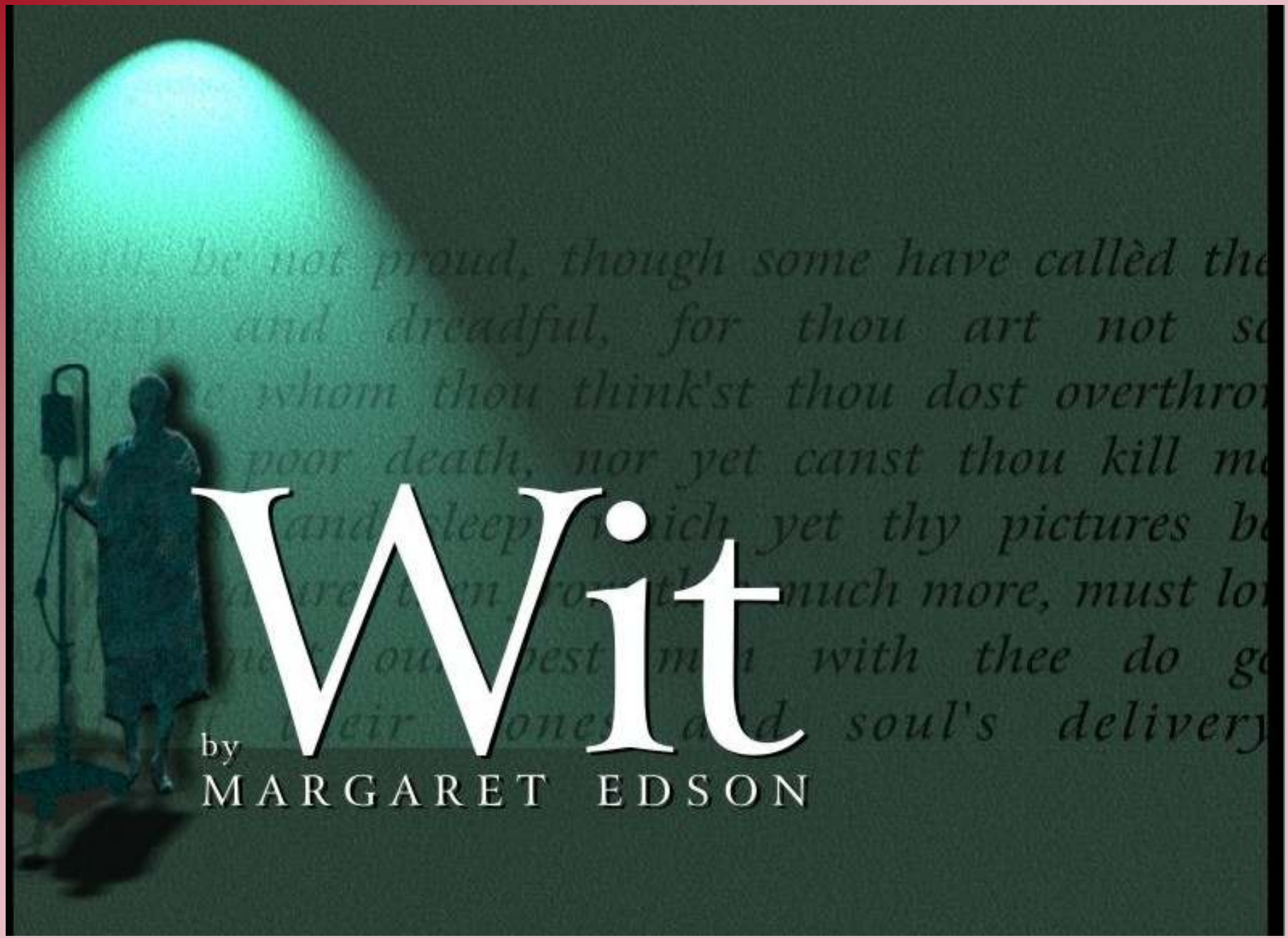
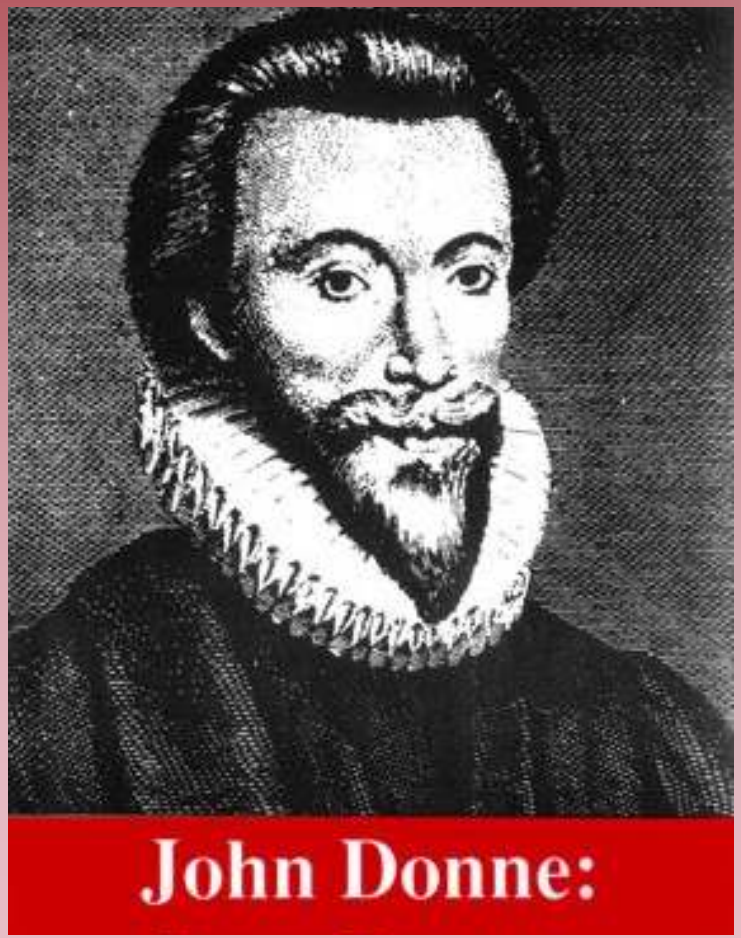
Wayne E. Sirmon

HI 102 – Western Civilization


Wit
by
MARGARET EDSON

John Donne: Wit

T EDSON



[The] new Philosophy calls all in doubt,

The Element of fire is quite put out;

The Sun is lost, and th'earth, and no man's wit

Can well direct him where to look for it....

'Tis all in pieces, all coherence gone;

Scientific Revolution

Scientific Reformation

Scientific Renaissance

Scientific Revolution

Intellectual Revolution

Scientific Revolution

Physic Bodies

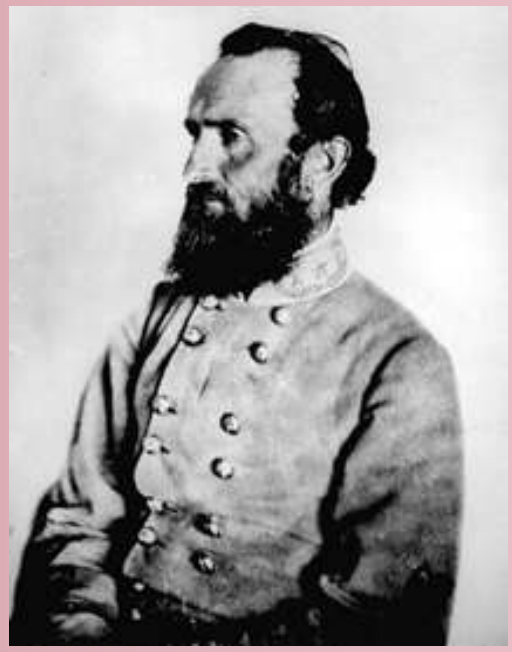
& &

Physic Body

Scientific Revolution

Philosophy

&



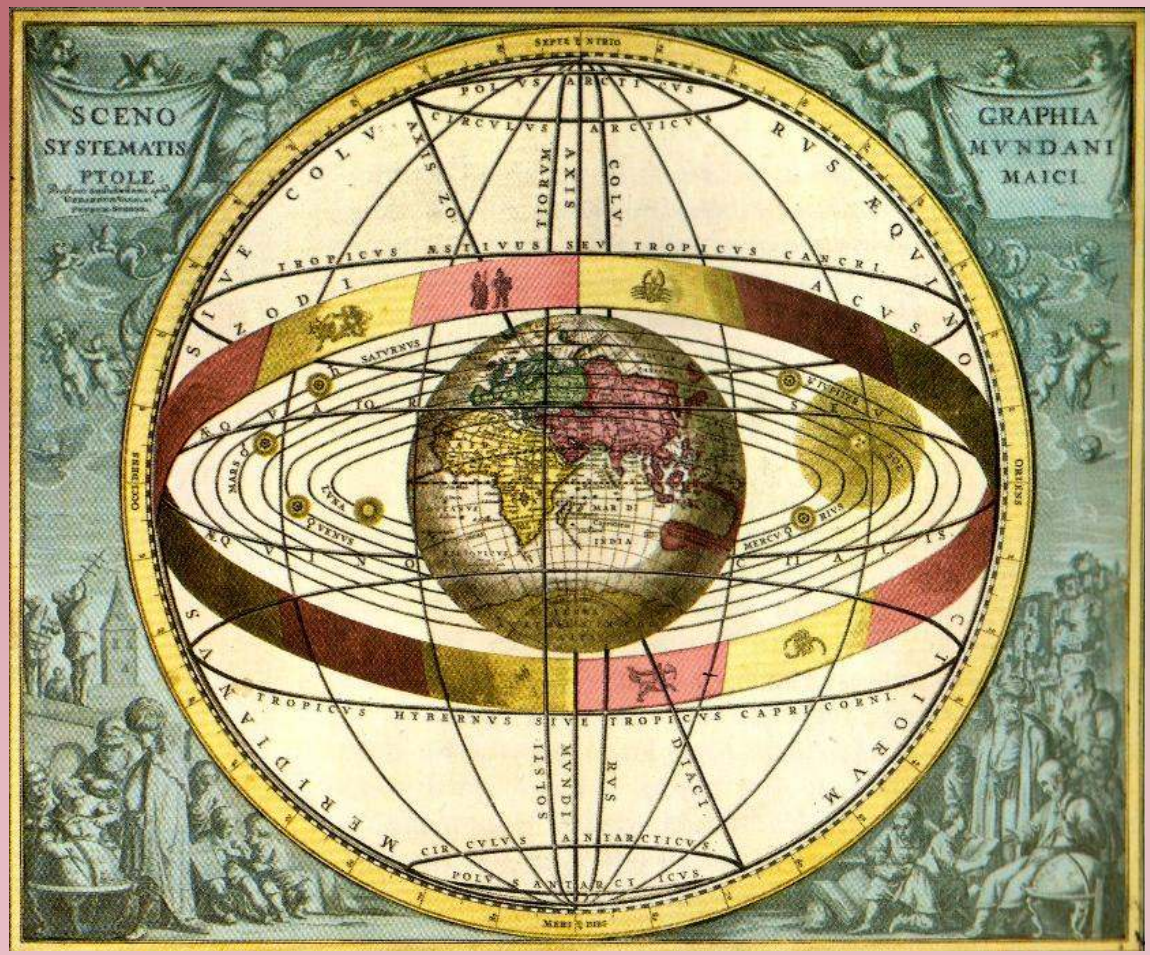
Natural Philosophy

Old School *vs.* New School

Aristotle	Galileo
Galen	Boyle
Ptolemy	Harvey

Old School

Geocentric Universe

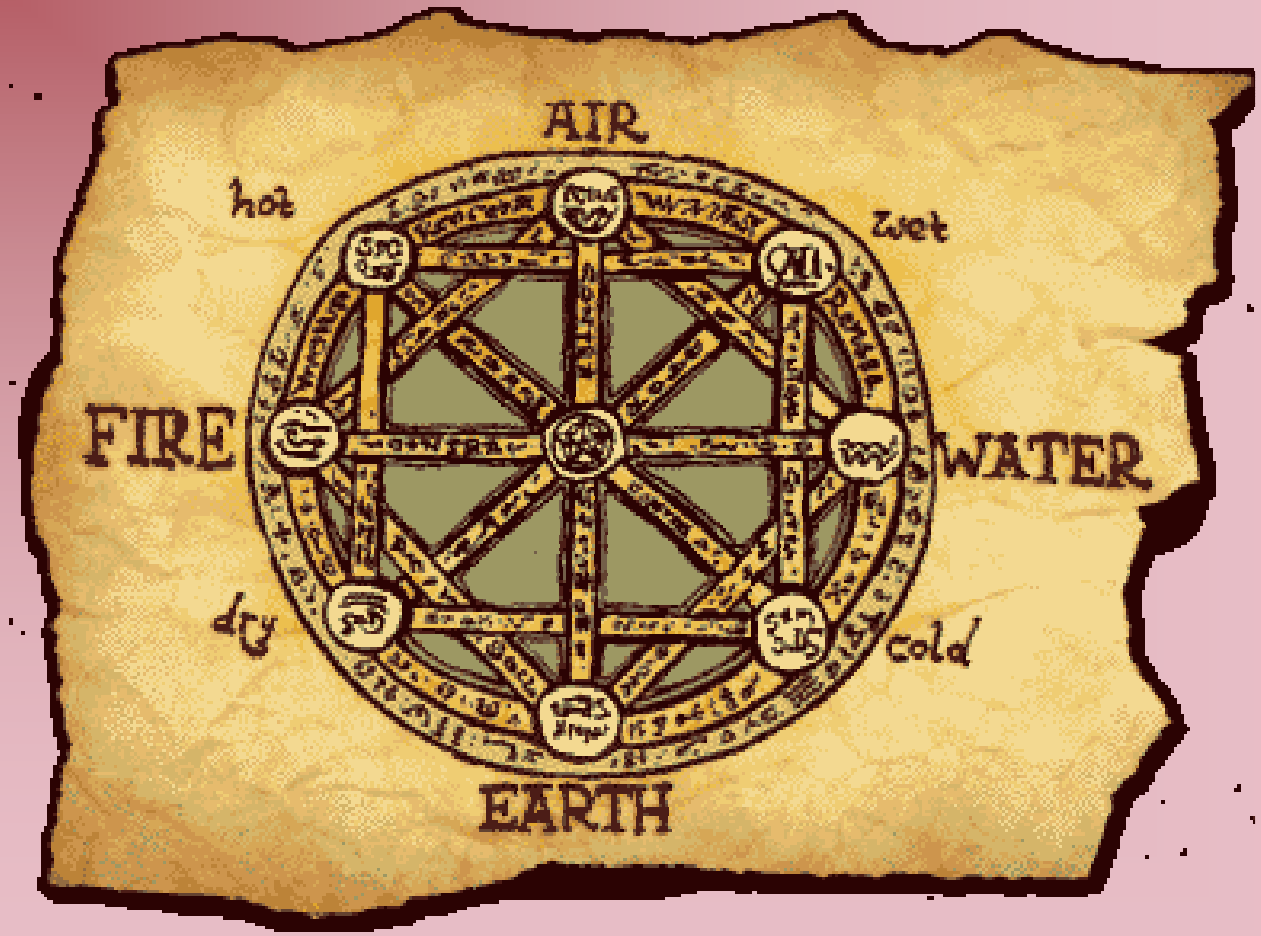


Ptolemy
Alexandria
2nd century CE

Old School

Elements

— 4 —



Old School

Human Body

Galen
180 CE

Old School

Human Body

Spleen	Black Bile
Gall Bladder	Yellow Bile
Liver	Blood
Lungs	Phlegm

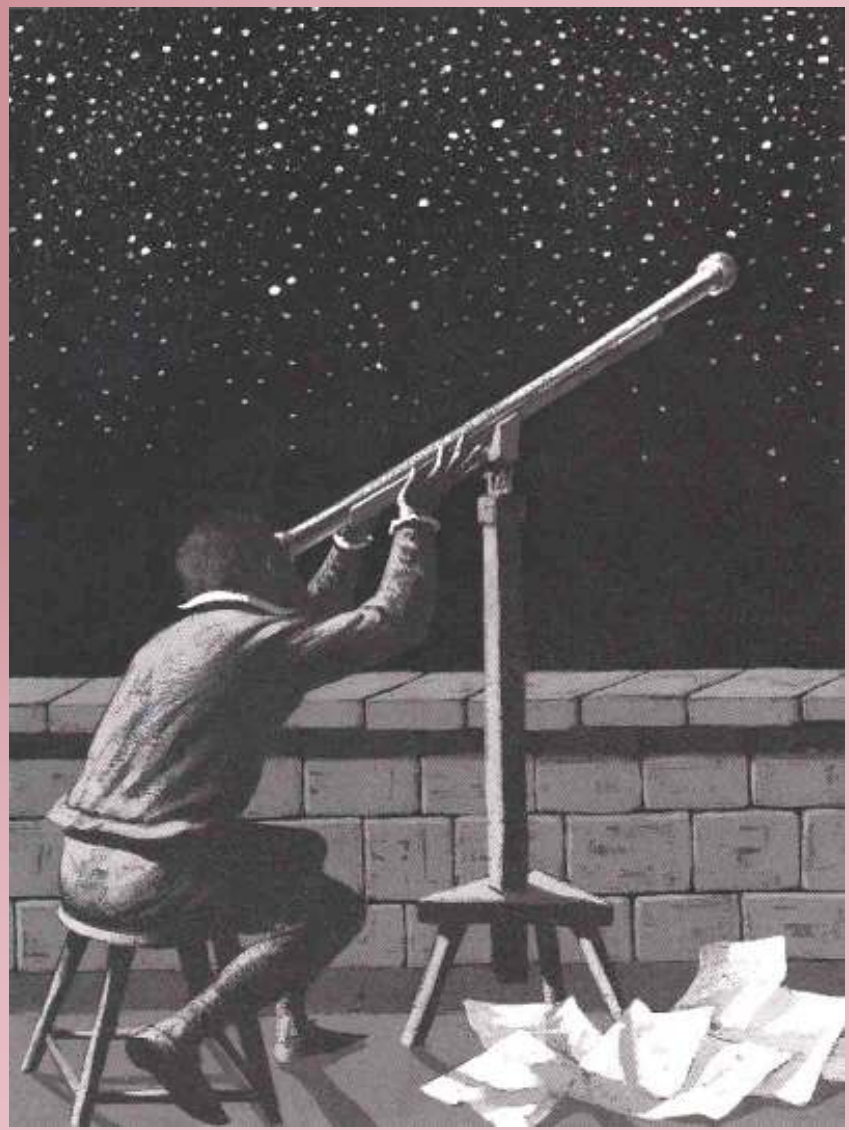
New School

Heliocentric Universe

Copernicus
De Revolutionibus
1543

New School

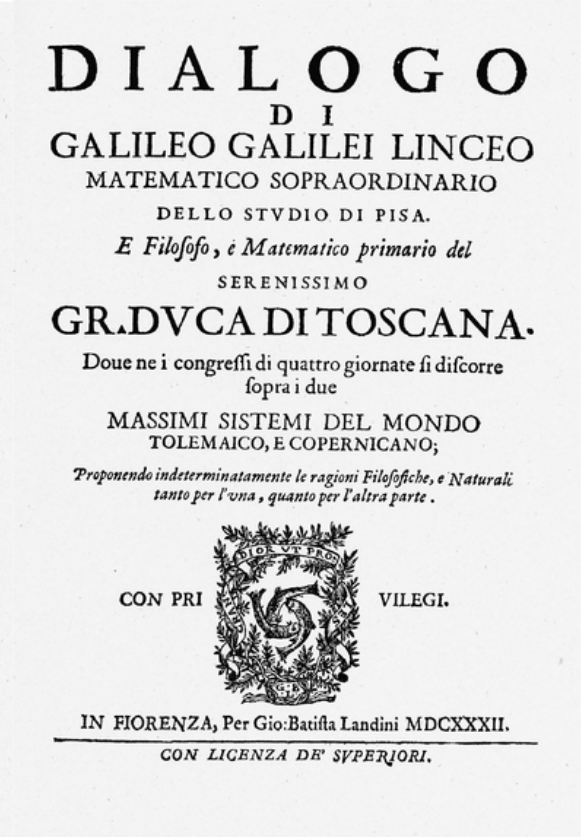
Heliocentric Universe



Galileo
Starry Messenger
1610

New School

Heliocentric Universe



DIALOGO
DI
GALILEO GALILEI LINCEO
MATEMATICO SOPRAORDINARIO
DELLO STVDIO DI PISA.
E Filosofo, e Matematico primario del
SERENISSIMO
GR.DVCA DI TOSCANA.
Doue ne i congressi di quattro giornate si discorre sopra i due
MASSIMI SISTEMI DEL MONDO
TOLEMAICO, E COPERNICANO;
Proponendo indeterminatamente le ragioni Filosofiche, e Naturali tanto per l'vna, quanto per l'altra parte.
CON PRI VILEGI.
IN FIORENZA, Per Gio:Batista Landini MDCXXXII.
CON LICENZA DE' SVPERIORI.

Galileo
Dialogue...
1632

New School

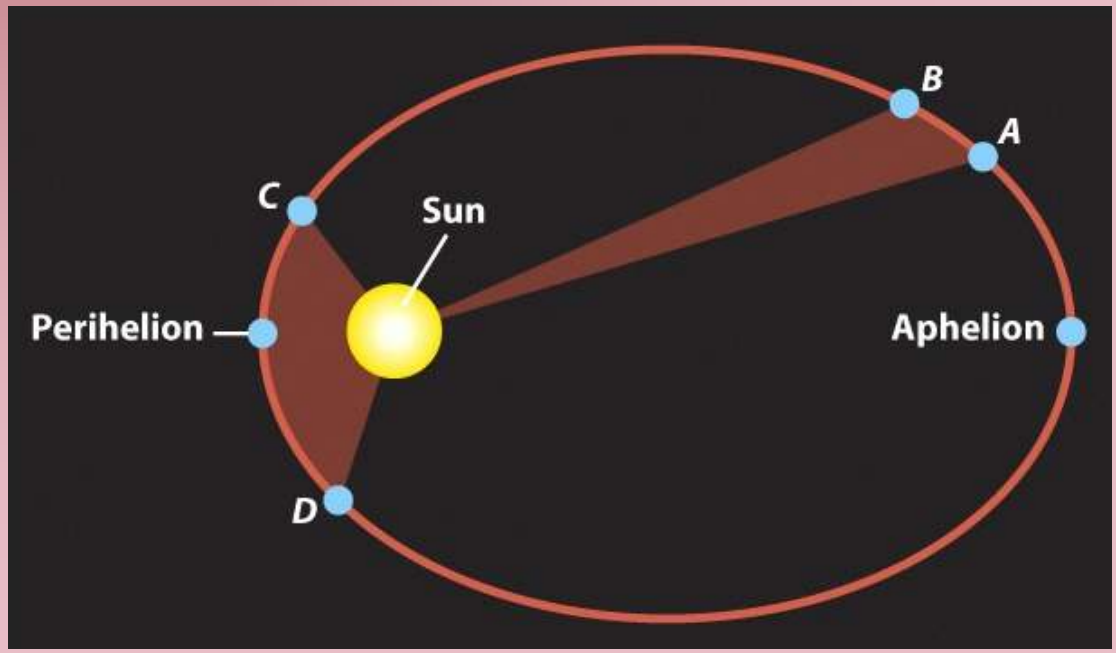
Heliocentric Universe

Inquisition 1633

Pope expressed "regret" Oct. 31, 1992

New School

Heliocentric Universe

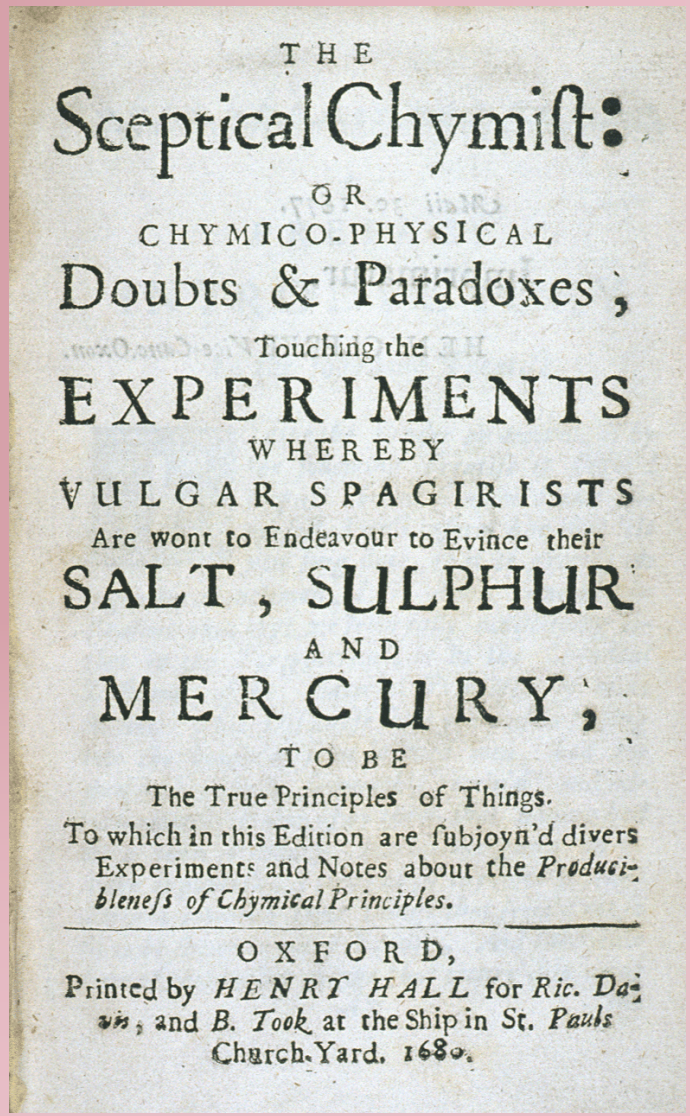


Johannes Kepler
Harmonice Mundi
1619

New School

Chemistry
&
Physics

Robert Boyle
Sceptical Chymist
1661



THE
Sceptical Chymist:
OR
CHYMICO-PHYSICAL
Doubts & Paradoxes,
Touching the
EXPERIMENTS
WHEREBY
VULGAR SPAGIRISTS
Are wont to Endeavour to Evince their
SALT, SULPHUR
AND
MERCURY,
TO BE
The True Principles of Things.
To which in this Edition are subjoyn'd divers Experiments and Notes about the *Producibleness of Chymical Principles.*

OXFORD,
Printed by *HENRY HALL* for *Ric. Davis*, and *B. Took* at the Ship in St. *Pauls* Church-Yard. 1680.

New School

Chemistry
&
Physics

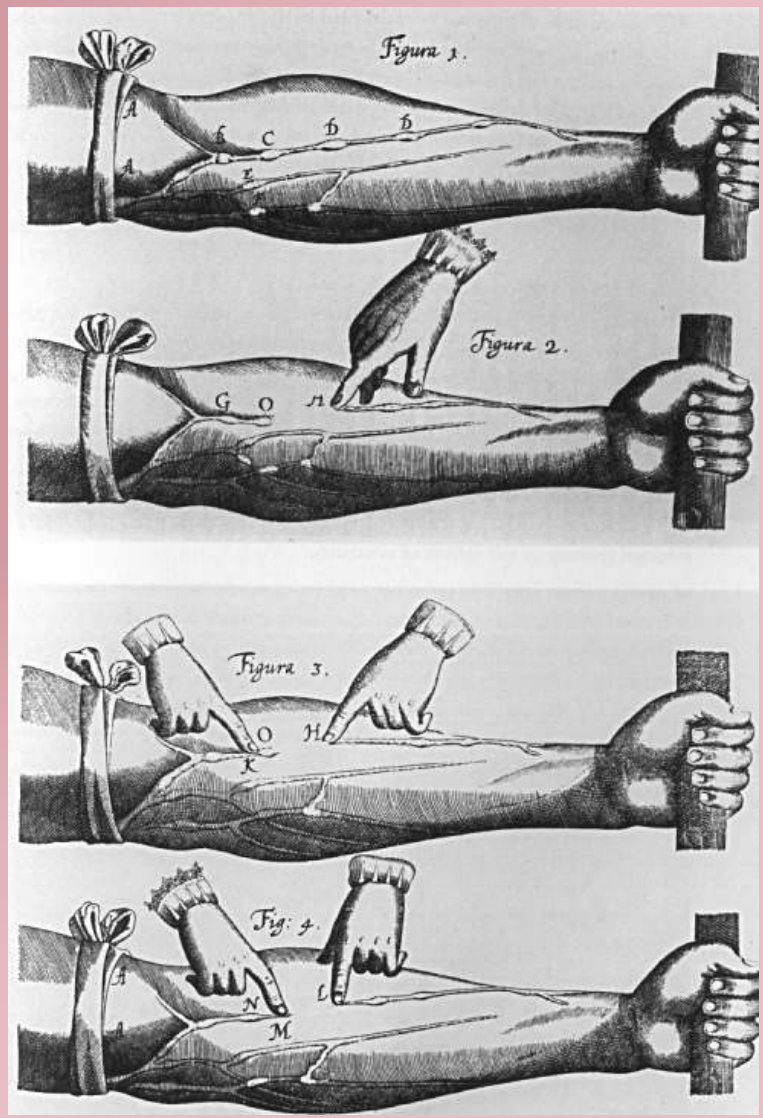
$$P_1V_1 = C = P_2V_2$$

New School

The Practice of Medicine

New School

The Practice of Medicine



William Harvey
de Motu Cordis
1628

New School

Knowledge "replaces" Wisdom

"Every object persists in its state of rest or uniform motion in a straight line unless it is compelled to change that state by forces impressed on it."

"Force is equal to the change in momentum (mV) per change in time. For a constant mass, force equals mass times acceleration."

$F = m\ a$

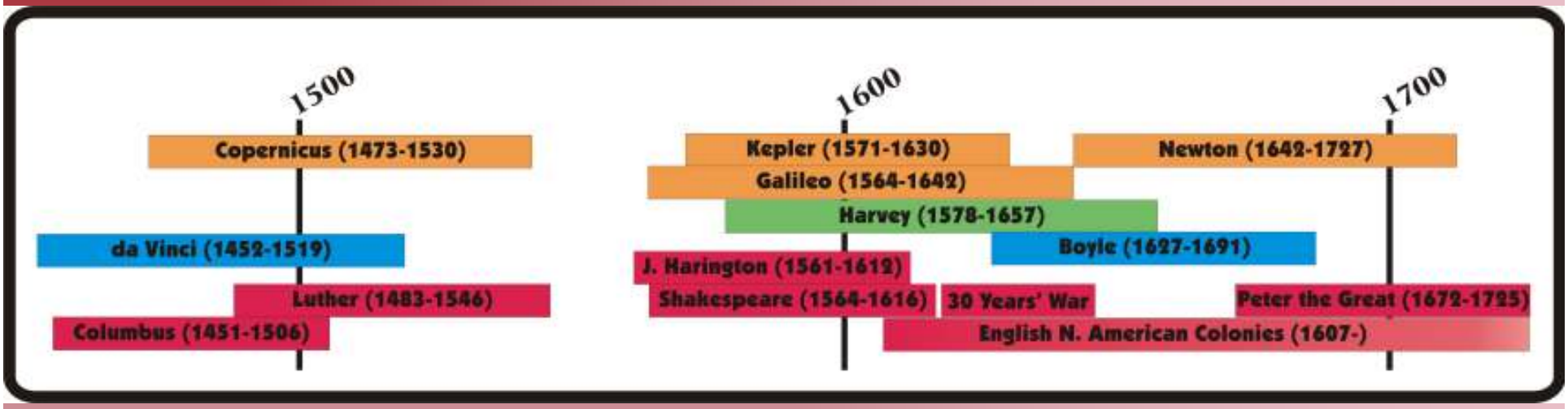
"For every action, there is an equal and opposite re-action."

Isaac Newton

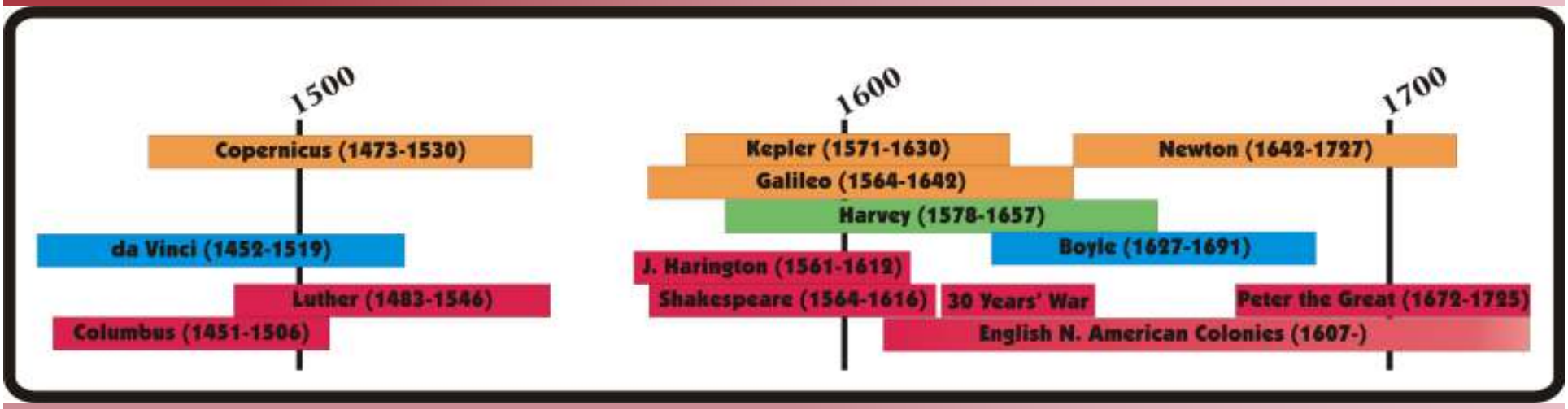
Principia Mathematica

1687

Time Line


1500
1600
1700
Copernicus (1473-1530)
Kepler (1571-1630)
Newton (1642-1727)
Galileo (1564-1642)
Harvey (1578-1657)
da Vinci (1452-1519)
Boyle (1627-1691)
J. Harington (1561-1612)
Luther (1483-1546)
Shakespeare (1564-1616)
30 Years' War
Peter the Great (1672-1725)
Columbus (1451-1506)
English N. American Colonies (1607-)

Time Line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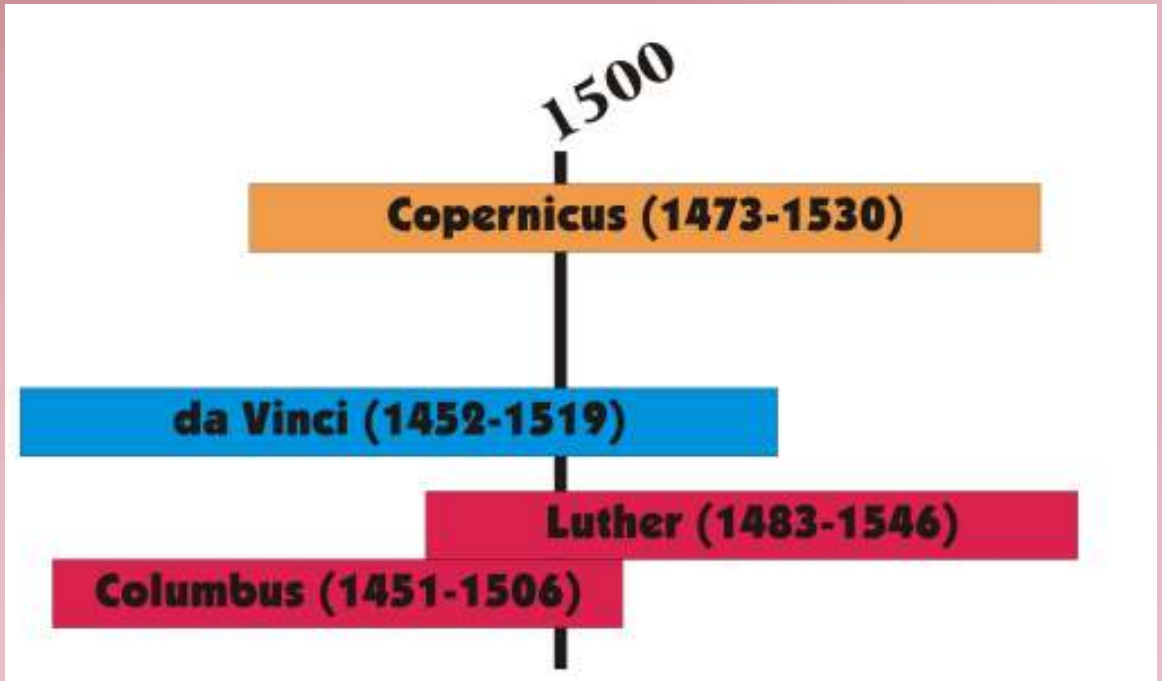
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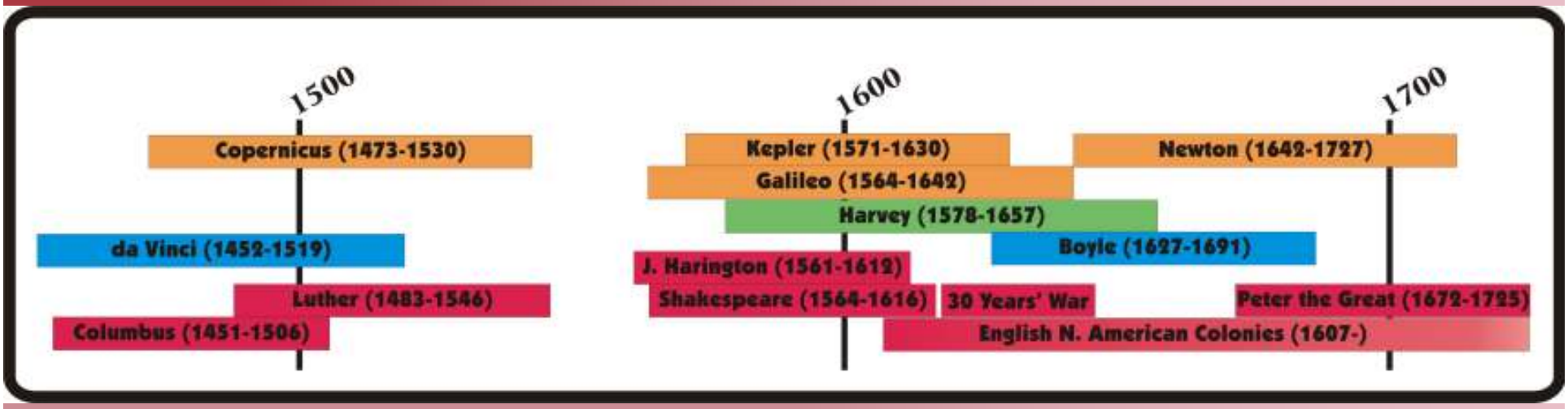
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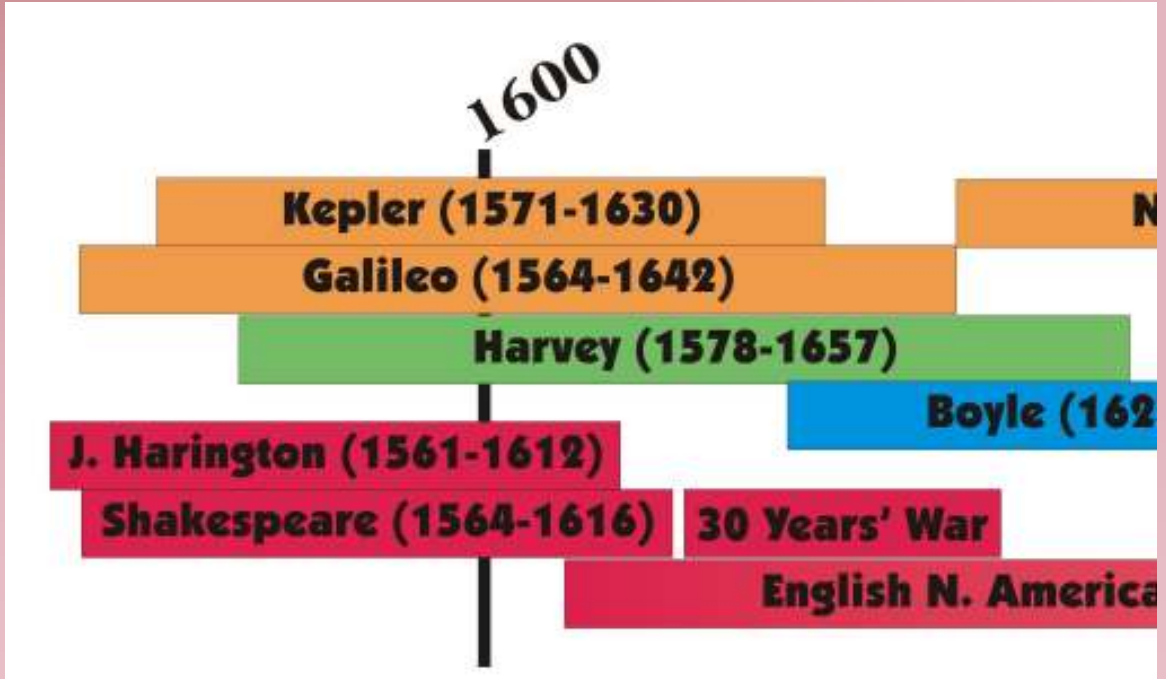
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Boyle (162
J. Harington (1561-1612)
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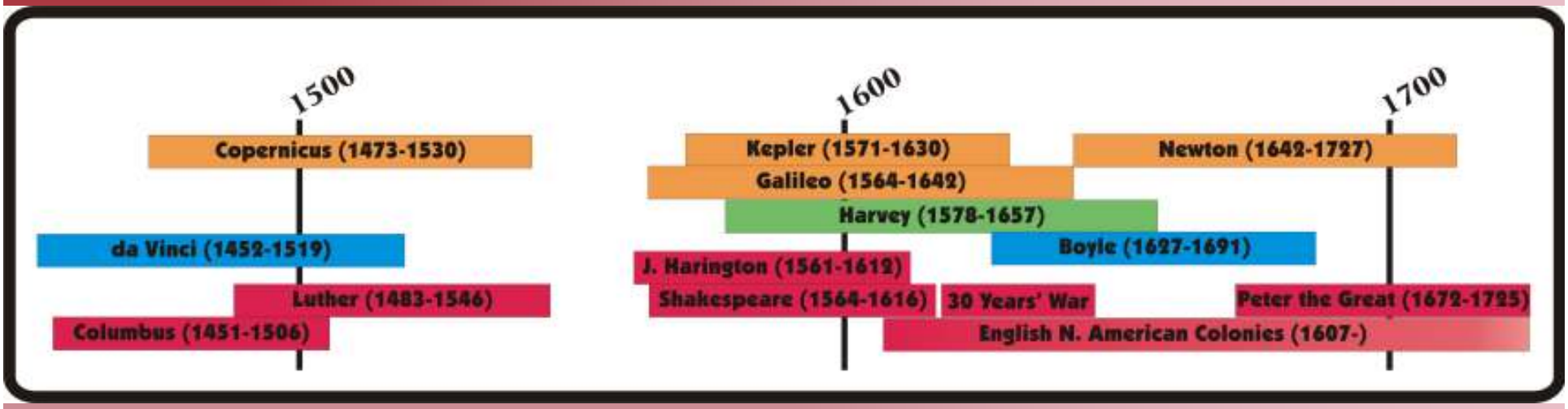
30 Years' War
English N. America

Time Line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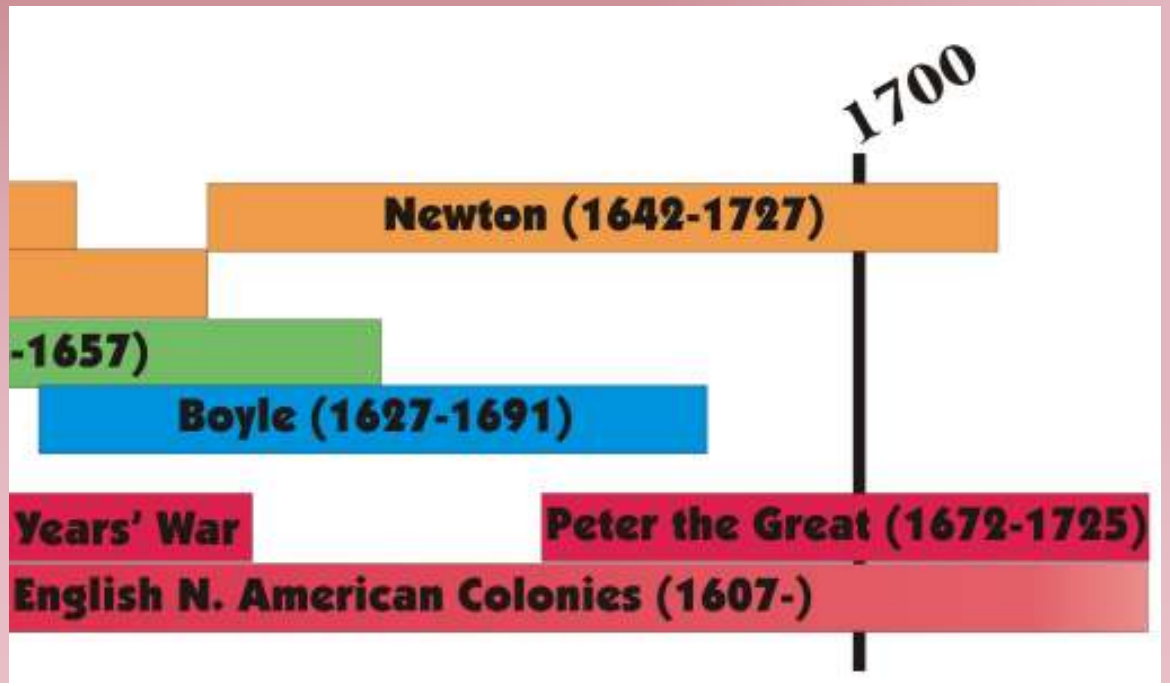
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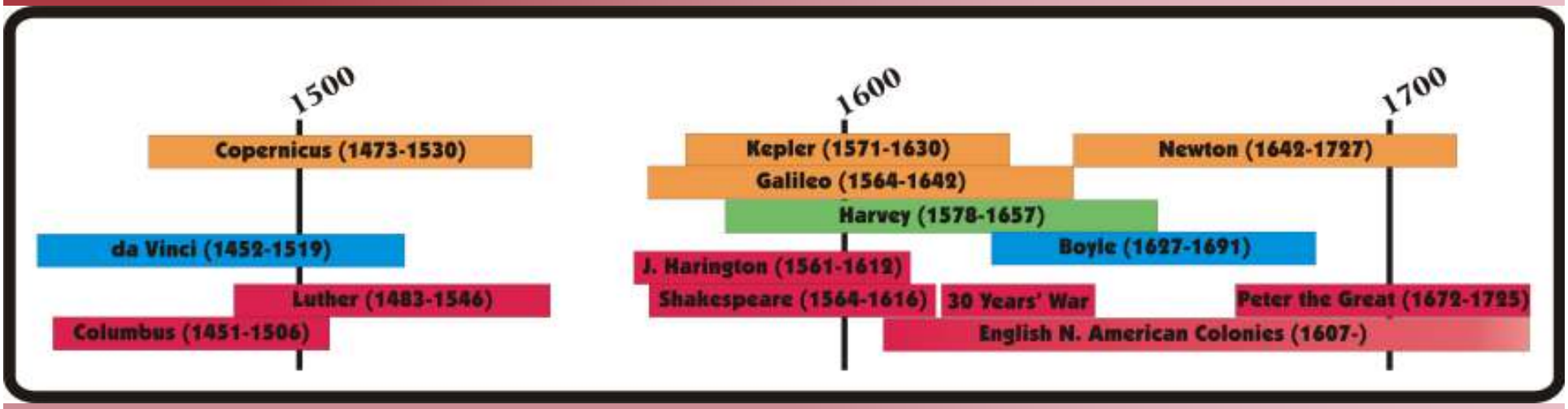
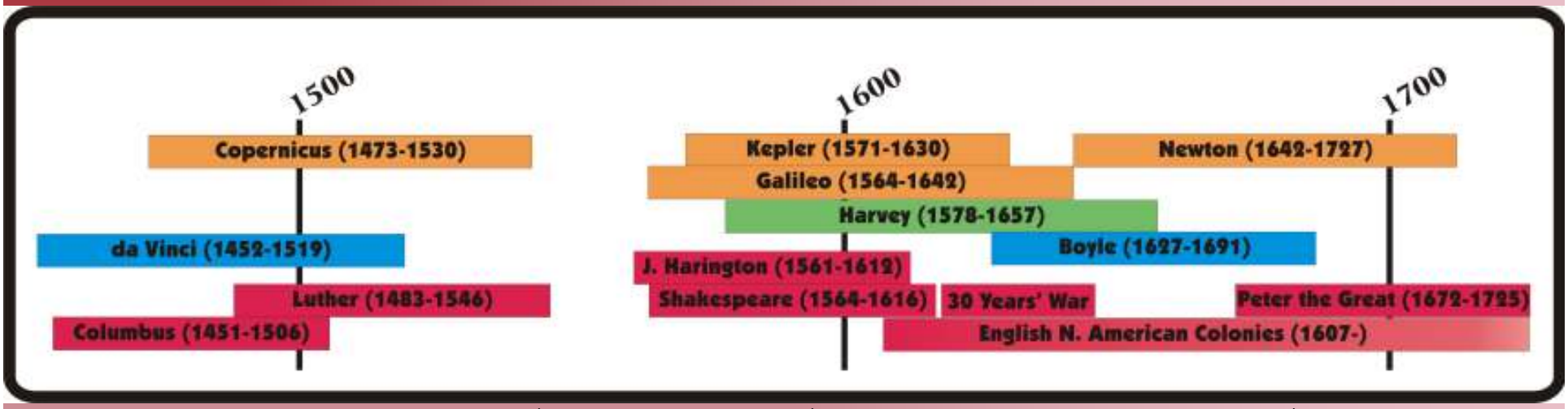
Conditions for Revolution



Print Revolution

1450 - Gutenberg - movable type and ink

Conditions for Revolution



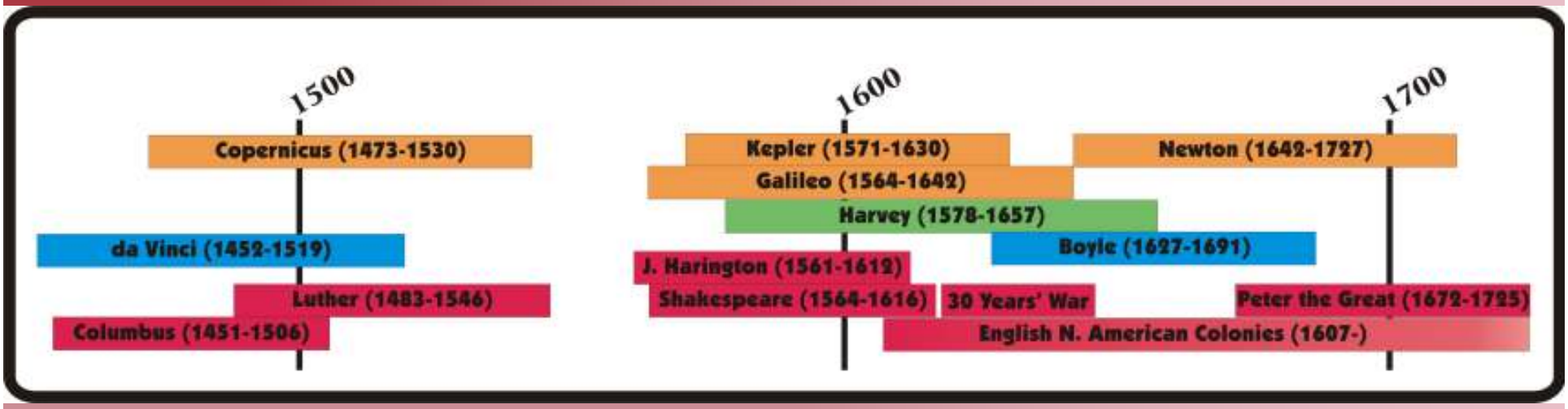
Power of Nation over Church

1534 - Church of England

1598 - Edict of Nantes *(France)*

1689 - Act of Toleration *(England)*

Conditions for Revolution



Time to Think

Agricultural Revolution *(rapid evolution)*

Enclosure / 4 field crop rotation

Mercantilism

Conditions

Print Revolution

1450 - Gutenberg - movable type and ink

Power of Nation over Church

1534 - Church of England
1598 - Edict of Nantes *(France)*
1689 - Act of Toleration *(England)*

Time to Think

Agricultural Revolution *(rapid evolution)*
Mercantilism

Impact

Age of Reason

Bacon, Newton, Galileo, Pascal
Royal Society *(1660)*

The Enlightenment

experience, reason, rationality

Industrial Revolution

Metallurgy, Chemicals, Steam
Lunar Society *(1775)*