



AMERICAN HOMELIFE ®
eBook: Education Age physical science

AMERICAN Homelife ®
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-citizen culture-

Education Age [Renaissance + Enlightenment] 1400-1700CE is a physical science awakening for human forbearers to natural law & order Nature's reason or Logos in natural-rational-critical enquiry, finally accepted at end of Age by clergy. Nature home/ human home come out of hiding hibernation, overlooked by clergy's heaven home story. Clergy save religion's divine home *Word of God* revelation. But, *Book of Life* reality is absent to medieval-mindedness. Institutions that once supported rational thinking/feeling and doing, meditative/asking humans are returned, no longer threatened by rigid fundamentalists, cultured or religious. Continental european Thinkers lay foundation for return to universal experience Nature reference [*'Book of Life* culture'] that broadens to Republican Age civil 'american', world citizen. Meditation Age philosophers Confucius- Buddha- Solon/ Socrates and especially scientist Thales' Ionian Thinkers return in Education Age 'educant'.

Absolute power corrupts absolutely. People grow weary of arbitrary/absolute/ medieval hierarchy religious and royal [often joined in theocracy], unfair taxation, non-stop warring [cultured/ religious], and class distinctions. Good deeds done by enlightened royal Frederick the Great of Prussia, Catherine the Great of Russia, and Joseph II of Austria is undone by their successors. There is neither continuance nor safety from arbitrariness of absolute rulers. Native european Continental Thinkers want classical culture freedom structures returned that once promoted reason and in turn enables continuing good governance under human consensus common law with focus on the common good. Rational people refuse to bow to brute force that says might is right. Educant with rational programs for human progress is chosen by native european Continental Intellectuals over arbitrary hidden hierarchal purpose, legal and social inequality, unfair taxation, enforced illiteracy, religious denominational intolerance, slave to land serfdom, and constant-constant-constant warring for empire or religious conversions over tolerance and rational peace. Education Age 'freedom educant' with natural law & order Freedom Education homelife rebirths Cultured North in classical citizen, asking natural cosmic energy and securing the structures needed.

Beginning in Renaissance, we open to a truly rational Intellectual Revolution. All hierarchy is questioned!!! Free enquiry, open discussion, and scientific method returns. Arts, sciences, and kindly wisdom philosophy cultures emphasize Nature's intuitive/ rational/ empirical power. There's an honest effort for knowledge and understanding without addictions. We live reality around US all, but need math/science for better understanding. Education Age 1400-1700CE returns universal/ social/ global 'Greek free man's education' of forgotten classic citizen

culture we call 'Freedom Education' or 'physical homelife'. Technological advancements improve machinery and farming methods. All areas of life are touched by the eternal truths of reason, in radiant universal principles. Education Age physical science begins with descendent of Old Republican, native Italian, in Galileo story and in Humanist story. Educant wants to take responsibility for Greco-Roman human home heritage, neglected by Vatican employer and Bible paid priest, recorder of clergy heritage, divine dignity memory. Rather than using metaphorical clergy style of record, Italian Humanists choose rather Herodotus-Thucydides truth discipline in scientific social historical record, referencing original human agents of change/ original source materials/ putting fact before feeling.

Religious medieval is loyal/obedient to intolerant hierarchal ordered authority, illiterate from clergy enforcement with clergy only allowed to read *Word of God* revelation for divine law authentication and inspiration in national prophets of personal prophecy, and supernatural traditional in a belief heritage with interpretations of clergy causing denominational differences and being sometimes irrational/ arbitrary. Ones eternity is in self-continuance with God's saving intervention and with a personal otherworld afterlife. The divinity of God ____and importance of message from His/Her messenger prophet is focus. Heaven home is central.

Cultured educant is... **tolerant** of equal authority with honest everyday people in free/open discussion consensus, **literate** reading *Book of Life* Nature and books in reality over fantasy in principles from universal experience, and traditionally **rational** in the understanding human heritage of 'asking' Nature's reason and amending in principle with teacher or truer empirical information. Naturally, ones eternity is continuance of self in progeny and in principles past on. Citizen culture has Ancient basic-Meditation social-Education physical-Republican civil-Information universal principles. Nature home/ human home is central.

Education Age is physical-natural-critical enquiring culture. People want to know their physical reality and are less interested in learning how to behave. Social behavior was addressed in former Meditation Age '4principles': tolerance/ truth/ compassion with Ancient equality. Divine medieval heritage brings religions' imperial domination of literacy and clergy devotion to one book in national prophets of personal prophecy revelation from God Vishnu- God Jehovah- God Jesus- God Allah, etc. Belief is the only way another person can accept God's revelation in national prophets of personal prophecy. Working hard to get to heaven home is the Religious South [Asian] agenda. Natural culture, asking Nature's reason, with citizen culture in homelife is understood in principles of universal experience that is **physically** repeatable. It is culture's joy to realize we can find and understand, pattern and order. We live in principles chosen, passed on to progeny. Cultured North's agenda is understanding Nature and living in social principles defined in Meditation Age. Ones we love and who love us, and the common good works we do is natural eternity to cultured. Cosmic/ universal survival of humanhood is central. Different are cultured/ religious agendas. Positive feelings permeate physical science/ social society cultured in natural community. At very end of Education Age revelation religious clergy stop seeing rational teacher as evil, realize they made a mistake by not asking Nature's reason, and start to welcome this adventure for themselves. Clergy story writes supernatural miracles in other than human story, uses its own godly clergy as agents of change rather than original good human forbearers, and omits/overlooks the human story.

Pioneering Education Age people are many. Here, are a few human stories: Galileo, Italian Humanists, Gutenberg, Germans of modern science universities, French Encyclopedists, and English human Rights of Englishmen. When **you** have social history-modern science univ.-encyclopedia-human rights, Italian-German-French-English live respectively. We access the human story in human memory for literate age dignity social history with one's natural advocacies.

The Galileo Story

Education Age physical science begins with Continental native European outrage at clergy injustice to asking Nature's reason scientist Galileo. Galileo Galilei argues that humans have cognitive powers and can hope to understand how the world works by observing the natural law and order real world. Galileo thinks theory of Copernicus 1473-1543 (that planets including earth orbit sun) is true. This puts him in conflict with the unchanging 900 year old Aristotelians (earth-centered universe) of unquestioning Catholic Church who want to ban Copernicanism and do so 1616. It worries Galileo a good Catholic who argues before the ecclesiastical authorities that the inerrant Bible is not intended to tell us anything about scientific theories; and where Bible conflicts with common sense, it is allegorical/ metaphorical. In 1623 Galileo's friend becomes Pope. Galileo tries again to get the 1616 decree revoked. He fails. But, his papal friend gives him permission to write his book discussing Aristotelianism and Copernicanism if Galileo refrains from taking sides and if Galileo would conclude that humankind can't determine the workings of the world because God Jehovah's only begotten son God Jesus brings its effects in ways unimagined by humans, who can not place restrictions on God's omnipotence. *Dialogue Concerning the Two Chief World Systems* is the result published 1632 with the full backing of the censors and greeted as a literary and philosophical masterpiece. But, his friend the Pope feels Galileo contravenes the 1616 decree, brings Galileo before the Inquisition, sentences him to house arrest for life, and commands Galileo to reject Copernicanism, sun-centered solar system. Galileo acquiesces. Though remaining a faithful Catholic, Galileo thinks asking natural law & order Nature for eternal truths of reason is independent of clergy-rule religion under supernatural God intervening. *Two New Sciences* is his last book smuggled to a publisher in Holland that gives even more empirical research support for Copernicus and is the genesis of both modern physics as well as the Education Age physical science.

After a medieval millennium and with scraps and shards of remaining scientific writings from old Milesian Greeks and Romans, Copernicus-Kepler-Galileo return our human heritage of natural law & order *Book of Life* meditation, discarded by irrational medievals, returned by educated cultured. The asking scientific method of observation/ experimentation is clarified/ popularized by Baconian method and doctrines of Francis Bacon 1561-1626CE still used today in modern research laboratories. Hierarchical faith, or religion, says obey and don't ask. So, thinking stands still, and Aristotle's theories are unchanged for 900 years. Galileo 1564-1642CE returns Nature asking, for which divines label him a sinner. However, Galileo's telescopic sky observations extend empirical factual data, confirming Copernican theory. Heaven/ earth are joined again in natural cosmic law & order [with old Milesian Greek scientists who said 'Life is one']. Changing from medieval earth-centered universe where man is most important creation in divine scheme to Education Age sun-centered universe reduces importance of human in universal scheme of things. Earth is not at center of cosmos but rather one of several planets revolving around our star the sun in a minor planetary system. From technological innovation of telescope lens with Galileo we search sky, with Leeuwenhoek's 1632-1723CE perfected microscope lens we search for better empirical data in heretofore invisible world of Earth's protozoa/ bacteria, animal / plant cells.

Renes Descartes 1596-1650CE, founder of analytic geometry, explains the wonder that is Galileo when he says, "I think, therefore I am." Before Galileo you are killed for disagreeing with dogmatic divines: After Galileo there is discomfort for disagreeing with godly clergy, but you are allowed to live.

Natural environmental, physical critical enquiry progresses among scientists:

1. Galileo with telescope and math joins sky and earth in natural law/order, as Greeks before.
2. Newton with his apple explains universe with laws for motion-gravitation-light/color.

3. Edison with his 1st modern technological research laboratory makes our electric light bulb.
4. Harvey with blood demonstrates its circulation through our human body.
5. Marie Curie with her test tube discovers uranium: Einstein develops it into atomic bomb.
6. Stephen Hawking with his book, *A Brief History of Time*, joins literate world citizen to our universal world of wonder in measuring patterns and mysteries of law & order Nature.
7. From Galileo satellite to WMAP since July 2001 we find: 4% of universe is ordinary matter; 23% dark matter; 73% dark energy. Nobody understands dark matter and dark energy! Human is 2 million years, earth 5 billion years, universe 15 billion years. Interval between the Big Bang and the appearance of the first stars is 200 million years. ['Cosmic Fingerprint', Michael D. Lemonick, *Time* magazine, 24 Feb. 2003, page 45.]

Italian Humanist Story

Renaissance Italian Humanists return the lost and forgotten human heritage forbearers of Classic Greek and Roman. They make equality possible by returning long art of scientific social history in the Education Age. Italy is a center of Greco-Roman classical culture and contains manuscripts that excite curiosity about our nature home and human home in natural law and order Nature. Near Constantinople Europe and Middle Eastern lands, Renaissance Italy absorbs ideas from these civilizations. Constantinople saves some cultured scriptures of Classicism. Middle Eastern medieval Arab universities save most of the Meditation Age classical writings returned without which we would have no memory. Italy benefits financially from growing Mediterranean trade.

Italian Humanism is a literary movement. It begins in 14th century Italy. It reaches northern Europe in the 15th century. Social human, or Humanism, is supported by Johann Gutenberg 1450 movable type printing by making reading and writing more available to everyday people who begin to write literature in their own language, or vernacular. Humanists usually give attention to everyday human stories/principles, not clergy stories/prophets. Early humanists are inspired by Old Democrat/Republican—eagerly seeking, studying, and publicizing Greek/Roman manuscripts.

Requesting Christian Constantinople for their few classical documents and MidEast university Arabs for their many, Italian Humanists return to themselves their human forbearers' Meditation Age cultured human heritage—remnants of Greek city-states and Roman Republic—the lost leftovers of theocracy. In theocracy Constantine/Bible-rule is extended by Frankish/Bible-rule [with emperor Charlesmagne and clergy Avicenna not knowing of classical culture, neither Old Democrat nor Old Republican], and extended again by Hapsburg/Bible-rule in Spain and in Central/ South America. MidEast university Arab gift of saving Greco-Roman classical cultured manuscripts is a thansgiving foundation for eternal good relations among MidEast citizen with world citizen american everywhere wherever one finds citizen scientist/philosopher joined in asking ideas/ principles from law & order Nature. Here is the good global gift given and not to be forgotten. World citizen culture is deeply rooted in the Arab gift given, the gift of saving classical citizen culture memory.

Italian Humanists are enthusiastic, and it is felt in their commercial contacts. Leading Renaissance patrons [supporters] are wealthy merchants in Venice, the Sforza family in Milan, and the Medici family in Florence [especially Lorenzo the Magnificent 1469-1492CE a wool merchant and banker]. While godly clergy encourage illiteracy, Italian Humanists encourage good people to be literate. Many northern scholars come to Italy to learn Italian art and learning. They encourage people to write social literature. Petrarch 1304-1374 studies the classics, writes in vernacular Italian and Latin sonnets of love and nature, and imitates the style of classical writers. English Shakespeare 1564-1616CE and bourgeois family French Voltaire 1694-1778CE give US all a tradition of great social literature along with Rabelais and Montaigne.

Italian Humanists encourage people to write their own human home social history. Humanists want scientific social history of human story, Roman Republic forbearers' heritage past, forgotten by clergy story. Italian Humanists are able to do so because of wealth and energy from their independent city-states doing lucrative trade and commerce once again that is independent of religious rules and contracts for priestly or Vatican employment. Inspired by Meditation Age classical citizen culture, Education Age Italian Humanists in turn inspire Republican Age with literate inamerican U.S. and african U.S. wanting their own scientific social human history. Native continental ancestral families are united in wanting accurate memory. Social history is an important component of 'a Greek free man's studies', the freedom education needed to make homelife citizen culture possible. With Italian Humanists, african humanists, and inamerican humanists one sees need for having a human famili heritage in scientific social history, hopefully united in unfolding consensus principles/ideas of consciousness and commitment. Homelifers, Old Americans and americans, want to join human famili efforts/ viewpoints and create a common forum for caring/ sharing our human famili of nations with my famili of nations in world citizen culture for a more universal homelife agenda. With work of Carter G. Woodson native african, continental and global, sees need to have their own record of human heritage in written scientific social history and become active co-creators of a lively african culture. Common culture, however, saved beautiful/ strong memory from all cultures. Literate native continental ancestral families are saving human heritage in reality, human agents, and original references appropriate to scientific social history. Literate cultured people return to Classicist and Italian Humanist, home of scientific social history story, to write human story heritage/tradition, different than clergy story heritage/tradition. Our whole story needs human story inclusion.

The Good Gutenberg Story

German Johann Gutenberg 1450CE makes the technological break through with his awesome printing press that allows reading and writing to be made available to literate everyday people. Freedom Education Age homelife is made possible with Gutenberg's printing press. German Johann Gutenberg's printing press is the technological innovation that emancipates enslaved native european from the illiteracy caused and enforced by their own Bible clergy-rulers for a divine medieval millennium. This technological innovation jump-starts the beginning of universal literacy that reaches its culmination in 2001CE when the United Nations members vote to encourage universal literacy worldwide and within their own countries. Literacy is central to citizen culture because it empowers and informs for a world of ideas.

Before the time of Gutenberg it takes monks and copyists a long time to turn out a few hundred copies a year. Literacy is dominated by clergy-rule. But after good Gutenberg gives the world the printing press with moveable type and as paper becomes cheaper, millions of books are printed first in continental Europe, then worldwide.

Books make our world a wholly different place. People read. No clerics nor kings can stop them now. Humans read about humans who live far away, and they get to know strange lands. Everyday people think new thoughts. Because of what they read about their world, native europeans begin to go on great explorations of discovery that over time tie together our planetary village. Fifty years after Gutenberg, Christopher Columbus sails dreaded Atlantic Ocean to find better Middle Asian and NE Asian trade lanes for Europeans, who accidently bump into the Americas, a 'New World' to them but not to native americans. Soon african labor on farm and in mine uncovers treasures of wealth and fertility of soil. To adventuring countries merchantile wealth encourages merchant activity. When seamen ask law & order Nature to understand their ocean nature home, the dream of reason returns with reference made to universal experience.

Supported by natural science europeans are encouraged to take the risk and voyage Atlantic Ocean for trade, information, and wealth for young countries with strong kings and queens. European mariners have advantages. They have Renaissance geographical knowledge that realizes the world is round not flat. They have improved maps. They can determine direction from improved Chinese compasses. Mariners use new astrolabe instrument to determine latitude.

Great sailing expeditions are done by old milesian enquirers during the time of Egyptian power with Alexander Museum Library scholars financed by pharaoh. Captain Rata, a native african ship captain, sails along the African coast much like the later voyages of Prince Henry the Navigator's Diaz and De Gama a thousand years later. Burning and artificial controlling of information by medieval hierarchs loses precious information. Slowly again knowledge returns with increase of information. Information destruction is degrading to US all in natural culture, including citizen. As old milesian Alexandrian mariners financed from wealthy pharaoh, Education Age mariners financed from wealthy kings again return to exploring the world in simple adventuring voyages of global wonder and discovery that include the Americas.

We know more about our world than even learned scholars of Meditation Age Alexandrian library or Education Age Gutenberg literates. Without Gutenberg, books would still be few and expensive. There would be no magazines-comics-newspapers-Internet with books and current events on-line. Gutenberg would be impressed, indeed, to see humans getting any number of books from school or borrowing books from public global libraries—all free! Chinese did not extend their earlier than Gutenberg printing press because their language has so many characters. Gutenberg only struggles with few alphabet characters.

Gutenberg technology helps US all in cultural democracy by overcoming dominating theocrats. People can read again, as they did before in Meditation Age social behavior with classical citizen cultured. Literacy! Good German Gutenberg opens literacy to everyday people. Open literacy stops caesar/clergy story monopoly that so successfully secured medieval imperial hegemony.

The French Encyclopedists Story

French philosophers, or intellectuals, lead Education Age physical science with the firm idea that humans possess cognitive powers as well as natural human rights. The 'philosophe' thinks society can be improved beginning with human institutions conforming to logic and reason in natural law & order Nature asking enquiry. French enlightened thinkers criticize Old Regime hierarchy of religion and royal theocracy. Montesquieu 1689-1755CE proposes in his book *The Spirit of Laws* that the king's powers be separated into three branches of government--- legislative [makes common law], executive [enforces common law], judicial [judges justice of a law] —each checking the other. [Inspired by Montesquieu U.S. Constitution does this separation and balance of powers.] Voltaire 1694-1778CE writing *Letters on the English*, believes Catholic Church's insistence upon authority bars human progress, and says the famous words: 'I disapprove of what you say, but I will defend to the death your right to say it.' These words are precious to democrats, especially european U.S. Jefferson, who struggles to win the separation of church and state first in Virginia and then in U.S. America. Rousseau 1712-1778CE says in his book *The Social Contract* that the General Will, or the rule of the majority of people, is supreme. In agreement with Rousseau U.S. America sees integrity in rule of law and majority political rule, as Meditation Age classical citizen before. French philosophe Denis Diderot is an important leader of French Enlightenment. Educant

Diderot 1713-1784CE becomes editor of *Encyclopedia. Classified Dictionary of the Sciences, Arts, and Occupations* is the full title of *Encyclopedia*. Attorney general of France denounces to all publishers its editor Diderot for destroying religion and nourishing moral corruption. French

royal governmental and Bible religious critical forces convince some contributors to back out of their commitments. Publication is stopped for a time. The publisher simply wants to translate an existing English work. Diderot convinces him rather to make a new series. Subscribers are found to defray costs. Two thousand original subscribers increase to four thousand from 1751 to 1772CE. The series is seventeen volumes of written text and eleven more volumes of illustrations.

Many contribute to Diderot's Encyclopedia, *the* book of the Education Age. Rousseau does music articles. Leading physiocrats write on economics. Asked to write articles on democracy and despotism, Montesquieu replies he has already written enough about those subjects and decides rather to write on esthetics. Diderot writes articles on philosophy and industrial processes.

Sharing ideas of Freedom Education educants, Encyclopedists are 140 writers of the Encyclopedia. There is natural law to the universe. Tradition, especially religious tradition, is under reason when dealing with physical science world and its problems. Monarchy needs limiting. Humans need to be governed in fairness/efficiency. Informed people need accurate/ real/ current information.

Royal/ religious French authorities are furious with the natural law & order asking Nature's reason approach behind Encyclopedia articles. After seventh volume they order the series stopped. Jean d'Alembert writes an article on Geneva that praises the city's toleration, which indirectly criticizes French intolerance. Diderot decides to continue working on Encyclopedia. He has remaining volumes done secretly. Printer deletes some controversial passages.

The Encyclopedists are revolutionary in their comprehensiveness, rationality, and affirmation of Education Age physical science principles. The Encyclopedia 1767 financially breaks Diderot. Native Frenchman Denis Diderot returns to US all in cultural democracy an encyclopedia like Old Roman Pliny the Elder's fifty-seven book encyclopedia set burned by imperial Bible religion at the Alexander Museum Library. The Encyclopedia is a mini- Alexandrian library, economical/ natural/ factual. It symbolizes human returning to read reality. Diderot vigorously attacks hierarchal abuses: religious intolerance, unjust taxation, dictatorial governance, favoritism of nobility and clergy. Educants of France convince most people of how really bad their living conditions are and give a neo-classical cultured vision, also called 'Western Tradition', of natural law and order cultural democracy. Religious clergy-rule under supernatural God ____ belief is a different category [authority/authentication/tradition] from cultured human rights and rule under natural law & order Nature's reasoned understanding written into common law from universal experience in universal principles chosen by people and lived in public human community. Common law authority has natural law authentication in human story tradition.

German Modern Science University Story

Cathedral Schools use *Word of God* as last filter. Modern science universities use *Book of Life* Nature as final filter. Education Age allows US all to be modern milesians, willing to ask natural law & order Nature prosperity with old milesian Thales of Greek city-state Miletus. [It is well that May 28 be natural laws science day when Thales accurately predicts eclipse 585BCE.] Francis Bacon 1561-1626CE develops his theory of inductive reasoning we call the scientific method [Aristotlian in favoring empiricism over Platonic reasoning from abstract principles]. Irish Bishop James Ussher 1581-1656CE works through Bible chronology to conclude our Earth is created in the evening of 22 Oct. 4004BCE. Almost all, including Isaac Newton, accept this. Ussher's date is used today against geologists and evolutionists. It is cited in U.S. court at the Scopes trial. But, Francis Bacon's intuition-reason-empiricism says: "If a man will begin with certainties, he shall end in doubts; but if he will be content to begin with doubts he shall end in certainties."

By mid-1600s new information floods in from global adventures of discovery, experiments/theories of independent asking scientists, and from new technologies in instruments that expand knowledge of cosmic law & order Nature's reason. How to keep up? How to learn what others are doing? Human heritage thrives on argument, including physical scientist. Publications of encyclopedias are slow. Many scientists are wealthy or have patrons that pay for their laboratory work. Institutionalization of science into universities comes at end of Education Age physical science.

Invaluable forums do arise before the institutionalization of modern science universities. One is the Royal Society of London for the Promotion of Natural Knowledge, chartered by the British crown 1662. It produces the *Philosophical Transactions*, an influential scientific journal. The French follow in 1666 with the Academy of Sciences in Paris, with *Memoires* their publication. Journals increase information exchange [much like Internet does for intercreative mutual modernity] and requires scientists to meet uniform standards of reporting and defending their work. So, work is better shared and better moved ahead in daily careful thoughtful improvements. It certifies and publicizes individual discoveries, taking fear away from human agents of change that there will be no theft of original idea/principle.

They see themselves as reading the 'book' of Nature, *Book of Life*. In second half of 1600s it becomes clear that mathematics is needed to interpret Nature's reason. Need for organizing principles, especially mathematical principles, is met by many including Newton. Time shows that Sir Isaac Newton's laws of motion and interaction are without flaw except at huge speeds [Einstein's Relativity] or in the case of tiny distances [Von Planck's Quantum Mechanics]. Newton is the main physical science lawgiver. We travel to moon and land on it, send Galileo satellites into outer space and takes measurements by relying on Newtonian laws made without leaving earth!

It seems as if Nature does not need the intervention of supernatural God for daily operations, any more than a watch needs the intervention of a watchmaker. Our universe once wound up at creation [with non-intervening Creator of natural laws, or 'Prime Mover' of Greeks with Thales/Socrates/Plato] ticks its way through eternity obeying its own laws. These Laws of Nature can be learned if we study its inner workings. There are universal principles that should also govern affairs of humankind no less basic as the laws of physics that determine a planet's orbit. Education Age is a worldview of physical science consciousness for physical homelife citizen culture. From medieval immobility, Education Age has freedom education physical science change arising with asking modern milesian scientists who bring US all gravitation force and steam engine power. There's renewal in ability of logic and experimentation to uncover the eternal truths of reason in nature home/human home. It's no longer necessary to bend science into conformity with *Word of God* religious revelation. Applying intellect to heaven and Earth we uncover the rules that govern the cosmos; so modern science universities separate themselves from cathedral schools.

At some level we live a mechanical universe, a physical homelife. William Harvey 1578-1657 offers a new view of animal circulation as a closed system, with heart as pump, and blood going in one direction only around the blood vessels. His work is written in *Anatomical Dissertation Concerning the Motion of the Heart and Blood* 1628. Circulation is here in physical natural law & order in physical homelife human consciousness. Robert Boyle 1627-1691 experiments with gases and is today celebrated as one of the chief founders of chemistry due to his experimental method. The *Principia* 1687 of Isaac Newton 1642-1727 provides mathematical rationale for the mechanistic universe, thereby establishing the new tradition of natural mechanical processes. Newton's world is complex interacting machines moving by collisions. Education Age sees the physical homelife of cultural democracy's human heritage with increasingly sophisticated machines, especially clocks, pumps, looms, waterworks, becoming common elements in daily life of everyday people.

There is a strong desire to build a new foundation for society. After hundreds of years of enormously destructive religious warfare, culminating in the 30 Years War 1618-1648 where 50% of the native Europeans are killed. People want change, pattern, and predictability in reality over relying on arbitrariness of godly clergy interpretations on *Word of God* revelation. Reason is made welcome. There is no longer any firm agreement among Christians on the one true faith. People need to find something other than religious belief to serve as a common foundation. Foundation of timeless Truth is always. While religion champions praying God's revelation approach to Truth, culture champions asking Nature's reason approach to Truth. In timeless Truth we trust, both cultured and religious agree. German philosopher Immanuel Kant's Critique of Pure Reason 1781 asks "What can we know?" when humans have physical limits that deny complete knowing. Kant answers that our knowledge is constrained to mathematics and the science of the natural, empirical world. Having the ability to choose the principle to guide our actions makes us actors and in moral actions reason leads and takes the common good into account. The pivotal Kantian insight is that the mind [thinking/feeling] plays an active role in structuring reality.

English begin Deism in late 1600sCE. Deism rejects Divine Providence, rewards/punishments in after life, and divine intervention. Deism is similar to the 'Prime Mover' of Socrates and Plato. Deists have faith in a nonintervening Creator who makes the world and who then because He is omniscient and unchangeable has no further need to intervene. Creator is radically separated from all His creatures, including we humans. Natural world operates by the Creator's natural law set at time of creation. French Voltaire is deist with U.S. Jefferson- Madison- Franklin- Lincoln.

Classical culture is returned to modern science German universities that teach philology, Platonic philosophy, astronomy, geometry, and other Classical subjects. New Classical music is loved and written to be in harmony with Nature. In *Jerusalem*- Moses Mendelssohn 1729-1786, Jewish Germany philosopher/ scholar of Hebrew Torah, says roles of State/ Church are separate and that Mosaic law is coherent with Reason as defined by Plato. He sees original Ancient Torah of Bible confirming nothing more than rational truths, a more or less Deist view. Like deists, he claims that reason can discover the reality of God, divine providence, and immortality of the soul. Moses Mendelssohn defends Spinoza's rationalism without permitting this attitude to lead him to reject religious beliefs as man-made. Moses Mendelssohn recognizes with Spinoza the consistency and order of the universe is replicated by human reason even while he holds the Jewish ceremonial law, rabbinic Law, is revealed, permanent, and hence applicable in his own day and time. This 'German Moses' revolutionizes revelation Judaism to finally be in harmony with rational physical natural law & order thereby overcoming the issue that may have cost Israel's Messiah his very life. Joining religious revelation and cultured reason, Moses Mendelssohn ['Jewish Socrates'] does what Israel's Messiah, Socratic Jesus, may have tried to do. However, fundamentalist rabbis categorically reject the coherence of reason with Mosaic law. Mendelssohn argues for the joining of natural law & order with supernatural religious training as essential to modern life. Orthodox rabbi clergy reject, too, the related idea that people should participate in their country, for they believe that the Jews are a theocratic nation in exile, awaiting their return to Zion. Caring/sharing Classical Cultured North with his people, German Moses' writings emancipate younger Jewish minds to eternal truths of reason, bring them cultured human home in natural law & order, and begin new divine religions of Reform and Conservative Judaism. Studying to be rabbis, young Jewish intellectuals with Mendelssohn legacy and Humboldt educational reforms attend modern science German universities for the first time in early 1800s, and about sixty of these students receive advanced degrees. Trained in Greek Classics and Platonic method, they seek to bring reason to a reinvented Judaism's revelation. These young rabbis led the Reform Movement

that is bitterly opposed by elements within the entrenched orthodox rabbinate. Also, so greatly loved is classical European music that even the Jewish liturgy is rewritten in the Bach-Beethoven-Mozart Classical musical mode, adding Israel's own composers in Mendelssohn and Schubert. [*Moses Mendelssohn and the Bach Tradition* by Steven P. Meyer, *Fidelio Magazine*, Vol.8, No.2, Summer 1999.]

Asking Nature's reason in tolerant skepticism of independent liberty morality, everyday people return rational culture's support structures. Rational René Descartes 1596-1650 and empirical Bacon 1561-1626 give US all the new mechanical universe of Newton, taught in modern science German universities. Teachers teach and quest for reality in natural law & order Nature. We, the world's people, become irrational when we lose rational Plato and empirical Aristotle taught in their Athenian schools of early science. These schools of early science are closed by soldiers sent from Emperor Justinian 529CE for clergy Bible benefit that begins medieval religious millennium.

Affirming reason, there is optimism. Individualistic and equalitarian we Americans [all people] have all the necessary requirements [reason/ common sense] to pursue scientific knowledge. Anti-rational, old-fashioned ways are still here. Understanding our world as a machine is one physical reality even as the later quantum physics welcomes another more creative proactive physical reality. Religion no longer opposes natural law and order Nature, but rather is concerned about its **relationship** to revelation religion. After medieval-mindedness, Education Age physical science is a welcome change. Modern science German universities educate all who come to learn the new science of a Newtonian mechanical universe of systems within systems. German language becomes for a time the language of science.

Yang/ Yin in 'Ren' Reciprocity Discipline

31 May 2003 U.S. American President and Mrs. Bush visit Auschwitz, Germany on way to opening Middle Eastern talks. Their visit is a follow up on the Gulf War II to bring compromising 'road map' hope for middle East peace with creation of a new Palestine State for Ancient nation Philistines now called modern Palestinians. Leaning on U.S. country and people who accept it, Bible priests have presidents and Congress helping them do Zion religion agenda [Israeli nation stated in Abraham's donation.]. While in multi-national country of Germany, Mrs. Bush places a white rose to commemorate over a million Jewish [Israeli national] lives lost at Auschwitz to negative plural person Hitler's WWII. No red rose is taken to modern science German university.

There in Germany everyday people, plutocrats, and priests from a world of nations are educated in law & order Nature's physical science. Education Age Moses Mendelssohn inspires the next generation of 1800s young orthodox rabbi clergy students to take their first science classes in Germany and participate in the country. Greek Thales' Ionian thinkers of science, overlooked by prophets of Israeli story/Bible clergy, are finally returned by European thinkers and modern science German university teachers. Lives lost to Hitler at Auschwitz are a million. Lives gained to thought by physical classical culture returned at modern science German universities are myriad. German became the language of science, asking physical natural law. Among other nationals, Israeli nationals are given science in what was a German national human homeland.

Take a red rose to your science school. We with Mrs. Bush are guilty of forgetting our manners in reciprocity principle that build US all in good memory among people/nations/countries/ humanhood. We in self/family/country/world have done yanggood/ yinbad in equality principle human heritage contribution. Twelve years of Nazi nightmare under Holocaust Hitler, Jewish banker Rothschild's illegitimate love grandchild [says Austrian government], is not the true German measure/memory to friend.

The Rights of Englishmen Story

Englishmen inspired by the check on royalty, The Magna Carta a medieval outlier, return democracy's 'agape' fraternity of Greco-Roman Classicism within England then U.S. America in 1600s and 1700sCE. The 17th century English Revolution is an all native English brothers' civil war in homeland England for ideas wrestled on cultural democracy. It culminates with bloodless revolution in 1688CE that ends 'divine right' of king in England and reaffirms the supremacy of Parliamentary people over monarch king. Parliament passes the British Bill of Rights 1689CE that a hundred years later serves as a model for first ten amendments to the U.S. Constitution—the U.S. Bill of Rights. The Magna Charta 1215CE, cornerstone of native English democracy, is the very basis for political liberties written later in British Bill of Rights 1689CE. Political parties arise. The Toleration Act 1689CE (Common Era) gives freedom of worship to non-Anglicans. In Britain hierarchal royal and robe hegemony is curtailed for first time during Education Age. John Locke's father joins parliamentary forces. The next year after King James II is overthrown, John Locke writes a philosophical justification of the Glorious Revolution as a liberal and democratic statement in *Two Treatises of Government*. Locke's ideas influence young Thomas Jefferson, who later writes the U.S. Declaration of Independence under natural law and order and James Madison, who later writes the U.S. Constitution without direct reference to any intervening God or Divinity, clergy or divines, and with clear curtailment to titles of nobility. Locke's ideas are that people have the natural rights to life, liberty, and ownership of private property; to protect these natural rights people enter into a social compact creating a secular government with limited powers; and if government, which is party to the compact, fails to live up to purpose or exceeds its authority, the people have the right even duty to alter or end it—by revolution if necessary.

The 18th century American Revolution is again an English brothers' civil war, this time on both sides of the Atlantic Ocean, for ideas wrestled on cultural democracy. Old Americans oppose strict British control. Fifteen years before the 1776 fighting begins, English-led U.S. American colonists change their minds and decide for self-determination. This is the real revolution in ideas for independence and democracy. Misunderstanding comes from the great distance that separates English colonists from their Britain motherland by Atlantic Ocean, a body of water 3,000 miles (4,800 kilometers) wide then traveled only by slow moving ships under sail. Atlantic Ocean becomes a barrier to communication that increases misunderstandings and harms mutuality. Thomas Paine in his popular pamphlet *Common Sense* considers independence a logical effect.

Writing for all U.S. Americans and drawing upon philosophy of famous Englishman John Locke, young Thomas Jefferson writes *Declaration of Independence* outlining living principles of Meditation Age social behavior for homelife in cultural democracy's '4principles' learned:

Tolerant-*Liberty* is an unalienable right along with life and the pursuit of happiness.

Truth-*Integrity* is government instituted among men deriving their just powers from the consent of the governed.

Compassionate-*Fraternity* is not destructive to the human rights and civil liberties of men.

Ancient Age-*Equality* is, 'All men are created equal' under 'Laws of Nature and of Nature's God' [Jefferson's Creator].

Culture is people chosen ideas/principles whether in medieval Mongolia with Genghis Khan legacy to his people who love him or in Republican Age U.S.American summer *Declaration of Independence*-autumn *Constitution*-winter *Bill of Rights*-spring *FDR's Alphabet Soup Economy* of social citizen culture. Education Age English return to native homeland classical culture's 'democracy' in human rights/self-rule, then in U.S. in Republican Age. English consistently make support structures for rational common law guarantees. Learn your civil scriptures: Be able to live and protect from abuse your democracy's chosen principles. 'Rights of Englishmen' is with US all in cultural democracy.

Classicism Inspires Education Age Rational Structures

In cosmic natural law and order asking with Athenian teachers and **German** modern science universities of teachers and students, *liberty* [that overcomes powers violent and superstitious] is not forgotten. In caring the Herodotus-Thucydides' human story discipline and **Italian** Humanists' struggle to regain their past lost to priestly politics/ militant activism, *integrity* is not forgotten in scientific social historical record. In tolerant Greek agape and **English** human rights guarantee, *fraternity* is not forgotten. In literate Greco-Roman citizenry and **French** Encyclopedists, *equality* literacy in a real world of ideas is not forgotten. Asking and caring, tolerant and literate we american homelifers, world citizens cultured, are from the long art of literate everyday people chosen principle culture with Classicism to Americanism by way of Continental European Thinkers' Education Age physical science. Godlife is clergy story in other than human memories and miracles: Homelife is human story in human forbearers' wonderful gifts given US all in cultural democracy. Homelife is the new story.

With a word we are transported to an Age of unfolding citizen culture.

<i>AMERI Ages</i>	<i>citizen culture</i>	<i>WORD</i>
Ancient Age basic survival	basic homelife from Old Worlds' human famili contributions	'ameri'
Meditation Age social behavior	social homelife from nature/human home	'home'
Education Age physical science	physical homelife from <i>Book of Life</i> [Nature]	'life'
Republican Age civil society	civil homelife from Americanization	'american'
Information Age universal co-creating	universal homelife from world citizen culture	'hapi'

We see from AMERI Ages cherished citizen culture basic-social-physical-civil-universal in human story american homelife that we in principle learn-live-love-share generationally in common sense and empathy.

!For forthright forbearers who give US all treasures of spirited thought to care/ share/ understand in world citizen culture!

Keep the physicalEducation culture!

Welcome to 'democracy's playground'. Enjoy/ explore world citizen cultural democracy's long human heritage. To Life, homelifer!

