

# The Aesthetical Of

The success of the American Revolution was indeed a 'shot heard 'round the world.' Republicans everywhere were inspired by the possibility that similar republics could be established throughout the globe. But, after the French Revolution failed, the German poet and playwright Friedrich Schiller wrote his *Letters on the Aesthetical Education of Man*, to argue that a people would be successful in establishing republican government, only if they had first undergone a process of aesthetical education.

*What allowed the American Revolution to be a success? Was it the 'aesthetical education' of the American colonists?*



Philadelphia Museum of Art. Gift of Mr. and Mrs. Wharton Sinkler

*Benjamin West, "Benjamin Franklin Drawing Electricity from the Sky," 1816. The poet Friedrich Schiller celebrated Franklin's experiments by referencing "God's sparks" in his famous "Ode to Joy."*

# Education America

by Robert Trout

Alexander Hamilton opened *The Federalist Papers*, which he co-authored with James Madison and John Jay to advocate the adoption of the Constitution of the United States, by challenging the American people that, “it seems to have been reserved to the people of this country, by their conduct and example to decide the important question, whether societies of men are really capable or not of establishing good government from reflection and choice, or whether they are forever destined to depend for their political constitutions on accident and force.”<sup>1</sup>

The success of the American Revolution was indeed a “shot heard ’round the world.” Republicans everywhere were inspired by the possibility that similar republics could be established throughout the globe. The German poet and playwright Friedrich Schiller described the excitement felt by many in Europe: “Full of expectation, the eyes of the philosopher, as of the man of the world, are fastened upon the political theater of action, where now, as one believes, the great destiny of humanity is treated.”

These hopes were quickly dashed, however, when the attempt to reproduce the success of the American Revolution in France quickly degenerated into a Reign of Terror, in which an estimated 40,000 people were killed, including many of France’s leading scientists and republican leaders. After the French Revolution failed, Schiller wrote his *Letters on the Aesthetical Education of Man*,<sup>2</sup> to argue that a people would be successful in establishing republican government, only if they had first undergone a process of aesthetical education.

This calls up the question: *What allowed the American Revolution to be a success?* In this essay we will demon-



The Granger Collection

*Homage to Friedrich Schiller as he leaves the theater in Leipzig after the premiere of his “Virgin of Orleans,” 1801.*

strate that the success of the American Revolution was the result of the “aesthetical education” of the American colonists.

\* \* \*

Schiller’s *Aesthetical Letters*, his “political treatise” on the requirements for establishing republican government, was written as a series on “the results of my inquiries into the beautiful and art.” Schiller informs the reader that the potential for a great political revolution beckons the philosophical mind “to engage itself with the most perfect of all works of art, with the construction of a true political freedom.” Even though the eyes of the world were focussed on questions of the just design of new political institutions, Schiller did not focus on the political sphere according to the prevailing assumptions of his day. “That I resist this alluring temptation and cause beauty to walk in front of freedom” was necessary, since, he says, “in order to solve the political problem in

experience, [one] must take the path through the aesthetical, because it is beauty, through which one proceeds to freedom.”

*Why does Schiller assert this?* The answer to this question, points to a profound difference between the character of the American colonists, and that of the majority of their European contemporaries.

## The Founding of the Modern Nation-State

---

Throughout most of its history, mankind’s condition has been characterized by an aristocratic class ruling over masses of commoners through feudal institutions, where the life of the majority 95 percent was little better than that of cattle. It was only with the establishment of the modern nation-state, that it became possible to end feudalism, and uplift the population to conditions consistent with human dignity.

The 1439 Council of Florence marked a watershed in the transformation of society from feudalism to the nation-state. Representatives of the Eastern and Western Christian churches wrought a unification of Christendom based upon the Nicene Creed, which contains the doctrine of the *Filioque*, that is, that the Holy Spirit proceeds from both Father and Son. This affirmation of the divinity of Christ, introduced the conception of man in the image of God as the principle governing affairs among men.

The Renaissance (in Italian, “Rebirth”) was the creation of republicans who consciously brought back the Platonic tradition of Greek civilization, breaking the domination of the Aristotelean philosophy which had held back Europe for over 1,500 years. Teaching orders like the Brotherhood of the Common Life spread education to the children of commoners, and created geniuses like Nicolaus of Cusa and Erasmus of Rotterdam. The project for colonizing the New World grew out of the intellectual circles of Nicolaus of Cusa, who was the key organizer of the Florentine Council.

The first modern nation-state was established in France by Louis XI, who ruled from 1461 to 1484. Louis made the purpose of the French nation the welfare of all its citizens, and in so doing, brought into political practice the theological precepts of the 1439 Council. Wielding a government intelligentsia educated by the teaching orders, Louis rapidly transformed France, checking the power of the aristocracy, and doubling the economic output of the nation during his reign. This success increased the military power of France, and made it impossible for the forces of feudalism to crush it.

England moved to copy France under the first Tudor king, Henry VII (reigned 1485-1509). The nation, which had been devastated by feudal rivalries and dynastic wars, underwent a profound transformation.

Nonetheless, even though the nation-state became thus firmly established in Europe, the power of the landed and financial oligarchies was not broken. Instead, these aristocracies continued to exist in symbiotic relationship to the institutions of the nation-state, which were distorted from their true republican purpose as a result. Beginning the Sixteenth century, Europe’s financial aristocracy, which had been centered in Venice throughout the later Middle Ages, began to relocate its center of operations northward, to The Netherlands and England. The last chance to rescue England from the Venetian takeover was the battle waged by Gottfried Leibniz and his collaborators, including Jonathan Swift in England, at the beginning of the Eighteenth century. However, with the accession of George I in 1714, a Venetian-style financial oligarchy—well-characterized as the “Venetian Party”—established firm control.<sup>3</sup> America’s break with England became essential.

### Schiller vs. the Empiricists

In his opening Aesthetical Letters, Schiller describes the period of early civilization as the childhood of mankind. Man’s existence was dominated by his natural instincts, a condition which Schiller describes as “sensual slumber.” In the first condition of raw nature, man sees the world only in terms of how he can use it to meet his sensual needs, or how it may present a threat to him. Since he has not ordered the world outside himself according to “form,” all the things in it appear to him as disconnected objects. His emotional life is dominated by greed and rage. This condition of raw nature is only an abstraction, to which man has never fully conformed, but from which he has never fully escaped. When mankind’s existence more closely approximated this condition, governments may have existed, because they were necessary to achieve the requirements of physical existence, but they were based, not on reason, but on force.

Writing in the aftermath of the American Revolution, Schiller raised the great hope that mankind could replace government of “the blind right of the stronger,” with government based on reason. Long-held conventions were now being questioned, and man was seeking to reorder government to cohere with the true nature of man:

However artfully and firmly blind caprice may have founded its work, however arrogantly it may maintain it and with whatever appearance of veneration may surround it—he may, with this operation [reason], consider it as fully

undone, for the work of blind power possesses no authority, before which freedom need bow, and all must accommodate itself to the highest purpose, which reason erects in his personality. In this way the attempt of a people to come of age, to transform its natural state into a moral, arises and justifies itself.

Schiller asks, How can this transformation of the institutions of government come about? The transformation must be carried out by the citizens themselves. This leads to a second question: What qualities are required of the citizens, to make them capable of accomplishing this task?

If mankind were still in its natural, "savage" state, it would be incapable of living under, much less establishing republican government. The natural character of man, selfish and violent, aims much more toward destroying, than preserving society. Therefore, the blind instincts of destructive egoism must be calmed, before society can allow multiplicity. But, at the same time, the independence of man's character from the acceptance of despotism, must be secured, before this multiplicity were made subservient to government.

Schiller demonstrates that, if mankind conceives of morality in the form of abstractions, but lacks the will to put these conceptions into practice, then it will be incapable of establishing republican government. Here, Schiller has identified a problem discussed by Plato in *The Republic*. If morality is to order human behavior, it must cease being merely hypothetical, and become a force connected and driven by emotion. Man must develop what Plato described as *agapē*, the emotional commitment to fight for truth and justice. Thus, Schiller writes, in order for man to live under government and still preserve his freedom, his character must be developed, so that "his instincts are sufficiently harmonious with his reason, in order to be of use as universal legislation."

The French Revolution failed, because the overwhelming majority of French citizens did not possess the character required to carry out a successful transformation of their government into a republic. Schiller writes:

The edifice of the natural state rocks, its worn out foundations give way, and a physical possibility seems given, to place the law upon the throne, to honor man finally as an end in himself and to make true freedom the basis of political union. Vain hope! The moral possibility is wanting; and the generous moment finds an unresponsive people.

Schiller describes the lower classes as savages, and the more educated, as barbarians:

In the lower and more numerous classes, brutal lawless instincts present themselves to us, which unleash themselves after the dissolved bond of the civil order, and hasten with unruly fury to their animal satisfaction.

He labels the cultured classes barbarian, because their culture and education has "so little an ennobling influence on the inner convictions, that it rather strengthens the corruption through maxims." The educated classes are worse than the ignorant masses, since they

give us the still adverse sight of slackness and of a depravity of character, which revolts so much the more, because culture itself is its source.

Schiller identifies the flawed ideology that had come to dominate Europe in the form of British empiricism and utilitarianism:

Utility is the great idol of the time, for which all powers slave and all talents should pay homage. Upon this coarse balance hath the spiritual merit of art no weight, and robbed of all encouragement, it vanishes from the noisy mart of the century.

Philosophical empiricism had been consciously spread as an ideology to sabotage the effects of the Renaissance. It can be traced back to Paolo Sarpi, the Seventeenth-century Venetian who played a key role in the oligarchy's counter-deployment against the Renaissance.

Sarpi preserved the basic ideological content of Plato's enemy Aristotle, but presented it under a modern cover. He argued that knowledge was based on sense perception, and claimed, following Aristotle, that the nature of man is not to be governed by reason, but to be dominated by the emotions of greed and rage. Hence, Sarpi assumed that the essence of human nature was the very bestial tendency which Schiller shows must be overcome to establish republican government. The empiricist ideologues Thomas Hobbes, John Locke, Adam Smith, France's Voltaire, and numerous such others, all derived their views from this bestial conception of man. Hobbes, Locke, *et. al.* argued that society must be organized, such that each man can best achieve the object of his animalistic instincts. For example, John Locke's political theory, the Social Contract, aims at establishing government among men who are driven by greed and rage.<sup>4</sup>

Schiller shows that when man is dominated by this ideology, even the development of his rational faculties works merely to extend his greed:

His heart remains in the sensual, so the infinity of form extends his cravings for material. The first fruits of this misdirected reason are care and fear. Man loses the happy, limited animal existence, and seeks to meet his animal desires over the infinity of time. All unconditional systems of happiness are fruits of this tree.

A people dominated by this ideology would not be capable of establishing a republic,

[b]ecause sensuousness knows no other aim than its advantage, and feels itself driven by no other cause than blind chance; so he makes the former the determiner of his actions, and the latter the ruler of the world.

Hence it was, that the French Revolution succeeded in merely replacing the French monarchy, with a government that was even more arbitrary and tyrannical.

## England's Tudor Renaissance

Today, it is often claimed that the theories of the empiricist Locke were the basis for the American Revolution. In fact, the roots of the American Revolution can be traced back to the Renaissance, and the spread of the Renaissance in England.

Henry VII carried out reforms to control the power of the feudal aristocracy and develop England. He brought in as advisers, men who were steeped in the Florentine Renaissance, such as John Morton, the Archbishop of Canterbury, who was also the patron of Thomas More. A major effort was launched by the circle of collaborators including More, More's friend Desiderius Erasmus, John Colet, and William Lily, to bring the Platonic method of Renaissance learning to England. Around 1510, Erasmus collaborated with the Platonists Colet and Lily to found St. Paul's School. The educational methods introduced at St. Paul's were then spread throughout England with the establishment of public grammar schools. Under Henry VIII, the number of grammar schools expanded dramatically, even as Henry became disoriented by Venetian intrigues. The works of Erasmus, and a textbook written by Lily and Erasmus, were used in the grammar schools throughout England.

Desiderius Erasmus (1466?-1536), who played such a

key role in launching the Renaissance in England, was the most important writer and Platonist philosopher during this period, working to reform both society and the Church. Erasmus promoted the idea that children of all classes and backgrounds should be educated. He recognized that the purpose of education was to develop the creative powers of the individual, and not to focus narrowly on learning a single skill.

Erasmus's text, *On the Civility of Children's Conduct*,<sup>5</sup> established modern education based on republican principles. He stated that, "[t]he possessors of true nobility are those who can use on their coat of arms, ideas which they have thoroughly learned from the liberal arts," and stressed that education of the entire population "is a public obligation in no way inferior to the ordering of the army."

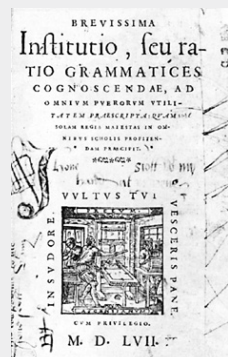
Although a battle raged for control of England during the Sixteenth century, with increasing infiltration by Venetian interests, the period was characterized by efforts to develop the national economy, and uplift and educate the population. Government policies in the tradition of Henry VII consciously promoted manufactures and seafaring. Scientific advances were promoted in areas such as metallurgy and navigation. William Gilbert's *De Magnete (On the Magnet)*, released in 1600, was the first great book of modern science to be published in England, and the first by an Englishman. Gresham College, established in 1597 as a center for scientific research, spread this knowledge into the broader population. The plays of William Shakespeare and Christopher Marlowe stand as excellent examples of aesthetic education, using drama to create a citizenry capable of comprehending the principles of republican government.

The Tudor Renaissance had a dramatic effect in



The Granger Collection

The Tudor Renaissance launched study of Classical learning in England. **Left:** Desiderius Erasmus of Rotterdam. **Right:** John Colet.

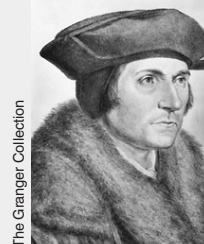


Educator William Lily's "Short Introduction of Grammar," 1557.



Library of Congress

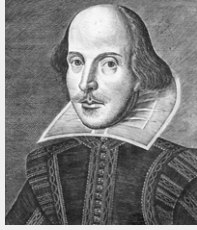
England's leading Christian Platonist was Erasmus's friend Thomas More (below), Chancellor under Henry VIII. More's book "Utopia" called for reform of economic relations and social conditions in the kingdom (illustration right).



The Granger Collection



The Granger Collection

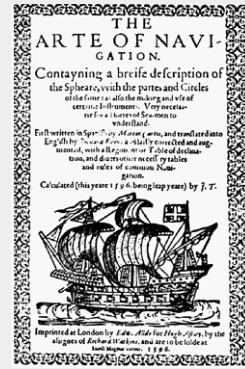
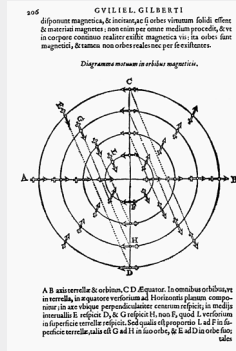
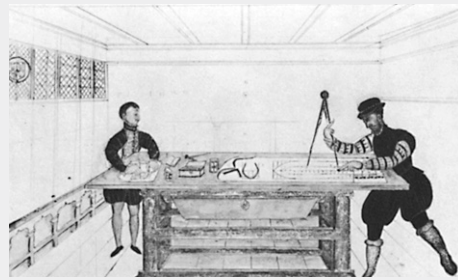


The dramas of William Shakespeare (top left) and Christopher Marlowe (left) aimed at creating citizens capable of comprehending republican principles.



The Granger Collection

"De Magnete" (right), England's first great scientific treatise, was written by William Gilbert (far right), physician to Elizabeth I.



Above: Tudor economic policy fostered seafaring and navigational arts.

uplifting the English population, both morally and intellectually. In 1615, England's literacy rate, which was estimated at one-third, was one of the highest of any nation in the world; the literacy rate in France, for example, was then estimated to have been only 20 percent. England's literacy rate rose through the Seventeenth century, reaching a high point of about 50 percent.<sup>6</sup>

The promotion of education, especially during the reigns of Edward VI and Elizabeth I, fostered the founding of new grammar schools, such that by 1600 every boy, even in the remotest part of the country, could find a place of education in his own neighborhood, competent to prepare him to enter college.<sup>7</sup>

The English Puritans were the most supportive of education of any grouping in England. A statement by Cotton Mather, of the Massachusetts Bay Colony, exemplifies the emphasis of both the English and American Puritans on the necessity of literacy for salvation. Mather, in his sermon, "What Must I Do To Be Saved?," answers:

Knowledge, Knowledge; To get good Knowledge, let that be the First Care of them that would be Saved. Knowledge, 'Tis a Principal thing; My Child, Get Knowledge; with all thy might, Get understanding. Oh! That this Resolution might immediately be made in the minds of all our people; I will get as much Knowledge as ever I can! The Word of God must be Read and Heard with Diligence that so you may arrive to the Knowledge that is needful for you. The Catechisms in which you have the Word of God fitted for your more early Apprehension of it must be diligently Studied. Unto all the other Means of Knowledge, there

must be added, Humble and Earnest Supplications before the Glorious Lord, You must cry to God for Knowledge, and lift up your Voice to Him for Understanding; Prefer it before Silver, Before any Earthy Treasures.<sup>8</sup>

It was the positive impulse of England's Tudor Renaissance which was the tradition in which the American colonies would grow toward republican self-government.

## John Winthrop and the Massachusetts Bay Colony

The story of the Aesthetical Education of America starts in 1630 with the founding of the Massachusetts Bay Colony, although colonies had been previously established in Virginia and in New England at Plymouth Rock. The founding of Massachusetts Bay marked the beginning of a remarkable development of the principles of self-government. Lawfully, this colony was also the first society in the world to require universal education of its populace.

The establishment of the Massachusetts Bay Colony, with a charter allowing for self-government, is a story in itself, which is reported in depth in H. Graham Lowry's seminal *How the Nation Was Won*.<sup>9</sup> The founders of the colony obtained from King Charles I, a charter which allowed the "freemen" of the company to elect their own officers. Although nominally under the rule of the gov-

ernment of England, Massachusetts Bay practiced self-government under this charter, until Charles II revoked it in 1684.

John Winthrop was the colony's most influential founder. Born in 1588, the son of a wealthy landowner, he was educated for two years at Trinity College, Cambridge. Elected the first governor, in October 1629, before the colonists set sail from England, he held office for approximately twelve years, until his death in 1649. More important than his official position, however, was his intellectual leadership.

Winthrop was a member of the Puritan faction within the established Church of England. In 1629, he wrote his "Arguments for the Plantation of New England," in which he explained why a wealthy man like himself would choose to abandon his position in England, for a place in the wilderness. In this statement, Winthrop exposed an anti-human outlook widespread in England:

[I]t is come to pass that children, servants & neighbors (especially if they be poor) are counted the greatest burden, which, if things were right, it would be the chiefest earthly blessings. . . . This land grows weary of her inhabitants, so as man who is the most precious of all creatures is here more vile and base than the earth we tread upon, and of less price among us, than a horse or a sheep, masters are forced by authority to entertain servants, parents to maintain their own children, all towns complain of the burden of their poor though we have taken up many unnecessary, yea unlawful trades to maintain them.

Winthrop argued that this anti-human outlook would be overturned by the establishment of colonies, where the colonists would follow the injunction in Genesis 1:28<sup>10</sup>:

The whole earth is the Lord's garden & he hath given it to the sons of men, with a general condition, Gen:1.28. Increase and multiply, replenish the earth and subdue it, which was again renewed to Noah, the end is double, moral and natural, that man might enjoy the fruits of the earth. . . .

Winthrop and the first colonists set sail from England in the Spring of 1630. On the ship *Arbella*, he delivered perhaps his most important statement, the lay sermon "Modell of Christian Charity."<sup>11</sup> In this sermon, he proposed to his fellow colonists that their new colony must set an example that would transform the world: "For we must consider that we shall be as a city upon a hill. The eyes of all people are upon us." Winthrop argued that the very survival of the colony would depend upon establishing a society coherent with the Golden Rule. This is, of course, what Schiller understood to be required for the success of a republic.

He began his sermon with the observation that, although God had created divisions in mankind between rich and poor, and between those eminent in power and dignity and others mean and in subjection, the colony's very survival demanded that the conventional class structure be circumvented, and that all men and women work together, rich and poor alike. He compared the colony to a body, where *love* is the ligament that binds the body together. He defined love as

the bond of perfection. First it is a bond, or ligament. Truly, it makes the worke perfect. There is noe body but consists of partes, and that which knitts these partes together gives the body its perfection, because it makes eache parte soe contiguous to other as thereby they doe mutually participate with each other.

Winthrop argued that each must show the same concern for others, as that which "makes hime carefull of his owne good." He outlined rules for giving and lending, and argued that "wee must be willing to abridge ourselves of our superfluities, for the supply of others' necessities."

Lastly, Winthrop argued that the colonists had formed a special covenant with God, to live by these principles. "Thus stands the cause between God and us, wee are entered into Covenant with him for this worke." Winthrop stated that man must meet his obligations to God for society to prosper. "Now if the Lord shall please to heare us, and bring us in peace to this place wee desire, then hath hee ratified this covenant and sealed our commission, [and] will expect a strickt performance of the Articles contained in it." From this statement springs the covenant theology which became a common theme among New England preachers.

It is today a commonly held prejudice that the Puritans were staunch followers of the Calvinist ideology of predestination. However, Winthrop's polemics in two major controversies in Massachusetts Bay demonstrate that he was seeking to establish a positive conception of freedom, similar to that recognized by Schiller.

In the "Antinomian" religious controversy, Winthrop defended the existence of free will in man; those who opposed it, tended to promote the dissolution of the republic. The controversy was provoked when, in 1634, Anne Hutchinson arrived from England and began factionalizing among the colonists with her doctrines.

Hutchinson and her followers, who were labelled Antinomians, believed that God's grace was presented free and unconditionally to a handful of souls at the Creation. Therefore, good works could have no effect on whether one obtained or failed to obtain salvation. In this she was following the predestination doctrine of John

Calvin. Hutchinson rejected the importance of following the moral law contained in the Bible, as taught by the colony's ministers, claiming instead that her actions were governed directly by the Holy Spirit.

A comparison of the dispute between Winthrop and the Antinomians, to the dispute between Erasmus and Martin Luther over a hundred years earlier, shows Winthrop to be in the Platonist camp of Erasmus. In 1524, Erasmus wrote "On Free Will,"<sup>12</sup> in answer to Luther. Erasmus charged that a doctrine which denies that men possess free will, will lead to the condition where God is seen as the cause of both good and evil in man. A consequence of this doctrine is, that God must punish man for evil which man, in fact, has no control over. This doctrine would encourage Godlessness:

How many weak ones would continue in their perpetual and laborious battle against their own flesh? What wicked fellow would henceforth try to better his conduct? Who could love with all his heart a God who fires a hell with eternal pain, in order to punish there poor mankind for his own evil deeds, as if God enjoyed human distress?

Luther's response, "The Bondage of the Will,"<sup>13</sup> reaffirmed his rejection of the freedom of the will, with an argument that compared man to a beast. Luther stated,

Thus the human will is like a beast of burden. If God rides it, it wills and goes whence God wills; as the Psalm says, "I was as a beast of burden before thee" (Psalm 72:22). If Satan rides, it wills and goes where Satan wills. Nor may it choose to which rider it will run, nor which it will seek. But the riders themselves contend who shall have and hold it.

Winthrop denounced Hutchinson and her doctrines with arguments similar to those of Erasmus. He called the Antinomians "Libertines," stating that "many profane persons became of her opinion, for it was a very easie and acceptable way to heaven," and "indeed most of her new tenets tended toward slothfulness."<sup>14</sup>

In a second controversy, Winthrop developed the two different conceptions of freedom: natural liberty, and civil or federal liberty. In the "Little Speech on Liberty,"<sup>15</sup> Winthrop responded to accusations that he had overstepped his authority in an incident involving the appointment of a captain for the militia. He defined natural liberty as that of a brute beast, which is "a liberty to do evil as well as good." He said:

There is a Liberty of corrupt Nature, which is affected both by Men and Beasts, to do what they list; and this Liberty is inconsistent with Authority, impatient of all Restraint; by this Liberty, we are all the worse. 'Tis the Grand Enemy of Truth and Peace, and all the Ordinances of God are bent against it.

Winthrop contrasted civil or federal liberty to this:

But there is a Civil, a Moral, a Federal Liberty, which is the proper End and Object of Authority; it is a Liberty for that only which is just and good; for this Liberty you are to stand with the hazard of your very Lives; and whatsoever Crosses it, is not Authority but a Distemper thereof.

Winthrop argued, as Schiller would later do in the *Aesthetical Letters*, that the success of a republic requires that the citizens reject bestial natural liberty, in favor of liberty based on doing the good:

If you stand for your natural corrupt liberties, and will do what is good in your own eyes, you will not endure the least weight of authority, but will murmur, and oppose, and be always striving to shake off that yoke; but if you will be satisfied to enjoy such civil and lawful liberties, such as Christ allows you, then will you quietly and cheerfully submit unto that authority which is set over you.

## The Development of Education in New England

The Massachusetts Bay Colony grew rapidly. Within ten years, fifteen to twenty thousand people settled in the region. The educational level of the settlers was remarkably high.<sup>16</sup> In a New England population of not more than 25,000 by 1645, there were 130 university alumni, or approximately one university graduate to every 40-50 families. In addition, a large number of men had received a sound Classical education in the English grammar schools, and saw eye-to-eye with the university men on intellectual matters. The university alumni, such as John Winthrop and Cotton Mather's ancestors, John Cotton and Increase Mather, assumed leading positions in both the Church and government.

Within ten years of the founding of Massachusetts Bay, the New England Puritans had established the institutions to ensure the intellectual development of the entire population: a school system, a college, and a printing press.

The educational system of New England was developed on the Erasmian model. Ironically, this took place while the anti-Renaissance ideologies of Descartes and the British empiricists increasingly dominated the educational institutions of Europe. This fact should present the reader with a paradox. The popular stereotype of the Puritans is, that they were hard-working fundamentalists, with little use for art, science, or culture. For example, the 1642 decision by the Puritan government of England to close the theaters, effectively banning Shakespeare and Marlowe,



strengthens this impression. But the New England Puritans developed a Classical educational system, at the very moment that such a system was being dismantled in England.

Only twelve years after its founding, Massachusetts Bay became the first organized state in history to pass a law mandating that every (male) child be taught to read.<sup>17</sup> The Massachusetts School Law of 1642 delegated to the head of each household, responsibility for the elementary education of children and servants; required that every town appoint men to ensure this be done; and specified penalties for failure to do so. The Law required that all children be educated, “especially of their ability to read & understand the principles of religion & the capitall lawes of this country, and to impose fines upon such as shall refuse to render such accounts to them when they shall be required”; and to see to it that they were kept constantly employed in some useful occupation. When this law was re-enacted in the revision of the colony laws of 1648, the preamble began, “Forasmuch as the good education of children is of singular behoof and benefit to any Common-wealth.”

This act was copied by the other colonies in New England. A New Haven law of about the same time was equally explicit: “For the better training up of youth of this towne, that through God’s Blessinge they may be fitted for publique service hereafter, either in church or commonweale.” Two years later, in its first code of laws, Connecticut copied the Massachusetts law, with its preamble, almost verbatim; and Plymouth Colony followed suit, considerably later, in 1677.

Only five years later, the Massachusetts School Law of 1647 was passed, mandating that every town of fifty families should appoint a common schoolmaster, “to teach all such children as shall resort to him to write and read”; his wages were to be paid either by the parents or the town, as the town should elect; and towns of a hundred families or more should “set upon a Grammer-School, the masters thereof being able to instruct youth so far as they may be fitted for the Universitie.” The law did not mandate that boys must attend grammar school, but that schools had to be available for any boys wanting to attend them.

The Act of 1647 was copied by Connecticut in her code of 1650, and applied to New Hampshire and Maine. By 1672, all the settled territory of New England—with the exception of Anne Hutchinson’s Rhode Island—was under a system of compulsory education. (Rhode Island—the colony of “religious liberty,” “democracy,” and “intense individualism”—had no school system or compulsory educational law throughout the colonial period. Only one boy from Rhode Island attended college in the entire Seventeenth century.)<sup>18</sup>

## Classical Curriculum

In the *Aesthetical Letters*, Schiller describes the degeneration of education under the influence of utilitarian ideology, which stunts the development of the entire individual and reduces man to a mere occupation or position:

Eternally chained to only a single fragment of the whole, man only develops himself as a fragment, eternally only the monotonous noise of the wheel, that he revolves, in the ear, he never develops the harmony of his being, and instead of impressing humanity upon his nature, he becomes merely an imprint of his business, of his science.

Schiller insisted that the men of his period compare themselves to the Greeks, so that they would be better able to recognize the shallowness of their age.

New England’s grammar schools were based on a Classical curriculum that aimed at the education of the whole personality. They took a boy between ages six and eight, who had already learned basic reading and writing, and taught him Latin grammar and literature, and some Greek. Graduates were prepared to enter college at the age of fourteen to sixteen.

The most famous such school was the Free School or Free Grammar School of Boston, which has had a continuous existence from 1636 to today. Its curriculum from 1712 is indicative of the curriculum of most grammar schools, and is similar to the description of Cotton Mather, who studied there in the 1670’s. In the first three years, students studied basic Latin. Texts included Cato, Corderius, and Aesop’s *Fables*. In later grades, students studied Ancient Greek, reading Homer and the New Testament. Also emphasized were the works of the Roman Platonist Cicero, with his *Epistolae* (Letters), *De Officiis* (Morals), and *Orationes* (Orations) studied in the last three years. Remarkably, works by Erasmus, the great Catholic reformer, were included among the basic texts used in the Puritan grammar schools.<sup>19</sup>

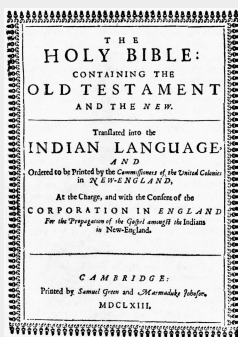
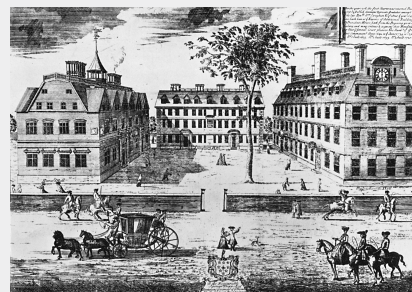
## Higher Education

The commitment of the founders of Massachusetts to education is dramatically demonstrated by their founding a college in 1636, within six years of their arrival, with a legislative appropriation of £400. Although the opening of the college was delayed by the Antinomians, the first freshman class began its studies in the summer of 1638. That September, John Harvard died, leaving his library of about 400 volumes and half his estate to the college, which was then named after him.

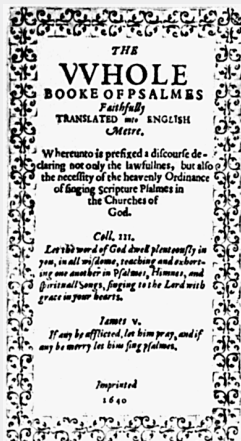
The purpose of the college was, “The advancement of all good literature, artes and sciences,” “the advancement and education of youth in all manner of good literature Artes and Sciences,” and “all other provisions that may

*John Winthrop, first Governor of the Massachusetts Bay Colony, provided intellectual leadership for the Puritan colony from its founding in 1630.*

*The first college, established in 1638, later named Harvard.*



*The Puritans established a printing press in 1638. Left: The Book of Psalms, first book printed in North America, 1640. Above: The Puritans published the entire Bible in the Algonkian language, 1663.*



conduce to the education of the English and Indian youth of this Country in knowledge: and godliness.”<sup>20</sup> It used the same Erasmian approach as was practiced in the grammar schools. Greek and Hebrew were each studied one day a week for four years. Greek texts included the New Testament, Homer, and Sophocles. Students were expected to have mastered Latin in grammar school. Studies centered on Grammar, Logic, Rhetoric, Arithmetic, Geometry, Astronomy, and ancient history. Students studied metaphysics, ethics, and natural science. Although almost half of the students became ministers, the study of theology began only after the bachelor’s degree.

For its first eighty years, the ranking of students was based on scholastic merit, rather than social distinction. Circa 1650, tuition was £2, and the cost of board, approximately £10. This was generally paid in kind with a variety of farm products, including wheat, malt, livestock, meat, firewood, lumber, tallow, wax, turnips, live goats, and shoes. In 1644, the New England Confederation requested that every family in New England give a quarter bushel of wheat, or a shilling in currency, each year, “for the maintenance of poor Schollars at the College at Cambridge.”

### Printing and Publishing

The New England Puritans were prompt in setting up a printing press in 1638, the first in North America outside of Mexico. Intended to be beyond the reach of the censors in England, the press was also used in efforts to educate the indigenous Indian tribes. The first major project was publication of a 1,200-page Bible in the Algonkian language. Printing grew rapidly as a result of the efforts of republicans, such as Increase and Cotton Mather, who were prolific

writers, to educate the population. In 1700, Boston, was second only to London, and ahead of even Cambridge and Oxford, in the number of books published.

### Increase in General Literacy

This emphasis on universal literacy resulted in New England’s having the highest literacy rate in the world at the time. The literacy level in the other colonies, although significantly lower than New England, was higher than England. In England, the opposite trend was at work, leading to stagnation, and possibly even a decrease in literacy among the working classes.

Estimates of male literacy levels during the colonial period, while inexact, nonetheless demonstrate this.<sup>21</sup> Immigrants to all of the North American colonies were more literate than the general population of the countries they left. In New England, the literacy rate was over 50 percent during the first half of the Seventeenth century, and it rose to 70 percent by 1710. By the time of the American Revolution, it was around 90 percent, certainly the highest on earth.

This rise in the literacy rate was achieved through a sharp increase in literacy of the farmers, artisans, and laborers, who made up more than three-quarters of the population. Literacy among farmers rose from 45 percent in 1660, to 60 percent in 1710, to 80 percent in 1760. This had a powerful effect in ending social distinctions, and allowed the common man to participate in the political debates that led to the Revolution.

In the middle colonies, education was not promoted as rigorously as in New England. Schools were generally attached to churches, and were usually supported by

charitable donations. Poor youth were often educated through apprenticeship, which generally imposed educational requirements, such as one quarter's schooling each year. This led to the establishment of evening schools in the larger towns during the Eighteenth century.

In the south, apprenticeship was the leading method for educating the poor, while the children of wealthy planters were educated by tutors or through private, fee-supported schools.

The level of literacy in early New York and Pennsylvania was high, owing to the very high rate of literacy among their immigrants, particularly the Dutch and Germans. Although the literacy level in these colonies and the south increased more gradually than in New England, nonetheless their literacy level of approximately 65 percent at the time of the Revolution was higher than England. Not surprisingly, in the less literate South, Toryism was also stronger.

During this same period, on the other hand, the educational system in England was deliberately degraded, especially among the common people. As the financial oligarchy increased its control over the country, a strong brake was applied to further efforts to educate the lower classes. Just as republicans sought to promote literacy, the opponents of republicanism sought to restrict it. The neo-Aristotelean Francis Bacon told King James I, that the education of the working class would cause a shortage of farmers and artisans, and fill up the kingdom with "indigent, idle and wanton people." Bacon advised:

Concerning the advancement of learning, I do subscribe to the opinion of one of the wisest and greatest men of your kingdom: that for grammar schools there are already too many, and therefore no providence to add where there is excess.<sup>22</sup>

Thomas Hobbes, writing after the English civil war, attacked, as the cause of the rebellion, the Classical curriculum of the Universities,

especially having read the glorious histories and sententious politics of the ancient popular governments of the Greeks and Romans, among whom kings were hated and branded with the name of tyrants.<sup>23</sup>

This attitude brought about a collapse of educational opportunities for England's lower classes. The England of 1660 would be better provided with secondary schools, many of them free in part, than for the next 200 years, until the Education Act of 1870.

The literacy rate in England hovered around 60 percent throughout the Eighteenth century, until as late as 1815. Meanwhile, the quality of education in England declined, as the Erasmian educational system was replaced by the ideology of British empiricism.

In New England, on the contrary, the elites promoted the education of the children of the lower classes. The greatest resistance to education came from the poorer farmers, because education laws placed a heavy burden on small farming communities. It took a century for the republican elite to convince the community to accept the ideal of tax-supported public education, and a second century elapsed before this principle spread to any extent outside New England.

## *Agapē* and the Aesthetical Education of Man

---

Schiller asks, How can a people who are driven by base emotions, be transformed to be governed by *agapē*, or the emotional commitment to truth and justice? Reason can only *promulgate* the law; "it must be *executed* by the courageous will and the living feeling." [Emphasis added] The emotions must be educated to serve the cause of reason.

The instrument that can educate the emotions, says Schiller, is beautiful art:

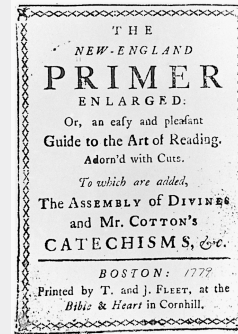
In the modest stillness of thy heart, educate the victorious truth, set it forth from within thyself in beauty, that not merely the thoughts pay homage to it, but rather also the sense lovingly seizes its appearance.

Schiller is not talking about didactic stories, which moralize that one should suffer by doing what is right, rather than pursue the objects of one's baser emotions. Instead, true art educates the emotions, *so that one will desire to do good*.

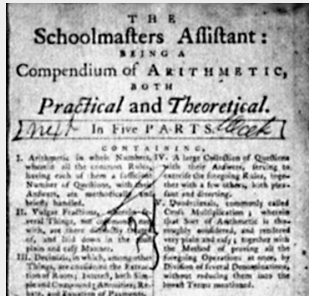
Schiller discusses how man's behavior is shaped by two forces, which, since they impel us, he calls instincts. The first of these instincts, which he names the "sensuous," is the drive of man to explore the physical universe through his senses.

The second, the "form" instinct, is the desire of the mind to rise above seeing the universe as a collection of individual physical objects (as they are perceived by the senses), to formulate laws that strive to encompass the world in its entirety. The form instinct proceeds from man's rational nature, and strives to set him free from the impressions of his senses, and bring harmony to the diversity of sense impressions.

However, in withdrawing from physical objects, the form instinct withdraws from the physical universe itself. Man, under the influence of this instinct, arrives at a state of abstract contemplation. This state of cold, sterile abstraction, is most people's concept of reason; it is the view of reason promoted by Plato's opponent Aristotle, for example, and the schools that were derived from his outlook.



Library of Congress



*Eighteenth-century New England had the highest literacy rate in the world. Education of farmers had a powerful effect in ending social distinctions. Shown are examples of Eighteenth-century textbooks. Above: a typical one-room schoolhouse.*



It is this conception of reason—which Schiller rejects—which rules science to the present day. That is why today's dominant theories of economics, for example, which are derived from empiricist or utilitarian ideology, reject the central principle of true economics: the idea that through human creativity, individuals can make scientific discoveries which, although seemingly causing an infinitesimal change, can in fact transform the curvature of an entire economy.

The Aristotelean view of man reduces him to a mere object, driven by forces or emotions over which he has no control. Society is reduced to little more than a collection of mechanistic interactions between individuals, which can be subjected to analysis by statistical methods. The physical universe is turned into an object which man is incapable of intervening into, to change in any meaningful way.

Denying the central role of human creativity in man's relationship to the universe reduces morality to a mere subject of passive contemplation. As both Erasmus and John Winthrop understood, if man's free will is not seen as the cause of events in the physical universe, man is freed from responsibility for events, because he has no apparent control over them. Man's conception of morality would remain passive, then, as opposed to the active force

Schiller understood was required to motivate man to make the transformation required to establish a republic. If this problem seems abstract, just consider how many times you have heard said, or yourself thought, "Sure, what you are describing would be morally the right thing, but I just don't feel like doing it, since, after all, it won't really make any difference what I do."

Schiller states that the senses apprehend; reason comprehends:

Where both qualities are united, there will man combine with the highest fullness of existence the highest self-reliance and freedom, and instead of losing himself in the world, he will rather draw this into himself with the entire infinity of its phenomena and subject it to the unity of his reason.

In order for man to be capable of carrying out the republican transformation of the state, Schiller argues, these two instincts must be superseded by a third, the "play" instinct, which brings the emotions into coherence with morality and reason:

The object of the play instinct, represented in a universal scheme, will therefore be able to be called living form; a concept, which serves to designate all aesthetical qualities of phenomena and, in a word, what one calls beauty in the broadest meaning.

All artistic creation which is truly art, whether poetry, music, or the plastic arts such as painting or sculpture, develops the creative powers of the mind. Take the case of poetry, for example, as it has been discussed by Lyndon LaRouche.<sup>24</sup> True poetry is more than a mere collection of images or rhyming phrases. The poet must generate a series of different images in the mind of the listener, which contain a contradiction or dissonance. This provokes the mind of the listener to create a *metaphor*, an idea that is not contained in the words themselves, but is lawfully generated from them. The reader of the poem generates the same creative breakthrough in his own mind, that the author made in composing the poem.

LaRouche has demonstrated that the principles of creativity are the same in science as in art.<sup>25</sup> The scientist, in exploring the universe, discovers phenomena that contradict man's existing hypotheses. He is presented with a paradox, which can be solved only by coming up with a new hypothesis, a Platonic *idea*, that subsumes both the new evidence and the existing hypothesis, and demonstrates the coherence of the universe on a higher level.

In contemporary culture, creative discovery is seldom encouraged for adults. But, most people have seen a child working at solving a problem, even a simple one, and how the child experiences joy at discovering the solution. This state of mind, the joy of discovery, is to be contrasted with the infantile state, where the child, or adult, fixates on possessing a physical object.

It is in the aesthetical disposition of mind, that the individual is able to develop true freedom. His mind is freed from domination by the passions, and from the trap of sterile formalism, which denies his ability to intervene to transform the universe. Schiller describes how, in the aesthetic condition, man finds "no individual, either intellectual or moral, purpose," and "no single truth,"

[b]ut precisely thereby is something infinite achieved. For so soon as we recall, that precisely this freedom was taken from him by the one-sided compulsion of nature in sensing, and by the excluding legislation of reason in thinking, so must we regard the capacity, which is given back to him in the aesthetical state of mind, as the highest of all gifts, as the gift of humanity.

A true work of art brings out this state of mind. Schiller states,

this lofty equanimity and freedom of mind, combined with strength and vigor, is the state of mind, in which a genuine work of art should set us free, and there is no more certain touchstone of true aesthetical goodness.

In this state of mind, which lifts one above individual and determinate effects, man is able to achieve a morality

which encompasses the entire world, rather than narrowly focussing on particular issues of injustice. This is most fruitful in regard to knowledge and morality, for a disposition of mind which contains in itself the whole of humanity, must necessarily contain also every individual expression of the same.

This aesthetical disposition is coherent with the qualities required of citizens to transform a state into a republic. It is by developing this state of mind of experiencing the joy of discovery, that the fixation on sensually perceived objects, or the fixation on "me" as a sensually perceived object, is replaced by an identity with *agapē*, the emotion of the pursuit of truth. The person learns *to love*—not to possess, but to create, to make scientific discoveries that enrich all mankind.

When man so masters his own creative ability, he then fully understands what it means to be made in God's image. As Schiller says, "When he is conscious of both his freedom and his existence, he has a complete intuition of his humanity, and has realized destiny as a representation of the infinite."

We have now identified the solution to the problem of uplifting a people to become capable of being self-governing citizens. It is the aesthetical disposition of mind, which allows citizens to locate their identity in the positive conception of freedom which both Schiller, and John Winthrop, sought. Egoism is replaced by an identity in which the citizen finds enjoyment in doing that which will benefit his fellow citizens. By training the will, "he must learn to desire more nobly, thereby he need not, to will sublimely."

Let us now return to America.

## Cotton Mather and the Aesthetical Education of the Colonies

In discussing the proper approach to education, Lyndon LaRouche often uses the image of Raphael's painting, "The School of Athens."<sup>26</sup> In a competent education, the student re-creates the great discoveries of the past. His mind is populated by the minds of the men and women who made these discoveries. The student measures himself against this proven standard—rather than against the passing whims of popular opinion.

The school system established by New England's founders aimed at this to a large extent, and hence fulfilled the task of the aesthetical education of the student. The grammar schools and the college fostered a love of the Greek and Roman Classics, or "*literae humaniores*"; Cicero, Virgil, Terence, and Ovid; Homer, Hesiod, and Theocritus. Most of these works were either poetry or

dialogues. When the republicans' grip on New England was broken, the Classical texts were gradually replaced by modern empiricist works.

The character of the educational system was a continuation of the grammar school system established in England under the influence of Erasmus. Erasmus had introduced the Platonic method into education, to end the rule of stultifying Aristotelean logic. He charged that the Christian church was "about to crumble to ruins, by the influence of their [Aristotelean] syllogism." Condemning Aristotle, Erasmus asked, "What connection is there, I ask, between Christ and Aristotle? between the petty fallacies of logic and the mysteries of eternal wisdom?"<sup>27</sup>

To break the control of Aristotelean commentaries over the medieval churches, Erasmus recommended returning to the original texts. It was for this reason that the study of Greek and Hebrew was encouraged, in part to be able to read the Bible. Erasmus also recommended the study of Classical Greek and Latin authors, and that, "of all the philosophical writings, I would recommend the Platonists most highly."<sup>28</sup>

Erasmus's dialogues, which were a primary text in the grammar schools of New England, exemplify the Platonist approach to knowledge. As in the dialogues of Plato, the truth is not located in the statements of any one character. Rather, the reader must locate himself above the paradoxes which are presented by the often playful interaction of the characters, in order to comprehend a truth which is the solution to the paradoxes so presented. It is through this playful process, that the reader is challenged to overcome fixed patterns in thinking, and enjoy changing his previous opinions. Erasmus also often used seemingly trivial themes, to launch devastating attacks on the corruption of the feudal institutions of his age.

This approach to education shaped the New England churches around which Puritan society was centered. Sermons were the main form of public speaking. New England's ministers, studying at Harvard, received a sound Classical education, obtaining a bachelor's degree before being trained in theology.

The content of the Puritans' sermons contradicts the popular prejudice that the Puritans' religious belief was fatalistic. Historian Samuel Eliot Morison states that, "after reading some hundreds of Puritan sermons, English and New English, I feel qualified to deny that the New England puritans were predestinarian Calvinists."<sup>29</sup> The Puritan sermons assume—when they do not directly teach—that, by virtue of the Covenant of Grace, and though the efforts of the churches, salvation lay within reach of every person who made an effort.

## Increase and Cotton Mather

After John Winthrop, the next remarkable figures in the aesthetical education of the American colonies were Increase Mather and his son, Cotton. Increase was born in 1639 in Dorchester, Massachusetts, and received a degree at Trinity College, Dublin. In 1664, he became minister of the Second or Old North Church in Boston, soon becoming the most influential religious leader in the colony. He wrote approximately 130 books and pamphlets.

In 1683, Increase Mather and a number of Boston men formed a scientific club, named the Philosophical Society. The Boston group met fortnightly, "for conference upon improvements in philosophy and additions to the stores of natural history." Although it only lasted about ten years, it served as a model for Benjamin Franklin's Philadelphia Junto.

Increase Mather's son, Cotton, was born in Boston in February 1663. He studied at the Boston Latin School. He reports that, at age 12, he could speak Latin and had "conversed with Cato, Corderius, Terence, Tully [Cicero], Ovid, and Virgil." In Greek he had "gone through a great part of the New Testament and read considerable in Isocrates and Homer." Cotton Mather graduated from Harvard College at age fifteen. At eighteen, he joined his father as assistant pastor at the Old North Church.

Cotton Mather is truly an example of the Renaissance method of New England education. In his writing, Mather quotes in Latin, Cicero, Erasmus, Augustine, and Virgil. He read and quoted Plato in the original Greek. In discussing the founding of the Massachusetts colonies, he frequently refers to events in ancient Greece and Rome, and makes comparisons to Plato's *Republic*.

Mather was consciously working to get his readers to locate their own actions on the stage of universal history, and to thereby act as world historical individuals. He quotes from Book II of Plato's *Republic* in discussing John Winthrop's qualities as a leader.<sup>30</sup> Of the attacks on Winthrop, Mather states, "For the trial of true Virtue, 'tis necessary that a good Man . . . Tho' he do no unjust thing, should suffer the Infamy of the greatest Injustice." In his essay, "Bonifacius, An Essay upon the Good,"<sup>31</sup> Mather holds himself accountable to the standard set by Erasmus. He states:

But Erasmus . . . has furnished him [Mather] with an answer, which is all that he intends to give unto it: "The censure of others upbraids me, that I have done so much; my own conscience condemns me that I have done so little." The good God forgive my slothfulness.

The Granger Collection



Increase Mather, the most influential religious leader of the Massachusetts Bay Colony. Right: one of Mather's over 130 pamphlets and books.

AN  
**ESSAY**  
FOR THE  
**RECORDING**  
OF  
Illustrious Providences :  
WHEREIN,  
An Account is given of many Remarkable and very Memorable Events, which have happened in this last Age ; ESPECIALLY IN  
**NEW-ENGLAND.**  
By **INCREASE MATHER,**  
Teacher of a Church at Boston in New-England.

Psalm 107. 5. Oh that men would praise the Lord for his goodness, and for his wonderful works to the Children of Men.  
Psal. 145. 4. One Generation shall praise thy works to another, and shall declare thy mighty Acts.  
Printed at BOSTON in New-England, and are to be sold by George Corlies at the Sign of the Maypole in Pauls Church-yard, London, 1684.

The Granger Collection

**BONIFACIUS.**  
AN ESSAY  
Upon the GOOD, that is to be  
**Devised and Designed,**  
BY THOSE  
Who Desire to Answer the Great END  
of *Life,* and to DO GOOD  
While they Live.  
A BOOK Offered,  
First, in General, unto all CHRISTIANS,  
in a PERSONAL Capacity, or in  
a RELATIVE.  
Then more Particularly,  
Unto MAGISTRATES, unto MINISTERS,  
unto PHYSICIANS, unto LAWYERS,  
unto SCHOLEMASTERS, unto Wealthy  
GENTLEMEN, unto several Sorts of  
OFFICERS, unto CHURCHES, and  
unto all SOCIETIES of a Religious  
Character and Intention. With Humble  
PROPOSALS, of Unexceptionable  
METHODS, to Do Good in the World.

Eph. VI. 18. Knowing that whatsoever God thing any man does, the same shall be receive of the Lord.  
BOSTON in N. England : Printed by B. Green, for Samuel Gerrish at his Shop in Corn Hill. 1710



The Granger Collection

Cotton Mather, his son, became the dominant intellect of New England. His "Bonifacius" (left), was coherent with Plato's concept of *agapē*.

Cotton Mather emerged as the dominant intellect of New England, and of the American colonies as a whole, during the last decade of the Seventeenth and the beginning of the Eighteenth centuries. During the 1690's, Increase Mather and his son Cotton wrote 30 percent of all the books printed in Boston. Cotton Mather's total published works reached 450. His works included history, biography, essays, sermons, fables, books of practical piety, theology, and verse. Mather was at the center of a global network, and is estimated to have written 8,000 letters during his lifetime.

Cotton Mather quickly stepped into his father's shoes as the leading defender of the liberties of the Massachusetts colony. He emerged as America's first native-born political pamphleteer during the revolt that deposed the British-imposed Governor Andros in April 1689. On the very day of the Boston revolt, he read his speech, "The Declaration of the Gentlemen, Merchants, and Inhabitants of Boston, and the Country adjacent," from the balcony of the Town House to the crowd below.

Cotton Mather's most famous work, "Bonifacius, An Essay upon the Good," is an organizing manual for creating a society which is coherent with Plato's concept of *agapē*. Mather argues that no person's knowledge or activity has any value unless he is governed by the commitment to do good:

It will be no immodesty in me to say: The man who is not satisfied of the wisdom in making it the work of his life to do good, is always to be beheld with the pity due to an idiot.

Mather applies this standard most emphatically to religion itself. Bonifacius declares that "a workless faith is a worthless faith," and,

I will not be immodest, and yet I will boldly say: The man is worse than a pagan, who will not come into this notion of things, A good man is a public blessing *or, a common good*. None but a good man, is really a living man; and the more good any man does, the more he really lives. All the rest is death; or belongs to it.

Mather asks his reader to see the entire world as his sphere for doing good:

The world has according to the computation of some, above seven hundred millions of people now living in it. What an ample field among all these, to do good upon! In a word, the kingdom of God in the world calls for innumerable services from us.

In "Bonifacius," Mather proposed the creation of public societies to deal with all manner of civic problems: to deal with public disorders, to found schools for the poor and improve existing ones, to meet to discuss and propose legislation. We will see, later, how Benjamin Franklin acted on the lessons learned from Mather and his "Bonifacius."

### The Beauty of God's Creation

Mather, in "The Christian Philosopher,"<sup>32</sup> demonstrates the beauty and perfection of the universe in a very poetic way. He discusses how God designed the universe as the best of all possible worlds,

[a]s the essence of every thing, and its relation, in being fitted, beyond any Emendation, for its Actions and Uses, evidently proceeds from a Mind of the highest Understanding, so the nature of these Actions and Uses, in as much as they are not any way destructive or troublesome; no, but each thing tends apart, and all conspire together to conserve,

cherish, and gratify: this is an Evidence of their proceeding from the greatest Goodness.

Mather rejects the view of man as a wretch, by reference to St. Augustine:

It was most reasonably done of thee, Father Augustine, to tax the Folly of them who admired the Wonders in the other Parts of the Creation abroad, . . . but see nothing in themselves to be wondered at.

Instead, he says of man, that

if thou standest where thou oughtest to stand, in the uppermost Round of the Divine Ladder, next to the most High; then thou approvest thyself to be indeed what thou wert designed by God to be, the High-Priest and Orator of the Universe; because thou alone, standing to know Him, and Speech to express thy Knowledge of Him, in thy Praises and Prayers to Him.

### The 'Newtonian' Arian Heresy

Cotton Mather was part of the global political and scientific network of Gottfried Leibniz. In fact, Mather did battle against Isaac Newton's protégé Samuel Clarke for promoting the Arian heresy, at the same time, and on essentially the same issues, as Leibniz did in the famous Leibniz-Clarke Correspondence on the nature of the laws of the physical universe, and of God's role in them.

The Arian heresy, which arose in the Fourth century A.D., presented the Christian God in Aristotelean terms. God was not the Creator, but rather, he was the Aristotelean "First Cause," which set the universe in motion at the beginning of time. Christ was considered neither divine nor eternal. By reducing Christ to human status only, the Arian heresy denied Christianity's primary religious statement of man's being in God's image. For related reasons, God was considered to be unknowable to man.

The scientific worldview promoted by Newton corresponded to this heresy. Newton's physical universe was an empty void in which particles interacted. God, in this universe, was nothing more than Aristotle's "First Cause," the pool player who racked up the billiard balls, and fired up the first shot that set all the particles in motion. Once the balls were in motion, God was powerless to change their course. Leibniz attacked this view, because it reduced God to an impotent observer, and turned the universe into a mechanism which, like a wind-up clock, was running down.

Mather coordinated a campaign against Arianism on both sides of the Atlantic. He argued that Arianism struck at the very essence of Christianity. In 1712, he urged a correspondent in Scotland to refute the Arian doctrine by documenting that Christianity was funda-

mentally based on the eternal deity of Christ. He urged his correspondent to write a history of Christianity, which demonstrated that the Nicene Creed had always been the doctrine of Christianity. In this, Mather placed himself squarely in the tradition of the Council of Florence.

It was against Samuel Clarke, who Mather described as one of "two grand satanic tools," that he directed his strongest polemics. Mather wrote of him:

The grand poisoner has been Dr. Clarke, who has refined upon Arianism so far as to decry the Arians; and yet his whole (pretended) New Scheme is in the very words of it, the vomit of the infamous Valentinus Gentilis, whom the Switzers beheaded for his blasphemies about the middle of the Sixteenth century.<sup>33</sup>

### A Little People

After the restoration of England's monarchy in 1660, following the period of the English Civil War and Commonwealth, a redoubled assault had been launched on New England's independence. In October 1686, the Massachusetts Charter was declared void. In December, Edmund Andros was dispatched as the royal governor, to enforce the Crown's will on the colony.

However, in 1688, during the "Glorious Revolution" which placed William and Mary on the British throne, the colonists rose up and overthrew the royal governor. In April 1689, over a thousand Bostonians and militiamen from neighboring towns easily overwhelmed the royal forces. The colonists immediately restored their charter, and proclaimed a series of measures for both political independence, and economic independence through economic development. Increase Mather, who was already in England, argued the colony's case before the new king.

Despite Increase Mather's efforts, New England did not recover its Charter. Even more serious, the leadership of New England was taken over by a British-allied merchant grouping that rejected the Colony's republican mission. Cotton Mather described this decline in his 1696 pamphlet, "Things for a Distress'd People to Think Upon."<sup>34</sup> New England, wrote Mather, was no longer filled with heroes worthy of serving as models for future ages. Its leaders were no longer sustained by a Public Spirit and "a fervent Inclination to Do Good, joined with Incomparable Ability to do it." This moral descent went hand in hand with the increased subjugation of New England to the British. Mather wrote "There seems to be a shameful Shrink, in all sorts of men among us, from that Greatness and Goodness, which adorned our ancestors: We grow Little every way; . . . we dwindle away, to Nothing."



However, if self-government was ended in Massachusetts, it certainly was not forgotten. The principles of self-government embodied in the Massachusetts Bay Colony served as an inspiration and example for America's republicans. Even as the British were asserting their control over New England, the processes that had been set in motion were pushed ahead elsewhere in the colonies.

## Aesthetical Education Leads to Truth

Schiller wrote, that although in the aesthetical condition the mind is free, it is through this freedom that man is able to find truth:

The transition from the passive condition of feeling to the active of thinking and willing occurs therefore not other than through a middle condition of aesthetical freedom, and although this condition in itself decides something neither for our insights nor convictions, hence leaves our intellectual and moral worth entirely problematical, so is it yet the necessary condition, under which alone we can attain an insight and a conviction. (p. 277)

Schiller understood that man discovers truth, not through sense certainty, but in the realm of Platonic *ideas*. It is precisely by developing the creative powers of the mind to think aesthetically, to create Platonic ideas, that one is able to arrive at truth. Schiller states:

Truth is nothing, which can be received from outside like the reality or the sensuous existence of things; it is something, that the power of thought produces self-actively and in its freedom, and it is just this self-activity, this freedom, which we miss in the sensuous man. (p. 277)

Once man has located his identity in the powers of creative discovery, rather than in sense certainty and the sensuous emotions, the search for truth becomes much easier:

The step from the aesthetical condition to the logical and moral (from beauty to truth and to duty) is thence infinitely easier, than the stem from the physical condition to the aesthetical (from the mere blind life to form) was. (p. 278)

Once one has located his identity in the realm of the aesthetical, he now desires to make creative discoveries and develop new hypotheses to improve his knowledge.

It is through the science of physical economy, which was founded by Leibniz and advanced further by Lyndon LaRouche, that one is able to test the validity of scientific discoveries. LaRouche has developed a scientific method to relate the individual mind's discovery of a validatable universal physical principle, to the increase of the

potential relative population-density of his species as a whole. LaRouche writes:

Mankind's functional relationship to the universe, is expressed for sense-perception in two general ways. It is expressed both in the improvements in increased life-expectancy, size of population, and other demographic characteristics of populations, and that population's increased physical power over the universe, in *per-capita* and *per-square-kilometer* terms. These perceptible forms of improvements in the human condition, are benefits acquired both through relevant changes in human behavior, as scientific and technological progress expresses this, and by alterations of nature in ways which are relevant to, and indispensable for the realization of the potential benefits implied in scientific and technological progress.<sup>35</sup>

This principle would characterize the economic development of America before and after the Revolution.

## Republican Development in the American Colonies

The next breakthroughs in the development of the American colonies were the result of a transatlantic battle against the Venetian party in England, by the republican forces led by Leibniz. The pro-republican faction in England saw the expansion of the colonies as a crucial flank against the Venetian party, and in 1710 succeeded in having Royal governors appointed to Virginia and New York who pushed forward those colonies' development.<sup>36</sup>

- Robert Hunter became governor of New York and New Jersey. A former military commander, he was a personal friend of Jonathan Swift, Leibniz's leading ally in England. He launched a series of projects to expand those colonies beyond their confinement around the lower Hudson Valley. He also wrote the first American play, an attack on the former governor, Andros.

- Alexander Spotswood became lieutenant-governor of Virginia in 1710. Earlier, positive influences in Virginia had been largely snuffed out during the 1690's, following the appointment of Andros as Virginia governor, after he had been kicked out of Boston. The Virginia colony consisted largely of tobacco plantations, whose product was shipped to London. There were few towns or even roads to connect these plantations into a coherent unit. The colonial government was dominated by the wealthy planters. Few schools existed in its decentralized economy, and the planters hired tutors to educate their sons.

Spotswood arrived determined to expand the colony—which was confined to within 50 miles of the Atlantic—all the way to the Mississippi River. He personally directed the colony's development, forcing

through a law that landowners must develop their holdings, or they would lose their land titles. He mapped out roads and inland waterways, and new towns and forts. He pushed for the establishment of an iron industry, and eventually developed it himself, after the Colony's House of Burgesses refused to use tax money to fund it.

Finally, he led an expedition to find a route west, through the Blue Ridge mountains. This rekindled the spirit of discovery, and had the effect of driving the colonial society forward. Virginia began a renewed growth through westward expansion. Growth decreased the dominance of the plantation system, and developed a healthier political climate, ensuring that Virginians saw themselves as building a nation. Not surprisingly, the young George Washington was involved in surveying the west, and mapping out plans for further expansion.

### Pennsylvania's James Logan

The Charter to the colony that became Pennsylvania had been granted to the Quaker William Penn in 1681. The colony was permitted a measure of self-government. It was settled by tens of thousands of Quakers, and also, later, a large number of German immigrants.

William Penn selected James Logan (1674-1751) to be his secretary, and brought him to Pennsylvania in 1699. Logan became a leading figure in the colony, holding all the most important political offices during the following fifty years.

James Logan was a Classical scholar, who had mastered Latin, Greek, Hebrew, and many other languages. His library of 2,651 volumes contained the greatest collection of Classical works in the colonies.<sup>37</sup>

Logan was at the center of a network of scientists in the colonies, who saw themselves as opponents of British empiricism. He was the leading exponent of Leibniz in the colonies, and his library contained numerous of Leibniz's works. Not only did Logan express his support for Leibniz against Newton in the dispute on the discovery of calculus, but he questioned Newton's mathematical and mental competence, at a time when Newton was president of London's Royal Society. His American correspondents included New York's governor Robert Hunter, and Cadwallader Colden.

Around the time that Benjamin Franklin arrived in Philadelphia in 1723, Logan began writing "The Duties of Man As They May be Deduced From Nature,"<sup>38</sup> as a refutation of Locke and Hobbes. Logan circulated copies of each chapter among the circles of Franklin's collaborators, and to his correspondents in England.

In agreement with Leibniz, Logan developed a conception of the universe as the best of all possible worlds, writing that one must express

a due sense of gratitude to your bountiful Donor, your Creator, and supream Lord of this Universe, the beautiful and exact order of which, in all its outward part you here behold, and how wisely and determinately each is made to answer its proper end.

Logan rejected Locke's assertion that human nature is governed by the seeking of pleasure and the avoidance of pain. Instead "the inclination of the Heart to Good, with which it seeks to unite . . . is the principle which animates us to seek our perfection."

## Benjamin Franklin: The Playfulness of the Beautiful Soul

---

*The disposition of the viewer and hearer must remain completely free and unimpaired, it must go forth from the magic circle of the artist pure and perfect as from the hands of the Creator. The most frivolous subject must be so handled, that we remain disposed, to pass over directly from the same to the most severe earnestness. The most earnest material must be so handled, that we retain the capability, to exchange it immediately for the lightest play.*

—Friedrich Schiller, *Aesthetical Letters*

*The Truth is, that tho' there are in that Country [America] few People so miserable as the Poor of Europe, there are also very few that in Europe would be called rich: it is rather a general happy Mediocrity that prevails. There are few great Proprietors of the Soil, and few Tenants; most People cultivate their own Lands, or follow some Handicraft or Merchandise; very few rich enough to live idly upon their Rents or Incomes; or to pay the high Prices given in Europe, for Paintings, Statues, Architecture and the other Works of Art that are more curious than useful. Hence the natural Geniuses that have arisen in America, with such Talents, have uniformly quitted that Country for Europe, where they can be more suitably rewarded.*

—Benjamin Franklin,

"Information to Those Who Would Remove to America," 1784<sup>39</sup>

When the delegates to the Continental Congress met in Philadelphia in 1776, they found a city that in many ways had surpassed all other American cities. Philadelphia had tripled in size over the last three decades. Its population of 40,000 exceeded New York's at 25,000, and Boston's, whose population had remained static at 16,000.

Philadelphia had taken the lead in many areas, developing a medical school and the leading hospital in the colonies, and taking the lead in science and culture with the American Philosophical Society. Although Philadelphia was still behind Boston in elementary and secondary

school education, its literary output greatly exceeded that of Boston.

The development of Philadelphia during this period is an excellent example of how the creative discoveries of one individual, Benjamin Franklin, dramatically changed the curvature of the economic and cultural processes of the larger society. (Most of the delegates to the Congress were a generation younger than Benjamin Franklin, who was seventy years old at the time of the signing of the Declaration of Independence.) Franklin's efforts were the infinitesimal that dramatically transformed the American Colonies as a whole.

Did Benjamin Franklin, who reported in his *Autobiography* that his father's disapproval saved him from being a bad poet, reject art as a useless distraction, of little use to "practical" Americans? While Franklin is known as a statesman, a diplomat, and even a scientist, he is rarely considered to be an artist. Here, however, we shall examine Benjamin Franklin's character and work from the standpoint of Schiller's concept of the "beautiful soul."

\* \* \*

Benjamin Franklin was born in Boston, Jan. 17, 1706. His father, Josiah, was a collaborator of Increase and Cotton Mather in the battle to defend the liberty of the colony. His father often hosted republican leaders in his house.

The history of the fight for the independent charter shaped Franklin's thinking for life. When Franklin launched his *Poor Richard's Almanack* in 1733, with a dedication to "Poor Richard, an American Prince without subjects," he gave Oct. 23, 1684 as Poor Richard's birthday. This was the day that Charles II revoked the Massachusetts charter.<sup>40</sup>

Clearly a child prodigy, Franklin was enrolled by his father in the Boston Latin School. Although he advanced rapidly, he was able to remain for only a year, because his father could not afford it. After one more year at a school that taught writing and arithmetic, his father apprenticed him to his older brother, to become a printer.

A lack of formal education did not stop Franklin in the least, however. He devoured books from a very early age. Throughout his life he continued learning, beginning the study of Spanish, Italian, and Latin in 1733. He also learned to read German.

Benjamin Franklin was always proud of his trade as a printer, proudly describing himself as a "leather-apron man." In the statement quoted above, Franklin was making the same criticism of the miseducated "barbarian," as Schiller levelled in his *Aesthetical Letters*.

In his first published writing, "Silence Dogood,"<sup>41</sup>

Franklin attacked Harvard College, which had been taken over by the opponents of the Mathers, because it denied entrance to the poor. He ridiculed Harvard as dominated by Idleness and Ignorance. The Classical curriculum was being removed, displaced by empiricists Descartes, Newton, and Locke.

Franklin credits Cotton Mather with determining the direction of his life. In 1784, he wrote to Samuel Mather,

When I was a boy, I met with a book, entitled *Essays to Do Good*, which I think was written by your father. It had been so little regarded by a former possessor, that several leaves of it were torn out; but the remainder gave me such a turn of thinking, as to have an influence on my conduct through life; for I have always set a greater value on the character of a doer of good, than on any other kind of reputation; and if I have been, as you seem to think, a useful citizen, the public owes the advantage of it to that book.<sup>42</sup>

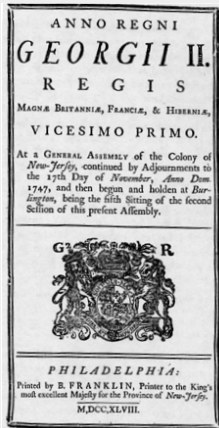
Franklin moved to Philadelphia in 1723, and soon became a successful printer. By 1748, he put the operation of his printing business into the hands of a partner, so he could devote himself full time to politics and science.

Soon after his arrival in Philadelphia, Franklin became friends with James Logan, who steered him to a Leibnizian outlook. Franklin often visited Logan's home, where they sat and talked for hours, and he frequently borrowed books from Logan's library. Indeed, a letter from Franklin to Logan reveals that they discussed Logan's rejection of the wretched British philosopher, Thomas Hobbes, whose image of society was as a "war of each against all." Logan gave Franklin his first major printing contract, and, later, Franklin printed Logan's translation of Cicero's essay on old age, which was his typographical masterpiece.

Schiller ends his *Aesthetical Letters* by discussing the state of mind of one who has developed within himself the qualities required to transform society by establishing institutions of self-government. Schiller describes this person, whose emotions guide him to act in the interests of humanity naturally, without compulsion, as a beautiful soul:

But does such a state of beautiful appearance even exist, and where is it to be found? As a Need, it exists in every finely-tuned soul, as a reality, one might indeed only find it, like the pure church and the pure republic, in a few select circles, where not the mindless imitation of foreign manners, but rather one's own beautiful nature guides conduct, where man passes through the most complicated circumstances with bold simplicity and calm innocence and needs neither, to impair others' freedom, in order to maintain his own, nor to cast away his dignity, in order to display grace.

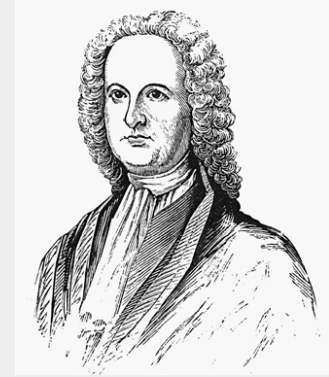
Benjamin Franklin began his career as a printer. In 1723, he moved to Philadelphia, where his business prospered. **Right:** young Franklin working at his press.



Prints and Photographs Division, Library of Congress

Book printed by Franklin's firm, 1748.

James Logan, secretary to Pennsylvania colony founder William Penn. The leading exponent of Leibniz in America, Logan steered the education of young Benjamin Franklin.



The Granger Collection

**Below:** Franklin set up the first subscription library in the colonies in 1731.



The Granger Collection

After crushing the freedom of the Massachusetts Bay Colony, the British were determined to keep the colonies under control. How could the American colonists be educated in the principles of self-government, while living under the control of a British monarchy determined to prevent it? Franklin's solution was to demonstrate that self-government was possible, by proving it through his own personal initiatives. He turned himself into a perfect example of republican government in action. As an exemplar of the beautiful soul described by Schiller, Franklin shows in his *Autobiography* that his life, as a "doer of good," was the most happy and natural existence imaginable.

Franklin transformed Pennsylvania, and the colonies as a whole, through his initiatives.

Franklin's efforts improved the literacy level in Philadelphia and throughout the colonies. In 1729, he bought out the failing *Pennsylvania Gazette*, and during the next decade, made it into the most widely read newspaper in the colonies. He set up at least six other printers throughout the colonies, and had a hand in the publication of newspapers in South Carolina, New York, and Rhode Island.

Printing was a crucial tool in organizing the American Revolution. By the time of the Revolution, there were 38 newspapers published in the colonies, of which almost

two-thirds were run by patriots. Their average circulation rose to around 3,500 each in 1775, as the population became highly politicized. Their total circulation reached approximately 100,000, out of a largely rural colonial population of approximately 2.6 million. The newspapers, which were filled with debates on the political themes of the day, were passed from hand to hand, or posted.<sup>43</sup>

Franklin began publishing *Poor Richard's Almanack* in 1732. Many households in the colonies had no printed matter besides an almanac, but almost every one of them had that. *Poor Richard's* became an institution, selling 10,000 copies a year.

In 1731, Franklin set up the first subscription library in the colonies. Fifty people joined initially. James Logan was consulted about the selection of books. Anyone could read the books at the library, but only subscribers could check them out.

In his *Autobiography*, Franklin describes how his subscription library served as a model that was copied throughout the colonies, a perfect example of an infinitesimal introducing a crucial change in the curvature of an entire geometry:

This was the mother of all the North American Subscription Libraries, now so numerous. It is become a great thing itself, & continually increasing. These Libraries have

## Self-Government in Action

The extent to which Benjamin Franklin became a personal republican government in action can be seen from the list of major initiatives taken by him while living in Philadelphia:

**1729:** Publishes “A Modest Enquiry into the Nature and Necessity of a Paper Currency.”

**1731:** Founds the Library Company of Philadelphia, the first American subscription library.

**1732:** Forms the Junto, to meet weekly to increase their knowledge and practice self-improvement.

**1735:** Proposes fire protection society in *Pennsylvania Gazette*.

**1736:** Organizes Philadelphia’s first Fire Company.

**1743:** Publishes “A Proposal for Promoting Useful Knowledge,” the founding document of the American Philosophical Society.

**1744:** Drafts presentment of the Grand Jury against public houses and other nuisances.

**1747:** Organizes a voluntary militia for the defense of Pennsylvania.

**1748:** Refuses position as colonel in militia, avowing military inexperience, serving instead as a common soldier.

**1749:** Writes “Proposals Relating to the Education of Youth in Pennsylvania,” resulting in the establishment of Philadelphia Academy, which later becomes the University of Pennsylvania.

**1751:** Pennsylvania Assembly passes Franklin’s bill, providing public funds to match private contributions, to found the Pennsylvania Hospital. It becomes the leading hospital in the colonies.

**1751:** Initiates proposal to merge Philadelphia’s fire companies into insurance company.

**1753:** Appointed joint Deputy Postmaster-General of North America.

**1754:** Prints “Join, or Die” cartoon in *Gazette*, America’s first symbol of united colonies. Proposes Albany Plan of Union to unite the colonies.

**1755:** Organizes defense of Pennsylvania. Assembly passes Franklin’s militia bill, and approves £60,000 for defense. Franklin travels to frontier to supervise the construction of forts and organize defenses.

**1756:** Pennsylvania Assembly passes Franklin’s bill providing night watchmen and street lighting.

improved the general Conversation of the Americans, made the common Tradesmen and Farmers as intelligent as most Gentlemen from other Countries, and perhaps have contributed in some degree to the Stand so generally made throughout the Colonies in Defense of their Privileges.<sup>44</sup>

In 1732, Franklin formed the Junto, a club that consisted largely of “leather-apron men” like himself, to meet weekly to increase their knowledge and practice self-improvement. This was followed by Franklin’s founding of the American Philosophical Society in 1743, as a national organization headquartered in Philadelphia.

In 1749, Franklin published “Proposals Relating to the Education of Youth in Pennsylvania,”<sup>45</sup> to lobby the citizens of Pennsylvania to establish an educational institution. Franklin argued that education was a proper responsibility of government:

The good Education of Youth has been esteemed by wise Men in all Ages, as the surest Foundation of the Happiness both of private Families and of Common-wealths. Almost all Governments have therefore made it a principal Object of their Attention, to establish and endow with proper Revenues, such Seminaries of Learning, as might supply the succeeding Age with Men qualified to serve the Publick with Honour to themselves, and to their Country.

Franklin warned that, although “[m]any of the first Settlers of these Provinces, were Men who had received a good Education in Europe, and to their Wisdom and good Management we owe much of our present Prosperity,” American youth had no similar opportunity to develop their capacities.

The new Academy was to educate boys from eight to sixteen years of age. A board of twenty-four trustees was formed, with Franklin elected president. The Pennsylvania Academy grew, and eventually became the University of Pennsylvania.

Similarly, after Franklin sought the post and was appointed Deputy Postmaster-General for the colonies in August 1753, he toured post offices throughout the colonies. He streamlined the system, made it safer, and made mail delivery quicker and more regular, and use of the postal system increased as a result. Franklin had dramatically increased communications between the colonies, binding them together by expanding the infrastructure needed to disseminate ideas.

Franklin founded the public library, the fire department, the philosophical society, the militia, the university, the hospital, street lighting and a system of night watchmen, and reorganized the national postal system [SEE Box]. He did all of this as on his own initiative, acting largely as a private citizen, rather than as a government

official! Franklin had singlehandedly did more to improve the lives of the citizens of Pennsylvania, than the King and all his ministers combined. What better education in self-government? Franklin became recognized as the leader of the republican forces, and was given the most important positions of responsibility for Pennsylvania and the other colonies, thereby expanding his influence and ability to do good.

## Franklin's Organizing Method

As Schiller has shown, true art is not didactic or moralizing; rather, it is through the development of the creative power of the listener, that moral character is strengthened. It is through the development of the true freedom of being creative, that people come to enjoy doing what is moral:

No less contradictory is the conception of a beautiful instructing [didactic] or improving [moralizing] art, for nothing disagrees more with the conception of beauty, than to give to the disposition a definite tendency.

Schiller describes how one who has mastered this state of mind of locating his identity in his creative pow-

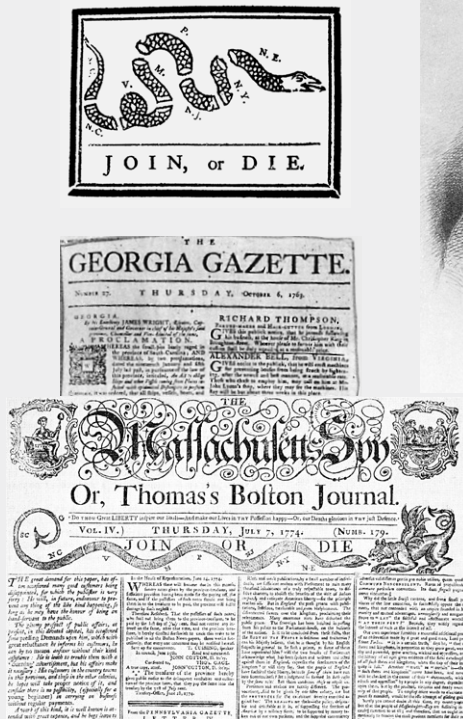
ers, is a "noble soul." This person is able to take any problem, and transform it through his creative capabilities:

This intellectually-rich and aesthetically-free treatment of common reality is, where one encounters it, the characteristic of a noble soul. In general a disposition is to be called noble, which possesses the gift, to transform even the most limited business and the most trivial object through the mode of treatment, into an infinite one. (p. 279)

This was exactly the outlook of Franklin, who spent over 50 years transforming and preparing the American people for the momentous events of 1776. Franklin's writings, which spanned 68 years, fill 35 volumes. Many are in the form of dialogues, either between two characters, or between a fictional character and Franklin himself. Ironically, it is often said that Franklin's writings seem to be didactic and moralizing. Anyone who thinks this, however, clearly does not understand Franklin's method, and certainly not his sense of humor.

It is precisely in examining this question, that we comprehend why Schiller argues that the sensual instinct and the form instinct must be superseded by the play instinct. Schiller asked,

[I]s not the beautiful degraded thereby, that one makes it



Franklin took over the Philadelphia Gazette in 1779, and was involved in other colonial newspapers. By the Revolution, there were 38 newspapers in the colonies, and 2/3 were run by patriots. Franklin's "Join, or Die" motto (top left), appeared on patriotic periodicals.

Prints and Photographs Division, Library of Congress

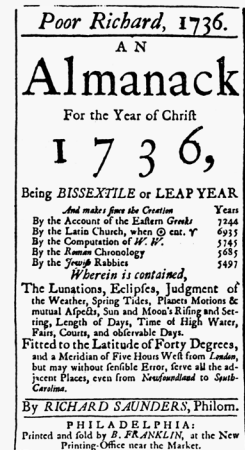


Library of Congress

Franklin began publishing "Poor Richard's Almanack" in 1732. Many of its witty aphorisms entered the common speech. The almanac motto (below) sported images of industry and agriculture, and advised readers to "Drive thy business, let not that drive thee," and that "Early to bed and early to rise, makes a man healthy, wealthy, and wise."



The Granger Collection



The Granger Collection

into mere play, and places it on an equal level with frivolous objects, which were all along in possession of this name? Does it not contradict the rational conception and the dignity of beauty, which are yet regarded as an instrument of culture, to limit it to a mere play, and does it not contradict the concept of play from experience, which can exist together with exclusion of all taste, to limit it merely to beauty?

But Schiller argues that it is precisely in play, that man is able to move beyond fixed modes of thinking, and develop his creative powers: "with the agreeable, with the good, with the perfect, man is only earnest, but with beauty he plays."

It is this playful quality that one sees in Franklin's homespun humor, such as his *Poor Richard's Almanack*. Following the example of Erasmus, Franklin included aphorisms, for example, "To err is human, to repent divine, to persist devilish," and, "No gains without pains." Many of these expressions entered the common speech. Franklin was using wit to reach the farmers and working people, who were the very people the oligarchy did not think should be educated. Drawing the reader in with humor, Franklin would often present to them the most profound and advanced topics of the day.

Satire was a well-developed weapon in the republican arsenal, used by writers such as Erasmus and Jonathan Swift. Swift's satires were often aimed at the Aristotelean ideology disseminated by England's Venetian Party. In *Gulliver's Travels*, for example, Swift lampoons the British Royal Society with his description of the "Grand Academy of Lagado" on the floating island of Laputo.

Franklin, who reported that he had "an old friend," one "Mr. Gulliver, a great Traveler,"<sup>46</sup> wrote a similar spoof of the Royal Society, as we will see below.

Franklin's polemical humor is illustrated in the series of letters he wrote under the pen name, "The Busy-Body."<sup>47</sup> Here, the Busy-Body claims to have been observing the "Vices and Follies of my country Folk," and proposes to address them:

Sometimes, I propose to deliver Lectures of Morality or Philosophy, and (because I naturally enclin'd to be meddling with Things that don't concern me) perhaps I may sometimes talk Politicks. And if I can by any means furnish out a weekly entertainment for the Publick, that will give a rational Diversion, and at the same time be instructive to the Readers, I shall think my Leisure Hours well employ'd.

In his final letter, the Busy-Body argues that the economic development of the colony was being hindered by the population's fixation on gold, as typified by a large number of people going out in the middle of the night, digging deep holes in search of buried treasure. The Busy-Body reports that a successful farmer had informed him, that, to find gold in the soil, "never to dig more than *Plow-deep*." [Emphasis added]

The Busy-Body then presents a defense of the development of the economy through the issuance of a paper currency. This was an important question for the economic development of the colonies. One week later, Franklin issued his tract, "A Modest Enquiry into the Nature and Necessity of a Paper-Currency."<sup>48</sup> Franklin, with "The Busy-Body," had engaged the common people in studying an important issue in a way they would enjoy.

## Franklin's Leibnizian Outlook

A good example of Franklin's ability to, as Schiller says, "transform even the most limited business and the most trivial object through the mode of treatment into an infinite one," is his 1781 paper, "To the Royal Academy of \*\*\*\*\*."<sup>49</sup> This spoof, similar to that of Swift in *Gulliver's Travels*, was written while Franklin was stationed in Paris as America's most important diplomatic representative to Europe, and the key organizer of European support for the Revolution.

Franklin's letter, which is addressed to an unnamed Royal Academy, signed by "FART-HING" pretends to praise the academy for giving a yearly contest in which "you esteem Utility as an essential Point in your Enquiries, which has not always been the case with all Academies." Franklin purports to propose that the next year's topic for the Academy's prize for the research with the most "UTILITIE," be "To discover some Drug wholesome & not disagreeable, to be mix'd with our common Food, or Sauces, that shall render the natural Discharges of Wind from our Bodies, not only inoffensive, but agreeable as Perfumes."<sup>50</sup>

Franklin presents a few arguments, that wind "so retain'd contrary to nature" can give Pain, and even cause serious Diseases, that can even be life-threatening. He then drives home the real target of his attack:

For the Encouragement of this Enquiry, (from the immortal Honour to be reasonable expected by the Inventor) let it be considered of how small Importance to Mankind, or to how small a Part of Mankind have been useful those Discoveries in Science that have heretofore made Philosophers famous. Are there twenty Men in Europe at this Day, the happier, or even the easier, for any Knowledge they have pick'd out of Aristotle? What Comfort can the Vortices of Descartes give to a Man who has Whirlwinds in his Bowels! The Knowledge of Newton's mutual Attraction of the Particles of Matter, can it afford Ease to him who is rack'd by their mutual Repulsion, and the cruel Distensions it occasions?

And he concludes with,

[I]n Comparison therewith, for universal and continual Utility, the Science of the Philosophers above-mentioned, even with the Addition, Gentlemen of your "Figure quel-conque" and the Figures inscrib'd in it, are, all together, scarcely worth a FART-HING.

Franklin was mocking Newton's Royal Society and the empiricist school that dominated the educated classes of Europe. The utilitarian philosophy, which claimed to place a value on everything according to its utility, had nothing to do with improving the conditions of existence

for the population! With all the talk about utility, the followers of this doctrine accomplished very little that was actually useful, because they failed to be "doers of good." Indeed, their ideology assumed that the nature of man is to be motivated by greed, and not by doing the good.

Franklin approached Lyndon LaRouche's conception, that the validity of a scientific discovery is measured by how it increases the relative potential population-density of man. Franklin's conception of the responsibility of the scientist and the legislator was the same. He developed the responsibilities of the legislator in "Observations concerning the Increase of Mankind, Peopling of Countries, etc."<sup>51</sup>:

[T]he Legislator that makes effectual Laws for promoting of Trade, increasing Employment, improving Land by more or better Tillage; providing more Food by Fisheries; securing Property, etc., and the Man that invents new Trades, may be properly called Fathers of their Nation, as they are the Cause of the Generation of Multitudes, by the Encouragement they afford to marriage.

The responsibility of the scientist was also measured by Franklin according to the standard of the "doer of good." In his 1743 document founding the American Philosophical Society, "A Proposal for Promoting Useful Knowledge Among the British Plantations in America,"<sup>52</sup> Franklin argued that the truthfulness of an idea is measured by how it increases man's power over nature and improves human existence. He proposed that the Society pursue "all philosophical Experiments that let Light into the Nature of Things, tend to increase the Power of Man over matter, and multiply the conveniences or Pleasures of Life." He proposed numerous specific projects for research, having thoughts about a wide range of areas. In his own scientific work on electricity, Franklin's hypotheses were a direct attack on the Newtonian doctrines, and an important bridge in the scientific tradition from Kepler to Gauss and Ampère [SEE Box, p. 40].

Contrary to those who point to a few references to Locke in his writings, as proof that Franklin was part of the empiricist school, Franklin's philosophical outlook was that of Leibniz. In his philosophical writings one finds optimism and humor. God, for Franklin, had that same optimism and humor. He wrote that God wanted man to find happiness, and true happiness is found through virtue:

Next to the praise due, to his Wisdom I believe he is pleased and delights in the Happiness of those he created; and since without Virtue Man can have no Happiness in this World, I firmly believe he delights to see me Virtuous, because he is pleas'd when he sees me Happy.<sup>53</sup>



## The Scientist Franklin

Franklin's research on electricity was based on rejecting the Newtonian worldview, and was coherent with his Leibnizian view of the universe. He began his electrical experiments in 1743, and is best known for demonstrating that lightning was electricity, using the famous kite experiment. His discovery won him immediate acclaim throughout the Colonies and in Europe, and he became known throughout Europe as the "Modern Prometheus" and "the man who tamed the lightning." Friedrich Schiller, in the "Ode to Joy," wrote of the *Gottesfunke* ["God's sparks"], a direct allusion to Franklin's Promethean achievement.<sup>54</sup>

Franklin's experimental hypotheses followed from his teacher James Logan's refutation of Newtonianism. In considering the phenomenon of light, Logan followed Leibniz in postulating that even in an apparent vacuum, where Newton claimed an empty void, there remains an "electric or elastic medium."<sup>55</sup>

Franklin argued that, "Universal Space, as far as we know of it, seems to be filled with a subtile Fluid, whose Motion, or Vibration, is called Light."<sup>56</sup> Electricity, he stated, was an "extream subtile fluid, penetrating other bodies, and subsisting in them, equally diffused."<sup>57</sup>

Franklin's experiments demonstrated that lightning was the same substance as the electrical fluid created by men in an experimental apparatus (Leyden jar). Electrical sparks resulted from the natural tendency of the electrical fluid to spread itself evenly: "When by any operation of art or nature, there happens to be a greater proportion of this fluid in one body than in another, the body which has most, will communicate to that which has least, till the proportion becomes equal."<sup>58</sup> Franklin's invention of the lightning rod to protect buildings was an immediate application of this discovery.

Franklin delighted in using the properties of electricity to show the flaws of sense certainty. Although electrical shocks are extremely dangerous to man, he stated that "our Bodies at all times contain enough of it [electrical current] to set a House on Fire." And, although water was used to put out fires, electrical current can exist in water, such that "this Fire will live in Water, a river not being sufficient to quench the smallest Spark of it."<sup>59</sup>

Franklin echoed Leibniz's concept, that God has created the best of all possible worlds:

1. That he must be a Being of great Wisdom; 2. That he must be a Being of great Goodness, and 3. That he must be a Being of great Power. That he must be a Being of infinite Wisdom,

is proved by studying all aspects of the Universe, to see that

the highest and most exquisite human Reason, cannot find a fault and say this would have been better so or in another Manner, which whoever considers attentively and thoroughly will be astonish'd and swallow'd up in Admiration.<sup>60</sup>

Franklin rejected Newton's universe, arguing that if it were as the Newtonians described it, then it would follow that God were no more a God, for he would have divested himself of all further Power: "Power, he has done and has no more to do, he has ty'd up his Hands, and has now no greater Power than an Idol of Wood or Stone."<sup>61</sup> He similarly rejected the empiricists' argument that man is nothing more than a creature who seeks pleasure and avoids pain, writing in his essay, "Men are Naturally Benevolent as Well as Selfish"<sup>62</sup>:

It is the Opinion of some People, that Man is a Creature altogether selfish, and that all our Actions have at Bottom a View to private Interest; If we do good to others, it is, say they, because there is a certain Pleasure attending virtuous Actions. But how Pleasure comes to attend a virtuous Action, these Philosophers are puzzled to shew, without contradicting their first Principles, and acknowledging that Men are naturally benevolent as well as selfish. For whence can arise the Pleasure you feel after having done a good-natured Thing, if not hence, that you had before strong humane and kind Inclinations in your Nature, which are by such Actions in some Measure gratified?

In several writings, Franklin playfully argued that self-denial is not, in itself, a virtue. This is because, if a man does not desire to commit vice, he need not practice self-denial. Franklin states,

The Truth is that Temperance, Justice, Charity &c are Virtues, whether practis'd with or against our Inclinations; . . . He that denies a Vicious Inclination is Virtuous in proportion to his Resolution, but the most perfect Virtue is above all Temptation, such as the Virtue of the Saints in Heaven.<sup>63</sup>

True happiness is not found by seeking sensual pleasures, which often lead to misery, but rather, by doing the good. For, as Franklin wrote, "Did you ever find yourself weary of relieving the miserable, or of raising the distressed into life or happiness?"<sup>64</sup>

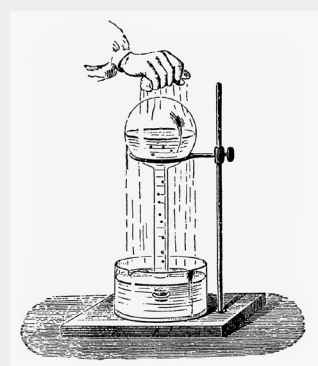


EXPERIMENTS  
AND  
OBSERVATIONS  
ON  
ELECTRICITY,  
MADE AT  
Philadelphia in America,  
BY  
Mr. BENJAMIN FRANKLIN,  
AND  
Communicated in several Letters to Mr. P. COLLINSON,  
of London, F. R. S.  
L O N D O N :  
Printed and sold by E. CAYE, at St. John's Gate, 1751.  
(Price 2s. 6d.)

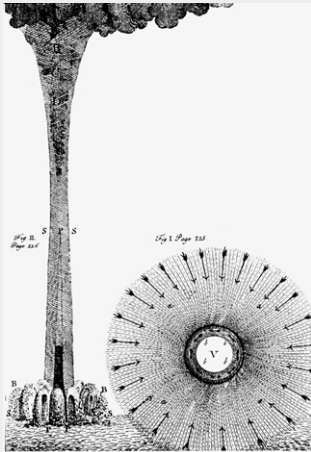
The Granger Collection



The Granger Collection



The Granger Collection



The Granger Collection

Franklin's electrical experiments proceeded from Leibnizian hypotheses. His 1751 "Experiments and Observations on Electricity" offered a fluid theory of electricity, coherent with his researches into air pressure (top right) and meteorological phenomena like water spouts (left). Franklin was the first person to map the Gulf Stream current.



The Granger Collection

The American Revolution was organized by such a beautiful soul.

## The Road to the American Revolution

Contrary to the claim of revisionist historians that the American Revolution was a revolt by selfish Americans who wanted to avoid paying taxes, the Revolution was the result of the collision of two completely contrary worldviews, one republican, the other oligarchical. As Benjamin Franklin recognized from his first visit to England during 1724-26, the British population lacked the moral qualities necessary for self-government. The establishment of a republic required America's break with Britain.

It was understood both by Americans such as Franklin, and by the British, that the rapid development of the American colonies would allow the population of the colonies to surpass Britain economically, in the not-too-distant future. Franklin wrote in 1751 that, "This Million doubling, suppose but once in 25 Years, will in

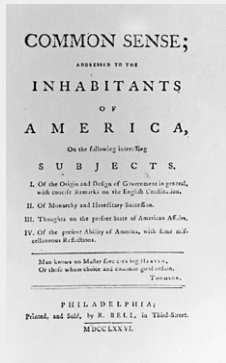
another Century be more than the People of England, and the greatest Number of Englishmen will be on this Side the Water."<sup>65</sup> Seen in this light, the demand for "no taxation without representation," was a call for eventual American control over the British Parliament.

One proponent of the British Empire, after reviewing the speed that the American colonies were outstripping England, asked, "And how are we to rule them?"<sup>66</sup> It was for this reason that the British launched a deliberate attempt to crush the colonies.

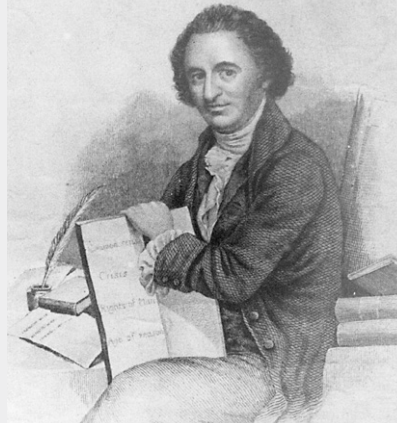
Following the failure of the Albany Plan of Union, Franklin wrote a series of letters which contain one of the first statements denouncing the British for non-representational taxation.<sup>67</sup> Franklin identified as a hidden tax, the British measures that blocked the development of American manufactures, and forced the colonies to be dependent on Britain. As a result of these kinds of measures, the colonies had a negative trade imbalance with England—except for the slave economy dominating the Carolinas—throughout the entire Eighteenth century prior to the Revolution.

In the aftermath of the 1763 defeat of the French in the French and Indian War, which opened up the possi-

Circulation of political pamphlets was a primary organizing tool of the American Revolution. Below: A 1774 pamphlet. Right: Tom Paine's 1776 "Common Sense." 500,000 copies were printed.



Library of Congress



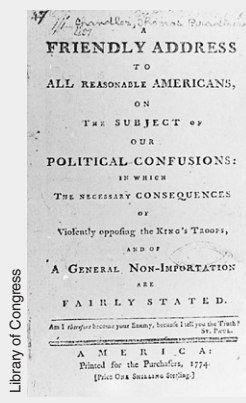
Revolutionary organizer Tom Paine, recruited from England, was Franklin's protégé.

**The American Crisis.**  
NUMBER I.  
By the Author of COMMON SENSE.

THESE are the times that try men's souls: The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of his country; but he that stands it now, deserves the love and thanks of man and woman. Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph. What we obtain too cheap, we esteem too lightly:—'Tis dearest only that gives every thing its value. Heaven knows how to set a proper price upon its goods; and it would be strange, indeed, if to celestial an article as FREEDOM should not be highly rated. Britain, with an army to enforce her tyranny, has declared, that she has a right (not only to TAX, but) "to BIND us in ALL CASES WHATSOEVER," and if being bound in that manner is not slavery, then is there not such a thing as slavery upon earth. Even the expression is impious, for to unlimited a power can belong only to God. WHETHER the Independence of the Continent was declared soon, or delayed too long, I will not now enter into; my own simple opinion is, that had it been sooner, it would have been much better.

Library of Congress

The Granger Collection



Library of Congress

After military defeats in New Jersey, Paine authored "The American Crisis" (above, right) to rally support for the republican cause. General Washington had it read to his troops as they weathered the difficult winter at Valley Forge (right).



bility of the colonies' western expansion, the British intensified economic warfare against the colonies. Settlements beyond the Allegheny Mountains were banned. In 1764, the British Parliament banned the issuance of paper money, of which Virginia had issued £250,000. This, combined with the imposition of a new series of taxes, threw the colonies into a depression.

The colonists met this assault by organizing a movement that increasingly united the colonies. The networks that grew up to oppose these measures became the force that organized the American Revolution.

This political movement was organized, in large part, through the mass distribution of newspapers and pamphlets. The debate that was initiated in response to the repressive measures, was quickly turned into a discussion of fundamental questions about government. The vast majority of the population participated in this debate, which was conducted on a far more profound level than any people have ever done, either before or after, in founding a nation.

The use of pamphlets as political organizing tools allowed large numbers of people to participate, since pamphlets could be produced cheaply. The circulation of political pamphlets expanded rapidly with thousands of different ones printed. Their content reflected the high educational level of the colonies, often making compar-

isons to ancient Greece and Rome, and quoting writers such as Homer, Sophocles, Plato, Xenophon, Plutarch, Cicero, Virgil, Shakespeare, Swift, and Vattel.

The efforts of Massachusetts republicans were extremely effective in reaching the entire population of Massachusetts. In 1772, the Boston Committee of Correspondence distributed a pamphlet denouncing the tyrannical nature of British rule to all of the 260 towns and districts in the colony, requesting that the towns join in resistance. Over the next year, the majority of towns took some form of action, such as issuing pamphlets or proclamations declaring the right and nature of self-government. The people of Lexington, for example, declared that it was "their unalienable Right, and a Duty they owe to themselves and Posterity, as a Town, as well as Individuals to take these Matters into serious Consideration."<sup>68</sup> Not surprisingly, during the Revolution, 60 percent of the soldiers in the Continental Army were from Massachusetts.

Through the rapidly expanding circulation of political pamphlets, the entire population was brought into the debate about theories of government. The most widely circulated pamphlet was Thomas Paine's *Common Sense*,<sup>69</sup> which was first published in January 1776. Paine had been recruited from England by Benjamin Franklin. Both friend and foe admitted that *Common Sense* worked

a powerful effect. An incredible 500,000 copies of Paine's *Common Sense* were circulated in the colonies—literally, one copy for every household in America.

Benjamin Franklin took the lead in organizing the union of the colonies. Franklin was appointed the representative of Pennsylvania, Georgia, New Jersey, and Massachusetts to London. This put him at the center of the action in the colonies' battle with the British. Finally, at the Second Continental Congress in 1775, while others were debating the question of separation versus accommodation with England, Franklin presented a proposal for the Union of the Thirteen Colonies. He was preparing the future.

### Aesthetical Education Today

The American Revolution was the fruit of a struggle waged in Europe for self-government and the nation-state, which began with the Renaissance launched at the Council of Florence. It would not have been possible, without the collaboration of Europe's Leibnizian networks. The support in Europe for the republican cause in America is exemplified by the work of Emmerich de Vattel, whose text, *The Law of Nations*,<sup>70</sup> presented the justification for a republican overthrow of an oligarchical government, and the Leibnizian conception of "Life, Liberty, and the Pursuit of Happiness"; American pamphleteers began using Vattel's work almost immediately after its publication in 1758. One of Benjamin Franklin's main responsibilities as America's chief diplomat in Europe, was to coordinate with America's European allies in the republican cause.

The American victory was obtained through a difficult and risky struggle. During the opening months of the war, the cause of independence looked very bleak. As the Continental Army retreated through New Jersey, Tom Paine wrote the first of his *American Crisis* pamphlets,<sup>71</sup> to rally the soldiers and patriots:

These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of their country; but he that stands it now, deserves the love and thanks of man and woman. Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph. What we obtain too cheap, we esteem too lightly: it is dearness only that gives everything its value.

Heaven knows how to put a proper price upon its goods; and it would be strange indeed if so celestial an article as FREEDOM should not be highly rated. Britain with an army to enforce her tyranny, has declared, that she has a right (*not only to tax, but*) "to bind us in all cases whatsoever," and if being *bound in that manner* is not slavery, then is there no such a thing as slavery upon earth. Even the expression is impious, for so unlimited a power can belong only to God.

American patriots responded to this call to action.

Equally remarkable, following the Revolution, American patriots had to face the fact that the government that they had created, was failing to meet the requirements for maintaining the nation. Representatives of the thirteen states met in 1787 at a Constitutional Convention in Philadelphia, and drafted a new Constitution, whose Preamble still stands as mankind's most advanced statement of republican self-government. This Constitution was then ratified by the people of the thirteen states. The people were rallied in support of the Constitution by mass-circulated writings, such as Hamilton's *The Federalist*, which, ironically, most Americans today either could not, or would not bother to comprehend.

In 1789, the year that George Washington became the Republic's first President, French republicans attempted to establish a republic in France. However, the French Revolution failed, for as Friedrich Schiller wrote: "Vain hope! The moral possibility is wanting; and the generous moment finds an unresponsive people."

You, dear reader, are living at a time when you are faced with a similar challenge, whether you desire it or not. It is time to learn to desire more nobly to meet this challenge.

Lyndon LaRouche has developed the conceptions necessary to overcome the crisis of civilization that looms before us. He has repeatedly challenged the American people to transform themselves, or see this nation's destruction. LaRouche states:

That, like Hamlet's, is your tragedy. To overcome what menaces you today, it is, above all, yourselves you must change. You must choose to change back into what the founders of our republic intended us to be.<sup>72</sup>

That is the issue of the Aesthetical Education of America today.

---

1. Alexander Hamilton, James Madison, John Jay, *The Federalist* (New York: Barnes and Noble, 1996), p. 89.

2. *On The Aesthetic Education of Man, in a Series of Letters, in Friedrich Schiller, Poet of Freedom, Vol. I* (New York: New Benjamin Franklin House, 1985).

3. H. Graham Lowry, *How the Nation Was Won: America's Untold Story, 1630-1754* (Washington, D.C.: Executive Intelligence Review, 1988). (Hereafter, "Lowry.") This is an invaluable source, which, as its title states, tells the history that had previously been untold: The continuity of Leibniz's republican struggle against

- England's Venetian Party, in the efforts to establish a new nation-state in America rooted in the principles of economic development. This is the historical context for the present essay.
4. John Locke, *Two Treatises of Government* (New York: Cambridge University Press, 1988).
  5. Quoted in Donald Phau, "Erasmus of Rotterdam: The Educator's Educator"; and Michael Minnicino, "Erasmus and Public Education"; *Fidelio*, Summer 1995 (Vol. IV, No. 2).
  6. Kenneth A. Lockridge, *Literacy in Colonial New England* (New York: W.W. Norton, 1974), pp. 87-88.
  7. Samuel Eliot Morison, *The Intellectual Life of Colonial New England* (New York: New York University Press, 1956).
  8. Cotton Mather, *The Greatest Concern in the World, What Must I Do to Be Saved?* (Worcester, Mass.: American Antiquarian Society, 1975), Early American Imprints, First microfilm Series, N 10067.
  9. Lowry, *op. cit.*
  10. *Ibid.*, pp. 5-6.
  11. Quoted in Lee Schweningen, *John Winthrop* (Boston: Twayne Publishers, 1990), pp. 41-46.
  12. Desiderius Erasmus, *The Free Will*, in *Erasmus-Luther: Discourse on Free Will* (New York: Frederick Ungar Publishing Co., 1984).
  13. Martin Luther, *The Bondage of the Will*, in *Erasmus-Luther: Discourse on Free Will, ibid.*
  14. Schweningen, *op. cit.*, 47-66.
  15. Quoted in Lowry, pp. 12-13, and Schweningen, *op. cit.*, pp. 113-114.
  16. Morison, *op. cit.*
  17. The following laws are quoted in Morison, *op. cit.*; Marcus Jernegan, *Laboring and Dependent Classes in Colonial America* (Chicago: University of Chicago Press, 1931); Henry Steele Commager, *Documents of American History* (New York: Appleton-Century-Crofts, 1963).
  18. Morison, *op. cit.*
  19. *Ibid.*
  20. Quoted in Morison, *op. cit.*, p. 32.
  21. The following estimates are taken from Lockridge, *op. cit.*
  22. Francis Bacon, 1611: "Risks of educational expansion," excerpted in David Cressy, *Education in Tudor and Stuart England* (New York: St. Martin's Press, 1975), pp. 24-25.
  23. Thomas Hobbes, 1668: "The core of rebellion," excerpted in Cressy, *op. cit.*, p. 131.
  24. Lyndon H. LaRouche, Jr., "On the Subject of Metaphor," *Fidelio*, Fall 1992, (Vol. I, No. 3).
  25. Lyndon H. LaRouche, Jr., "The Classical Principle in Art and Science," *Fidelio*, Winter 1997, (Vol. VI, No. 4).
  26. Lyndon H. LaRouche, Jr., "The Truth About Temporal Eternity," *Fidelio*, Summer 1994 (Vol. III, No. 2).
  27. Desiderius Erasmus, "Letter to Martin Dorp," in *Christian Humanism and the Reformation: Selected Writings of Erasmus*, ed. by John C. Olin (New York: Fordham University Press, 1975), p. 72.
  28. Desiderius Erasmus, *The Handbook of the Militant Christian*, in *The Essential Erasmus* (New York: New American Library, 1964), p. 36.
  29. Morison, *op. cit.*, p. 11.
  30. Cotton Mather, *Magnalia Christi Americana*, (Cambridge, Mass.: Belknap Press, 1977), p. 218. Mather quotes from *The Republic*, Book II, 361c.
  31. Cotton Mather, *Bonifacius, An Essay upon the Good*, (Cambridge, Mass.: Belknap Press, 1966).
  32. Cotton Mather, *The Christian Philosopher: A Collection of the Best Discoveries in Nature, with Religious Improvements* (Urbana: University of Illinois Press, 1994).
  33. Kenneth Silverman, *Selected Letters of Cotton Mather* (Baton Rouge: Louisiana State University Press, 1971).
  34. Quoted in Lowry, pp. 48-49.
  35. Lyndon H. LaRouche, Jr., "The Economics 'I.Q.' Test," *Executive Intelligence Review*, May 14, 1999 (Vol. 26, No. 20), p. 11.
  36. See Lowry, *op. cit.*
  37. See Philip Valenti, "The Anti-Newtonian Roots of the American Revolution," *Executive Intelligence Review*, Dec. 1, 1995 (Vol. 22, No. 48).
  38. Quoted in Valenti, *op. cit.*
  39. In *Benjamin Franklin: Writings*, ed. by J.A. Leo Lemay (New York: The Library of America, 1987), pp. 975-83. (Hereafter, "Lemay.")
  40. Lowry, *op. cit.*
  41. In Lemay, pp. 5-42.
  42. "Letter to Samuel Mather," in Lemay, p. 1092.
  43. Bernard Bailyn, *Pamphlets of the American Revolution* (Cambridge, Mass.: Belknap Press, 1965); Richard B. Morris, *Encyclopedia of American History* (New York: Harper and Brothers, 1953).
  44. *The Autobiography*, in Lemay, p. 1372.
  45. In Lemay, pp. 323-44.
  46. "Contempt for the Thames," in Lemay, p. 584.
  47. *Ibid.*, pp. 92-118.
  48. *The Political Economy of the American Revolution*, ed. by Nancy B. Spannaus and Christopher White (Washington, D.C.: Executive Intelligence Review, 1996).
  49. The original manuscript was titled "To the Royal Academy of Bruxelles." Swift's *Gulliver's Travels* contains a description of the Laputan's scientific writings, which is a spoof of papers published in the *Transactions of the Royal Society*.
  50. "To the Royal Academy of \*\*\*\*\*," in Lemay, pp. 952-55.
  51. In Lemay, pp. 367-74.
  52. Spannaus and White, *op. cit.*, pp. 262-65.
  53. "Articles of Belief and Acts of Religion" in Lemay, p. 84.
  54. Lyndon H. LaRouche, Jr., "Prometheus and Europe," *Executive Intelligence Review*, July 23, 1999 (Vol. 26, No. 29).
  55. Quoted in Valenti, *op. cit.*
  56. "Loose Thoughts on a Universal Fluid," in Lemay, p. 988.
  57. "Of Lightning, and the Method (Now Used in America) of Securing Buildings and Persons from Its Mischievous Effects," in Lemay, p. 600.
  58. *Ibid.*, p. 600.
  59. "Course of Experiments," in Lemay, p. 355.
  60. "On the Providence of God in the Government of the World," in Lemay, pp. 163-168.
  61. *Ibid.*, pp. 165-66.
  62. In Lemay, pp. 200-203.
  63. "Self-Denial Not the Essence of Virtue," in Lemay, pp. 242-244.
  64. "Conflicting Motives for Human Conduct: Pleasure or Virtue," in *A Benjamin Franklin Reader*, ed. by Nathan G. Goodman (New York: Thomas Y. Crowell Company, 1971), p. 229. See pp. 72-75, this issue.
  65. "Observations Concerning the Increase of Mankind, Peopling of Countries, &c., 1751," in Lemay, p. 373.
  66. Quoted in Theodore Draper, *A Struggle for Power: The American Revolution* (New York: Random House, 1996), p. 105.
  67. "No Taxation Without Representation," in Lemay, pp. 401-410.
  68. See Richard D. Brown, *Revolutionary Politics in Massachusetts: The Boston Committee of Correspondence and the Towns, 1772-1774*, (Cambridge, Mass.: Harvard University Press, 1970), p. 103.
  69. *Common Sense*, in *The Life and Major Writings of Thomas Paine*, ed. by Philip S. Foner (Secaucus, N.J.: The Citadel Press, 1974).
  70. See Robert Trout, "Life, Liberty, and The Pursuit of Happiness: How the Natural Law Concept of G.W. Leibniz Inspired America's Founding Fathers," *Fidelio*, Spring 1997 (Vol. VI, No. 1).
  71. *The Crisis*, in Foner, *op. cit.*, p. 50.
  72. Lyndon H. LaRouche, Jr., "Will the U.S.A. Keep Its Sovereignty?," *Executive Intelligence Review*, Nov. 19, 1999 (Vol. 26, No. 46).