# Without 'dead white European males' there would be no civilization

#### by Melvin Klenetsky

The proponents of "political correctness" tell us that the writings and thought of the great minds of European civilization are irrelevant today, especially if you happen to be female or African-American. After all, one can hear the arguments in university classroom after classroom, that the world is oppressive, filled with seemingly unsolvable problems and undeniable brutality, and these "dead white European males," or DWEMs, as they are called, are the architects of the very repression which has gripped our world and holds it in its current stanglehold.

So the doomsayers, fully funded by the Ford and Rockefeller foundations, in contemporary literature, plastic art, and music, under the name of modern and chic, backed up by the university professor (undoubtedly a Maoist rebel from the 1960s counterculture), mesmerize the youth in song and print, and lead them into rebellion against the entirety of western civilization. The doomsayers are part of the most destructive faction in western civilization, and these political correctness warriors are the contemporary "Red Guard" of that faction, no better than the book burners of old, or than Cambodia's Khmer Rouge or Mao Zedong's Red Guard during the Cultural Revolution. Should they succeed, as will be demonstrated here, then the very basis for sustaining civilization will be destroyed, and a new dark age will ensue—if the human race survives at all.

Throughout its history, the western world has always had two warring factions within it. Friedrich Schiller (1759-1805), the German poet of freedom, who commemorated the great achievements of the American Revolution, described these two forces within society. On the one side, there is the oligarchical force, which has sought to establish master-slave colonial and imperialistic relationships within society. On the other is a republican force, exemplified by the thinkers of Leonardo da Vinci's (1452-1519) and Raphael's (1483-1520) great Renaissance, and by the leaders of the American Revolution.

The republican forces believe in universal principles: that man is made in the image of God, and that this manifests itself in each individual human being through his individual potentiality for creativity. Thus the great European Renaissance, in its art and literature, celebrates the God-given spark of reason that differentiates man from the beast. Man can exercise this creative spark through culture in general, which

includes music, literature, pictorial art, and the sciences, and more specifically through technology, which allows man to master nature and thereby ensure the continued survival of civilization at ever higher levels.

We shall demonstrate, by sampling a key number of critical thinkers, that their efforts have allowed for the tremendous developments that we see in the world today. In doing so, we do not in any way mean to underestimate the numerous problems that have befallen modern civilization. The point is that these problems are the result of an oligarchical faction, against which the republican faction has been in a continuous state of war; and it is that oligarchical faction which wants to rob us of the republican heritage that has allowed for the positive developments over the past 550 years.

#### **Population potential**

Mankind would not be here today, 5.3 billion strong, with higher living standards, on the average, and longer life expectancies, than any other period in history, but for the efforts of this republican faction. Should the oligarchical faction prevail, however, with their political correctness red guard and their malthusian proclivities, then these positive developments will disappear within generations, if not sooner.

If we examine the growth of world population for the past 2,500 years, there is a direct correlation between population growth and periods of renaissance. Tremendous increases in population growth occurred during the periods of the Golden Age of Greece, the Islamic Renaissance, and the European Renaissance. These are periods where man's belief in the sacredness of his fellow man is realized and enhanced through a process of mutual development amongst men in society that involves an increase in knowledge, education, and scientific and technological know-how, all of which contribute toward greater productive capacities in society capable of sustaining increasing populations.

The Golden Renaissance in Europe, however, marks a far greater and entirely new level of sustaining ever larger populations. From A.D. 1 to 1650, the population grew two and a half times, from 200 to 500 million people. Thereafter, the time span for doubling the population dropped dramatically, showing the tremendous developments within society that allowed for this unsurpassed capability for population growth.

At this juncture, we hear a negative note from our politi-

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cal correctness guru. He is jumping up and down, saying that we have proved his point, because the growth of the world population is one of the major causes of the world's problems. Our guru argues that all these people, whose numbers grew because of the breakthroughs of the Industrial Revolution and the Golden Renaissance, are gobbling up the scarce, finite resources of the planet, thereby destroying opportunities for future generations.

Fortunately, his argument is erroneous. The idea that society is locked into finite and fixed resources is absurd. We constantly develop new technologies that define and use new resources. The potential of fusion power, for example—a technology close to being developed should we invest in its development—where energy, in first-generation applications, would be derived from hydrogen isotopes found in seawater, could give us millions and perhaps even billions of times the energy we now get from fossil fuels.

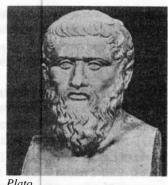
The history of mankind has been one of using up scarce resources, but in so doing, of developing the capacity to invent new technologies that define and utilize different resources. During the 200-year period from 1650-1850, the world population doubled from 500 million to 1 billion. The next doubling, from 1 to 2 billion, only took 80 years, occurring by 1930. By 1975, thirty-five years later, there is another doubling of the population to 4 billion worldwide. In 1990, the world's population was estimated at 5.3 billion.

The Industrial Revolution, in the latter part of the nineteenth century, played a significant role in allowing for this spectacular population growth. But these developments—a direct result of the development of European civilization and the Industrial Revolution, coming out of the Golden Renaissance of Leonardo da Vinci-took place in the midst of a battle between two opposing forces, oligarchical and republican. The American Revolution, for example, came out of the Golden Renaissance, Christian-Platonic tradition that all men are made in the image of God. Thus the American Declaration of Independence and the U.S. Constitution rest on this foundation, and declare that all men have an inalienable right, endowed by the Creator, entitling all of the citizenry to the pursuit of life, liberty, and happiness.

#### The viewpoint of Plato

Just as the Ionian city-state republics were pitted against the evil of Mesopotamia and Canaan, and Athens of Solon's constitutional reforms was pitted against the oligarchical evil of slave-holding Sparta, so the American colonies were pitted against the British Empire. The people throughout history who have fought for the inalienable rights of man, for making science and education the property of all mankind, for demonstrating man's God-given potential for the spark of reason through great art and music, are the individuals who are responsible for the breakthroughs that civilization rests upon.

Their breakthroughs are universal, transcending space and time—a gift for all people and all time, that can contribute to future development. This is the viewpoint of Plato's Republic, where Plato calls for a society that develops and enhances man's creative potentials; in contrast to Aristotle's Politics, where he defends the master-slave relationship, thereby demonstrating his oligarchical proclivities. proudly stand on the shoul-



Plato

ders of Plato and his followers, and not of Aristotle, whose minions have defended the interests of the oligarchy.

In the areas of science, philosophy, technology, and the arts, the republican faction, associated with Plato, proved to have made the most important and greatest number of discoveries. The important developments in mathematical physics, which paved the way for the technological breakthroughs in thermodynamics, hydrodynamics, electromagnetism, nuclear energy, aerodynamics, and supersonic flight, comes from a steady output of work from this political faction, whose method of investigation has proven to be more conducive to the generation of creative discoveries.

#### An imperial policy

To keep the fruits of the thinking of these DWEMs from our young people, is to perpetrate a state of ignorance and perpetuate a level of backwardness that will inevitably result in the destruction, through disease, famine, poverty, and war, of whole areas of the globe. The same people who underwrite political correctness, argue that it is legitimate to withhold technology from the developing sector. Under the catch-phrases "technological apartheid," "appropriate technology," and "cultural relevancy," the modern-day purveyors of British colonialism create the conditions to keep nations of the Third World in a perpetual state of underdevelopment.

Political correctness is the ideological cover for justifying modern day neo-colonial and imperialistic policies. We extract raw materials from Third World nations and refuse them the modern technology that will allow these countries to develop a broad base of economic development; we treat the populations of the Third World as mere beasts of burden, dehumanizing our fellow man, denying him his God-given right to knowledge and scientific progress, all the time claiming that we are "respecting the feelings" of the black-, brown-, and yellow-complexioned peoples of the world.

We claim that these nations are poor and that they have too many people; but we deny them the scientific and technological knowledge that can transform their economies, enabling them to sustain higher rates of population growth at higher living standards, whose feasibility has been demonstrated by the periods of growth in western Europe and the

rest of the world over the past 2,500 years. That history thoroughly debunks their malthusian arguments, and demonstrates, beyond any shadow of a doubt, the malicious, hidden agenda and evil behind the political correctness movement.

#### The development of science

Beginning with Cardinal Nicolaus of Cusa (1401-64) and continuing on through Leonardo da Vinci, Johannes Kepler (1571-1630), Gottfried Leibniz (1646-1716), up through the works of Lazare Carnot (1753-1823), Gaspard Monge (1746-1818), Carl Friedrich Gauss (1777-1855), Bernhard Riemann (1826-66), and Georg Cantor (1845-1918), the foundations of mathematical physics were developed by a Christian-Platonic tradition in European culture which laid the basis for the Industrial Revolution. They proceeded to investigate the physical universe based on their conception of man, which includes man's relationship to God, his fellow man, and the physical universe. They investigated the underlying causes of physical processes from a hylozoic, universal standpoint.

From the German philosopher Leibniz's principle of sufficient reason, for example, which states that God did not put anything into the world without a reason for doing so, comes the important scientific principle of least action. This enables scientists to investigate the underlying causes of physical process, knowing that the organization of the physical universe cannot be arbitary. At the same time, the physical universe has a simplicity and complexity built into it that allows for the greatest potential for development, a concept that resonates with the principles of creativity found in man and the Leibnizian conception that God's world is the best of all possible worlds.

Just as reason prevails over logic or sense-certainty, so the processes of nature have to be understood as non-linear and only approximated by algebraic, mechanistic, or linear processes. Thus, the linear, sense-certainty approach of an Isaac Newton (1642-1727), who postulates point masses and action-at-a-distance, leads us to the famous "three-body problem," a problem which is insoluble from the Newtonian viewpoint, but which never appears in Kepler's approach, as exemplified by his analysis of planetary interactions. The answer to that difference lies in the methodological approach of this Platonic faction, and underscores the superior success of these thinkers.

Joseph Fourier's (1768-1830) investigation of heat transfer problems, with multiple sources of heat, is another example, like the three-body problem, which demonstrates the flawed nature of the Newtonian mechanistic approach, of pair-wise interactions. Bringing the areas of hydrodynamics, mechanics, and such radiational phenomena as heat transfer under one coherent theory, stretches the limits of the Newtonian approach to the breaking point. Fourier's investigations in the early nineteenth century, along with other investigations into electrodynamics, electromagnetism, astronomy,

and geodetics from the standpoint of mathematical physics, forced an investigation into the relationship between the arithmetic and geometric continuum, which in turn led to development of a new theory of irrational numbers and the Cantorian notion of a non-linear continuum.

The work of nineteenth-century mathematical physics was spearheaded by the tremendous discoveries of men such as Monge, Carnot, Gauss, Karl Weierstrass (1815-97), Gustav Lejeune Dirichlet (1805-59), Riemann, and Cantor. These thinkers understood the relationship between the self-developing qualities of human self-consciousness, and the self-ordering qualities found in physical processes.

Let us highlight the accomplishments of a few of these thinkers, in order to give you a sense of their accomplishments and thinking. The work of Cardinal Nicolaus of Cusa is a useful starting point, because it lays the foundation for modern mathematical physics.

### Nicolaus of Cusa (1401-64)

A German clergyman and natural philosopher, Cusa studied law at Padua and became a cardinal in 1448. His Concordantia Catholica laid the basis for ecumenical relationships amongst the great religions of the world. He also wrote on calendar reform, improvement of the Alphonsine Tables of celestial mo-



tions, the theory of numbers, and many other areas. During his investigation on the quadrature of the circle ("the squaring of the circle"), where Cusa reworks Archimedes' treatment of that subject, Cusa announced that he had found a superior approach. Cusa defined the circle as that curve which encloses the greatest area or accomplishes the greatest work, with the minimum circumference (the minimum action). Cusa thus defined the circle as not in any sense a mere limit of inscribed and circumscribed polygons with an ever greater number of sides, but rather as a relatively more perfect existence or action, than that of the inscribed and circumscribed polygons—an existence which is transcendental to them. This discovery, the outcome of Cusa's "mininum-maximum" method, was later elaborated as the isoperimetric theorem of topology, and was to become an essential feature of any investigation of mathematical physics into physical processes.

Cusa's "isoperimetric theorem" was also crucial in the development of number systems of increasing power, which was important in Cantor's transfinite number theory in the late nineteenth century.

## Leonardo da Vinci (1452-1519)

Leonardo is the next important figure in this faction. Artist, sculptor, architect, engineer, inventor, and scientist, more than any other figure in history he embodies the principles of the Renaissance. Under the patronage of Lorenzo de' Medici, Leonardo studied anatomy, astronomy, botany, mathematics, engi-



neering, and music. He was court painter, chief engineer, director of public works, pageant-master, and may also have been the director of the academy of arts and sciences founded by the Duke of Milan, Ludovico Sforza, under whom he served. Under Cesare Borgia, Duke of Valentinois, Leonardo was chief military engineer during the 1502-03 Romagna military campaigns.

Leonardo's inventions and accomplishments are too numerous to list here. Among them is his discovery that energy (such as light and sound) is radiated at a definite speed of propagation, and that the radiation is in the form of transverse wave motion. He insisted that all wave motion is transverse, including sound waves. On the question of sound waves, Leonardo was assumed by many to have been in error, until he was thoroughly vindicated by Riemann's 1859 treatise on the propagation of acoustical shock waves.

Leonardo's examination of fluid dynamics, which can be seen in his scientific sketches of water flows, demonstrates a method of investigation which looks beneath the surface of phenomena, examining the underlying causes. The vortical nature underneath the wave-like surface of flowing liquid, demonstrates the presence of a negative and positive curvature within the motion of water, which may prove to be important in understanding the weak and strong forces that appear in the examination of plasma processes and other such phenomena. For Leonardo, man made in the image of God was at the center of the universe, as specified by Judeo-Christian and Platonic beliefs.

# Johannes Kepler (1571-1630)

The world's greatest astronomer gave us his three laws of planetary motion based on a conception of harmony. Kepler's second law of planetary motion—which states that between any planet and the Sun, equal vectorial areas are swept out in equal times, as the planet revolves in its elliptical orbit—is at the center of Gauss's perturbation theory of the nineteenth century. Kepler's third law, that the constancy

of the relationship between the square of the period of a planet's revolution around the Sun, divided by the cube of the mean radius of that planet, is the basis for Newton's universal law of gravitation.

Kepler demonstrated the extraordinarily important discovery, that although the Solar System,



and the physical universe as a whole, are not "living" systems, nonetheless the laws of action and construction of the physical universe "in the large" (of the macrocosm) and in the small are coherent with the same ratios and harmonics of the Golden Section, as are living processes. Thus, the structure of the universe, like that of life, is negentropic—evolving toward greater ordering and beauty, and toward greater coherence with principles of Golden Section harmonics.

The germ of this Keplerian outlook on physics is contained in his early work, *Mysterium Cosmographicum (The Secret of the Universe)* (1596), his *Harmonices Mundi (Harmonies of the Universe)*, and many other works, such as his short paper on the six-cornered snowflake.

# Gottfried Wilhelm Leibniz (1646-1716)

This dead white German male mathematician, physicist, and philosopher not only invented the calculus, but developed the theoretical foundations for the concepts of work and energy, crucial for the areas of hydro- and thermodynamics. Leibniz's principle of sufficient reason was described by twentieth-centu-



ry scientist Max Planck (1858-1947) as the foundation for the principle of least action, the only absolute invariant in the physical sciences. Planck argued that the principle of least action stands above other invariants in nature, such as the so-called Second Law of Thermodynamics (the conservation of energy), or the invariance of the speed of light, all of which were relative, holding true only in delimited boundaries.

Leibniz developed the theory of envelopes and *analysis* situs, or analysis of situation, which became the foundation for Riemann's complex analysis and modern topology. Leib-

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niz collaborated with Christiaan Huygens (1629-95), the Dutch astronomer, mathematician, and experimental physicist, who invented the pendulum clock in the winter of 1656-57. Huygens's construction used the isochronic principle of the cycloid—the remarkable property that a weight released along the path of a cycloidal arc will reach the low-point of the arc in the same amount of time, regardless of the point along the arc at which the weight is released. Using this principle, Huygens fashioned for his pendulum a guideway which forced the pendulum to wind up along a sleeve in the shape of the arc of a cycloid.

Leibniz, Huygens, and their circle, which included Jakob Bernoulli (1654-1705) and his brother Johann Bernoulli (1667-1748), investigated the important relationship of the involute and evolute of curves, which was soon to play a crucial role in the development of the calculus. These relationships of cycloids and involutes and evolutes are at the heart of machine designs using gearing mechanisms. They also studied the cycloids and other non-algebraic curves (catenary, tractrix, logarithmic spiral, etc.), which likewise became crucial to the further development of the calculus and pointed toward the solution to a wide range of physical problems by this circle of collaborators.

# Gaspard Monge (1746-1818)

This French mathematician was an important figure among the republican forces in France. He was the inventor of descriptive geometry; he began study of perspective and polarity; he was the discoverer of the method of topographical mapping; and undertook important researches in differential ge-



ometry, especially in the theory of curvature. Monge also provided solutions to partial differential equations by means of his theory of surfaces. Monge was the teacher of Lazare Carnot. Lazare and his oldest son Sadi Carnot (1796-1832) are important for the development of thermodynamics.

Monge's chief work up to 1789, his descriptive geometry, was classified as a military secret, since its technique for representing any three-dimensional object by plan and elevation, unknown at the time, implied a revolution in military engineering and in mass production of war matériel. In 1794, as a leading member of the Commission of Public Works, he founded the famous Ecole Polytechnique, where he taught two courses: One, on descriptive geometry, included intensive study of the theory of surfaces, while the other was on the theory of machines. His lectures

on the application of algebra (analysis) to geometry, to which he contributed much original work, set a standard for most of the next century. Monge trained the military engineers of France in descriptive and projective geometry in the 1780s and 1790s, building on the original work of Leibniz in defining curves as a locus of their tangents—i.e., as envelopes.

### Carl Friedrich Gauss (1777-1855)

Based at Göttingen University in Germany, Gauss was an integral part of the cultural renaissance in Germany at the beginning of the nineteenth century. His friends included Wilhelm and Alexander von Humboldt and the poet Friedrich Schiller. Like all of the great figures of his day, Gauss was an ardent



supporter of the American Revolution. Gauss's work falls into three main periods, during which he worked on astronomy, geodetics, and electromagnetism. His work is so important that it fundamentally touches on practically every area of mathematical physics.

Gauss was professor of astronomy, and director of the astronomical observatory at Göttingen, was in charge of the government project for the triangulation of the Duchy of Hanover. Along with Wilhelm Weber (1804-91), he built one of the first observatories for magnetic studies at Göttingen. Gauss authored numerous works on number theory, analysis, geometry, the method of least squares, mathematical physics, astronomy, complex numbers, electromagnetism, elliptical functions, topology, electricity, and geodesics. Among the most significant of these, was his reworking of the leading accomplishments of Kepler, Leibniz, et al., superseding simply isoperimetric notions of least action with a notion of conic, self-similar-spiral action as the elementary form of least action in the universe.

Building on the work of earlier French investigators, Gauss completely generalized the concept of number and its relation to geometry, in such a way as to subsume the real numbers within the complex or "Gaussian" plane. This made possible the treatment of problems not solvable in the earlier non-complex function theory. Subsequent developments in the nineteenth century established the uniqueness of another class of numbers, the transcendentals—of which  $\pi$  and the trigonometric functions (sine, cosine, etc.) are examples. Transcendental function theory refers especially to the work of Dirichlet, Riemann, Weierstrass, and finally Cantor.

# Louis Pasteur (1822-95)

Without the basic scientific contributions of the great Louis Pasteur, who created the modern conception of public health, founded the modern "germ theory" of disease, and combatted it through well-known discoveries such as the techniques of vaccination and pasteurization of milk, the current world's



population of 5 billion people would be inconceivable. His central notion was that health is not the mere absence of disease, but is a condition which man can improve through raising nutrition, scientific discovery, the creation of a public health infrastructure and modern hospitals, and preventive measures such as large-scale immunization programs. The core of his belief was based upon his profound Christian commitment to fostering and advancing the quality of human life for all people. This idea took institutional form at the end of his life, when he and his followers established a network of Pasteur Institutes in Europe, Africa, and Asia.

Pasteur found means to prevent and cure a wide range of diseases, from silkworm disease to chicken cholera, from anthrax to rabies.

Pasteur's work developed in several phases. During the decade 1844-54 he did groundbreaking theoretical work studying "molecular dissymmetry" or the non-linear geometric configurations of molecular chemical reactions in living and non-living systems. He was the first to notice the differences between "right-handed" and "left-handed" molecules—the basis of all modern stereochemistry and medication development.

From 1854 until the middle of the 1870s, he exhaustively investigated the process of fermentation, for which he derived a model of biologic interaction that stressed the coherence between processes occurring on the global ecological level; those directly under man's control through industrial, agricultural, and technological development; and those occurring on the molecular level.

He developed the modern "germ theory" of disease between 1863-85, established the science of epidemiology, and discovered the procedures of antiseptics which drastically reduced the risks of infection in surgery.

During the 1860s, he did highly publicized experiments which shattered the myth that life came from "spontaneous generation." The latter theory was first devised by Aristotle, who claimed that life would generate "spontaneously" from mud, dead maggots, and human wastes. Pasteur devastated Aristotle's theory in simple and popularly accepted experiments.

Aristotle's conception was not merely a scientific hoax, but was an attempt to deny God's role in creation. It was through his critiques on Aristotle's theory, that Pasteur developed his modern germ theory and popularized man's Christian responsibility to defend and improve the living standards of all mankind. To that end, Pasteur wrote several programs to encourage mass scientific education, as well as to feature scientific research and development in the national budget of modern nations.

# Friedrich Bernhard Riemann (1826-66)

Riemann is one of the greatest mathematicians of the nineteenth century. He first worked out his general ideas on functions of a complex variable in 1847, at the age of 21, and later set them down in his 1851 dissertation, "The Foundations of a General Theory of Functions of a Complex Variable."



Riemann's method was a unique synthesis of geometrical and physical intuition and philosophical insight with pure mathematics, and for this reason his work is often misunderstood, or poorly appreciated, by modern specialists. His concept of a Riemann surface derives from the possibility in a complex mapping that different paths to the same endpoint in the complex plane can yield multiple coverings of the image plane. Riemann is thus led to consider the topological qualities of space, and the concepts of *connectivity*, *sheets* or *branches*, and *winding points* arise in his work.

In other papers, Riemann applied these methods to physical situations, addressing such topics as electromagnetism, gravity, and the propagation of waves in a medium (from which he adduced the existence of transsonic shock waves), presenting his proof in a paper "On the Propagation of Plane Air Waves of Finite Magnitude." Massive opposition to Riemann's proof came from Aristotelian figures in the late nineteenth and early twentieth centuries, led by John William Strutt Lord Rayleigh (1842-1919), Hermann Helmholtz (1821-94), and Theodore von Karman (1881-1963).

German hydrodynamicist and mathematician Ludwig Prandtl (1875-1953), working in Riemann's tradition and understanding this shockwave concept, demonstrated the existence of effectively separate "boundary layers" around wings, and showed the way out of the limitations of the existing "gas-dynamic" wave equations championed by Rayleigh and Helmholtz. Prandtl's work led to that of Adolf

Busemann (1901-86) and others who were responsible for the advent of supersonic flight.

# Georg Ferdinand Ludwig Philipp Cantor (1845-1918)

Our listing of dead white European males concludes with this mathematician, whose work is still sparking a revolution in human knowledge. Cantor's first worked on classical mathematics until 1878, after which he developed his transfinite theory of numbers. He joined Weierstrass, Carl Jacobi (1804-51), Dir-



ichlet, and others in developing a mathematical physics that can capture the interplay of continuities and discontinuities in physical processes. Cantor developed a theory of irrational numbers, and began to develop a theory to examine the correspondence between the arithmetic and geometric continuum.

Cantor's investigations led him to explore the non-linear continuum and the nature of the infinite. He developed his theory of point-sets or point-aggregates, and his transfinite theories of ordinal and cardinal numbers, in order to explore the nature of the infinite. In so doing, he developed a new theory of the continuum that provides crucial insights into theological issues (Cantor was in correspondence with a circle of theologians around Pope Leo XIII), the creative aspects of human consciousness, and the non-linear nature of physical processes.

#### What would life have been without them?

In the twentieth century, looking at the full implications of what Kurt Gödel (1906-78) demonstrated, we see that no algebraic, mechanistic, logical process can substitute for or replace human creativity. From Cusa, who demonstrates the impossibility of "squaring the circle," to Cantor and Gödel, we come full circle to an understanding of the subjective creativity of mankind and the causal principles of physical processes from a standpoint that is both consistent with Judeo-Christian principles and with the philosophy of Plato and his followers. These principles gave us a great Renaissance and a view of man that led to the Declaration of Independence and the U.S. Constitution, which, with all of its problems, gave society the capabilities of fighting for the emancipation of all mankind, a task that still calls for completion.

Much of the discussion of the development of nineteenthcentury analysis and its importance for mathematical physics, can be seen in such histories of mathematics as that of Felix

(1849-1925),chairman of mathematics at Göttingen at the end of the nineteenth century. The knowledge and progress that has resulted from these thinkers and many more, not mentioned here because of space considerations, is a gift to all mankind. Should we abandon these thinkers as irrelevant, or fail to under- Klein



stand the importance of their thinking for mankind, then the world will surely descend into a dark age.

In 1969, the U.S. Apollo mission successfully landed the first men on the Moon. The three-stage liquid fuel rocket reached speeds of almost 25,000 miles per hour. The first television broadcast from the Moon reached 100 million viewers worldwide by satellite feed. The gift of space travel and the future colonization of the Moon rests on the shoulders of such giants as Leonardo, who investigated the principles of fluid dynamics and flight; Kepler, who examined the nature of force-free orbits; Riemann, whose work on shockwaves led Busemann to understand supersonic flight; and all the others whose contributions went into making the miraculous technology of the Apollo mission possible.

In 1971 and 1972, the CAT scan (computerized axial tomography) and MRI (magnetic resonant imaging) were developed to help medical diagnosis. These breakthroughs were also made possible by the accomplishments of these dead white European males. They belong to everyone on the planet as well as future generations—unless the cult of political correctness seals up their work.

We now have the capability of space flight and CAT scan technologies; but we insist on keeping developing countries in an impoverished state of colonial backwardness and subservience. Today the International Monetary Fund forces Peru to pay its interest on its international debt, when a little more than a month's worth of those interest payments could have purchased the medical supplies that would have stopped the cholera epidemic from raging. The professors of political correctness want to keep these nations in a permanent cycle of impoverishment—by denying them the fruits of modern society, under the guise of "cultural relevance."

It is time that university students take off the blindfold. Political correctness is an albatross, the cement boots of university life, the backward pit of modern culture, setting the stage for a Red Guard, book-burning descent into hell. Look instead up at the stars, and see the world as Leonardo would have seen it. Leonardo certainly envisioned the Apollo mission and more. If we understand the great thinkers of our time, even if they are European, we can unshackle man and help him soar, for these gifts of past and current knowledge belong to all mankind, present and future, should we not foolishly turn our backs on them.