On this account, generally speaking, when compared to the superior levels of culture represented by early to middle Nineteenth-Century European Classical culture in general, even the leading sections of those of today's populations dominated by our recent generations of global, European-dominated trends in global cultures, are ignorant, appallingly backward, even relatively bestial. [See box on this page.] This recent, moral and cultural degeneration of successive post-World War II generations, is typified by the recent rise in homicidal outbreaks of existentialism among present-day adolescents. This deplorable trend is typical of the majority of both the top-most ranks, and the lower levels of today's society.

The challenge of reversing the present cultural and physical-economic collapse of global civilization, is the context for the following report. The solution to the difficulties of comprehending these presently most urgent matters, was first discovered, and, later, developed in the following way.

1. Three crucial discoveries

It was during the interval 1948-1952, that I first made three original, interdependent discoveries of physical principle, a set of principles whose continued and interconnected development has since dominated my life, my professional and related accomplishments, and also the controversies in which

boldt. Bache formed an elite American grouping of scientists, cooperating with German and French co-thinkers. He and his aides designed and organized the U.S. Naval Academy. As chief of the U.S. Coast and Geodetic Survey, Bache was chief strategist for the emergence of an advanced U.S. military-industrial capability, and the creation of the electrical industry; he was a leading intelligence adviser to President Abraham Lincoln.

7. Six serious incidents of school killings have taken place in rural areas of America since February 1996, involving children between the ages of 11 and 16. In two cases, the children killed their parents, before proceeding to the schools, where they also killed classmates and teachers. In all cases, the children were immersed in video games, such as "Mortal Kombat," mindnumbing rock music, and violent films. Note, that in five of the cases, the children are being tried as adults.

The phenomenon of juvenile violence in Germany was addressed by Countess Marion Dönhoff, in an editorial in the weekly *Die Zeit* on April 8, 1998. Titled "These Are Our Children," she points to such sources of juvenile violence as "the lack of sense of injustice, intolerance, extreme ego-centrism"—the results of a permissive society in which "everything revolves around material and commercial success."

Such cultural degeneration is an example of what Nazi existentialist philosopher Martin Heidegger called "thrownness." Helga Zepp-LaRouche, in a Sept. 3, 1994 speech ("Ghost of Martin Heidegger Haunts Cairo Conference," *Executive Intelligence Review*, Sept. 12, 1994), described Heidegger's existentialism as follows: "Man, in the course of the history of Occidental culture," says Heidegger, 'has forgotten the essentials of human life. People live life in an unactual way, and they look for entertainment in their flight from death agony. The actuality of true life, lies in the banal, basic experience of the being-thrownness'—*Geworfenheit*, that is, you are thrown into history, and plop, there you are." Heidegger was a major influence on Jean-Paul Sartre.

I have become an increasing central figure of recent decades.

The first among these principles, is one whose adoption dates from work during the 1948-1951 interval: man's increase of power over nature, per capita and per square kilometer of the Earth's surface, may be described, in rough approximation, as follows.⁸

It is to be said, that that ordered increase of man's power over nature, per capita and per square kilometer of the Earth's surface, is always expressed in the form of the outcome of *successive*, *revolutionary*, realized discoveries of physical principle. It is shown, on physical grounds, that experimentally validatable, revolutionary discoveries of physical principle, form orderable, if not linear, or otherwise simple sequences. It is the realization of those sequences, whose

The Humboldt curriculum

Wilhelm von Humboldt (1767-1835) was director of ecclesiastical affairs and education in Prussia from 1809 to 1810, giving him—for the brief span of about a year—responsibility for all public cultural and scientific institutions. During this time, he transformed Prussian education, with far-reaching effects for generations to come. This description of his program is taken from an article by Helga Zepp-LaRouche, "The Modernity of the Humboldtian Education Ideal."

In the two documents he wrote on the educational system of Königsberg and Lithuania, Humboldt lays out what he thinks to be the "aim of education": the formal shaping (*Bildung*) of the entire man into a harmonious totality.

"Each individual, even the poorest, receives a complete education as man, each one absolutely completely, only where he might continue to make further progress; those who may have certain limitations also find their right and their place, and no one should have to set a goal sooner than in his own gradual development; after all, most of them will still have to, even after leaving school, make a transition from merely being taught, to further development in specialist institutions."

Humboldt was very much opposed to any form of merely career-oriented drill, which he saw practiced in the cadet institutions and the vocational schools; indeed, he even warned that a "merely drilled man should always be

24 Feature EIR June 26, 1998

^{8.} Lyndon H. LaRouche, Jr., *So, You Wish to Learn All About Economics*?, second edition, (Washington, D.C.: EIR News Service, 1995).

Consider the intersecting, but distinct contributions to the founding of a science of electrodynamics by Ampère, Fresnel, Wilhelm Weber, Gauss,

accumulation correlates with an increase of mankind's potential (physical) power over nature. During 1948-1951, as today, the argument remains, that this connection is typified by the treatment of an experimentally validated physical principle as the subsuming source of those applicable machine-tool designs, and analogous principles, which are to be recognized as "technologies." ¹⁰

Riemann, et al. See Laurence Hecht, "The Significance of the 1845 Gauss-Weber Correspondence," 21st Century Science & Technology, Fall 1996, and Laurence Hecht, "Optical Theory in the 19th Century, and the Truth about Michelson-Morley-Miller," 21st Century Science & Technology, Spring 1998. To be emphasized, on this account, are Ampère-Weber on the "longitudinal force," and Fresnel-Riemann on refraction and retarded propagation.

10. Formally, the introduction of "machine-tool design" into modern economy, originates with the work of Lazare Carnot, especially his role in the economic-military mobilization of 1792-1794. However, the "machine-tool-design era" is dated to a later time, the 1861-1876 mobilization of the U.S. economy. The "industrial revolution" proper was thus launched from the United States, from whence direct U.S. influence spread it into Bismarck's Germany (1877), Meiji Restoration Japan, and the Russia of Alexander II.

The second of the three principles, whose discovery also dates from the 1948-1951 interval, was the apprehension of the fact, that those same processes of creative mentation, by means of which experimentally validated, original (i.e., "revolutionary") discoveries of physical principle are generated, in response to deductively insoluble paradoxes of experimental physics, are processes identical in their nature to the validatable solution for the type of paradox rightly identified as *metaphor*, as such metaphors are unique to *strictly Classical* modes of musical, poetic, dramatic, and plastic composition in art. This second principle, which is contrary to the currently popular, erroneous notion of a division of art (e.g., *Geisteswissenschaft*) from physical science (e.g., *Naturwissenschaft*), 11

11. i.e., the doctrine of G.W.F. Hegel's politically reactionary ally, the neo-Kantian Romantic Karl Friedrich Savigny: i.e., the absolute separation of *Geisteswissenschaft* from *Naturwissenschaft*. In a cruder version, this is also the doctrine of "art for art's sake:" that there is no rational principle underlying the determination of value in art, that art is the arbitrary taste of artists and their audiences.

useless and dangerous."

Formally, Humboldt's concept has the three phases of schooling—elementary, *Gymnasium* (secondary school), and university—building upon one another, each complementing the other. Humboldt emphasized that the teaching of philology, mathematics, and history are of equal importance. A plan of studies designed according to his proposals envisaged for the *Sexta* [about the first year of secondary school—the student would be about 13 years old] had the following ordering: 12 hours language instruction (Latin and German), 13 hours scientific subjects (mathematics 6, science 2, geography 3, religion 2), 3 hours of drawing, 4 hours of calligraphy, and additionally, singing and gymnastics.

For the *Prima* [the last year of high school before entering university], the following hours were envisaged: 8 Latin, 7 Greek, 4 German, 6 mathematics, 2 science, 3 history and geology, 2 religion. For the first time, Greek (Plato, Homer, Sophocles) was to be read from the *Quarta* [equivalent to about 8th or 9th grade] until the *Prima*.

In designing this curriculum for the *Gymnasium*, Humboldt defined two centers of gravity: the teaching of the ideal concept of man embodied in the Greek Classics, and the teaching of philology, which two were, for Humboldt, the nucleus of philosophy, history, and mathematics.

At the university, there should be only researchers: those who are autonomous, and those guided by others, through which the unity of teaching and research should also be preserved—Humboldt wished that it might bring forth the "deepest and purest aspect of knowledge/science (Wissenschaft)." Knowledge, from whose organic unity

he proceeded as a basic principle, must be built upon a principle, it must not consist of an accidental collection of facts....

Because of the fortunate circumstance that Humboldt became responsible for the Prussian education system at its most decisive moment, the ideal of man, oriented toward the Greek Classics, was of decisive influence for more than a century for the intellectual elite who received their education at a humanistic *Gymnasium*.

Humboldt in America

The Humboldt Classical humanist curriculum was used as a model for U.S. high schools, thanks to the efforts of Benjamin Franklin's great-grandson Alexander Dallas Bache, as Anton Chaitkin reports:

Alexander Dallas Bache travelled in Europe (1836-38), examining 280 schools in the British Isles, Germany, Austria, France, Italy, and other countries. His detailed report on his educational findings is a milestone in the history of American schools.

Bache was the first president of Philadelphia's Central High, the first U.S. public high school outside New England, and the model for successful American urban schools. Bache was said to have organized Central High School, in particular, on the principles of the *Gymnasium* and *Real* schools of the Leipzig system. He created a pioneering laboratory for measurement of the Earth's magnetism, employing his students as the observers, and he equipped Central High with one of the world's finest astronomical observatories, with the students under the supervision of the leading astronomers of the era.

EIR June 26, 1998 Feature 25