LaRouche: Alternative theories of evolution do indeed exist

The following is the text of a letter to the editor of the New York Times, *written by* EIR *chief executive Lyndon H. LaRouche, Jr. in reply to an April 27* Times' *editorial, "Seeing the Light in Texas." The subject of the controversy addressed by the editorial was an order by the Texas State Board of Education directing that all biology textbooks in public schools include material on "alternative theories of evolution," not just the doctrine associated with Charles Darwin.* The Times *has to date failed to publish the letter.*

Dear Sir:

In the subject editorial, "Seeing the Light in Texas," you write:

> The board [Texas State Board of Education] is also unhappy with the theory of evolution and requires biology textbooks to mention "alternative theories of evolution," even though biology knows of none.

Your statement, that no alternative is known, is inaccurate in fact, and counterproductive in effect. Despite the admittedly popular myth, that there is no alternative to the controversy between followers of Archbishop Ussher and the Darwin-Huxley doctrine, 15th-century Christian humanism advanced the first modern doctrine of evolutionary development, originally formulated by Cardinal Nicolaus of Cusa.

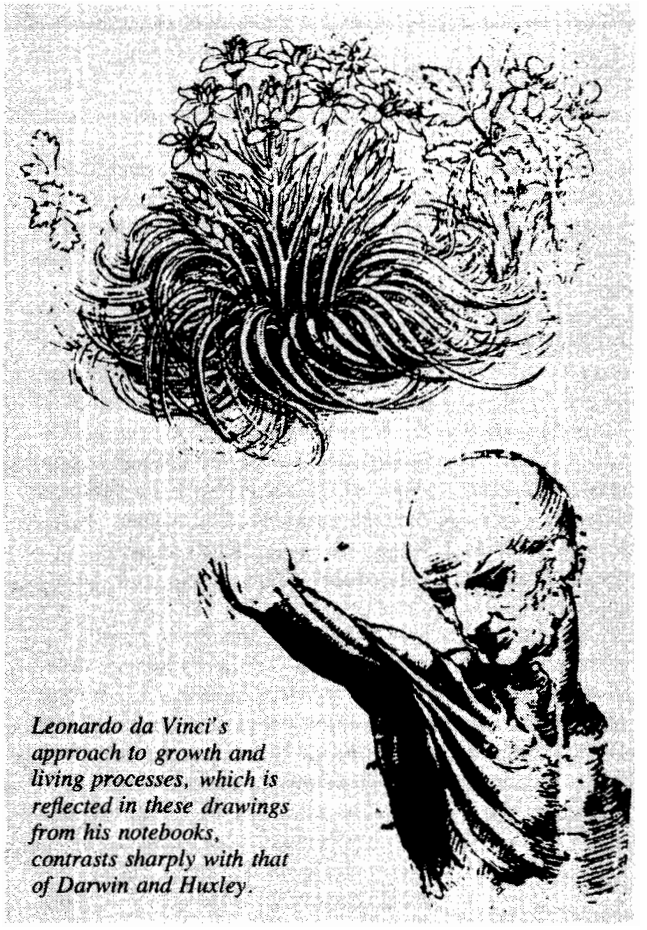
Cusa's work directly influenced the collaborators, Luca Pacioli and Leonardo da Vinci, who established the study of the morphological harmonics of growth and function of living processes, as Leonardo was also the first to identify the elementary topology of the kind of double-helical function we associate with DNA today. Darwin, Wallace, Huxley, et al., did not "discover evolution"; referencing Thomas Malthus, and implicitly the Gianmaria Ortes upon whose work Malthus's own was premised, Darwin, Huxley, et al. advanced a dogma contrary to pre-19th-century doctrines of evolutionary development.

If the public-school student is to be provided an accurate picture of differing ideas of evolutionary development, the relevant observations on scientific method, in Cusa's *De Docta Ignorantia,* ought to be described. The work of Pacioli, Leonardo, and Kepler on harmonics of development should be presented, and supplemented by such accessible demonstrations as Phyllotaxis in plants. These notions of evolutionary development should be contrasted with the Darwin-Huxley varieties.

We must show respect for the various millenarians and others who have accepted Ussher's dubious calculations, but such views have no factual basis for scientific interest, and can be reported in biology textbooks only as a matter of identifying the arguments employed to reject "evolution" from such quarters. The scientifically interesting differences are between the Golden Renaissance's and Darwinian approaches to the facts of evolution. The root-issue of these latter differences is readily within the reach of literate secondary-school pupils, reflecting differences which have bearing on subject-matters other than biology.

Summarily, the Darwin-Huxley definition of "natural selection" is nothing more than a subsumed feature of the emergence of the doctrine of "statistical fluctuations," as that doctrine was developed by LaPlace, and continued by Clausius, Kelvin, Helmholtz, Maxwell, Rayleigh, and Boltzmann, among others, during the 19th century. Boltzmann's version of this is the primary source for the appearance of the same dogma in the guise of the Weiner-Shannon and von Neumann dogmas of "information theory" today. The coherence of the Malthusian, Darwin-Huxley notions of "natural selection," and statistical mechanics, in matter of choices of method, shapes most significantly the way in which R.A. Fisher and others introduced statistical methods for design of experiments into biology today.

To uncover the elementary nature of the differences separating the two opposing schools of evolution, it is most useful to stress that these are the differences in method separating Leibniz from Descartes. Leibniz is rightly located as the continuation of Cusa, da Vinci, Kepler, et al., whereas Descartes epitomizes the opposition to Kepler's and Leibniz's choice of method. Although Laplace is treated in the classroom as the seminal neo-Newtonian of the 19th century, in fact Laplace was directly a continuation of Descartes, as was Laplace's famous protégé, Cauchy. So, Gauss, the Webers, Dirichlet, and Riemann, as well as Carnot's and Monge's Ecole Polytechnique, are anti-Cartesian followers of Leibniz. The epistemological and ontological issues of



Leonardo da Vinci's approach to growth and living processes, which is reflected in these drawings from his notebooks, contrasts sharply with that of Darwin and Huxley.

the doctrine of statistical fluctuations exemplifies the central issue of method separating the two opposed modern schools of mathematical science in every facet, every subject-matter.

Against that background, it is shown to be a serious factual error to propose that there are no "theories of evolution" contrary to the Darwin-Huxley species. It is also a practical error today, with implications going far beyond the scope of public-school textbooks.

The frontier of biological science today is identified by weighing the recommendation that we establish an international medical-research protocol providing comprehensive coverage for the category of diseases of aging of tissue. Beginning with the work of Dr. D. Sodi Pallares and others on cardio-vascular therapy, decades back, the same approach has been extended, for obvious reasons, into treatment of cancer and other expressions of diseases of aging of tissues. The study of the "energetics" of healthy and pathological cell-reproduction, in the environment of the immunological processes, is not only the most important frontier of clinical work, but calls into play directions in laboratory work bearing directly upon the most fundamental conceptions of life itself.

The economics of demography make this the area of leading moral as well as practical concern for us today. To maintain a high-quality of productive powers of labor, we require a modal school-leaving age of between 18 and 25 years, which requires a long-lived, healthy labor-force, whose life-expectancies must range between 75 and 85 years of age for surviving infants. The impairment of function of adults, beginning perhaps the 50-55-years age-range, into the retirement-age range, is the leading economic, as well as moral, issue of demography today. Cancer and cardio-vascular disease are merely the leading typifications of the problems to be mastered. If but a significant portion of what is spent for gambling, or pornography, or "recreational psychotropics," were allotted to support both the clinical and laboratory features of such a comprehensive medical-research protocol, we may expect to accomplish at a rapid pace of progress, one of the greatest boons to present and future generations which might be presently proposed.

Who could not be sufficiently gratified if our benefit from this commitment were no more than to lessen substantially the kinds of pain and misery associated with such disease? Yet, even by the amoral standards of "cost-benefit analysis," the savings to society accomplished by mastering such disease, and, more significantly, the added contributions of those whose mature capacities were preserved by this advance, represent a breakthrough for societies characterized by tendencies of demographic aging of their total populations.

This obliges us to examine DNA, RNA, and the simplest forms of living processes as "hydrothermodynamic," or, as "hydroelectrodynamic" processes. Essentially, our attention is focused upon the conditions under which the DNA double helix, for example, emits energy at significantly higher energy-flux density than the energy-input supplied to excite this emission. This obliges us to abandon not only statistical theory, but the implicitly embedded, Cartesian, ontological assumptions underlying statistical methods. On condition that the term "Riemannian" is employed to signify not only Riemann's "radically geometrical," as opposed to axiomatically arithmetical standpoint, but also his status as a continuation of the standpoint of Cusa, Kepler, and Leibniz, as well as, more immediately, Legendre, Gauss, and Dirichlet, the choice of mathematical method in approaching the fundamentals of biology is "Riemannian."

A Riemannian approach to the "hydrothermodynamic" fundamentals of the most-approximately irreducible forms of living processes carries with it a certain, cohering notion of the way in which negentropic development of the spectrum of species occurs within the developing biosphere as a whole, and rejects flatly and unconditionally the dogma of statistical fluctuations underlying the Darwinian view. How could scientists, or laymen, comprehend the practical issues facing us today, unless we inform our pupils and others that there is a current of evolutionary thought "alternative" to and entirely opposing the popularized Darwin-Huxley dogma?

Sincerely Yours,
Lyndon H. LaRouche, Jr.