

# How the Human Mind Works (The Sight & Sound of Science)

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*The following subject-matter, omitted from Dennis Small's report (see above, page 27), should be added to the reading of Small's report.*

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The most crucial of the issues posed by the present, world-wide, physical breakdown-crisis of the present world monetary-financial systems, is the factor of the suppression of the recognition of the role of human individual creativity in determining the relative physical productivity of labor in economies, as measured in physical terms, per capita and per square kilometer.

The point to be emphasized, is that virtually no secondary or university student graduated since approximately 1968, has any actual, mere comprehension of what scientific and related creativity actually signifies in practice. This problem is most notable in those students who mistake mathematics-at-the-blackboard for physics. Thus, the emergence of the role of actual creativity within the work of the LaRouche Youth Movement (LYM), especially the "basement operations," is of the greatest significance for treating the crisis which menaces all of mankind at the present moment.

In the context so identified, it is, therefore, of the most notable relevance, to focus attention on the fact that the presently customary reliance on Liberalism's notion of statistical determination in measurement and forecasting of net performance of economies excludes any competent notion of human creativity in the most thoroughly vicious manner. Hence, the intrinsic incompetence, respecting long-range forecasting of all among my known rivals, including would-be rivals in my own association.

Notably, the errors, on this account, which I have been forced, implicitly, repeatedly, to counter among my own associates, are often a result of their attempting to propitiate commonplace opinions met within sundry strata of the population, especially a morally rotten

leading press, such as the ideologies of the *Washington Post* or *New York Times*.

Similarly, we have, also, the ideological pressures upon my associates which reflect both the intrinsically anti-scientific bent of the so-called "Baby Boomer" generation's influence inside the Congress, as elsewhere. This includes the phenomena of the peer pressures on my own immediate associates from the population in general. These combined, intellectually and morally corrupting outside influences on our work, must be recognized as representing a broader, pervasive, systemically tragic factor controlling the mass-behavior of nations and their populations thus far.

It is the influence of those corrupting beliefs which has been the most significant of the efficient political forces causing the present, global breakdown-crisis of not only the U.S.A., the Americas, and Europe generally.

## The Rot Called 'Liberalism'

As we must emphasize in this specific kind of discussion, the general cause for the tendency for the breakdown-crises known to the history of European culture and its nearby antecedents, is that identified by the historian-dramatist Aeschylus' *Prometheus Bound*: the prohibition of knowledge of the principles of scientific-economic creativity (e.g., "fire") by the legendary Olympian Zeus. In all known empires, including Rome and later, as

in the Babylonian tradition earlier, the general suppression of the creativity of the great majority of the population, is the characteristic root of all the major evils, and consequent doom, of what had been once powerful cultures.

As I emphasized, once again, in last evening's briefing-session, the systemic failures in modern European physical science and economy, have been chiefly the consequence of the introduction of what has become known as the Anglo-Dutch "Liberalism" which Paolo Sarpi premised on the lunatic method of the

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medieval William of Ockham (Occam), which has been the principal source of the lunatic corruption expressed within Liberal reflections on subjects of modern physical science and social practice generally.

Most notably, it has been the figures of René Descartes and his bastard offspring, the largely mythical Isaac Newton, which has been the most vicious of the destructive forces within the teaching and practice of modern science, and also the axiomatic root of the inherently destructive nature of the misanthropic notion of political economy associated with imperialist Lord Shelburne's lackey Adam Smith. There is no science worthy of that name in any aspect of notions of economy traced from the syphilis-like influence, and the filthy sporrans, of David Hume and Adam Smith.

As I emphasized, again, during last evening's meeting, to find a competent trace of the spoor of that foul perversion known as modern European, Anglo-Dutch Liberalism, we must view that Venetian pervert known as Paolo Sarpi, against the backdrop of the earlier activity of the circles of Venice's Francesco Zorzi (a.k.a. "Giorgi") as marriage-counsellor to England's King Henry VIII. The essential features of the account run as follows.

The medieval system of rule by a Norman chivalry which was itself, in turn, controlled by the Venetian financier-oligarchy's Lombard investment-banking system, broke apart in the Fourteenth-Century collapse of Europe into a New Dark Age. The later happy outcome of what had been this disastrous European crisis, was the founding of a modern European civilization through events converging on the great ecumenical Council of Florence.<sup>1</sup> The Venetian reaction against that great Renaissance was expressed most significantly in events beginning with the orchestrated fall of Constantinople and immediately subsequent developments. The rise of Venetian power, which followed as a consequence of the fall of Constantinople, led into the vast religious warfare, of 1492-1648, which began with the expulsion of the Jews from Spain.

The efforts of the Venetians and their Habsburg puppets, to crush the effects of the Renaissance, ran into the growing strength of the modern nation-state, a growth typified by Louis XI's France and Henry VII's England, which were concretized expressions of the work of the Renaissance. This conflict between the forces of the Venetian-controlled Habsburg party and the legacy of the Renaissance principle of the modern nation-state system, prompted the Venetian party's efforts to divide Europe



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*Peter Martinson and Tarrajna Dorsey, members of the 2007 Basement Team, work on spherical geometry. "The emergence of the role of actual creativity within the work of the LaRouche Youth Movement," wrote LaRouche, "especially the 'basement operations,' is of the greatest significance for treating the crisis which menaces all of mankind at the present moment."*

between two conflicted parties. This division was built up by Venice's corruption and control, by Zorzi, Cardinal Pole, Thomas Cromwell, et al., of the manifestly insane Henry VIII, a division, brought about by the defection of Henry VIII, which split Europe, to the present day, between, principally, a nominally Catholic, Habsburg, and Protestant parts. Hence, the religious warfare of 1492-1648, which historian Friedrich Schiller described as men fighting one another, not as men, but as beasts.

During this interval, the outcomes of the 1542-1563 Council of Trent, were the interdependent relationship between that Council itself and the rise to power of the Venetian faction of Paolo Sarpi. Sarpi continued the trend which had been set into motion, earlier, by Zorzi's role as marriage counsellor to what became, under his influence, England's lunatic butcher Henry VIII.

The immediate effects of this new division of Europe against itself, persisted as a Venice-directed religious warfare until that 1648 adoption of the Peace of Westphalia with which a decent quality of European civilization became a possibility again, but, as Gottfried Leibniz emphasized, with the highly problematic, persisting division of Protestant from Catholic parts.

However, the 1648 defeat of the cause of religious warfare, while setting back the Habsburg interest, left the emerging superior power of northern maritime Europe in the hands of the essentially evil, Liberal followers of Paolo Sarpi.

## **Our U.S. Legacy**

To identify the significance of the creation of our U.S.A., we must return our intention to its essential ori-

1. See William F. Wertz, Jr., [Toward a New Council of Florence](#) (Washington, D.C.: Schiller Institute, Inc., 1993), Introduction: pp. 1-55.

gins, with attention to the work of Christopher Columbus.

Columbus, a Genoese navigator in the Portuguese service, become informed of the intentions of the then-deceased Cardinal Nicholas of Cusa approximately A.D. 1480. This was notably the Cusa who had prescribed the formation of the modern sovereign nation-state, with his *Concordancia Catholica*, and had not only founded modern European science, but defined the method of all competent science, afresh, with his *De Docta Ignorantia*, and with the work of such among his avowed followers as Leonardo da Vinci and Johannes Kepler. This same Cusa had recognized, from the aftermath of the conquest of Constantinople and the resulting breakup of the great ecumenical agreement forged at the Council of Florence, that European civilization was in a process of a new descent. Cusa had pointed his associates and followers to the importance of crossing the great oceans with the intent to renew European civilization from abroad. Christopher Columbus' voyage to the Americas was the explicit outcome of his adoption of Cusa's advice.

In the aftermath of Columbus' voyages of discovery intended to this end, what was to become our United States emerged, beginning, most emphatically, with the establishment of the Plymouth and later Massachusetts English colonies in 1620-1688 New England. This process in North America itself, assimilated something greater than the floods of immigrants from sundry parts of Europe; the best among the settlers brought with them a devotion to the greatest achievements of European civilization, but achievements largely freed from the oligarchical legacy's grip on the nations and culture of Old Europe.

Thus, our republic was founded as a constitutional nation-state under a Presidential system, rather than the crippled form of self-government represented by the parliamentary systems typical of western and central Europe to the present time. In matters bearing on the subject of scientific and related expressions of creativity, the most significant feature of specifically American republican culture, as distinct from the followers of the British East India Company, such as Judge Lowell, is the emphasis on the promotion of the scientific and related creativity of the typical citizen of what was to become our new republic.

Since that time, especially since the time of that February 1763 Peace of Paris which established the British East India Company as a privately controlled, Anglo-Dutch Liberal, financier empire, we in our U.S.A. have been divided, even in our scientific culture, between the patriotic tradition associated with Leibniz and the fraudulent, anglophile form of the Liberal tradi-

tion of Paolo Sarpi, as typified by the legacy of René Descartes and the hoaxster Isaac Newton.

### Sarpi's Hoax

That much stated by way of general introduction, we now bring the discussion to the core of the matter.

The strategic problem, as defined by Paolo Sarpi's cultural policy, was to attempt to offset the effect of the creativity promoted by the strategic policies of such Cusa followers as Luca Pacioli, Leonardo da Vinci, Niccolò Machiavelli, and Johannes Kepler, by allowing a certain degree for technical innovations, but without allowing anything resembling the principle of creativity as exemplified by the discoveries of Cusa, Pacioli, Leonardo, and Kepler. To this end, whereas Sarpi had overthrown the authority of Aristotle, he replaced Aristotle with the raving, empiricist lunacy borrowed from the medieval William of Ockham.

On this account, we must see clearly both the agreement and disagreement between the philosophies of Aristotle and Ockham. Both, like Aristotle's follower Euclid, located knowledge within the limits of blind faith in sense-certainty, as did Sarpi's apologist René Descartes. The difference lay essentially in Sarpi's fostering innovation to the extent it did not lead to actually scientific knowledge and practice. With Sarpi, especially as his influence is expressed in Descartes and such Eighteenth-Century followers of Cartesian empiricism as de Moivre, D'Alembert, the hoaxster Euler, and Lagrange, or the hoaxster Augustin Cauchy later, algebraic and related mathematical formulas are substituted for the kinds of those universal principles of physical science which are typified, explicitly, by the work of Kepler, Fermat, Leibniz, (implicitly) Gauss, Bernhard Riemann, Max Planck, and Albert Einstein—in opposition to such fraudsters as mechanist Ernst Mach or the even worse set of followers of the purely evil Bertrand Russell.

In all cases of Sarpian empiricism and its modern positivist outgrowths, the assumed pre-existence of mere forms, becomes a general set of arbitrary assumptions of belief superseding the simpler set of a-priori definitions, axioms, and postulates of an essentially Aristotelean Euclidean geometry. In this way, as Descartes explicitly prescribes this modern empiricist form of so-called "scientific" irrationalism, no margin is permitted for the actual discovery of any actually universal principle, such as Kepler's uniquely original discovery of gravitation, of our universe.

What, according to Albert Einstein, distinguishes the quality of originality in Kepler, is the originality of Ke-

pler’s discovery of the evidence showing that his principle of universal gravitation is defined by the ironical juxtaposition of the human sensory apparatus’ senses of sight-versus-(harmonically ordered) sound, exactly as Max Planck’s discovery of the quantum principle remains the necessary alternative to the mechanistic hoax of the pathological so-called quantum mechanics of both mechanistic and Russellite types. Kepler develops the foundations of this crucial argument at the foundations of his general discovery in the opening section of his work on the principles of universal harmonics.

As Einstein emphasized, the locating of Kepler’s work as the underlying practical-scientific foundation of modern mathematical physics, leads Einstein to emphasize that the universe is self-bounded, as by Kepler’s harmonically-ordered principle of universal gravitation, and is therefore mathematically finite, but without external bounds.

The specific genius of Kepler’s discovery on this account, is the crucially experimental form of the demonstration that neither sight nor sound underlies the principle of universal gravitation. Rather, gravitation, as discovered, uniquely, by no one but Kepler, is the primary discovery, in science in general, which shows us the means by which the individual human being’s mind is able to discover principles which rule the evidence of the senses as if from outside and above.

This discovery, when recognized, as it must be, by any competent science classroom, leads us to a general notion of what we may term “scientific instrumentation.” When we see that human sight and sound are merely instrumentation delivered in the package with the mortal human body, we are able to reach more broadly, into comprehension of a general theory of scientific instrumentation, under whose direction we recognize that the universe’s efficient quality of existence is not in the form defined by the senses; but, that the senses perceive those shadows of reality which are adumbrations, rather than the actuality of universal principles. So, we proceed from our given

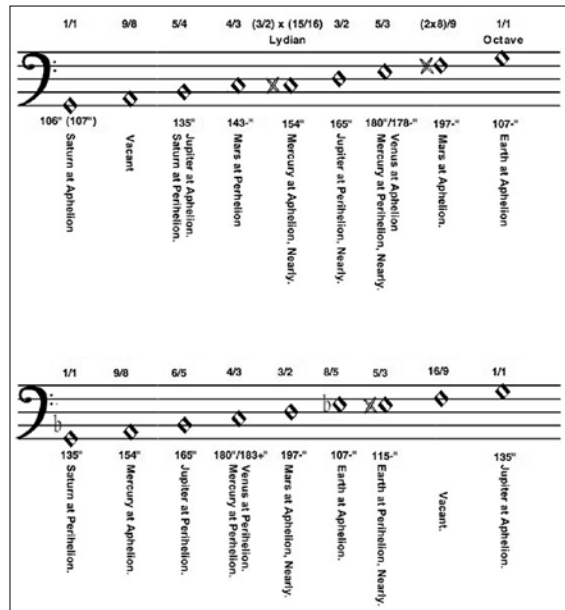
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Johannes Kepler (1571-1630) gave modern science its first practicable, scientific conception of the astronomical universe. The illustrations here are from the LaRouche Youth Movement’s “Basement” project on Kepler’s Harmony of the World; the LYM explicates this monumental work through the use of animated graphics and musical examples ([science.larouchepac.com/kepler/harmony/](http://science.larouchepac.com/kepler/harmony/)). The drawing is from Kepler’s frontispiece to his 1627 Rudolphine Tables. It shows Copernicus and Tycho Brahe at the center, while Hipparchus and Ptolemy look on. On the base, the panel to the left shows Kepler himself, laboring by candlelight. The musical scales shown here are taken from Kepler’s Harmony, and show the “tonalities” of the harmonic orbits of the planets (these can be heard on the website). Above is the major scale; below is the minor scale.



senses, to the supplementary devices we recognize as instrumentation into the microphysical and cosmic domains.

The case is made sufficiently well in Kepler’s opening sections of his *Harmonies*. Sky Shields and his team, now addressing the crucial work of Riemann, have carried this into the direction of a study of the ironies explored jointly by Max Planck and by the Wolfgang Köhler of Köhler’s *The Mentality of Apes*.

These are the aspects of Tuesday evening’s discussion which were not referenced in Wednesday morning’s briefing lead.