Science

THE MARS DEBATE:

A New Meaning for 'Space'

by Lyndon H. LaRouche, Jr.

May 11, 2013

Heretofore, for a relatively long time, the teaching of the mere name of "science" had often meant, for many, an actually mistaken devotion to a notion of what had been merely "sense-certainty." That presumed "certainty" has been a widely habituated fallacy, but has also meant a habit which had prevailed in nominally senior ranks of what was wrongly presumed to have been "scientific" practice. This has been a habit which had dominated the relevant forms of practiced opinions. That same notion from the past, still lingers in the ranks of popular practice; but, the difference is, that we should now soon recognize the fact, that the ostensibly traditional doctrine of "sense-certainty," had never been an actually truthful one. Such presumptions as "sense certainty," have persisted, that much too long, even among what was considered to have been a relic of a certain "childhood of science," a kind of likeness of "childhood infancy" from which society had often attempted to escape, but still remained, rather, one whose very soul had simply failed to have been born.

The pivotal point which I present for consideration here, is conveniently illustrated by the use of a quality of attention directed in the following way, that is to say, in effect, in support of what had been a certain type of arbitrary, and essentially empty, false presumption. Such a mistaken presumption, is the same as that which I place as the central issue here; that issue is the same presumption, which is the obstacle to man's progress in

dealing with the actualities of the planet Mars. That progress does not depend upon a certain leading orientation to the actually living as a prospective inhabitant of Mars, but upon a commitment toward mankind's developing of control over the effect of Mars' existence within the Solar system. The most commonplace expression of a pseudo-scientific presumption respecting Mars, is the notion that the human species' effective relationship to progress on Mars (this far), has depended upon acknowledging the ultimately mistaken choice of a presently leading role of human sense-perception respecting the subject of prospective future human effects of quasi-residences on Mars; it were likely, from present standpoints, that nothing need ever deter man's naturally growing influence on the development of Mars within this present century—with, or without man's personal, explicit residence on that planet. We can better develop control over Mars' development without placing human beings in residence on Mars, at least not for a fair estimation of the remainder of this century. We can control Mars, and what man effects directly on Mars' development, without asking mankind to take up any personal residence there.

Errors of presumption typical of such as that relatively popular, but, nonetheless, inherently failed set of conceptions, are to be diagnosed, clinically, as by-products of the erroneous, but stubbornly popular delusion of heretofore common classroom and related practice.

It has been a delusion which had taught, and still teaches, in a systemically wrongful way, the presump-

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"We can better develop control over Mars' development," LaRouche writes. "without placing human beings as residents on Mars, at least for a fair estimation of the remainder of this century." We can, however, continue to go beyond man's own sense-perceptual capabilities, through technology such as NASA's Mars Science Laboratory, Curiosity, shown here in an artist's concept.

NASA/JPL

tion that it is human sense-perception, as such, which defines the foundations of a true physical science. The essential fact is, that it is not human sense-perception, which enables us to define a science of Mars; it is the exploration of the composition of the functions of the Solar system, when treated, not as parts, but as no less than a "unit," which supplies the needed corrective for those seeking knowledge of the efficient physical-scientific principles of experiment in space more broadly; it is that, which can enable mankind on Earth to discover, and to correct the errors which tend to inhere in belief in what have been, essentially, systemic deductions respecting mere sense-perception as such.

The necessary correction is to be derived from the combination of Nicholas of Cusa's crucial **De Docta Ignorantia**, and the outcome of that work of Cusa, Johannes Kepler's still little-comprehended, fundamental ontological principle, a principle which has supplied the basis for all competent modern physical science, that of *vicarious hypothesis*.

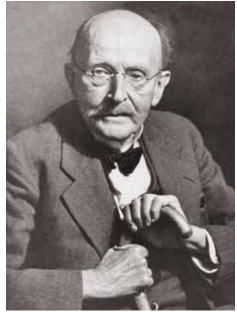
I. Your Senses: Are These a Matter of Shadows, or Substance?

There could be no plausible doubt, that the use of human sense-perceptions (in particular), has even often been, nonetheless, useful means, even indispensable means, for human use, and that in very large degree. Despite that, the usual opinions on that subject have been, nonetheless, profoundly in error; but, mostly, so far, without understanding the nature of that error, the most essential fact of modern physical science could not be properly identified in practice.

For example, the mere notion of the effect of the individual's lack of those capabilities presented, in effect, by the work of Cusa and Kepler can be terrifying, but, has been also foolishness. For example, the loss of both sight and hearing, creates an almost impossible situation. In the extreme, the effects are worse. Such considerations typify a matter of highly relevant facts; but mere sense-perceptions fail to define the basis for the proper functions. Nor do they suffice for the purposes of that kind of approximate insight into that proper definition of the human mind, a notion which had been shared between, in particular, the collaborators Max Planck and Wolfgang Köhler, in their time.

What Planck and Köhler, for example, achieved in this respect, is best appreciated in such types of experiences which are to be derived from Nicholas of Cusa's **De Docta Ignorantia**, as from the great and ominously brilliant, and properly thrilling experience of appropriate insight, which is implicit in the rarely comprehended discovery of what is the physically efficient principle of the *vicarious hypothesis* presented

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Max Planck (left, 1858-1947) and Wolfgang Köhler (1887-1967) shared a concept of the human mind, which, LaRouche writes, is best appreciated from the standpoint of Cusa follower Johannes Kepler's (1571-1630) insight, expressed as his "vicarious hypothesis."

by Cusa's follower Johannes Kepler.¹

What follows here now, will be *consistent*, "consistent" with what Max Planck and Wolfgang Köhler, for example, actually accomplished in merely practical terms, which was excellent in what it achieved as discovery, but here, that will be accomplished only in an elementary way of seeking to express the essential, far more developed approach. Scientists such as Planck,

Einstein, and Köhler, had already presented a principle, but it approaches fulfillment only with the statement of certain deeper isolatable principles. We must now go more deeply, and into a revolutionary view of the Solar system defined in more comprehensive and more profound notions of principle.

My particular point of emphasis, at this presently opening stage of this report, is the urgent need for liberating the practice of science from the chronic "great sucking-sound" which is so often created by a reliance on sense-certainty,

as, similarly, by the so-called "practical mind." Neither Johannes Kepler, nor Nicholas of Cusa, either committed, or intended such errors of ontological presumptions; nor had Friedrich Schiller.

Here, however, I must now turn your attention to more comprehensive challenges to be applied to certain great issues of scientific comprehension: the question of the validity of mankind's presently achieved notions respecting phenomena attributed to what is still presently accepted, as practical notions of an empirical basis for what are more or less popularized, but naïve, notions of "physical space-time," or the misleading effects of that which is the fruit of the vine of confidence in more or less conventional notions of a sensed "physical space-time."

II. Space, Time, and Matter

The systemically, and viciously intrinsic error of virtually all commonly taught so-called "physical science" (and even less trustworthy qualities of related and adopted popular and other common human knowledge so far), is to be traced in a failed practice which has to be considered as having been rooted in the practice of an

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^{1.} Note, on this account, that Kepler, following the most essential principle of Cusa's De Docta Ignorantia, presents us with a rigorous distinction of that shadow which is the principle of vicarious hypothesis: as it appears as a cast "shadow" reflecting the mere shadows which are of sense-perception as such. The same principle of the distinction of the substance of the "real unseen" from mere sense-perception, is the efficient meaning of William Shakespeare's, then revolutionary, assigned function of "Chorus" in his King Henry V. "Chorus," thus, in that degree, is to be compared, rigorously, with the significance of Kepler's distinctive, special notion of a general principle of irony in his use of vicarious hypothesis. Note, also, that the principle of composition expressed by Johann Sebastian Bach's set of Preludes and Fugues, have the same essential quality of distinctions from the banalities of "Romanticism." The same intellectual-moral failure represented by "Romanticism" and "Populism," would have to be noted in a lately attempted, "simplified" performance of the actual script of Friedrich Schiller's great Wallenstein trilogy. Such is the exact distinction, in principle, which I have intended to convey, here, as the distinction of human sense-perception from reality.

errant opinion which measures all scientific or related notions of opinion in elementary, "blind faith" terms of sense-perceptual objects/subjects as such. *Contrast* "conventional physical-science" measurements, with such exemplary qualities as *life per se* and *human creativity per se*. The latter two fall under the categorical qualities of notions of the relevant impact of qualities of ideas which exist independently of customary sense-perceptual measures of quantity (such as the case for *life per se*, *love per se*, *beauty per se*, ... *et al.*).

The effects of accepting only elements which meet only the standard for "conventional physical-scientific" measurements, have been a dominant factor in permitting the incompetence of the actually fraudulent exclusion of subject-matters such as life per se and human creativity per se. Such corruptions are to be associated with the effects of tolerating subject-matters of practice such as the product of Franz Liszt, Richard Wagner, and worse for categories of Classical artistic composition such as Classical musical composition, Classical poetry, and Classical drama such as that of William Shakespeare and Friedrich Schiller, and the incompetence in economics practice of, and among nations.

In general, such evils as those just mentioned above, are a reflection of the influence of such modern expressions of moral and related degenerations experienced in ancient Roman history, the Venetian system generally, and such outcomes of the Venetian system as the "new Venetian system" and of the imperialism of the House of Orange, and of the latter imperial house of Orange and "Windsor" presently. Compare the current British monarchy's schemes for both the human population and the systemically accelerated degeneration of the quality and quantity of the planet's economic and other culture and population-size under the present "green," mass-extinction campaigns. All of those systemic failures reflect the failures inherent in reliance on a system which refuses to take into account the role of principles which lie in a domain of origin beyond the roots of mere sense-perceptions.

The intrinsic criminality of those past and continuing imperialist practices of retrogression of the human population of the planet, could not have emerged as it continues to do, had the practice of societies not been permitted to degenerate both physically and morally as has occurred through injury of, and resistance to the essential function of the inter-depen-

dency of life and human creativity per se as being the uniquely cardinal distinction of creativity of species in the universe.

There is no basis for permitting exclusion of devotion to such transcendental qualities of universal principles as the set of *life per se, love per se,* and beauty per se. These are the exemplary purpose of the existence of the human species in the universe, whether in the past, present, or, above all else, the distant future. Our proper existence as mankind, in particular, is dependent upon creative qualities within us, creative because the causes lie beyond the reach of those deductions associated with the notions of sense-certainties.

III. The Creative Principle Itself

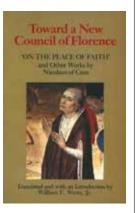
In a proper general notion of theology, we have the notion of an existent principle of *Creation*, a notion of *Creation* which is located intrinsically *outside* what might be considered "universal physical" principles as

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such. From the vantagepoint of theology, nothing of importance effecexists tively outside defined: Creation SO hence, a certain specific distinction of a "practical" meaning of the distinction of a "functional notion" of good, from evil. It is not mankind which has failed us on this account; it is the inhuman which has been a destructive influence: a kind of Satan, if you will, an influence which operates as if human beings have failed to rule to advance their own potential for a "genetically" specific quality of endless progress in development. Practically, this specificity is according to the observable effect of the actions of an ever-

expresses.2

The Chorus in Shakespeare's Henry V "is the actual reality of the drama; whereas, the sense-objects are merely the footprints of the subject.... To the actually literate human soul, all that is real 'lies between the notes' in a similar fashion."

THE

CRONICLE

History of Henry the fift,

With his battell fought at Agin Court in

LONDON ted by Thomas Creede, for Tho. Milling-

ton, and John Busby. And are to be fold at his hoofe in Canter Lane, next the Powle head. 1600.

Indeed, any literate use of a term of speech represents a reference to a quality of idea which is a mere shadow cast, as a surrogate for the sensed shadow of reality, on the human sense-perceptual usages. It is not the nominal experience of the sense-perception which "contains" the efficient reality of the nominally experienced matter presented by sense-perception, which is the efficient content of the notion. It is the efficient action of the universe which is the efficient truth of the experience to which the "sense-impression," or the like corresponds. The notion of the "Chorus" specific

impatient progress to the higher states of existence of that which Kepler's principle of vicarious hypothesis

to the Shakespeare's King Henry V must be consid-

ered in the sense that the part presented in the name of



EIRNS/Bonnie James

"Chorus," is the actual reality of the drama; whereas, the sense-objects are merely the foot-prints in the sand. As in J.S. Bach's two sets of **Preludes and Fugues**: the substance of the music lies "between the notes" of the songs.

To the actually literate human soul, all that is real "lies between the notes" in a similar fashion. It is the process which "appears to connect the notes," which expresses the reality of the action in all serious expressions of art, true science, and human life in action.

The same issues of "interpretation" are the reality of the processes which we actually express in the substance (the "action") of the existent experience. It is the attempt to define the action by the objects-in-motion, which is the prevalent great error in the functions of the "unfortunately all-too-literate" surrogate for "mind." We are, thus, compelled, to shift the subject from objects, to processes, that in the same sense as I have just summarized the point.

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^{2.} The specific meaning of Kepler's "physical ontology" which Kepler assigns to "vicarious" in "vicarious hypothesis" is specific to the intention of Nicholas of Cusa in his De Docta Ignorantia; any contrary view on either or both the meanings of "vicarious hypothesis," is not that of Cusa's writings.