WHY INDUSTRIAL MANAGEMENT HAS FAILED

Auto and Air Industry in the Pit

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One of the crucial changes in industrial policy which erupted in the wake of the U.S. stock-market crash of October 1987, was the maddened lurch toward eliminating the costs of design engineering through the substitution of what was inherently incompetent reliance on what was called "benchmarking" for the customary methods of experimental science. More than fifteen years later, the deadly impact of that change toward incompetence in corporate industrial management, has now caught up with the economy, more or less worldwide.

The most widespread disasters now being spread by that piece of lunatic managerial incompetence, are the effects of employing computer-dependent "benchmarking" in the transfer, through "outsourcing," of portions of the development and fulfilment of a design into cheap-labor elements of the developing-sector economies. This has ominous implications for the passenger-aircraft industry, in particular. It is a practice of folly which has already shown its teeth in the automobile industry, as merely typified, already, by the absorption of Germany's design-intensive aerospace firm MBB [Messerschmitt-Bölkow-Blohm] and the earlier fatalities associated with SUVs.

The relevant failures of current industrial management practice on this account, can be better understood by a glance at the ongoing work of teams of young adults working through the implications, for definitions of what is really a universal physical principle, by a pilot group of members of the LaRouche Youth Movement (LYM). This work, being done largely through application of existing computer technologies employed for generating animations, points precisely to the point at which customary notions of computer-program designs break down, in the case that the efforts involved must bring the conceptual image of an actual universal physical principle to the surface as the ontological focus of the conception of the relevant universal physical principle.

My keystone assignment to these LYM teams, is to treat Johannes Kepler's discovery of the need for an infinitesimal calculus as a subject for defining animations. This task is coupled with study of Fermat's discovery of a physical principle of "quickest time," Leibniz's discovery of the functional role of the infinitesimal in the expression of the catenary-logarithm-cued principle of universal physical least-action, and Carl F. Gauss's discovery of asteroid orbits of Ceres and Pallas from a limited number of observed intervals.

What is required is a special version, for ordinary physical science, of the same method I have employed successfully for my relatively infallible long-range economic forecasts delivered over the 1959-2006 interval to date, the method actually associated with the work on the subject of physical hypergeometries by Bernhard Riemann.

In the present days, the commonplace pathology being addressed by aid of this utilization of Kepler's uniquely original discovery of gravitation as a focus, is expressed, as a pathology, by the victim's substitution of the image of the


Airbus

LaRouche points out the ominous implications for the passenger-aircraft industry, of the "lunatic managerial incompetence" of "employing computer-dependent 'benchmarking' " and sending design development to cheap-labor economies. Shown here is the Airbus 380, for which delivery has been delayed for at least a year, for what are called "technical reasons."

mathematical formula for the ontological actuality of the crucial experimental proof.

The crucial example which is central to the referenced studies of the LYM teams, is that Kepler's rigorous measurements of the Mars orbit showed, rigorously, that the characteristic of the planetary orbits was the equal-area/equal-time characteristic of the orbit's generation. This experimental demonstration required the conclusion, which Kepler subsequently perfected experimentally, that the rate of change which generated the elliptical orbit (rather than the ellipse the rate of generation) was a principle which is universal within the bounds of the known Solar System, and can not be divided, as a cause of action, to any degree but a virtually boundlessly infinitesimal. The point is, that the principle of gravitation is as big as the universe, such that the universe should be no bigger than the reach of the principle of gravitation. Thus, gravitation is efficiently expressed, physically, within any arbitrary infinitesimal range, up to the inverse side of the universe: Einstein's "the universe is finite and unbounded."

Competence in scientific education today, requires the specific quality of experience which is typified by the reliving of Kepler's and related, relatively elementary forms of universal physical experiments.

In economic analysis for example, the crucial thing is to identify those empirically classified physical factors, which must be recognized in order to assess an economic process competently. The usual incompetence of economists today, is their adoption of a Cartesian, or Cartesian-like sense of an economic process as statistically mechanistic, rather than dynamic. Rather than working from the discovery of a relatively universal principle, to the particular situation, as I have done, they work from particular situations, and never find the actual universal. If we limit the comparison to the bounds of the ranks of my professional rivals and I who command essential competence in treating details, the reason for my success where those rivals have failed, lies in their acceptance of the wrongful dogma that economy in the large is an extrapolation of statistical results in the small.

The function of economic animations, is to isolate principled factors which participate in governing the dynamic relations within economies as a whole, over the duration of cyclical intervals.

Therefore, the best training exercise for able young economists and business managers, is living through the the kind of set of discoveries made by Kepler and the other cases similar to those which I mentioned.

This function of the "infinitesimal" of the Leibniz calculus's universal physical principle of least action, signifies that we can not treat the superficial appearances of a digitally-premised mathematical system as competently predicting the existence or absence of some previously unconsidered physical principle. Science must therefore be experimental, and never "ivory tower" mathematical.

The Remedy

Thus, the role of the machine-tool designer in industrial and related processes, must be seen as the other side of the work of the designer of a successful experimental apparatus employed to test an hypothetical universal physical principle. When we take these connections into account, we should promptly concede the dangerous incompetence intrinsic to benchmarking as industrial-design process.

The division of labor in the process of developing a particular product, when attempted across distant borders, is always hazardous, and implicitly more costly than reliance on integration design and production locally.

Otherwise, "cheap" in the matter of physical principles of design, is incompetence in principle, and may be catastrophic in its application. Bring back the design engineer, and keep him in close touch with the actuality of the product in its process of development and creation.

Benchmarking is not efficient; it is intrinsically incompetence.