

The 19th-century creators of neoclassical economics are credited with transforming their field into a scientific discipline, though in practice this really is not true at all. This is the theory that now serves as the basis for coordinating economic activities on a local and global scale. The truth is that they established an abstracted world view that serves as a cover story to justify massive extraction of wealth.

To accomplish this they adopted three related strategies. One was the adoption of a philosophy of science known as positivism which tended to be ahistorical. This approach was strengthened by the assumption that the conduct and study of science in the 18<sup>th</sup> and 19<sup>th</sup> century was considered to be the domain of gentlemen scholars, also known as wealthy elites. Another strategy was the adoption of mathematical forms and equations. Both of these features were in their time considered to be defining characteristics of the practice of science. The third strategy was to adapt equations of 19<sup>th</sup> century physics by substituting economic concepts.

The practitioners of positivistic science don't describe their own perspective in this fashion, but instead as THE only legitimate definition of science. This sort of post hoc consensus has served to greatly limit the perspectives within the field. In the history of the philosophy of science there are actually two different paradigms. One is the positivistic version which was strongly adopted by the academic social sciences. The other originated with historical and natural philosophers who derived most of their generalizations from observation.

Economists in the 19<sup>th</sup> century right up to the present are keen to present their domain as a science in the most impressive fashion possible. In all, the adoption of these strategies was a

grand public relations strategy. The alternative would have been the conduct of science as a community of investigators disciplined to adapt their theories based upon their success in producing desired and predictable outcomes. To the uninformed, the public relations value of neo-classical economics is fortified by the application of mathematical formulas and the assertion of strongly held prejudices as facts.

What is not widely known is that these now legendary economists, William Stanley Jevons, Leon Walras, Maria Edgeworth, Vilfredo Pareto, and others developed their theories by adapting equations from 19<sup>th</sup>-century physics that soon became obsolete. While the field of physics has progressed in fairly clear ways the field of economics generally did not.

The physical theory that the creators of neoclassical economics used as a template was developed as a response to the inability of Newtonian physics to account for the phenomena of heat, light and electricity. In 1847 German physicist Hermann von Helmholtz formulated the conservation of energy principle and postulated the existence of a field of conserved energy that fills all space and unifies these phenomena. Later physicists devised better explanations for electromagnetism and thermodynamics.

The strategy that the economists used was as simple as it was absurd, they substituted economic variables for physical variables. Utility (a measure of economic well-being) took the place of energy; the sum of utility and pricing replaced potential and kinetic energy. A number of well-known mathematicians and physicists told the economists that there was absolutely no basis for making these substitutions. But the economists ignored such criticisms and proceeded to claim that they had

transformed their field of study into a rigorously mathematical scientific discipline. In the adoption of mathematical techniques to model economic behavior, more often the economic behavior was adapted to the techniques rather than the techniques being adapted to the economic behavior.

Strangely enough, the origins of neoclassical economics in mid 19<sup>th</sup> century physics were forgotten. Following generations of mainstream economists accepted the claims that this theory as it posited its economic fictions, as it has applied mathematical techniques, and as it imitated early 19<sup>th</sup> century physics was thereby scientific. These curious claims explain why the theories used by mainstream economists are based upon on the following unscientific fictions.

One of these fictions is that the market system is a closed circular flow between production and consumption, with no inlets or outlets. Natural resources exist in a domain that is separate and distinct from a closed market system, and the economic value of these resources can be determined only by the utility and pricing dynamics that operate within this system. The natural resources are assumed to be infinite if only by the side assumption of the infinite replaceability of one resource and technology for another. It is also assumed that the environment has an infinite capacity to receive and contain both bulk and toxic wastes.

Neoclassical economics is also based on the assumption that market growth produces more happiness the more commodities are bought, that so called "marginal utilities" correspond to the prices paid. In fact, not even consumers in the developed world are happier by ever more market commodities. When scientific studies show that population satisfaction declines across

the first world as income and commodity consumption rise above a certain level, this message is not acknowledged by economists or by policy makers. Even an ordinary person might understand that an assumption that states that paid prices equals happiness is wrong. But instead the problem is ignored, because it does not fit into the neo-classical model.

Neo-classical economics also assumes that only wastes that cost private businesses money should be considered. As long as pollution and damages can be externalized onto others, it is "more efficient," even if it is supremely wasteful and harmful.

An extension is made in the assumption that global markets are thereby "productive and efficient." The global market system produces many times more waste than any economic order in history. The global fouling of the most basic means of human life, breathable air, water aquifers, ocean life-systems, and people's capacities to produce, are ignored in the economic models which business and governments use. These "externalities" are kept off the books by public as well as private neo-classical economic models.

Such evasions of reality as economic calculations are fatal in the long term, but not questioned. No principle of business or economics has been developed to distinguish between commodities that cause disease from goods that nurture people's lives. With 25 years of market de-regulation, disease epidemics like cancer that are traceable to commercially used carcinogens grow. But these too are ignored by government food-and-drug regulators, cancer institutes, and economists. Since these assumptions are false, then the neo-classical economic model loses its applicability and adequacy.

With the recently emerging obesity epidemic, an initiative by the UN Food and Agriculture Organization to inform consumers about healthy versus unhealthy foods was mounted in 2002, but was suppressed. A 2004 warning by the U.S. Surgeon-General that "the obesity epidemic is a bigger world problem than terrorism" was also ignored.

As a direct result a tragic macro-economic spiral unfolds. The more the global market system produces and consumes, the more it cumulatively depletes and destroys human and ecological life systems. But preventative and regulatory laws are rejected as "too costly" or as "interference in the free market."

Even the eminent U.N. Scientific Panel on Climate Change does not connect climate stabilization to the causal processes producing the industrial gases behind it. So new markets in "carbon trading" are prescribed, and the life-blind market mechanism causing the problem is extended further. The global spiral downward will continue as long as the public accepts it.

Even long-standing precautionary standards are abolished as governments hand over hazardous product testing to private-sector "clients". PR campaigns hold the course. "We must compete in the global market" and "business is doing all it can to give consumers what they want". Neoclassical economists tell us the market's "invisible hand" of competition ensures the "social optimum", and this is the grand narrative of our age. Locked into mathematical formulations, the economic myths and formulas appear rigorous and scientific until their collapse arrives to threaten our mere existence.

Credit to Robert Nadeau, John Mc Murty and other sources

# The Neo-Classical Economists have No Clothes

## Re-Imagining Economics