

Modern Economics as a Would-be Science*

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Since market-economic theory lacks predictive reliability, it is not scientific like physics. Nor has it ever really been “positive” like physics and chemistry. To become truly scientific, economic theory has to consider in detail the exosomatic physical aspects, including the ecological ones, of human activity, while medical science deals with the endosomatic physical aspects of the human organism.

The Earth is not, however, an organism (nor indeed is a market), and therefore, preserving wilderness will not suffice to solve the 21st-century problems caused by ecological degradation. Technological maintenance will also be required – and prudence when facing high-stakes risks in regard to which there is baffling scientific uncertainty. Some historical background to these theoretical points is given here.

Is market-economic theory scientific like physics? Many academic economists, especially those who liked to write algebraic equations, have thought so.¹ Opinions as to the extent to which it *can* be like a natural science were expressed in the German academic *Methodenstreit* of the late 19th and early 20th centuries.²

* Text of Kunda Datar Memorial Lecture delivered by Dr. Mark Lindley (Visiting Professor at Gujarat Vidyapith) at the Gokhale Institute of Politics and Economics, Pune, on March 22, 2013. Email: mirabene@yahoo.com.

1. Here are some illustrative snippets from a lecture delivered by Paul Samuelson (the most eminent American academic economist of the second half of the 20th century) when awarded in 1970 the Swedish Royal Bank’s Prize in Economic Science in Memory of Alfred Nobel: “[We praise] the followers of Galileo and Newton for taking the mathematical approach.... Often the physicist gets a better ... description of nature if he is able to formulate the observed laws by a maximum principle. Often the economist is able to get a better ... description of economic behaviour from the same device. Let me illustrate this by some very simple examples. Newton’s falling apple..... Let me illustrate the same thing in economics..... One of the pleasing things about science is that we do all climb towards the heavens on the shoulders of our predecessors. Economics, like physics has its heroes..... [L]et me recall the work I have done in formulating clearly and generalizing what is known in physics as LeChatelier’s Principle....”

For a survey of evidence that 20th-century economists suffered from physics-envy, see Philip Mirowski, *More Heat than Light: Economics as Social Physics, Physics as Nature’s Economics* (Cambridge University Press, 1989).

2. “*Streit*” (cognate with “strive”) means “struggle.” The categorical distinction in the *Methodenstreit* debate was between the *Naturwissenschaften* – the natural sciences – and the *Geisteswissenschaften*. “*Wissen*” (cognate with “wise”) is a verb meaning “to know” something objectively (whereas “*kennen*” means to be familiar with it subjectively); the suffix “-*schaft*” converts the word into a noun; the suffix “-*en*” makes it plural. “*Geist*” (cognate with “ghost”) means “spirit”. The *Geisteswissenschaften* would include theology, linguistics, history, psychology and so on, as well as sociology and market economics.