

Title: Economics, mathematics, ‘defect on reasoning’ and Chaos

Author: Vladimir Domingos Micheletti, Universidade Federal de Alagoas, Brazil

ABSTRACT

Celso Furtado, a Brazilian economist, on a newspaper’s article, comments about the contemporary at the post-graduate course in Cambridge University and tells that Amartya Sen, *On ethics & economics*, “pretends to fly very high, because he approaches the complex epistemological problem of rupture between conventional economics which grows upward to a social engineering and the value system which substratum is the ethic”. He also tells that “the book owns a British’s elegance and it is not easy for beginners”.

The paper examines the similarity between the linear and positive transformation of the utilities functions immanent to Neoclassic or Conventional Economic Theory and Marx’s resolution of the antagonism within the commodity (uneven and combined development) and also call attention: a) to Amartya Sen’s book - *On ethic & economics* – where the author, in an inelegance way, affirms that to think differently from the Conventional Economics (neoclassic) means to held defect on reasoning; b) to the (use and) abuse of mathematics (therefore the book carries on no mathematical formula) subjacent to the game theory arrangements (Lagrange function, Linear Programming) and others, to dissimulate the condition of this exuberant and dominant Economic Theory as contained into Marxist Economic Theory and; c) to the Chaos Theory (fractal geometry, strange attractors) as the ‘bridge’ between both Economics conceptions – apparently opposed to each other – in scientific research and/or Social Science.

Based on unconcluded antagonism within the commodity – use-value / utility = price – the criticized theory presents itself precluded to execute the linear and positive transformation needed to path from micro to macro, which is easily proposed by Karl Marx right at the beginning of his most known work: *Das Kapital*. Contained – as paraphrase of the Marxism - and precluded to develop itself (‘personal comparisons’ are the bypath to Marx), the Conventional Economics must abuse of the mathematics or depends on some mathematical sleight-of-hand to dissimulate this constraining situation.

The paper is finished with the ‘referential family’ as the ‘strange attractor’ (uncontrollable sequences of events) posing the harmony where the chaos or capital relations have established the empire.

vlamiche@ofm.com.br
Departamento de Economia
Universidade Federal de Alagoas
Brasil