## Book reviews

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JAROSLAV ZAPLETAL

## Autoorganics and Economics. A General Theory of Autoorganization in Economic Systems

Veda, Publishing House of Slovak Academy of Sciences, Bratislava 1996. 99 pages.

ISBN 80-224-0471-3.

One late afternoon in February someone knocked at the door of my office. When I opened, I faced an older unknown gentleman. He introduced himself as a philosopher X. Y. The name was familiar to me and I invited him to my office. He said that he knocked on my door almost at random, trying to find some faculty who was still at work. After we had exchanged some conversational trivialities, he presented his case: A friend of his, in fact his distant relative from Slovakia, published a book in Slovak. He would like to help him to promote the sale of the book in the Czech Republic.

He showed me a hardcover book of excellent graphical standard, published by the publishing house of the Slovak Academy of Sciences. The book cover and the title page were decorated with graphics by academic painter Dušan Skokňa. The pictures possessed some indisputable aesthetic values. The scientific editor of the book was Prof. Ing. Ladislav Andrášik, DrSc., and the reviewing editor Prof. Ing. Mikuláš Sedlák, CSc.

I browsed quickly through the book. In Contents I found some unusual constructions, like "Cybernetic mapping of autoorganic structure", or "Business contract: a proof of fourdimensionality". In the list of references one could recognise a distinguished, but a rather t o diversified family of authors. Among others one can find here: Aristoteles, A. Einstein, von Hayek, W. Heisenberg, J. M. Keynes, G. W. Leibnitz, A. Marshall, K. Marx, G. Orwell, von Weizsecker, H. A. Simon (3 times), J. Zapletal (7 times) and M. Zeleny (6 times). The book was issued as 3142nd publication of the publishing house.

Sales promotion is not what a typical university teacher like me is supposed to do, but I offered to write a review of the book. What follows is a fulfilment of my promise.

On p. 9 the "uthor states: "The goal of my many years of research was to find an analogous principle for economic systems as it holds in physics. I have in mind the conservation law of mass and energy which is a pillar supporting the exact knowledge in physics. The result was a discovery of conservation law of life which determines the behaviour and evolution of living systems such as to survive". Further in the book the author repeats many times that he founded autoorganics, a new discipline which describes autoorganization of living systems as a consequence of unavoidable and general performance of conservation law of life.

Another statement, repeated several times, is that the 20th century is a century of economic blunders which resulted in the decrease of potential living standard of citizens in many states. If autoorganics were known before 1917, the historical form of communist economy might not arise, Keynesian theory of employment, money and interest might not be presented as generally valid and there would be no need for the transformation of postcommunist states as there would have been no communist economies (p. 14).

The author discusses the role of mathematical modelling in economics. On p. 44 he studies conditions for the rise of a new entrepreneur. He says that the rise of a new entrepreneur depends on two factors: initial capital K and integral ability S, so that V = F(K,S), where V is a rise of a new entrepreneur and F some "substitution transformation function". The reviewer has a problem to find out what is the unit in which S is expressed and what are the values which V may take on. On p. 45 the author states: "I have tested the adequacy of many economico-mathematical models. Almost all are inadequate

or adequate for a narrow set of cases. The only adequate models are models describing material transportation problems, in which one operates with units of distance and units of mass that are assessed."

In several places the author studies the difference between living and non-living organisms. On p. 49 he considers a firm as a living organism. "The life of the organism depends mainly on property. The property alone decides on the vitality of the organism. When a subject (reviewers remark: one would expect here a firm or organism) is composed of a large number of owners and the shares of individual owners play negligible roles in the subjects existence conservation, then the organism composed of such subjects may be considered as a non-living system." As an illustration, the author mentions the property structure created in voucher privatisation in former Czechoslovakia. The privatised firms have many owners and are, in fact, non-living organisms.

On p. 53 the author investigates the problem of what is a unit of mass in living organisms. "As a unit of mass we consider a biological organism which independently, by its activities, draws its resources from nature. For man, we add also activities with respect to market, by which he obtains resources for his survival." On p. 57 one finds a statement that behaviour of a subject is influenced by four dimensions: knowledge, information, motivation and time. "The quantitative relations of these factors are automatically controlled by a feedback and the engine of the whole process is an endeavour of the subject to conserve its existence."

"This fourdimesionality may be verified on each business contract" says the author. Knowledge consists in the fact that you find the name and address of the supplier who is the bearer of the knowledge needed for materialisation of the contract. The contract also contains information about the object of the contract. Motivation is the profit from the contract and times there too, as a term of delivery or payment.

The paragraph 2.4.7 is on a computer model of subject behaviour. One can find here that "Model consists of 16 animals who try to find a way to a goal by random experiments. The way requires energy taken from a reservoir". There is no mention of software, hardware, or a reference to literature.

In Chapter 3.2 the author analyses the notion of sociogenesis. "Sociogenesis is one of the possibilities how autoorganizational structure materialised a survival of living systems. If there had been no possibility to survive as a relatively independent individual, there had been an association which provided to an individual subject in the group a higher chance to survive..." In Chapter 3.3 the author states that "The missing knowledge of autoorganics hit mostly the postsocialist countries in Central and Eastern Europe". He says that too dispersed property structure, which resulted from the transformation to a market economy, lead to the situation that the management, equipped with a new freedom to undertake, preferred pilfering and corruption, because bankruptcy has no personal consequences for managers. The first stage of the voucher privatisation has been a textbook example of ignoring the principle of conservation of existence. The idea that if state property becomes private property then all problems are solved is completely false.

In Chapter 3.9 the author writes that the communist economic system, which, except for small exceptions, became extinct all over the world, requires special attention. The principles of autoorganics may bring some new views. These might be very topical because the failures in the transformation of postsocialists countries generate in a great part of the population longing for the communist forms of economy. From the point of view of autoorganics, both Marxian economics and Gorbatschev style transformation are wrong. The reviewer would like to remark that the small exceptions from the general extinction of the communist economic system include China and Vietnam, with a population of 1.3 billion, a steady 10% growth, acceptable inflation and unemployment rates, positive trade balance

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and an unknown percentage of population longing for capitalist economy.

In Chapter 4 the author suggests that the potential applications of autoorganics are much broader than those analysed in the previous chapters of the book. These applications are recommended as potential research topics for future generations. More specifically, the autoorganics may be applied in artificial intelligence, psychotechnologies and in the theory of organisation and control. The principles of autoorganics are close to the organisation which was introduced by Tomas Bata in his ingenious entrepreneurial system.

In Conclusions the author repeats that he started to work on autoorganics in the middle 60's, with a goal to improve the degree of exactness of the economic knowledge in such a way that there are possibilities to control economic processes and predict future results. In the middle 80's he realised that the missing unifying principle is the principle of life conservation. On the basis of his discovery he was able to predict quite uniquely the failure of "perestrojka" in the former Soviet Union. In the period when there was a general enthusiasm for "perestrojka" the author had sent, via the USSR consulate in Bratislava, a letter to M. Gorbatshov, in which he pointed out the wrong conception of "perestrojka". He prognosticated that within two years the Soviet economy would suffer a calamity against which hundreds of natural catastrophes are only "mild spring winds".

The book ends with a graphically illustrated pyramidal scheme of principles that governs the existence of the universe: at the top there is a conservation of mass, one line below conservation of energy, then conservation of life and at the bottom of the pyramid, as most important, conservation of mankind.

The established publishing houses do not usually publish books possessing such a high degree of originality. On the other hand, the author is certainly entitled to state that mainstream economics failed to predict practically all noncontinuous changes in economic systems, that were followed in many cases by disastrous consequences. Instead of publishing another variant of a textbook on rather suspicious mainstream economics, the publishers simply produced an exemplum of a non-standard economic text.

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