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WHAT DO THE MARXIST "DIALECTICS OF COGNITION" AND LAKATOS'S "SOPHISTICATED FALSIFICATIONISM" HAVE IN COMMON?

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The article shows that Marxist dialectics and the social philosophy of science, whose influence was obvious in Imre Lakatos's early philosophical experiments, underwent substantial reinterpretation during the mature period of his creative activity. Being implicit heuristic sources of his "sophisticated falsificationism" or methodology of scientific research programs, they take on a conceptual form in which they lose the "excess" of authentic contents. Therefore, the philosophical views of "mature Lakatos" may be called close to the Marxist philosophy of science only with many important reservations and specifications.

Keywords: Marx, dialectics, Lakatos, "sophisticated falsificationism", "historicism", science, history of science, "scientific rationality"

ЧТО ОБЩЕГО МЕЖДУ МАРКСИСТСКОЙ «ДИАЛЕКТИКОЙ ПОЗНАНИЯ» И «УТОНЧЕННЫМ ФАЛЬСИФИКАЦИОНИЗМОМ» ЛАКАТОСА?

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В статье показано, что марксистская диалектика и социальная философия науки, влияние которых очевидно в ранних философских опытах Имре Лакатоса, в зрелом периоде его творчества претерпевают значительное переосмысление. Будучи неявными эвристическими источниками его «утонченного фальсификационизма» или методологии научных исследовательских программ, они облекаются в такую понятийную форму, в которой утрачивают «избыток» аутентичного содержания. Поэтому философские взгляды «зрелого Лакатоса» можно назвать близкими к марксистской философии науки только со многими важными оговорками и уточнениями.

Ключевые слова: Маркс, диалектика, Лакатос, «утонченный фальсификационизм», «историцизм», наука, история науки, «научная рациональность»

I. Lakatos began his philosophical career in Hungary when it was a satellite of the Soviet Union and the ruling (or claiming to rule) philosophical "paradigm" was Marxism–Leninism. Thanks to G. Lukács and the like thinkers, Marxism, no doubt, affected Lakatos. Researchers have long ago noted this influence on the formation of his philosophical intentions, expressed, primarily, in the lost dissertation "On the Sociology of Concept Building in the Natural Sciences"[1]. Later, when Lakatos, fleeing from repressions,

[1] In addition to the works specified in W. Lynch's article, let us also name [Ropolyi, 2002; Kvasz, 2002], and V. A. Bazhanov's series of studies [Bazhanov, 2008; Bazhanov, 2009a; Bazhanov, 2009b, Bazhanov, 2009c].

had to emigrate from Hungary and settled down at the London School of Economics, his commitment to Marxism in the philosophy of science yielded to sympathy with "critical rationalism" of K. Popper, whose ideas Lakatos developed creatively into the methodological concept of scientific research programs.

Some researchers, to whom, as I understand, Prof. W. Lynch belongs, think that an inseparable, although latent, "disguised" relationship exists between these two stages of Lakatos's creative evolution. The "Marxist roots" that fostered his interest in the history of science, which, as he put it, should be the "touchstone" of any relevant philosophy of science, allegedly did not wither even in London. These roots are the dialectics of cognition as a historical process of resolving contradictions and the consideration of this process in the social context, which predetermines both progressive and regressive trends in development. What sprouted from these roots conflicted with the positivistic philosophy of science but partly resonated with the ideas of "critical rationalists", who lacked sympathies with dialectics and "historicism." This created a "stress field" between Lakatos and "Popperians" in which the concept of "sophisticated falsificationism" did arise.

To what extent was this stress supported by the Marxist views of young Lakatos? W. Lynch holds that "Lakatos' notion of a dialectically-based fallibilism in science and mathematics remained central to Lakatos' thinking throughout his career", and V. A. Bazhanov concluded that the dialectical foundations of Lakatos's creative activity made him "a Trojan Horse in relation not only to postpositivism but also to the entire Anglo-American philosophy if we especially consider his merits in disseminating the historical method in the field of the philosophy of science in the West" [Bazhanov, 2008, p. 157]. From the account of M. Motterlini, who published correspondence between Feyerabend and Lakatos, the "methodological anarchist" P. Feyerabend ironically called Lakatos "a big bastard, a Pop-Hegelian philosopher born from a Popperian father and an Hegelian mother" [Motterlini, 2002, p. 23].

Allow me to specify my view on this problem. No doubt, the relict sympathies with Marxism also showed up in the mature period of Lakatos's creative work. However, being heuristic stimuli for the construction of his philosophical–methodological concept, they, as the concept developed, changed their contents so that they could be called Marxist only by a stretch of imagination.

In due time I called I. Lakatos the "Knight Ratio" [Porus, 1995]. He knightly served the ideal of rationalism, always calling out those who questioned or gave up on this ideal. In the beginning of his road, he served dialectical rationalism.

There is no reality more rational than the world of mathematical objects and judgments about them. This dates back to ancient Pythagoreans and was articulated by Galileo: "The book of nature is written in mathematical

language". Leibniz and Newton discovered a new horizon of applying mathematics to the adequate description of mechanical phenomena. The unification of mathematical modeling with the principles of empiricism underlay scientific rationality. However, as for mathematical research proper, where is its rationality?

Answering this question, Lakatos tried to combine the ideas of dialectics with the methodology of "critical rationalism". In line with it, the principle of rational research is the criticism of scientific judgments, from empirical statements to the basics of scientific theories. Lakatos saw a methodological prompt in dialectics: if mathematics is a science, then a mathematical study is subordinated to the principle of rational criticism, just like empirical natural science. Thereby he understood dialectics as a general theory of rational criticism.

In his doctoral dissertation [Lakatos, 1976], he showed that mathematical knowledge develops during the search for hypotheses and refutations and, in this sense, does not differ from similar processes in natural science. Can this process be called dialectical? It depends on what is understood by dialectics. K. Popper called to be careful with dialectics: the dialectical triad "thesis–antithesis–synthesis" has a methodological sense, because, in his opinion, it adds some valuable aspects to the method of trial and error, but the statement that contradictions reveal some truth leads to confusion and delusions [Popper, 1940]. Lakatos hearkened to this call.

His methodology of scientific research programs developed those "valuable aspects" by which the advancement of new hypotheses differed from the sorting of "samples". This concerned the strategy of scientific research, guided by a single principle: science develops, increasing the empirical contents of its theories, expanding and deepening the sphere of phenomena explained by them. Everything that facilitates this strategy is included into it, and everything that hinders it is rejected. Therefore, revealing a contradiction (finding a counterexample) does not entail escape from a good working research program but symptomizes the necessity to improve it for successful competition with other programs. If this task is not fulfilled, the program drops out of competition.

Dialectical logic, dating to Hegel and materialistically construed by Marx, considers a contradiction into which cognition runs as a necessary consequence that any specific form of cognizable reality develops through the origin and subsequent resolution of its inherent contradiction. Therefore, it is also objective, i.e., a logically correct expression of reality: the logic of thinking follows the development of reality.

Lakatos leaves this very substantial characteristic of the dialectics of Hegel and Marx off the stage, on which the action of his methodological concept unfolds. V. A. Bazhanov saw in this the "masking" of the dialectical basis, which allegedly supported this concept: "such maskings are typical of the style of reasoning of Lakatos as a scientist and political emigre, who

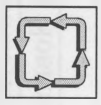
had to work in an environment that considered Marxist–Leninist ideas alien" [Bazhanov, 2009, p. 175]. This assumption is appropriate in a biographical study, where one has to find out the hidden motives and backgrounds of real actions. However, I would prefer to stay on the ground of comparative analysis of ideas, explicitly expressed in the texts of philosophers.

Lakatos's concept, like any other "theory of scientific rationality", risks to turn into a pure scheme of abstract "rationing" of a scientific study. Realizing this risk, he stepped decisively toward the history of science. W. Lynch sees the effect of G. Lukács's Marxist social philosophy in this step, which is a debatable hypothesis. In any case, it is clear that this step was an inevitable consequence of the main principle of his methodology. If the development of science happens in competition between scientific research programs, it is necessary to reveal the actual factors of this rivalry, which influence the choice of theories and methods, the processes of acknowledging or rejecting these or those basic ideas, and so on. It is clear that among these factors – in the real history of science – are not only those that correspond to the philosophical–methodological "theory of rationality" but also those that are generated by the sociocultural context. Hence is the difference between the "inner" and "outer" history of science. The former is subject to philosophical reconstruction (through the "theory of rationality"), and the latter is the responsibility of historians of science and culture. "A methodologist must treat the history of science not as a limitless reservoir of various forms and types of rationality but as a tamer who makes a beautiful but wild animal perform his commands; in addition, the spectator must have the illusion that the performance of commands reflects in the best possible way the natural essence of this animal" [Porus, 2008, p. 20].

The movement of the philosophy of science toward the history of science is risky in the following very important sense. Is it possible for them to close in so that the methodologist would have to acknowledge the historical variability of the criteria of scientific rationality? For example, to acknowledge "fallibilism" a self-usable principle? In other words, to dip the "theory of scientific rationality" into a sociocultural context and acknowledge its dependence on this context?

These questions can be generalized: to what boundaries can the historical method spread over the sphere of methodological analysis of science? Or: what significant changes in this sphere can its "historization" bring?

Lakatos – the Knight Ratio – did not cross his line of acceptable risk. He could not accommodate the claims of "historicists" (T. Kuhn, St. Toulmin, and others), which led to the "dissolution" of scientific rationality in contextualism and relativism. This left Toulmin perplexed and unable to understand why Lakatos considered him an antirationalist and relativist: "Far from the concern with praxis implying a species of 'anti-rationalism' in the philosophy of science, it represents a necessary middle way, by



which we can properly defend the claims of 'rationality' against both the narrowness of formal logicians and mathematicians, from which Lakatos was not finally exempt, and the exaggerations of relativist historians, such as the early Thomas Kuhn" [*Toulmin, 1976, p. 668*]. However, one thing is to state that the "middle way" exists, and the other is to walk it. Lakatos did not venture to do this.

The very existence of this way is an open problem, which I cannot discuss here. Can the establishment of "Marxist roots" of Lakatos's philosophical–methodological concept throw the illuminating light on this problem or, at least, become its heuristics? I doubt it. I think that it is important to see deep-lying conceptual differences under the surface of terminological similarities. However, similarities are also important and interesting for a historian of philosophy.

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