

## CONTEMPORARY SCIENCE STUDIES WITH OR WITHOUT HIDDEN MARXIST ROOTS?

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This article describes the two possible consequences of referring to the Marxist roots of modern research in science to which V. Lynch puts attention. First, referring to various Marxist viewpoints, whether they put an emphasis on reflecting reality or on its social construction process, can contribute to current discussions concerning the status of representation in science. Second, the Marxist legitimization of scientific theory competition protects from judgmental relativism in science that may arise in case of the recognition of their proliferation. Moreover, the appeal to the roots reveals the intersections between various scientific studies, and therefore serves as a condition for their possible constructive interaction.

**Keywords:** Marxism, scientific representations, relativism, historical epistemology

## ЕСТЬ ЛИ У СОВРЕМЕННЫХ ИССЛЕДОВАНИЙ НАУКИ СКРЫТЫЕ МАРКСИСТСКИЕ КОРНИ?\*

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В статье описываются два возможных следствия обращения к марксистским корням современных исследований науки, о которых пишет В. Линч. Во-первых, учет марксистских позиций, подчеркивающих значение отражения реальности или ее социального конструирования, может внести вклад в актуальные дискуссии по вопросу о статусе репрезентаций в науке. Во-вторых, марксистское обоснование конкуренции различных научных подходов избавляет от релятивизма, который может возникнуть в случае признания их пролиферации. Кроме того, внимание к истокам обнаруживает пересечения между различными исследованиями науки, а значит, служит условием их возможного конструктивного взаимодействия.

**Ключевые слова:** марксизм, научные репрезентации, релятивизм, историческая эпистемология

The article by Prof. W. Lynch “Imre Lakatos and the Inexhaustible Atom: The Hidden Marxist Roots of History and Philosophy of Science” focuses on the relationship between the Hungarian period of Lakatos and his subsequent ideas in the field of philosophy of science. The former were pretty clearly of Marxist nature, especially the missing 1947 Hungarian dissertation “On the Sociology of Concept Building in the Natural Sciences”. The latter are observed in relation to the works of Karl Popper, Paul Feyerabend, Thomas Kuhn and their studies of the development of scientific knowledge. At first glance, it may seem that the Lynch's

\* Статья подготовлена при поддержке РФФИ, проект № 18-011-00281 «Историческая эпистемология: теоретические основания и исследовательские перспективы».



article is mostly historiographical. In fact, it also scrupulously discusses important factors, affected the process of shaping the contemporary scientific research. Here, historiographic facticity explores not only sanity of modern philosophers of science and their unambiguous impression of Lakatos as internalist, reacting to the B. Hessen's externalism and the T. Kuhn's relativism. Drawing on the origins of the modern research of science, Prof. Lynch encourages the rethinking its current issues. In turn, I would like to briefly outline two complementary topical issues, which are implicitly presented in the Lynch's article. They receive a new stimulus for development thank to the ideas given in his work. Noteworthy, discovering Marxist origins is of important matter not only for the contemporary sociology of science but also for the historical epistemology.

## **The problem of scientific representations and elaboration of the terms “internalism – externalism”**

Scientific knowledge as a representation of scientific activity is connected to both the world existing independently of us, and social structures, which define how the knowledge of this world is constructed. Thus “external” can characterize both the society and its contradictions, which cause the appearance of scientific representations, as well as the represented reality itself. Accentuating one or another side forms either the position of social constructivism or vulgar materialism. In the latter case, a single representation overshadows the reality<sup>1</sup>. Prof. Lynch emphasizes that Lakatos considered “both the material determination of thought and the dialectic between social causes and scientific representations”. Lynch also quotes I. Hacking, who contends that “Lakatos sought ‘to provide a theory of objectivity without a representational theory of truth’”<sup>2</sup>. Therefore, the specified duality of the basis problematizes the concept of scientific representations. These two parts of the duality are: firstly, the material side of the reflected subject; secondly, the structures of society, which define the actor of cognition. Various Marxist viewpoints which put emphasis either

<sup>1</sup> Prof. Lynch emphasizes that vulgar materialism, unlike Marxism and fallibilism, equates reality (matter) to our current scientific conception of it. For the discussions about to the status of representations in sciences, see [Coopman, 2014].

<sup>2</sup> The production of knowledge, resulted in its alienation, rather than the reflection of reality and its representation as a socially distributing believe, serves for the description of scientific activity. For the production of scientific knowledge in this context see i.e. the ideas of Russian philosopher M.A. Rozov: “Cognition is not the reflection but, first of all, the construction, the construction of new types of activity, which is real or at the level of thought experiments <...> The term ‘reflection’ has another meaning here: reflection as description of activity that we create in co-authorship with the world” [Rozov, 2012, p. 123].



on reflection of reality or the process of its social construction, can both contribute to the current debate on the status of representation in science. In Marxism, partly followed by Lakatos, the fallibility, the changing process of disclosure of reality and the recognition of the inexhaustibility of reality itself discredit any attempts to follow a single ultimate description of reality. Similar attitude towards reality as an undefined characterizes contemporary historical epistemology. Investigating objects of the research at the stage of discovery, H. J. Reinberger calls them epistemic things. Such things present themselves in a “characteristic, irreducible vagueness. This vagueness is inevitable because, paradoxically, epistemic things embody what one does not yet know” [Reinberger, 1997, p. 28]. In the case of epistemic things, there is no priory relation between concept and its referent, reality is necessarily conceived as indefinite and inexhaustible. When Marxist ideas, mentioned by Lynch, complement these ideas, inexhaustibility as a feature of reality not only manifests itself at the stage of discovery but accompanies the development of science, serves as the condition of this development.

## The problem of relativism in science

W. Lynch mentions a well-known connection between Lakatos and Feyerabend and their shared interest towards dialectical philosophy of science influenced by Marxist ideas. Away from Marxist connotations, the idea of proliferation of scientific theories or multiple scientific perspectives [Lakatos, 1978, p. 29] can be construed as judgmental relativism, which proclaims equal legitimacy of different descriptions of reality<sup>3</sup>. Conversely, considering Marxist roots of these ideas, the preservation of different theories and the recognition of different approaches can be interpreted as a cause of the competition between them, a struggle, which supports the development of science. Hence, for a reason Feyerabend, as Lynch notes, criticizes the insufficient permeability for critics from the outside of the successful methodological program of Lakatos, betraying the position of fallibilism. Impossibility for the mutual criticism of Kuhn’s incommensurable paradigms but not the incommensurability of co-existing approaches, capable of enriching each other in the course of critical discussions, creates the danger of relativism. The dominance of a single scientific paradigm, its closeness to critic in this respect can be interpreted as ideological and supporting disparities of intellectual power<sup>4</sup>. The legiti-

<sup>3</sup> On the difference between epistemic and judgment relativism see [Lynch, Fuhrman, 1991, p. 236].

<sup>4</sup> On the relation between concept of ideology and the analysis of scientific knowledge see [Lynch, 1994]. One historical example of competition between different descriptions of scientific objects ones can find in the article of B. Latour [Latour, 1999].



mization of scientific theory competition protects from judgmental relativism and underscores the idea of inexhaustible reality that transcends any description<sup>5</sup>. Similarly, according to Lakatos, “the real history of science is always richer than its rational reconstruction”. This is why for mature Lakatos preservation of various approaches to reconstruction and the continued competition between them is necessary. And his work “History of Science and Its Rational Reconstructions” serves this purpose.

In conclusion, I would like to highlight two more lessons which we learn from the appeal to the Marxist thought. First lesson is the importance of the normative sometimes neglected by the contemporary social and historical studies of science, when they insist on the descriptive nature of their own research strategies. The normative considerations mean here the determination of the bases of one’s own position, distinguishing and limiting it from the others. Secondly, the reference to these origins reveals the intersections between various scientific studies, and therefore serves as a condition for their possible constructive interaction.

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<sup>5</sup> That is why contemporary sciences studies emphasize the importance of communication between different approaches in the evaluation and production of knowledge and the participation in these processes of various actors, including not professionals, interested outsiders. [Kasavin, 2017; Lynch, Fuhrman, 1991, p. 244–245].



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