Proletarian Science? The Case of Lysenko

Although this book addresses a topic quite unfamiliar to much of the Communist movement, Dominique Lecourt’s analysis of the theory that there are two types of sciences, one bourgeois, the other proletarian, which is based upon the work of Trofim D. Lysenko, provides some important political insights into the nature of class struggle in philosophy. These insights are valuable and relevant to current debates in the party building movement.

In the 1920s and 1930s a biologist named Trofim D. Lysenko advanced technical solutions to certain agricultural problems in the Soviet Union. From these technical solutions he developed a speculative theory to explain the nature of these innovations. This theory that Lysenko developed called “Michurin biology” was counter to the classical Mendelian genetic theory. The struggle between the two theories within Soviet science continued without resolution for almost two decades. However, with the intervention of the Soviet State in behalf of Lysenko in both the political and philosophical spheres, the theory of Lysenko won out. Although Lysenko’s theory was consecrated and emerged victorious at the meeting of the Academy of Agricultural Sciences in Moscow in 1948, the victory of Lysenko was not won on the basis of scientific proof in biology. Rather, his theory was shown to be more consistent with the official Soviet version of dialectical materialism, while the theory of the geneticists, with their invariant gene, was in contradiction with that same official version. A concomitant reason for the victory of the theory of Lysenko was the intervention of the Soviet State as Lysenko’s theory served its interest.

This interest served as the linkage propelling Lysenko’s speculative theory to that of a ‘science’. And since classes had been “eliminated” by Stalin in the 1936 Soviet Constitution, he was able to argue that bourgeois influences could only come from external forces by means of internal agents of foreign imperialism. This logic manifested itself in the sciences where any deviation from State doctrine or policy was an indication of foreign bourgeois influence. It then became an easy step for the State, based upon its political interests and its ‘version’ of the philosophy of dialectical materialism, to declare that opposing views were that of the bourgeoisie. Therefore there was a circular connection that tied and verified each of the elements: the official version of dialectical materialism, the interests of the State, the theory that there existed both “bourgeois” and “proletarian” sciences, and Lysenko’s biology.

I shall present here five major elements of the struggle over Lysenko’s views and how they combined to consolidate as State doctrine. The first thing to mention is that Lysenko made a number of technical innovations in agronomy which made possible an immediate and pronounced increase in the food supply of the USSR. This technical success was sorely needed in a time of acute agricultural problems, and his name and innovations were widely spread. This success served constantly to “verify” his speculative theory. The second element is the failure of the Mendelian genetic theory to provide immediate, practical, agricultural results. Based upon this “weakness” and the supposed incompatibility of genetics with the official Soviet version of dialectical materialism, genetics was characterized as a false theory, and therefore a “bourgeois theory.” Lecourt states: “Inversely, if a technique has proved more or less effective, the theory claiming to account for it, ill-founded as it may be, is immediately graced with the name science.” (p. 107) Against bourgeois genetics Lysenko posed his own “proletarian science” of biology.

The third element was political. Lysenko’s methods and innovations stressed (in fact depended upon) large scale, collective projects which was consistent with the economic policies of the Stalin period. The fourth element is also political, since the theory of the “two sciences” served as a means of controlling the intellectuals. By making divergent views from State policy errors of penetration of an imperialist conspiracy, the State could either compel silence or imprison those holding dissenting views. In either case the sanctity of the policies of the State remained intact and the State was able to either force ideological compliance on the part of its opponents or eliminate them. (Weren’t all dissenters agents of imperialism?) The fifth element is the official version of dialectical materialism which we will examine below.
The adoption of the "two sciences" theory was not some linear process where one event followed another, or just errors of socialist legality, or an error of the "cult of personality." Rather, the victory of the theory of the "two sciences" was a result of specific forces within a determinant conjuncture where the outcome was the result of class struggle.

In *Proletarian Science: The Case of Lysenko*, Dominique Lecourt provides an analysis not only of the scientific and biological issues involved in this struggle, but also the political interventions of the Soviet State and party. The examination of these historical events is presented by Lecourt in a readable and concise manner. A substantial aspect of this book is the presentation of the philosophical currents that underlined and maintained both the intervention of the State and the advancement of Lysenko's speculative theory as truth.

This examination of Lysenko and his charlatan theory of "two sciences" cannot be viewed as just some obscure debate that should be read only for historical interest. A constant theme in Lecourt's book is the immediate and topical importance of the whole question of Lysenko: to rectify a problem you must first bring it out into the open and examine it. Even though Lysenko had a disastrous effect on the Soviet Union for decades, effects which are still being felt, this episode in Soviet history has been theoretically and politically buried. But the official version of dialectical materialism which supported his views lives on. Louis Althusser, in the introduction to the book, speaks of Lenin:

...[Lenin] warned that the labor movement must analyse and understand its past, not out of a love of historical study but for political reasons related to the present itself: so that it will not be fighting in the dark. You must go to the root of things, analyse the reasons for an error in order to understand it properly and thus really be able to rectify it: if you do not, then even in the most favorable of cases you will only put it right in part, and a superficial part at that. Lenin had a quite different idea of putting things right from this notion of a circumstantial 'rectification'. In pleading for the primacy of analysis, in arguing the need for the labor movement to understand its own history, what it had done, where it had succeeded and where it had failed, he was pleading for the primacy of Marxist politics." (p. 9)

The official Soviet version of dialectical materialism has not been rectified, and Lecourt begins that process of rectification with a perceptive examination of it. Lecourt describes this dogmatic version of dialectical materialism as an "ontological" version which is defined in the quote below. The major proponent of this version was A. A. Bogdanov whom Lenin severely criticized in *Materialism and Empirico-Criticism* and characterized as "Mach's Russian disciple." Bogdanovism was later incorporated in the work of Stalin, especially his *Dialectical and Historical Materialism*. Lecourt describes this ontological version by comparing the philosophy of Lenin with Stalin:

In his notes "On the Question of Dialectics" (1915), Lenin wrote, summarizing once again the lessons he had drawn from reading Hegel: "The condition for the knowledge of all processes of the world in their 'self-movement', in their spontaneous development, in their real life, is the knowledge of them as a unity of opposites. Development is the 'struggle of opposites.'" (LCW, V.38, p. 358) Stalin on the other hand wrote: "The dialectical method of apprehending nature... regards the phenomena of nature as being in constant movement and undergoing constant change, and the development of nature as the result of the interaction of opposed forces in nature." ("Problems of Leninism")

Here are two apparently concordant texts: Stalin’s fidelity to Lenin’s philosophical positions seems indubitable at first glance. Yet a closer examination reveals that the passage from Stalin makes a slide from one conception of dialectical materialism—the critical conception of the practice of its theses—to another: the ontological conception of its supposed ‘laws’.

What Lenin stated as a 'condition for knowledge' of the processes of the world has been turned by Stalin into a law of the world itself, inscribing in being the (philosophical) presupposition of its knowledge. The fundamental dialectical thesis of the unity of opposites, whose function, according to Lenin, is to enable the process of the scientific knowledge of nature (and society) to overcome the idealist mystifications that tend to fix its results in so many 'absolutes', which enables knowledge to advance, has become in Stalin a law of nature itself (and society) which human knowledge only has to 'mirror' to be 'valid'.

In other words, a dialectical philosophical thesis which opens to objective knowledge the field of its own investigation according to its own modalities, is turned by the 'Stalinist' ontological interpretation of dialectical materialism into a general 'law' which is supposed to state the universal form of the laws established by the sciences of nature. It is called a 'law' ('law of dialectics') because it is held to be theoretically homogeneous with the laws stated by the sciences, and is conceived with them as the model. In return, each of these laws—notably those of historical materialism—is supposed to give a 'concrete' content to this form via a 'based in its own object; each actual science thus presenting itself as the application to a special domain of the general 'law'. In short, the thesis governing the contradictory movement of the appropriation of being thought on the basis of their respective movements is transformed, in these circumstances, into a law of movement of being which, according to an empiricist conception of knowledge, will be uncovered by reflection in thought. (p. 107)

Theory, which for Lenin, was profoundly active and critical, became under Stalin simply passive and reflective.

Althusser sums up some of the results of this Stalinian version of Marxism in his introduction:

The profoundly conformist, apologetic function of this version, which excels in 'glorifying the existing state of affairs' and in transforming its practitioners into headmasters of the school of theoretical production, serves the existing political practices too well to be allowed to disappear: they 'need' it. In the best idealist tradition, which restricts itself to the work of 'interpreting' (Marx), it provides these practices in advance (that is, after the event) with a higher guarantee and justification for every political decision of the hour, since its role is simply to play their servant. (p. 15)

The official Soviet version of dialectical materialism served as a major force not only in the false theory of the "two sciences," but also as a verification of the economist and technical policies of Stalin. The results were dramatic. Numerous geneticists were killed, imprisoned, or otherwise silenced, scientific investigation was frozen, Soviet agricultural development was severely retarded. Results favorable to the State's doctrine and policy also
materialized: servile and docile intellectuals were formed, an agricultural system that promoted and justified the economist policy of forced collectivization was created, and a “science” that formed to, and was subservient to, State doctrine was promulgated to insure compliance with it.

One final note. Lecourt repeatedly points out that the official version of dialectical materialism was not a brief diversion in the development of Marxism-Leninism, but rather the opposite, a consolidation of non-Marxist views within Marxism-Leninism itself. This dogmatic and ontological version has incorporated itself within the theory and philosophy of Marxism—Leninism and has served as a real limitation on its development. Lecourt’s book represents a strong and positive step forward by bringing this issue into the open for closer examination through his discussion of its effects on Soviet biology and philosophy.

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realities of the class struggle. Thus, would they gather political knowledge, and many of them would be drawn into broader political movements and the most advanced into the political vanguard.

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4 Shaffer, 1979, p. 96.

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20. An increase in the commuter’s allowance to 100 zlotys from 40, with a supplemental benefit on separation.
21. A day of rest on Saturday. Workers in the brigade system or round-the-clock jobs as to be compensated for the loss of free Saturdays with increased leave or other paid time off.

NOTES


3 Lenin, Collected Works, vol. 29, p. 175.

5 Ibid.
7 Dziewanowski, p. 158.
8 Quoted in Bethell, p. 38.
9 Quoted Ibid., at 36.
10 Dziewanowski, p. 254.
11 Bethell, p. 209.
13 Bethell, pp. 218-19.
14 Bethell, p. 233.
15 de Weydenthal, p. 133.
16 Lane and Kolankiewicz, p. 313.
17 de Weydenthal, p. 144.
18 Lane and Kolankiewicz, p. 316.
19 de Weydenthal, pp. 147-48.
22 Lenin, Collected Works, vol. 27, pp. 333-34.
23 Ibid., vol. 32, p. 84.
24 Brus, p. 89.
26 Ibid., p. 149.
28 Ibid., vol. 29, p. 381.
31 Ibid., vol. 33, p. 288.
32 Ibid., vol. 32, p. 25.
33 Ibid., vol. 33, p. 186.
34 Ibid., vol. 32, p. 388.
36 Ibid.
38 Guardian, February 27, 1980.
41 Seweryn A. Ozdowski, “Polish Industrial Enterprise—The Legal Model and Operational Reality,” Critique.
42 Quoted in Green, p. 86.
43 de Weydenthal, p. 147.
47 Ibid., p. 50.
48 Ozdowski, p. 58.
49 Dziewanowski, p. 317.
51 Quoted in New International Review (Summer 1980).
52 Brus, p. 113.
53 Ibid., pp. 113-14.
55 Ibid., p. 45.
56 Ibid., p. 8.