Lecture four: Marxism, history and the science of perspective

Part 1

By David North
14 September 2005

“The course of human history is strongly influenced by the growth of human knowledge.
“We cannot predict, by rational or scientific methods, the future growth of our scientific knowledge.
“We cannot, therefore, predict the future course of human history.
“This means that we must reject the possibility of a theoretical history; that is to say, of a historical social science that would correspond to theoretical physics. There can be no scientific theory of historical development serving as a basis for historical prediction.
“The fundamental aim of historicist methods is therefore misconceived, and historicism collapses.”[2]

Popper’s criticism is thoroughly idealist: the basis of historical development, he argues, is thought and knowledge; and since we cannot know today what we will know in either a week, a month, a year or even longer, historical prediction is impossible.

Popper’s idealist conception of history fails to consider the question of the historical origins of thought and knowledge. Popper’s attempt to invoke the limits of knowledge as an absolute barrier to scientific history fails to the extent that it can be shown that the growth of human knowledge is itself a product of historical development and subject to its laws. The foundation of human history is to be found not in the growth of knowledge, but in the development of labor—the essential and primary ontological category of social being. I mean this in the sense indicated by Engels—that the emergence of the human species, the growth of the human brain, and the development of specifically human forms of consciousness are the outcome of the evolution of labor.

The establishment of the ontological primacy of labor served in the work of Marx as the foundation of the materialist conception of history, which provides an explanation of the process of social transformation that is not dependent upon—although, of course, never completely independent of—consciousness. Its identification of the interaction of the relations of production—into which men enter independently of their consciousness—and the material forces of production can be shown to retain validity over a significant expanse of historical time during which, one can safely assume, man’s knowledge grew.

What provides the essential impulse for historical change is not the scale or level of knowledge in itself, but the dialectical interaction of the productive forces and social relations of production, which constitute in their unity and conflict the economic foundations of society.

Returning to Popper, it is not clear what he means when he says that historical prediction is impossible because we do not know what we will know tomorrow. One interpretation of this axiom is that the acquisition of some new form or type of knowledge might so radically alter the human condition as to move mankind upon some new and previously unimagined trajectory of social development, throwing all predictions out the window.
But what could this be? Let us imagine something truly spectacular: the sudden discovery of a technology that increases overnight the productivity of mankind by a factor of 1,000. However, even in such an extraordinary case, the theoretical framework of Marxism would not be obliterated. The hitherto unimaginable growth in the power of the productive forces would in some massive way impact upon the existing property relations. Moreover, as always under capitalism, the uses and impact of the advances in knowledge and technique would be conditioned by the needs and interests of the capitalist market.

Let us consider another possible meaning of Popper’s axiom: that new knowledge will invalidate historical materialism as a theory of man’s socio-economic development. If we admit the possibility that the subsequent growth of knowledge will demonstrate the inadequacy of historical materialism, that would imply that it had been superseded by a theory which made possible a more profound insight into the nature of historical development. If this new theory were to demonstrate that Marx’s emphasis on the socio-economic foundations of society was inadequate or incorrect, it would do so by bringing into light another, previously undetected impulse of historical development.

In other words, the expansion of knowledge would not make historical prediction impossible. Rather, it should make predictions of an even more profound, exhaustive and precise character possible. The growth of knowledge—which Popper makes the touchstone of his case against Marx—is far more easily turned against Popper himself.

In the course of his argument, Popper is compelled to acknowledge that “historicism,” i.e., Marxism, does establish that there are “trends or tendencies” in social change whose “existence can hardly be questioned...” But, he insists, “trends are not laws.” A law is timeless, universally valid for all times and conditions. A trend or tendency, on the other hand, though it may have persisted “for hundreds or thousands of years may change within a decade, or even more rapidly than that... It is important to point out that laws and trends are radically different things.”[3]

On the basis of this argument, it would be possible for Popper to argue that the unity and conflict between the productive forces and social relations, though it has persisted over several thousand years of human history, is merely a trend. The same could be said of the class struggle as a whole. Though it may well be true that the class struggle has played a key role in history for five thousand years, that may not be true in the future and so the class struggle is merely a tendency.

The positing of an absolute distinction between law and trend is an exercise in logical metaphysics, which violates the nature of a complex social reality. The vast heterogeneity of social phenomena, in which millions of individuals consciously pursue what they perceive, correctly or incorrectly, to be in their own interests, produces a situation in which laws “can only fulfill themselves in the real world as tendencies, and necessities only in the tangle of opposing forces, only in a mediation that takes place by way of endless accidents.”[4]

The ultimate basis of Popper’s rejection of Marxism (which, with all sorts of minor variations, is widely shared) is the conception that there are simply too many factors, too many interactions, too many unanticipated variables in human behavior. How can a deterministic view of human society be reconciled with the undeniable social fact that crazy things, coming in from way out of left field, do happen? There are just too many Texas Book Depositories and Dealey Plazas out there to allow us to make predictions with the degree of accuracy demanded by real science. That is why, to use the late Sir Popper’s words, “the social sciences do not as yet seem to have found their Galileo.”[5]

Putting aside for another day the complex problems of the relation between accident and necessity, it must be said that history shares with many other sciences the impossibility of making absolute predictions about future events. Meteorology is a science, but its practitioners cannot guarantee the accuracy of their forecasts for tomorrow, let alone next week. While it is likely that forecasting capabilities will continue to improve, it is unlikely that absolute predictability will be achieved. Nevertheless, even if meteorologists cannot predict whether the barbecue we plan to hold in our garden next week will occur under cloudless skies as planned, their ability to analyze weather patterns and anticipate climatic trends plays a critical and indispensable role in innumerable aspects of socio-economic life. Predictability encounters limits as well in the sciences of biology, astronomy and geology. As explained by Nobel physicist Steven Weinberg:

“Even a very simple system can exhibit a phenomenon known as chaos that defeats our efforts to predict the system’s future. A chaotic system is one in which nearly identical initial conditions can lead after a while to entirely different outcomes. The possibility of chaos in simple systems has actually been known since the beginning of the century; the mathematician and physicist Henri Poincaré showed then that chaos can develop even in a system as simple as a solar system with only two planets. The dark gaps in the rings of Saturn have been understood for many years to occur at just those positions in the ring from which any orbiting particles would be ejected by their chaotic motion. What is new and exciting about the study of chaos is not the discovery that chaos exists but that certain kinds of chaos exhibit some nearly universal properties that can be analyzed mathematically.

“The existence of chaos does not mean that the behavior of a system like Saturn’s rings is somehow not completely determined by the laws of motion and gravitation and its initial conditions, but only that as a practical matter we can not calculate how some things (such as particle orbits in the dark gaps in Saturn’s rings) evolve. To put this a little more precisely: the presence of chaos in a system means that for any given accuracy with which we specify the initial conditions, there will eventually come a time at which we lose all ability to predict how the system will behave... In other words, the discovery of chaos did not abolish the determinism of pre-quantum physics, but it did force us to be a bit more careful in saying what we mean by this determinism. Quantum mechanics is not deterministic in the same sense as Newtonian mechanics; Heisenberg’s uncertainty principle warns us that we cannot measure the position and velocity of a particle precisely at the same time, and, even if we make all the measurements that are possible at one time, we can predict only probabilities about the results of experiments at any later time. Nevertheless, we shall see that even in quantum physics there is still a sense in which the behavior of any physical system is completely determined by the initial conditions and the laws of nature.”[6]

The scientific character of Marxism does not depend on its ability to predict tomorrow’s headlines on the front page of the New York Times. Those who seek that type of prediction should consult an astrologer. Rather, Marxism, as a method of analysis and materialist world outlook, has uncovered laws that govern socio-economic and political processes. Knowledge of these laws discloses trends and tendencies upon which substantial historical “predictions” can be based, and which allow the possibility of intervening consciously in a manner that may produce an outcome favorable to the working class.

Popper’s assault on the legitimacy of Marxism, and his rejection of the possibility of historical prediction, in this sense fails the most crucial test of all: that of concrete historical experience. The development of historical materialism marked a massive leap in the understanding of human society, an advance in scientific social theory that imparted to man’s social practice, first and foremost in the sphere of politics, an unprecedented level of historical self-consciousness. To a degree previously unattainable, the disclosure of the laws of socio-economic development allowed man to locate his own practice in an objective process of historical causality. Prophecy was replaced by the science of political perspective.
To continue

Notes:

To contact the WSWS and the Socialist Equality Party visit:

http://www.wsws.org