Recently the number of Marx’s works has significantly increased on publishers’ lists in the US. Especially prominent are discussion of Marx as the founder of ecology. J. B. Foster’s Book *Marx’s Ecology* (2000) is in this respect particularly noteworthy. The central theses of the book are: the author’s interpretation of Marx’s so-called positivism and the explanation of the original anti-mechanistic and historical features of Marx’s materialism. In light of these two theses, I offer a comparison with my article ―Marksova koncepcija znanosti kao prirodne znanosti o čovjeku‖ (1969) (―Marx’s Conception of Science as Natural Science of Human Beings‖) and draw out significant similarities. I conclude that if we earlier missed an opportunity to base ecology on such foundations, we should not pass up the same opportunity after the appearance of Foster’s book.

**Key words:** Marx, materialism, ecology, natural science, science of human nature, comparison.

**INTRODUCTION**

In the journal *Green Left Weekly*, in 2009, Simon Butler [1] notes that the more capitalist economy was failing, the more attention publishers devoted to Marx’s works. It is clear, he adds, that the market cannot solve the problems of exploitation, war, hunger and poverty—especially when, as I hold, it is governed by a merciless struggle for profit. Other authors, besides Butler, turn to Marx’s recent years. The work of the American sociologist J. B. Foster is especially noteworthy in this respect and in particular his book *Marx’s Ecology* [2].

However, in reading his book and discovering its foundations, I cannot neglect an old article of mine from 1969 entitled, “Marksova koncepcija znanosti kao prirodne znanosti o čovjeku“ [3] (“Marx’s Conception of Science as Natural Science of Human Beings”). In it, I put forward and develop, in light of similar considerations as Foster, the thesis that Marx is in fact a pioneer of ecology. His ecology is, however, not anti-rationalist and idealist in emphasizing so-called ecological values, when “real historical-material objects” disappear [2]. Foster firmly contends that
Marx’s ecological views emerge from his materialism (VIII).

Comparing the foundations of Foster’s book with the aforementioned article, I note some striking similarities. Let me try to bring them out in what follows.

Foster starts with a citation from Marx’s Grundrisse, and my article starts with two citations from Marx’s Economic and Philosophic Manuscripts of 1844. All of them reveal the same aim: to show what real historical materialism is, in contrast to a mechanistic-scientistic materialism and also in contrast to a Heideggerian negativist antiscientism. Another aim is to reveal Marx’s original interpretation of the “metabolic relation” that is, the relationship between nature and humanity. This is only possible if beneath everything-life, nature and science-we postulate an original materialism.

This is why Foster puts Marx’s aforementioned citation at the head of his book: “It is not the unity of living and active humanity with the natural, inorganic conditions of their metabolic exchange with nature, and hence their appreciation of nature, which requires explanation or is the result of a historic process, but rather the separation between these inorganic conditions of human existence and this active existence, a separation which is completely posited only in the relation of wage labor and capital” [2]. Later, in 2010, Foster and B. Clark argue that the “problem of nature” is the problem of capital [4].

In my article, the introductory citations show that Marx correctly discerns the order of nature, human relations to it, science and history. At the same time, he shows that capital is the chief culprit for the broken relations between nature and human beings. The citations are the following: “A different basis for life and for science—that is, from the outset, a lie”. “Natural science will later equally be a science of human beings, just as the science of human beings will incorporate natural science; it will all be one science” [5].

SCIENTISM AND SCIENCE

a) Foster is especially concerned to show that Marx does not hold a positivistic and scientistic conception of science. In pursuing this goal, he shows Marx’s clear rejection of earlier mechanistic interpretation of materialism, despite the fact that he remained a materialist. Foster also emphasizes Marx’s differentiation from Comte’s positivism—in contrast to the Frankfurt Marxists who are fiercely opposed to Marx’s alleged positivism. All this shows how important it is to understand the proper Marxist approach to the objects of nature and natural science [2].

To illuminate Marx’s rejection of mechanistic materialism, Foster seeks to reinterpret the 17th century notion of “dominating nature” (VIII), which does not lead Marx to “Prometheism,” that is, some sort of domination over nature and a utilitarian anthropocentrism. Rather, Marx recognizes the fundamental features of the interaction between human beings and nature—in the sense of, as Marx called it, “the metabolic relation” [6-7]. This gives the sciences a corresponding higher status—as Foster and Clark also emphasize in describing the need for establishing a social order [4].

To understand this, it is necessary to understand Marx’s specific brand of materialism, which is historical materialism. That is why we first have to analyze the notion of materialism.

b) In my article, I stress that Marx’s view of changing hereditary conditions
clearly contains a rejection of a scientistic understanding that sees science as a positive instrument in exploiting the world [3]. Part of this is overestimating the importance of the natural sciences at the expense of the so-called humanistic sciences. This is Comte’s positivism, which Marx explicitly rejects, for example in *The Capital* [3,8]. This is especially evident in his rejection of utilitarianism, which he takes to be the starting point of every positivism. The utilitarian concept of “immediate returns” is an assumption that leads to intensified alienation. That is why in the *Economic and Philosphic Manuscripts of 1844* Marx devotes himself to explaining the sheer exploitation of nature and humanity [3]. According to Marx, to think of returns is in fact alienation [5]. For Marx, positive science is something entirely different.

This is also evident from his equally sharp opposition to expressly anti-scientific views, which prevent science from participating in change. In the 20th century, this is exemplified by ontologistic philosophy [3], which is nothing but a renewed idealist critique of science that dates back to the 19th century. According to L. Geymonat, Marx is expressly opposed to the latter, calling it “metaphysical absolutism” [3,9].

An ever increasing development of science [3], including the notorious natural sciences, which participate nonetheless in the growth of civilization, leads Marx to accept that science prepares “human emancipation”-despite the fact that by introducing the division of labor it deepens human alienation [3,5]. In light of this, he adopts the view that the natural sciences are a fundamental participant in the production of life by means of labor. For Marx, they play the role of an objectual confirmation of human beings without which humanization and historization of the world would be impossible [3]. That is why the natural sciences are the foundations of human science [3,5]. The natural sciences are a need and consequence of human sensory activity—which is in fact the emergence of nature in human history [3,5]. This is why he calls it historical nature [3,5]—and only that is real nature, “anthropological nature” [5]. As an agent of production, natural science humanizes nature; that is why it is a science of human beings. The object of this science—the natural science of human beings, that is, of sensory consciousness and sensory need—is the object of natural science of human beings, and nature is the object of the science of human beings. Positive science, which Marx mentions, is the science of human beings as products of “practical human self-activity” [3,5]. All conflicts that appear between scientism and anti-science, natural and humanistic science, civilization and culture, city and village, the allegedly developed and the allegedly backward and so on, are only fictitiously eliminated by instituting mutually inconsistent norms. These conflicts are overcome only through the immediate production of life. All therapies beyond such production, to paraphrase Marx, are only the conceits of a consciousness which imagines that it can do more than is possible. It is not enough to have an is-ought sensibility; a real affirmation of an objectual human being is necessary—a being which through its objectness sets free its natural and therefore human capacities [3]. The only answer lies in action-in universal and productive action which is real, that is, positive science, to the extent to which it bespeaks humanity. This means that science collaborates in bringing about a change in circumstances, be it in its alienated or in its unalienated form. And as long as human beings produce their lives, there will be a latent risk of a separation of their consciousness and their objectness [3].

Evidently, Marx firmly insists on the inseparability of science from the process
which is the relationship between human beings and nature. Equally unequivocally, he holds that there is no divide and no irreconcilable difference between natural and humanistic sciences. To repeat: natural science is a science of human beings, and the science of human beings incorporates natural science.

Thus Marx speaks of a metabolic divide between human beings and nature which is deepened by capital. However he does not speak of a divide between the natural and the so-called humanistic sciences; to the contrary, he unites them, because he proceeds from a decisive materialism.

Although there have been, on our intellectual scene, calls to unify all sciences, indeed as early as 1978 [10], Marx’s line of thought has been neglected under the influence of criticisms of Marx’s alleged positivism by the Frankfurt Marxists and also of Heidegger’s connection of science and metaphysics. Evidence of this influence can be found in a recent program on HRT (Croatian Radiotelevision) entitled, “Pogledi” (“Viewpoints”) on social scientific and humanistic perspectives on science. The program discussed the Sokal affair (1996)-the case of an American mathematician and physicist critical of postmodernism who accused it of incorrect use of scientific and mathematical terms. (For instance, he rightly criticized Julia Kristeva who, without any argument, claimed that poetic language could be understood in terms of the “cardinality of the continuum” [11]. Sokal is lambasted on the program-in the name of the humanistic sciences. In light of these observations, it is understandable that I now turn to a topic that Foster examines in great detail: Marx’s materialism.

MARX'S MATERIALISM

a) We can characterize Foster’s main task as that of showing what Marx’s materialism really consists in. He firsts insists on Marx’s transformation of mechanistic materialism into the Epicurean tradition in which much emphasis is placed on freedom [2]. Foster claims that Marx is really interested in “practical materialism” in a generally materialist conception of nature and science. Such practical materialism finds in its view of nature an important foundation for a conception of human freedom [1]. In contrast to Hegel’s idealism, Marx’s dialectical view of the world is contained in a transformation of the world and with it a transformation of ourselves by the unmasking of alienation (4-8). He thus turns materialism into a practical stance by tying it to a materialist conception of nature. That is why he holds that materialism is really part of a process of natural history (5). Hence, it is inseparable from the natural and physical sciences.

For this reason, Foster seeks to show in much of his book—especially in sections (21-66)—the strengthening of materialism from Epicurus and Lucretius all the way to Marx. This development becomes resolute with the rejection of an Epicurean and Christian synthesis, especially prominent in Gassendi in the 17th century (41), by the introduction of a materialism without God (46) and without teleology (48).

Foster considers all philosophers in this time period who have such an understanding of nature and human beings, from Bruno in the 16th century (28), Bacon (33, 40-41, 48) and Vico (47), to various doctors and scientists, such as Charlton, Boyle and Newton (42, 44). He mentions Hume (47), the Encyclopedists (24, 48), and even Kant, who, in place of Epicurean coincidence introduces “necessary law.” Of
the 19th century thinkers, he especially focuses on Darwin (21, 29-30) and the biologists Lawrence (28) and Gallo (29), and he mentions Hegel who in his Philosophy of History notes that Epicurus’s physics is the principle of modern physics (50).

Unsurprisingly, he spends most of his time on Marx’s dissertation on Epicurus (52-65). He emphasizes that Marx sees Epicurus as opposed to the determinism of Democritus’s physics and to teleological principles of religion [2,12]. That is because Epicurus advocates a conception of the possible [2]. This is very important because Marx comes close to a modern understanding of possibility that is later introduced by N. Abbagnano against all metaphysicians, including Heidegger [13].

It is evident that we can say, with Foster, that Marx has internalized Epicurus’s anti-mechanism [2,14] much more than Hegel’s dialectic [2]. This view is simultaneously a naturalism and a humanism (59) which emerges from Epicurus’s perception of the illusions of alienation [2,12].

However, Foster notes that Marx moves towards materialism even more because of the political and economic situation of his time in Germany, France and England [2].

c) In my article from 1969, I emphasize that, while rejecting any form of teleology, Marx opposes any speculation about and mystification of consciousness materialist grounds [3,5]. His starting assumption is the real individual and his life process which can be discovered only on empirical grounds [3,5]. Human life is thus produced through labor [3]. That is why the world of objects and objectual being cannot be denied. And that is also why material and spiritual culture cannot be separated so as to impose the dominance of the latter. We need real confirmation of an objectual human being, and not an empty appeal to a bare is-ought (682). According to Marx, there is no humanization or historization of the world without a confirmation of the objectness of human beings (681). To be real agents of their history, human beings have to properly integrate the past. Otherwise they cannot have an appropriate vision of the future—which they can achieve only through a continual study of history [5], in particular the history of production and exchange.

In Foster’s reading of Marx, Marx’s views on science and materialism form the basis of his views on ecology—a term that in Marx’s time had not even been coined yet, as was pointed out in 2005 [15]. Foster develops his reading by confronting five theses of extant criticisms of Marx. The criticisms are:

- That Marx’s views don’t systematically cohere with the majority of his corpus, as argued by D. Goldblatt [7].
- That ecological views are inconsistent with Marx’s earlier critique of alienation and are less evident in later works.
- That Marx misdirected his account of the exploitation of nature by failing to include it in his value theory and by adopting it despite his Promethean views, which are really pro-technology and anti-ecology (10).
- That on Marx’s view, capitalist technology and economic development will solve all problems, so that future societies will live in plentiful conditions and will not need an ecological consciousness [16].
- That Marx had little interest in questions of science or the effects of technology on the environment [17].

Foster rejects all these theses and shows Marx’s anticipation of the significance of ecology. (The relevant chapters are 4. The Materialist Conception of History, pp. 105-141, 5. The Metabolism of Nature and...
All this could be addressed in a separate paper.

I should add, however, that in my article from 1969, I indicated that Marx is concerned with problems that much later are thought of as ecological problems. At the beginning, I note that changing “the hereditary conditions always and everywhere faces the risks of two latent alternatives: to either preserve the existing creatures or to destroy them completely. A realization of the first alternative would mean a complete failure to change the hereditary conditions, whereas a realization of the second alternative would jeopardize the survival of civilization itself. However, Marx holds that human beings seek to change the hereditary conditions not for its own sake but to preserve civilization” [3,18].

CONCLUSION

In concluding, we should note again that on our intellectual scene, there was neither then, nor is there now, any interest in news about Marx, and so not even news about an ecological left. But even though we missed an opportunity then, it would be unforgivable, after Foster, to miss that opportunity again.

REFERENCES


