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### Embroiding Nature and History: The Philosophy of Praxis and the Challenges of the Present

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## REVIEW

# Embroiding Nature and History: The Philosophy of Praxis and the Challenges of the Present

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*The Philosophy of Praxis*, by Andrew Feenberg, London: Verso, 2014, 304 pp., £60.00 (Hardback), £16.99 (Paperback).

It is not easy to gauge the relevance of the Marxist tradition in current studies in science and technology. The Marxian heritage is lively and strong, also thanks to continuous evolution which made it able to traverse a number of intellectual waves, including structuralism, post-structuralism, the linguistic turn and, more recently, the so-called ontological turn and the resurgence of vitalisms. In the field of science and technology studies (STS), Marxist political economy has been fruitfully combined with insights from sociology of scientific knowledge, actor network theory, practice studies and French post-structuralism.

Looking at the particular strand that connects Marx with Lukács and the Frankfurt School—what Andrew Feenberg calls the ‘philosophy of praxis’—the situation is less exciting. Of course, books and articles keep being published on a variety of subjects related with this scholarship. However, their relevance to STS is not immediately apparent, since they are seldom interested in contemporary questions of science, technology and the biophysical world.

*The Philosophy of Praxis* stands as a welcome exception because it explicitly considers the relevance of Marx, Lukács and the Frankfurt School to the present. Feenberg is a philosopher well known to STS scholars for his essays on technology, and the interest in Marxism and Critical Theory is a constant in his production. This book is actually a revised and expanded version of his first book, published in 1981: *Lukács, Marx and the Sources of Critical Theory*.

Revisions and expansions, however, make *The Philosophy of Praxis* a new book, which confronts quite a different theoretical, social and techno-scientific context than the earlier one.

### **Philosophical Antinomies and Historical Contradictions**

For Feenberg, the philosophy of praxis is defined by the tenet that basic philosophical problems, with special reference to antinomies such as value/fact, freedom/necessity or individual/society, are rooted in concrete, historical contradictions, hence it is impossible to overcome the former without addressing and resolving the latter. The crucial antinomy is no doubt the subject/object one. From Descartes to Kant, to recent debates over realism and constructionism, it continues to trouble Western thinking. For the philosophy of praxis, this opposition is socially produced: 'the truth of being is historical becoming' (p. 49). Social change, then, may 'realize' philosophy, drawing contradictions to merge into a (re)union of reason and reality. For Feenberg, this type of argument is 'metacritical' in the sense of a 'sociological desublimation' of philosophical concepts, grounded in the unmasking of their historical and social positioning.

If this basic framework is what characterizes the philosophy of praxis, then the way the problematic is developed varies considerably. The book follows roughly a chronological rationale. This is consistent with one of Feenberg's core arguments, namely, that the theoretical work of Marx, Lukács, Adorno, Horkheimer and Marcuse is affected by the historical conditions in which they found themselves. Conditions that changed dramatically along the way, with special reference to the expanding power and pervasiveness of science and technology, and the growing disillusion with revolutionary ideals. However, the chapters focus on issues which are continuously re-elaborated throughout the book. This makes reading a fascinating journey but also demands concentration and requires some movement back and forth.

The first two chapters lay down the distinctive features of the philosophy of praxis and the political implications drawn from a redefinition of reason in terms of embodied practices. Marx and Lukács' key move appears to be, on the one side, the transfer of the formal attributes of reason to need and the transformation of the philosophical subject into a natural being that 'encounters its object, nature, in a natural way' (p. 36); on the other, the connection established between reason and revolution, in the sense that 'revolution can be rationally justified and the practice of a rational life includes revolutionary political action' (p. 21). The third chapter deals with the crucial question of nature. Marx's outlook pivots on the idea that labour represents the unifying element of man and nature. Among the other consequences, this position leads Marx to criticize natural sciences for their idealistic separation of knowledge and matter. Lukács called such separation the 'contemplative' approach, in the sense of the search for and 'discovery' of fixed laws which human intervention can only obey.

From such a critical standpoint, Marx advocated a new science, based on the recognition of the historical embroilment of human subjectivity and material reality, and thus the fundamental unity of the natural and social sciences.

This point, according to Feenberg, distinguishes Marx from Lukács and the Frankfurt School. Marx believed it possible to replace bourgeois science with another form of knowledge. The others accept the natural sciences, while regarding them as socially embedded, hence suitable to being disengaged from the reifying logic of capitalism. Feenberg suggests that this change in perspective is due to the increasing evidence of the effectual power of technology, which makes it plainly impossible to contest science's hold on reality. This may apply to Lukács and Marcuse (and, later, Habermas), yet I am not sure it does also to Adorno.

His idea of 'reconciliation' with the biophysical world entails an overcoming of instrumental reason, to the extent that such reason follows an abstracting logic by which the subject reduces the object to itself. Feenberg correctly remarks that Adorno is not blaming technology as such, as evidenced in a passage of *Dialectic of Enlightenment* where mechanization is depicted as having non-dominative potentials, since 'the thing-like quality of the means [ . . . ] makes [them] universally available' (Horkheimer and Adorno, 2002, p. 29). However, if, as Feenberg also stresses, Adorno's aim is 'to show how technology has been adapted in *its very structure* to an oppressive system' (p. 164, emphasis original), this situation seems to require something more than, or different to, a mere 'redirecting' of technology. As the notions of 'conceptual constellation' and 'determinate negation' indicate (see below), it requires a thorough rethinking of reason and its way to address the world.

### Science and the Sociality of Nature

Chapters 4 and 5 are mostly focused on Lukács and, in my reading at least, represent the core of the book—as Lukács represents a core author for Feenberg. With the concept of reification, Lukács aims to show that capitalism reduces all human relations to abstract, formalized, quantitative determinations. He links the 'contemplative' orientation of science, the commodification of the world and the bourgeois project of technical control of the whole reality. Only a concrete agent can overcome the form/content antinomy, in a dialectical process of mediation which finds in the proletariat the historical force where subject and object, knowledge and reality, theory and practice merge together in a transformative (rather than contemplative) relation with the world. For Lukács, Feenberg remarks, the proletariat's self-consciousness 'would have immediate repercussions on its behavior, abolishing the gap between "mind" and "matter" and creating a new type of practice different from reified technical practice' (p. 112).

Beside and beyond revolution, what interests Feenberg is the way Lukács resolves the relationship between knowing subject and materiality: between nature as produced by or premised on human labour, as an irreducible ground

of sociality. Marx's ambivalence about this relationship has notoriously led to diverging approaches to the ecological crisis within contemporary Marxist political economy (e.g. Foster's (2000) elaboration on the notion of capitalism's 'metabolic rift' vs. Smith's (2010) analysis of the social production of nature). Basically, and despite his own oscillations between realist and constructionist accounts, what Lukács holds—Feenberg tells us—is that different ways of knowing produce different realities. This lets his claim about the achievement of 'subject–object identity' appear in a particular light.

According to Feenberg, Lukács makes neither a Promethean case for the full domination of nature, nor a constructionist case for the primacy of language and culture over matter and thingness. Rather, for him practices mediate the object; their different design and enactments affect the constitution of reality. Feenberg's account, therefore, suggests that Lukács' outlook can be regarded as a significant precursor of recent 'co-productionist' approaches in STS.

### **Enlightenment's Contradictions and the New Left**

Chapter 7 and 8 are devoted to the Frankfurt School, with a focus on Adorno and Marcuse. The Frankfurt School, Feenberg notes, imparts a major shift to the philosophy of praxis. Adorno, Horkheimer and Marcuse cannot ignore Auschwitz, Stalinism and Hiroshima, the growing pace of scientific and technical advancement, the role of the cultural industry and the welfare state in producing new social arrangements. Their central theme is no longer capitalism, but Enlightenment as historically realized in a techno-scientific drive to the mastery of nature and human self-instrumentalization. Lukács' idea of the identity of subject and object is denounced as a restatement of rationalist hubris and productivist, domineering relationship with nature. Similarly, Lukács' confidence in a revolutionary subject and in revolution itself as a historical event fades away.

As we know, in *Dialectic of Enlightenment* Adorno and Horkheimer detect a tragic contradiction in human attempts to find protection from nature and the unknown through knowledge and technical control. Enlightenment promises a power over natural forces but ends up with submitting humans to artificially crafted ones that crush them ever so much more strongly. Adorno's reply to this vicious circle is 'negative dialectics'. In Feenberg's words, negative dialectics 'does not resolve the antinomies but rather identifies them as such and suspends all premature resolutions. It is the logic of immanent critique and not a constructive alternative'. The utopia of a society reconciled with nature 'is not an alternative rational plan of existence but can only be indicated negatively, as *not* this or that contemporary horror' (p. 155, emphasis original). Adorno's method of 'determinate negation' is actually not a sceptical, totalizing negation, but a negation that moves from specific contradictions, the emerging incompleteness of individual concepts. Lukács' unity of theory and practice is replaced by an account in terms of reciprocal implication and discontinuity, or non-correspondence. This

entails a re-evaluation of thought as a transformative force and a precondition for political praxis (see e.g. Adorno, 1998, p. 264). The task is not to accomplish the identity of subject and object but rather to reveal, by means of concepts set in ‘constellation’, what in the object always overflows the historical subject.

Feenberg joins a host of critics, from Habermas (1984) to Vogel (1996), in portraying Adorno’s position as ultimately sterile (if not utterly contradictory: determinate negation is conceptual work that seems to entail a non-conceptual grasp on the object), in that it does not indicate any viable path to, or historical agent of, change, and dwells on aesthetic experience as the only actual hint of a non-dominative, peaceful, reconciled relationship with the world. In Feenberg’s account, then, it is Marcuse that represents the real alternative. Marcuse is ‘the first philosopher of praxis to respond positively to the growth of technology’ (p. 207), hence he is the only one provided with direct relevance to the present.

Marcuse shares much of Adorno’s diagnosis, but also outlines a possible way out. In Marcuse nature ‘appears not just negatively as the repressed, but concretely as the natural environment and in expressions of the human needs for peace, beauty, meaning, and love’ (p. 155). More precisely, Feenberg remarks, Marcuse sees in the New Left and the environmental movements emerging in the 1960s not so much a new agent of revolution but the contours of new, emancipatory ways of living, capable of fostering a reform of the instrumental relationship with nature.

On the one hand, Marcuse builds on the phenomenological concept of experience, finding in new lifestyles the engine of social transformation. On the other, he seeks to disconnect scientific-technical rationality from capitalism as a system of domination. Even if, as Feenberg notes, there are ambivalences in Marcuse’s thought, this means not so much imagining a new science, as conceiving a different technology, designed to fulfil human needs and, more broadly, life-affirming values. Instrumental reason is broadened to encompass an aesthetic engagement with reality.

The last chapter recapitulates the distinctive features of the philosophy of praxis, as a metacritique of idealist philosophy replacing the dualism of knowing subject and known object with concrete, historically located agents and a materiality actively responding to their interventions. A table (p. 208) offers a useful synopsis of what the four thinkers mainly discussed (Marx, Lukács, Adorno and Marcuse) share, and what distinguishes the one from the others. In this picture, Adorno ‘is the odd man out because he believes the unity of theory and practice has broken down’ (p. 207), while offering inspiration or confirmation to Marcuse’s view about new social mobilizations as a trigger of practicable change.

### Feenberg’s Heroes

*The Philosophy of Praxis* is no textbook for newcomers to Marxism and Critical Theory but a fascinating journey into a strand of thought that, as I said in the

beginning, is hardly fashionable today. Feenberg's analysis is no doubt extremely rich and insightful. One may disagree on this or that point, yet this certainly does not detract from the value of the book. A book that is all but an anodyne description, especially as regards the two authors that, so to say, are Feenberg's heroes: Lukács and Marcuse.

In both cases, Feenberg proposes an interpretation which, supported by careful reading of their texts, is also different from those of other commentators; an interpretation that seems motivated by the aim to show how these authors were ahead of their time and can be engaged in a fruitful conversation with the theoretical and political present. As for Lukács' account of the unity of theory and practice and the historicity of science, Feenberg's 'co-productionist' interpretation contrasts, for example, with Vogel's account (see 1996, 26 ff.), according to which Lukács fails to draw the full consequences from his own case, resisting the idea of a completely socialized character of nature, of its emergence as entirely enmeshed in human praxis.

As for Marcuse, Feenberg stresses that, even in the absence of a clear distinction between science and technology, his case for a renewal of scientific rationality may consistently apply to technology (which allows for thoroughly different designs aimed at thoroughly different purposes) rather than to science (which is confronted with compelling evidences emerging from the biophysical world). This account, again, can be contrasted with Vogel's (1996, p. 105), for whom Marcuse's case is inextricably for a new technology *and* a new science, a liberated society entailing different scientific facts and, ultimately, a different nature.

Considering these divergences, one is tempted to apply to his own book Feenberg's remarks about the evolution of the philosophy of praxis in reply to changing historical conditions. Vogel's study belongs to a period in which the 'linguistic turn' and post-modern culturalism were still overriding, whereas Feenberg's book belongs to a period increasingly marked by the ontological turn (Bryant *et al.*, 2011; Dolphijn and van den Tuin, 2012) or new materialisms (Coole and Frost, 2010), that is, by a resurgent outlook on matter as an active, if not utterly dominant, player in human affairs, against the alleged predominance of culture. As a result, the frame of co-production replaces the frame of construction as an interpretive thread. One may object that, for example, Feenberg's reading of Lukács was basically already there in the original version of the book; yet revisions and extensions (see e.g. section 'Lukács' "constructivism": objections and replies', p. 146 ff.) strengthen the co-productionist interpretation of this author (and of the philosophy of praxis as a whole) considerably.

## Open Questions

I said that a major value of Feenberg's book is its concern for the relevance of the philosophy of praxis to the present. Some questions emerge in this respect. The first is about the separation of science and technology: in Feenberg's argument



this case fulfils the purpose of ‘saving’ the ambivalences of Lukács and Marcuse about the social vs. external character of nature, neutralizing them by assigning technology to the plastic sphere of sociality and science to the sphere of humans’ encounter with the irreducible ground of their own subsistence. Feenberg acknowledges that this separation may seem outdated, when confronted with the growing use of the concept of technoscience, but objects that ‘it would be a mistake to confound science and technology’, since their embroilment occurs in ‘domains [that] are still fairly marginal to the central productive activities of modern societies’ (p. 197, fn. 61). He goes on claiming that

the concept of domination does seem inappropriate when applied to natural sciences such as physics, chemistry and geology rather than their contingent social uses. [...] The most profound link between capitalism and natural science is its construction of nature as an object. At this level science is relatively neutral with respect to the ideologies and values circulating in modern society. [...] The link between capitalism and natural science is *fundamentally* methodological. (p. 198, emphasis original)

These seem to me questionable claims, for three reasons. First, talking of technoscience does not mean confounding science and technology, but focusing on their reciprocal implication. Second, in physics, chemistry, biology, nanosciences, ICTs and other fields the distinction between science and technology is increasingly losing analytical meaning—the transversal issue of big data is an obvious case in point. Third, the ontological separation of science and technology and the purported social neutrality of science seem to betray what the whole philosophy of praxis is about: namely, the embodied character of the knowing subject, or the embroilment of human cognition with its own underpinnings and targets. Separation and neutrality are at odds as well with plenty of STS work, which shows that there are many ways to ‘construct nature as an object’, and these ways are enmeshed with social assumptions and biases which the scientific method can hardly sidestep. As, for example, Woodhouse and Sarewitz (2007) argue, inequity is not only the result of distributive patterns of innovation, but can be inbuilt in the very programmes of research, as the so-called ‘10–90 problem’ testifies.<sup>1</sup>

A second question concerns the possibility to use the concepts of praxis and practice as synonyms, as Feenberg does throughout the book—hence, indirectly, the extent to which the philosophy of praxis can be straightforwardly connected with STS, where the notion of practice, but certainly not of praxis, plays a major role. This is not the place to elaborate on this issue. Yet, one has to at least remark that the notion of praxis focuses on human action, in contrast to mere thinking, whereas the notion of practice (especially, but not exclusively, in the STS field) hints at the intertwining of human and non-human agencies. So, any equivalence established between the two concepts should be adequately motivated.<sup>2</sup>

A third question concerns the New Left and the environmental movements, as a viable alternative to capitalism's social and ecological unsustainability and the failure of revolutionary promises. Marcuse's view, according to Feenberg, remains valid today; perhaps even more than earlier, if one considers the growing public sensitivity to environmental, health and quality of life issues, the expansion of technological opportunities and the increasing remoteness of the idea of revolution. Marcuse did not embrace the case for the New Left and new social movements without caution; a caution which Feenberg subscribes to as well. However, he stresses that this is the only eventual possibility, if one is not to surrender to Adorno's radical pessimism. Against this Feenberg holds that 'Marcuse recognized what we now accept as a commonplace, namely, that despite its flaws the New Left redefined the possibilities and goals of the opposition to advanced capitalism' (p. 173).

The 'we' of this acceptance is however hardly self-evident, and what exactly can be regarded today as the New Left is problematic. Does Feenberg mean the current antagonist movements? If so, then an analogy with the movements of Marcuse's time is rather debatable, if anything because capitalism and social stratification have dramatically changed in the meantime. Does he mean the governmental New Left, which since the 1990s has played a major role in supporting neoliberal reforms and related accumulative and exploitative drives? Does he mean social movements such as those making a case for a radical downshifting of economy (hardly a reformist programme)? Does he mean those environmental organizations that have long been integrated in an institutional set up which is hardly promoting any significant 'green' reform?

A fourth question concerns Adorno. Feenberg rightly observes that Adorno holds a particular position in the philosophy of praxis, in that he denounces the idea of the identity of subject and object and the aspiration to the unity of theory and practice as reproducing identity-thinking, with its dominative hubris. And, like many others, Feenberg condemns determinate negation as a self-defeating strategy. However, are we sure of the emancipatory implications of affirmativeness in the present historical condition? Admittedly, this is what new materialisms and vitalisms argue. Yet, if one considers that governmental processes are becoming increasingly indirect, building on the responsabilization and valorization of the individual self, as a 'capital' whose potentialities are to be fulfilled and constantly expanded (see e.g. Rose, 2007; Feher, 2009), then one becomes less sure that affirmativeness (however conceived) can offer adequate shelter against capture by what Foucault called the power/knowledge *dispositifs* of neoliberal governmentality.

Whatever the aims of farmers and consumers, for example, organic food is today mainly a highly profitable niche, hardly triggering any 'reform' (to say nothing of 'revolution') in the capitalist organization of agriculture and the market. And, in spite of many theoretical elucubrations, is anybody really able to trace a clear-cut distinction—at the level of praxis—between hubristic cases

for human enhancement such as those made in the ‘converging technology’ agenda (Roco and Bainbridge, 2002), and those for emancipatory post-human transitions one finds in much current philosophical and STS literature? In the light of these considerations Adorno might turn out the real, neglected hero among the philosophers of praxis; at least the most far-sighted, as far as the problematics and struggles of the present are concerned.

## Conclusion

According to Feenberg, the philosophy of praxis is relevant today essentially as a critical theory of technology. If labour and class are no longer theoretically (likewise empirically?) central, he says, the philosophy of praxis broadens the focus of much Marxist theory—from economy to the whole range of reifications, including administration and consumption; moreover, its account of nature and natural sciences fits nicely with today’s STS. Additionally, one can argue that, if much STS work is focused on case studies, this account may help to pay more attention to the broader socio-material frameworks impinging upon specific issues and settings.

Many STS scholars will find in Feenberg’s book an opportunity to expand their outlook beyond the theoretical references to which they are more accustomed. Indeed, amongst the questions raised by Marx, Lukács, Adorno, Horkheimer and Marcuse none have lost relevance; they have become more dramatic. The crucial one arguably remains whether a different, non-dominative, science and technology is possible, and how this difference is to be conceived, developed and gauged. This question often eludes Marxist scholarship, focused more on matters of uneven access than on matters of aims and programmes. Equally, STS seems often overwhelmed by the need to catch up with ever-accelerating techno-scientific change, while neglecting issues of purpose, power and justice. In this sense, the philosophy of praxis offers a rich terrain for cross-fertilizations between contemporary Marxism and STS.

## Notes

<sup>1</sup>The expression, as is well known, refers to the fact that only 10% of health research worldwide is directed towards problems accounting for over 90% of the global burden of disease. In other words, the bulk of research is targeted to the health problems of affluent populations, instead of the more urgent ones of the poorest people in poor nations.

<sup>2</sup>On the distinction between praxis and practice see, for example, Reckwitz (2002).

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