

A Fresh Look at Lukács: on Steven Vogel's *Against Nature*

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Steven Vogel's book, *Against Nature*, lies at the intersection of three important fields: Marxist Critical Theory, postempiricist philosophy and sociology of science, and environmental ethics. The book is organized around a discussion of the evolution of the concept of nature in Western Marxism, essentially, early Lukács and the Frankfurt School down through Habermas. Vogel argues that this tradition has a fundamentally ambivalent attitude toward nature.

On the one hand, Lukács and the Frankfurt School are influenced by Hegel's theory of alienation and self-recognition. On these terms, nature appears as an expression of reason or, in the later Marxist conception, practice. Nature in itself is a myth. The only nature is the one that depends on our conceptual frameworks and practices. Alienation from this nature consists in the belief in its independence from us. Such alienation is overcome in recognition of the constituting activity of the subject. Consistently followed out in a Marxist context, this line of argument leads to the conclusion that ideological critique should be extended to the natural sciences. The task of radical theory would be to unmask the role of social subjects in the constitution of nature. Yet the Western Marxists resist drawing this conclusion because it appears to contradict materialism. In Lukács this reluctance appears as a dualistic separation of natural from social science that turns out to be inconsistent with his interpretation of the philosophical significance of Marxism.

Lukács believed that classical German philosophy fell into an insoluble antinomy because the constructive activity of the subject it recognized was incompatible with its individualistic concept of subjectivity and its reified concept of objectivity. Such a subject and such an object could never stand in the constituting relation philosophy required. Hence the peculiarly contradictory concept of an unknowable thing-in-itself, which marks the place of a philosophical failure.

According to Lukács, Marxism resolved the antinomy by substituting a collective historical subject for the transcendental ego and dereifying objectivity as a flux of processes in which the subject is essentially involved. But insofar as Lukács posits a nature in itself that escapes social constitution, his version of Marxism falls into the very same antinomy as classical German philosophy. It too confronts a realm of things in themselves it cannot deny and is powerless to constitute.

Western Marxism is also influenced by romantic *Lebensphilosophie* and its nostalgia for a return to an original immediacy. This trend leads to a critique of instrumental reason and a rejection of science in favor of the unity of man and nature. But such unity is incompatible with the Hegelian emphasis on the recovery of alienated objectivity through self-recognition: either we have "made" nature, in Hegelian-Marxist fashion, or it has always existed as such and in that case the end of our alienation from it

would be a return to some sort of primal oneness with it. You cannot have it both ways; Hegelian self-recognition and romantic organicism are opposed positions.

Vogel shows convincingly how Lukács, Adorno, Horkheimer, Marcuse, and Habermas are all blocked in one or another incoherent position by these contradictory influences. Ultimately, a consistent position must reject the premises of *Lebensphilosophie*, objectivistic materialism, and positivism in favor of a Hegelian-Marxist conception of nature. That praxis conception finds support in postempiricist philosophy of science, which shows that nature is a product of the practices of research and not an ontologically independent thing-in-itself.

Vogel's positive contribution emerges in the final chapter of his book in the context of a critical appropriation of Habermas. Habermas retreats from the romantic critique of instrumental reason toward a more consistent development of Lukács's original attempt to distinguish natural from social science. However, under the influence of positivist philosophy of science, he carries the dualism of the human world and nature too far. While Vogel approves Habermas's communication-theoretic conception of the social, it goes along with an unacceptable view of nature as nothing but the reified object of science and technology. In the end this dualism prevents Habermas from dealing adequately with environmental ethics which crosses the artificial lines he has drawn between nature and society. His narrow positivistic conception of nature leaves no room for a normative relation to the environment. It seems that nature can have only instrumental value.

Constructivism helps Vogel resolve the problems with nature which bedevil Habermas. The reason humans must be central to environmental ethics is not that they are the only valuable beings in the world, a conclusion that seems to be implied by Habermas's restriction of obligation to the domain of communicating subjects. Rather, their centrality stems from their role in constituting nature and their consequent responsibility for it. Furthermore, it is through human communicative practices that value is constructed, whether it be the value of the human species or that of other species. Thus we can very well affirm the value of the ecosphere without denying our own special place within it.

I hope this brief summary of Vogel's book gives an idea of the broad range and interest of its argument. The project of relating the Western Marxist tradition to contemporary trends in philosophy of science and environmental ethics enriches all three fields. Where postempiricism all too often retreats from the ethical and political implications of its method, Vogel brings these out most explicitly. The Hegelian approach provides the basis for an anti-foundationalist philosophy in tune with the temper of the times.

Despite my admiration for this important book, I do have a number of criticisms, or at least points for discussion I would like to raise. I have chosen to focus primarily on the argument concerning Lukács which is central to Vogel's book and which he develops in dialogue with my own earlier work on this difficult philosopher.

I believe that Vogel's critique of Lukács results from a misinterpretation of his concepts of nature and of practice. Vogel (1996: 47) points out that for Lukács natural science has two essential moments, a creative moment in which an artificial experimental milieu is constituted, and a contemplative moment of passive observation of the laws of nature revealed thereby. Vogel thinks Lukács affirms the independence of

nature in itself because he emphasizes passive observation over the creative moment of scientific practice--hence his term "contemplative practice" for the scientific-technical relation to reality. Postempiricist science studies have presumably righted the emphasis.

I am not convinced by this diagnosis of Lukács's problem. He clearly and more than once affirms that our knowledge of nature is historical in character, that it is not a pure reflection of the "facts" but the result of our practices and conceptual frameworks (e.g. 1968: 6). This is in a general way precisely what postempiricism contends. Yet for Lukács, nature and society remain distinct, although in every significant dimension we can imagine, he too claims that nature is subject to dereifying analysis just like any other social fact. Wouldn't it be more consistent to follow Vogel and to affirm that what we call nature is simply another aspect of society, an aspect we treat as "natural" precisely to the extent we fail to dereify it? What explains Lukács's odd persistence in treating the nature he has dereified as "real" in a stronger sense than Vogel's constructivism admits?

The key to the problem lies in Lukács's theory of practice. It will prove more fruitful therefore to approach the problem of nature in his work from the standpoint of this theory rather than from analysis of his apparently contradictory comments on the subject. Lukács distinguishes between two fundamentally different types of practice, a reified "contemplative" practice characteristic of bourgeois society, and a proletarian transforming practice which "penetrates" its objects. Let's forget for a moment the archaic class references here and look at the structure of these two types of practice.

The model of contemplative practice is the relation of the worker to the machine (Lukács, 1968: 89). The machine is self-contained; it has its own logic, the law of its functioning; the worker is external to the machine and tends it without actually controlling its autonomous functioning. For Lukács, this type of subject-object relation exemplifies the reified practice of a capitalist society, whether it be entrepreneurial activity, buying and selling on markets, or scientific research (Lukács, 1968: 98). Contemplative practice is thus not simply passive as the term suggests, but technical, manipulative in character. It modifies the world, to be sure, but it leaves its objects *essentially* unchanged. Indeed, it presupposes the law of its objects which it comprehends and applies according to the Baconian principle that "Nature to be commanded must be obeyed." Contemplative practice must therefore separate theory, in which law is comprehended, from practice in which it is applied.

Despite the frenetic activity of a technical civilization, its practice does not affect the essence of its objects--their law, only their manifest form, their appearance. Activity at the level of appearance depends on a passive relation to law, which practice merely "contemplates" and does not attempt to change. The activism of the bourgeois subject is based on fatalistic acceptance, "realism," at a deeper level. This realism shows up in the idealistic notion of values as irretrievably cut off from the facts of this world. Philosophy's reified subject-object conception raises this structure to the highest level of abstraction. According to Lukács, when Kant demonstrates that the world of experience is rigorously determined by the laws of physics, he opens that world to unlimited technical progress while excluding in principle any role for values in its development (1968: 160-161).

Transforming practice differs in that it attacks the laws themselves. It is a non-technical practice that grasps the essence of its objects and changes them at the deepest level. The implicit model of this type of practice is self-consciousness. In becoming

aware of ourselves, we change what we are immediately. Self-consciousness is simultaneously awareness and action; it transcends the gap between theory and practice characteristic of the reified standpoint. Lukács's innovation is to attempt to conceive of social transformation on this model, as a highly complex and socially mediated expression of self-transformation.

How is this possible? The concept of social self-consciousness depends on the existence of some sort of collective subjectivity. But Lukács does not believe in a mysterious group soul. Rather, his collective subjects consist of individuals bound together in a whole by a specific logic of interaction. For the bourgeoisie, that logic is reification, which unites the class while obscuring its unity behind an individualistic facade (Lukács, 1968: 165). As Lukács writes, "It is true that the bourgeoisie acts as a class in the objective evolution of society. But it understands the process (which it is itself instigating) as something external which is subject to objective laws which it can only experience passively" (1968: 63). Lukács thus bridges the gap between individual and social self-consciousness by interpreting contemplative practice as unconscious collective action. Self-recognition and disalienation in the social sphere then involves collective self-awareness. Let me explain more precisely how this can come about.

Note that Lukács never claims that we can dispense with all contemplative practice and everywhere substitute transforming practice for it. The point is rather that certain contemplative practices are fundamentally modified when their subjects become self-conscious. In the individual sphere we are familiar with this distinction. Most beliefs are not modified when we become aware of holding them, however some, such as self-contradictory beliefs or self-deceptions, are immediately cancelled by self-consciousness.

The social equivalent of these latter types of belief is the market. When buyers and sellers act on the market, they form a collective subject which is unconscious of itself. Their practice is determined by the "law" of the market they each use to get ahead, but that law itself is the combined effect of their very attempts to use it. The condition for the emergence of such a system is its fundamental misrecognition by social subjects. This misrecognition consists in the preconceptual structuring of the social as a realm of individual activity on alien objects. This structuring is historically contingent. By coming together, becoming conscious of the consequences of their action, and coordinating it voluntarily, the individuals can overcome its contemplative limitation and the reified form of objectivity of their objects; they can change the "law" of their action and create a different type of social world together.

In fact, Lukács projects such radical results only in the case of the capitalist market in labor. Workers "produce" society through their labor and through their participation in capitalist institutions. When they come together, therefore, nothing can stop them from transforming the society they constitute unconsciously *qua* workers. But the condition of this transformation is self-consciousness, workers' recognition of their own real social role. That recognition then itself constitutes a fundamental social change because it changes what it is to be a worker, from passive, reified social atom to collective agent: "the act of consciousness overthrows the objective form of its object" (Lukács, 1968: 178). Let me quote here Lukács's analysis of working class self-consciousness at length as it lies at the heart of his theory. He writes,

In the commodity the worker recognizes himself and his own relation to capital. Inasmuch as he is incapable in practice of raising himself above the role of object his consciousness is the *self-consciousness of the commodity*; or in other words it is the self-knowledge, the self-revelation of the capitalist society founded upon the production and exchange of commodities. By adding self-consciousness to the commodity structure a new element is introduced, one that is different in principle and in quality from what is normally described as consciousness 'of' an object. Not just because it is a matter of self-consciousness. For, as in the science of psychology, this might very well be consciousness 'of' an object, one which without modifying the way in which consciousness and object are related and thus without changing the knowledge so attained, might still 'accidentally' choose itself for an object.... In contrast with this, when the worker knows himself as a commodity his knowledge is practice. *That is to say, this knowledge brings about an objective structural change in the object of knowledge* (Lukacs, 1968: 168-169).

Lukács's persistence in distinguishing between nature and history must be understood not primarily in ontological terms but in relation to this distinction between types of practice. Most basically, he is arguing that there is a realm in which transforming practice is possible, in which we can reconstitute our objects by becoming socially self-conscious, and alongside it, there is another realm in which our action will always be contemplative, technical. The first realm is society, the second is nature. In simplest terms, he is claiming that we need not organize our social life through technical control of some human beings by others, as capitalism requires, but that we will always stand in a technical relation to nature. In Vogel's terminology, capitalism "misapplies" reified technical control to social life which is potentially subject to collective self-control under socialism. No comparable change in our relation to nature accompanies the advance from capitalism to socialism.

The epistemological consequence of this distinction in types of practice and their objects is a parallel distinction in methods of study. Contemplative practice is essentially undialectical, and so is its object, nature. Reified methodologies are therefore appropriate to a reified object. We can of course dereify the practice of science and its conception of nature. The resulting social interpretation of science and nature reveals the dependency of our knowledge of nature on society. It is true that we thereby become in some sense self-conscious, but that does not constitute a transforming practice because, in Lukács's view, it does not change the results of scientific theory, nor the conception of nature proper.

Of course Vogel does not agree with this; he thinks a self-conscious science would be fundamentally different from the science of today. He concludes therefore that if Lukács persists in arguing for the validity of the natural scientific methods of the bourgeoisie, it must be because he has failed to appreciate the contingency of those methods on social causes. The key point is that Lukács does not share Vogel's belief that self-consciousness would alter science. Since he does not project any such radical incidence of self-consciousness on science, he has no need to deny the contingency of nature on our practices to distinguish it from the social domain in which self-consciousness does have immediate practical significance.

Vogel argues that unless Lukács extends his constructivism to nature, he is stuck with a thing in itself. But the application of Lukács's theory of transforming practice to

nature appears to go too far. Resolving the antinomy of classical philosophy by simply dissolving nature in the subject is idealistic. Does Vogel intend this? When he is criticizing Lukács, he appears to claim that constructivism requires some such reduction of all objectivity to a constituting subjectivity, but it is not clear why this should be so.

There is after all a difference between an epistemological argument about the social sources of our knowledge of nature and an ontological argument about the production of social realities through democratic cooperation. Merely knowing that our practices are involved in defining nature does not dereify it the strong sense Vogel intends if that knowledge leaves the world essentially unchanged. Vogel himself seems to recognize this since he claims that the question of a self-reflective science concerns what practices we wish to engage in rather than the choice of what we would like to be true (1996: 143). This is certainly reassuring, but does it solve the philosophical issues Lukács contends with, or does it implicitly reintroduce the very problem of the thing in itself that Vogel finds in Lukács? How can we distinguish theory and practice without ontologizing nature once again?

For Lukács true transforming practice involves not just an understanding of the epistemological dependency of reified objectivities on society, but an ontological dialectic of the subject and object underlying those objectivities. It is because, in the social domain, we *are* in the strongest sense the object that knowledge of society is self-knowledge and as such transformative. In this domain becoming self-aware immediately alters the logic of collective action. No comparable change in natural scientific law results from dereifying self-knowledge in that sphere.

In sum, Lukács need not posit an ontologically independent thing-in-itself to maintain the distinctiveness of nature and to exclude it from the dialectic. Nature as such has a certain relative independence of the social insofar as its lawful order is not changed by conscious social practice. This does not mean that nature transcends history at the most fundamental ontological level, that, for example, history is a mere accident of evolution. The question of ontological priority is independent of the epistemological problem. Whether nature is "in" history, or history "in" nature does not determine the truth value of each in its own domain. In fact Lukács believed that the nature of modern science was a direct consequence of reification, hence a socially relative perspective on the world. For him history, not nature, is therefore ultimate reality. But practically speaking reification gives us access to the truth of nature insofar as we can know it, and in this domain at least reification cannot be transcended.

Let me here concede a point which Vogel could make in reply to show that it does not ultimately refute Lukács's approach: there will inevitably be cases where the self-consciousness of scientific practice alters it and with it our conception of nature. The "scientific" racism of the late 19th century appeared well established by the scientific methods of the time, but came under increasing attack as a reflex of social prejudices. Eventually, science itself was revised to exclude the effects of these prejudices. We see similar changes occurring today in relation to gender and sexual preference.

These are cases where an ideology-critique of science becomes internal to science itself. Conceivably, the accumulation of such cases could lead to a "new science" in the restricted sense of the term given it by Marcuse in *One-Dimensional Man* (Marcuse, 1964: 166-167). Nevertheless, insofar as these cases effect scientific change, they issue in a new positing of a nature "independent" of us; indeed, the hallmark of scientific

advance in such contentious domains is that it gives access to a law which resists modification through self-consciousness.

The success of a scientific result in escaping ideology critique need not of course be eternal to serve the purpose of the argument. Nature is a moving target; as Marcuse says "nature is not a manifestation of 'spirit,' but rather its essential *limit*" (1972: 69). What we identify as nature at any given time is indeed historically contingent, posited in terms of our conceptual frames and practices. But what it means for us to posit it as nature is precisely to recognize it as independent of us, that is, as a presupposition of our practice. On this account, nature is not a thing-in-itself, and yet it is not transparent to human practice either.

The independence of nature is not merely an illusion; to claim that it is is to assume at the outset that truth must be absolute to be worthy of the name. While such an assumption may make sense to some philosophers, it has nothing to do with science as scientists themselves understand it. If, as Latour suggests, we "follow" scientists in their activity, we find that they have no trouble believing that the facts they have "constructed" are perfectly real (Latour, 1996: 37ff). The likelihood that a future stage of scientific development will significantly modify or perhaps even replace current theories, demonstrating that they were "mere" constructions, is in no sense a *refutation* of those theories or a proof that the natural world they posit is mythical.

In sum, the nature of natural science is a crafted product, not a metaphysical assumption. Scientifically speaking, there are good and bad constructions of that nature, constructions that collapse when we understand their ideological basis, and other constructions that stand however much we learn about them. In this context, to say that nature is "merely" a construct or that it transcends human knowledge as a thing-in-itself, is to mistake the domain of discourse. The philosophical proposition that "nature is a social category" in no way cancels the crafted production of particular natural objects, understood as independently real, in the practice of natural science (Lukács, 1968: 234). To overcome the independence of those objects requires further scientific work, not a general theory about nature. It is a category mistake to believe that a universal philosophical constructivism reduces at one blow all positings of an independent nature to the status of those old pseudo-scientific theories of race. It is equally a category mistake to believe that the independence of natural scientific objects establishes philosophical realism. I believe this approach avoids a return to the problem of the thing-in-itself without falling into idealism. The independence of nature is methodologically necessary, but it is not ontologically ultimate in a way which would threaten Lukács's historicization of the antinomies of philosophy.

While I believe this defense of Lukács explains how he can distinguish nature from society without self-contradiction, it does not answer Vogel's most important substantive criticisms of the tradition of Western Marxism. Let me turn now to the question of whether this approach to Lukács can resolve at least one of the central problems Vogel has identified in his theory.

According to Vogel, Lukács does not explain how nature and society can be distinguished so as to separate our practice in relation to the one cleanly from our practice in relation to the other. As Latour and others have argued, the social world is a network of people and things in intricate patterns that are not easily unraveled. Is it really possible to interpret the coming to self-awareness of a social group engaged in

complex technically mediated relations on the model of the immediate unity of subject and object in self-consciousness? The answer to this question is probably going to be negative, and yet we do not want to fall uncritically into acceptance of reification in every domain where complex relations between people and things prevail, as does for example, Habermas.

This is why I have significant reservations about Vogel's enthusiasm for Habermas, who has made Lukács's failure to develop an adequate theory of nature into a matter of principle. This principle is not so easily subverted as Vogel seems to believe. Habermas does not simply distinguish nature and society as theoretical objects, an error Vogel hopes to correct. Habermas also has a theory to account for their intermingling in the networks of a complex society. This theory is a fairly drastic revision of the Lukácsian theory of reification. Habermas holds that media such as money and power coordinate human action in an essentially objectivistic, technical fashion. Coordination through media is the only way to establish order in the major institutions of a complex society, including the economy and state. Such coordination has an unchangeable, reified system rationality. Self-reflection, and hence true democracy, belongs only to a lifeworld of informal human relations. That lifeworld includes a public sphere which can set boundaries on the range of the media, but no democratization is possible within the markets and administrations governed by media coordinated interaction. But, since most of our lives take place in contact with markets or administrations of one sort or another, Habermas's theory amounts to uncritical capitulation before reification.

Elsewhere (Feenberg, 1996) I have tried to show how Habermas's media theory can be revised to admit the possibility of radical democratization in complex societies, but in working on this problem I discovered that constructivism alone is not enough to do the job. The point is not just that we constitute complex networks--Habermas would admit that easily enough--but that we must be able to transform their logic. That Habermas would not admit because on his dualistic terms it would amount to substituting pure communicative action for the complex institutions of a modern society. The result would be regression to some sort of premodernity rather than advance to a higher level of direct democracy that is in fact impossible under modern conditions.

This stark opposition between system and communicative rationality, reified and democratic institutions results from a system theory which excludes in principle the effects of self-consciousness so central in Lukács. Indeed, for Habermas all reflexivity is associated with communication, and systems are by definition unconscious. But where the effects of consciousness are incorporated into systems theory, it is possible to cut the Gordian knot in which Habermas has tied himself and social theory.

Starting out from a reflection on what Hayek calls "spontaneous orders," the chief example of which is the market, Paul Dumouchel (1991) has proposed precisely such a revision of systems theory. He distinguishes two types of spontaneous orders constituted by agents who each follow a rule of action individually. There are those spontaneous orders which are "rational" in the sense that they are stable in the face of improvements in the agents' understanding of the system. Competitive games are examples of rational orders: the players' will and ability to play is not normally affected by what they may learn about the nature of the game and its rules. But there are also spontaneous orders which are "irrational" in the sense that when the agents come to

understand the rule of their action, they will necessarily modify it. Dumouchel offers the example of sacrifice or scapegoating, considered by René Girard to provide a basic mechanism of social solidarity. The sacrificial logic cannot withstand the revelation that the object of the sacrifice is an ordinary person, as guiltless as those who kill him. Sacrifice is cancelled by the self-consciousness of the sacrificial community. The passage beyond irrationality through consciousness can lead in Dumouchel's scheme to the creation of a rational order governed by new rules, or a "reasonable" order based not merely on individual action but planned collectively in terms of explicit norms, for example, of justice.

In Lukács's terms, reified social forms constitute irrational orders that are immediately transformed once the agents understand their logic. The Habermasian system is thus not based on rationality, but on blindness. It cannot withstand the discovery of its own inner logic by those who participate in it. But what is the alternative? As I will now try to show, the institution of a permanent system of transitions from the irrational to the rational and the reasonable offers an alternative to Habermas's rigid dicotomies.

In *Lukács, Marx and the Sources of Critical Theory* (1986) I suggested that there is a tension in Lukács between the model of self-consciousness as immediate self-transformation, a kind of radical idealistic constructivism, and another approach which emphasizes the unending process of mediation in which a social subject gradually pushes back specific barriers to self-recognition and self-control. According to this dialectical theory, construction is not self-creation but mediation of a pre-existing object.

Vogel focusses on the first approach. He notes that Lukács's dialectic does not embrace labor and therefore seems to overestimate the transparency of the social world. The rarefied air of self-conscious practice poses no resistance to radical change. In reality, of course, the obstacles to change are enormous and cannot be reduced to epiphenomena of social consciousness. Even Lukács is aware of this and promises a gradual process of dereification rather than a sudden bound into the future. He writes, for example: "Even the proletariat can only overcome reification as long as it is oriented towards practice. And this means that there can be no single act that will eliminate reification in all its forms at one blow; it means that there will be whole host of objects that at least in appearance remain more or less unaffected by the process. This is true in the first instance of nature" (1968: 206).

This strand of the theory is developed primarily in Lukács's reflections on the difference between idealistic and dialectical forms of rationality. While idealism imagines it can produce the object ex nihilo, at least in thought, dialectics involves the relation of a constituting practical subjectivity to an objective presupposition of some sort. All mediation presupposes an immediate, something given that it mediates. This is the condition of finitude that defines a dialectical constructivism. What distinguishes mediation from reification is the absence of limits of principle on what can be mediated. The process of mediation is potentially infinite and no immediate remains eternally beyond mediation as a thing in itself. Mediation "posits" its presupposition and can turn around and mediate it, whereas reified thought assumes the ontological fixity of its presupposition (Lukács, 1968: 163, 205-206).

The reason for this difference lies in the function of self-consciousness. The dialectical subject discovers itself in its objects in becoming self-conscious, whereas the reified subject separates itself from its objects. Note, however, that here transforming practice does not abolish the independence of objectivity as such, only particular objectivities that happen to be historically available for reconstruction in self-consciousness. But this implies that something very much like reification--objective, independent, lawful things--is a necessary moment in a dialectical conception, although precisely what will be reified at any given time will change as the social subject raises different aspects of its existence to self-consciousness.

The concept of mediation thus must treat resistances and transitions as normal features of historical development, and not merely as obstacles to a predestined future. This concept implies that corresponding to every realm of social transparency in which the subject constitutes itself through self-awareness, there will be opaque realms of reified relations which at least provisionally escape the logic of transforming practice. The act of collective self-awareness cannot dissolve the objectivity of the social networks into the intentions of their creators, but it can mediate aspects of those networks. Nothing would remain eternally beyond our grasp as nature in itself or as pure system rationality, and yet something would always be temporarily beyond our grasp, an immediate on which we would have to rely in our mediation of the currently problematic aspects of nature and system.

Radical democratization of complex societies would thus not involve the dissolution of all system rationality into a pure lifeworld of communicative action as Habermas fears, but rather an end to arbitrary limits on the restructuring of systems in accordance with publicly debated values. It is precisely such limits, called technological or economic imperatives, which are the ultimate protection of capitalism today. We need a post-Habermasian critical theory to attack them. Perhaps Lukács can still help in this task.

Consider, for example, the problem of the environment. It makes little sense to attempt to conceive environmentalism as a defense of the lifeworld against system as Habermas has on occasion suggested. Environmental activism is, in large part, about invoking the power of the state to limit the pursuit of profit on the market at the expense of human beings and nature. Such struggles come up against reified conceptions of the economy and nature which block progress ideologically. They proceed by mobilizing a critical attack on the market and scientific-technical counter-expertise. Protest and controversy are thus not about boundaries between lifeworld and system; their goal is not to substitute pure communication for the complex relations between people and things of a modern society. Rather, environmentalism mediates the system through democratic meta-practices that combine trade-offs between different forms of systemic coordination and direct political controls. The dereifying strategies this involves are practical and particular, not falsely metaphysical, and perpetuate certain reifications in new configurations, e.g. reformed state administration or revised scientific knowledge. In Dumouchel's terms, the irrational market or bureaucratic systems that lead to environmental crisis are transformed into rational systems that can withstand scrutiny and knowledge under the direction of the "reasonable" practice of a mobilized democratic public.

Unfortunately, Lukács himself does not consider the implications of his theory for the question of technology and the related problem of the environment. It would of course be too much to ask of him in 1923 to come up with an environmental ethic. But he could perhaps have engaged with technology in more depth and detail than the few remarks, largely dependent on romantic critique, which are scattered through his early Marxist work. Had he done so, I think he would have drawn conclusions similar to Vogel's.

The nature that is the object of technology is far easier to dereify than the nature of natural science. Technology is quite obviously not something separate from society but a dimension of society. The design and deployment of technology does not depend on laws and imperatives over which we can have no control, but on the contrary, it depends ultimately on us. The study of applied scientific-technical knowledge reveals the multiplicity of ordinary social interests and practices engaged in every important technical decision. Here indeed transformative practice as a process of mediation seems completely appropriate. To the extent that we become aware of our unconscious involvement as a society in the shaping of technology, we will be able to recognize our responsibility for nature and the need for an ethics of the built world that surrounds us. On this Vogel and I are in complete agreement.

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