STUDIES

THE PHILOSOPHY OF ECOLOGICAL LENINISM

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Abstract

Recently, the term "Ecological Leninism" has emerged as a popular invocation in the works of Marxist thinkers attempting to grasp dialectically the numerous intersecting ecological crises. Yet, beyond a few introductory remarks, little has been said about the content of this concept and, even less, its relation to Lenin. Generally, the concept attempts to combine Leninist political theory with the ecological analyses of the growing number of ecosocialists and eco-Marxists working both within the academy and without. This paper intends an initial, philosophical contribution toward developing Ecological Leninism: (1) by providing an interpretation of Lenin's philosophical method, that is, dialectical and historical materialism; and (2) explicating the way in which this philosophy gives rise to a political ecological theory and practice, Ecological Leninism, that addresses the crisis of the metabolic rift between nature and society. We intend to contribute to the development of Ecological Leninism by clarifying the philosophy through which the political method is articulated. Thus, we hope to show that, under the conditions of a global metabolic rift produced by capitalist society, Ecological Leninism as a political ecological theory signals the possibility of securing a just and sustainable world for future generations. **Keywords**

dialectical materialism, ecological Leninism, metabolic rift theory, Marxism, political ecology, dialectics

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A Brief History of Early Bolshevik Ecology

During their time in power, Lenin and the Bolsheviks displayed their concerns for an alternative social metabolic relation to nature through their early policy on the preservation and sustainable use of the forests of Russia. The law sought "to introduce a modicum of statewide planning and control over a vast resource [...] [and] provided for the creation of a Central Administration of Forests of the Republic to manage the forests *on the basis of planned reforestation and sustained yield*".⁴ Contrary to the capitalist

³ István Mészáros, *The Necessity of Social Control* (New York: Monthly Review Press, 2015), p. 249.

⁴ Douglas R. Weiner, *Models of Nature: Ecology, Conservation and Cultural Revolution in Soviet Russia* (Pittsburgh: University of Pittsburgh Press, 1988), p. 24 (emphasis is our own).

¹ See, for example, Andreas Malm, *Corona, Climate, Chronic Emergency: War Communism in the Twenty-First Century* (New York: Verso, 2020); Kai Heron and Jodi Dean, "Revolution or Ruin", *e-flux Journal* no. 110 (June 2020), pp. 1–15; and Ben Stahnke, "Lenin, Ecology, and Revolutionary Russia", *Peace, Land and Bread* (February 2021).

² John Bellamy Foster, *Marx's Ecology: Materialism and Nature* (New York: Monthly Review Press, 2000); Paul Burkett, *Marx and Nature: A Red and Green Perspective* (Chicago: Haymarket Books, 2014); Andreas Malm, *The Progress of this Storm: Nature and Society in a Warming World* (New York: Verso, 2018); Kohei Saito, *Karl Marx's Ecosocialism* (New York: Monthly Review Press, 2017); John Bellamy Foster, Brett Clark, and Richard York, *The Ecological Rift: Capitalism's War on the Earth* (New York: Monthly Review Press, 2010); Stefano B. Longo, Rebecca Clausen, and Brett Clark, *The Tragedy of the Commodity: Oceans, Fisheries, and Aquaculture* (New Brunswick: Rutgers University Press, 2015).

reduction of nature to exchange-value and treatment of natural resources as infinite and inexhaustible, the Bolsheviks, viewing nature as one of the two sources of all value, attempted to reorganize production so as to halt and reverse the destruction of nature wrought by the alienated capitalist social metabolism and, moreover, to achieve the sustainable future use of natural resources based on the foremost dialectical ecological science of the day.⁵

Building upon the Bolshevik policies regarding the protection and sustainable use of nature and natural resources, Lenin sought to determine the direction of development of ecological and environmental sciences in the Soviet Union by bringing research into line with the material needs of the population. To this end, Lenin and the Bolsheviks tasked Soviet agronomist and geneticist Nikolai Vavilov "with the responsibility for organizing an institute for genetics and plant breeding to end the chronic problem of insufficient food production in Russia".⁶ Through his study of Marxism, Lenin had developed a keen understanding of the role played by nature in the processes of human labor and in the productive relations of society, and as such understood the necessity of directing state resources towards the study of environmental sciences such as ecology, agronomy, genetics, epigenetics, biosphere science, conservation science, and so on.⁷ By developing in accordance with a dialectical account of reality, science in the Soviet Union was not to take the same path as that of capitalist bourgeois science, which operates according to the bourgeois framework of mechanism and the accumulative logic of the capital system.⁸ It was instead to be founded on the principles of a materialism

⁵ On this matter, John Bellamy Foster has observed: "All these contributions to ecology were products of the early Soviet era, and of the dialectical, revolutionary forms of thinking that it engendered. The ultimate tragedy of the Soviet relation to the environment, which eventually took a form that has been characterized as 'ecocide', has tended to obscure the enormous dynamism of early Soviet ecology of the 1920s, and the role that Lenin personally played in promoting conservation [...] In his writings and political pronouncements Lenin insisted that human labor could not simply substitute for the forces of nature and that a 'rational exploitation' of the environment, or the scientific management of natural resources in accord with the principles of conservation, was essential. As the leader of the young Soviet state he argued for 'preservation of the monuments of nature' [...] Hence, under Lenin's protection the Soviet conservation movement prospered in the 1920s, particularly during the New Economic Policy period (1921–1928)." Foster, *Marx's Ecology*, p. 243.

⁶ William DeJong-Lambert, *The Cold War Politics of Genetic Research: An Introduction to the Lysenko Affair* (Dordrecht: Springer, 2012), p. 6.

⁷ "These considerations on capitalist agriculture and the recycling of organic wastes led Marx to a concept of sustainability to be implemented in a society of associated producers concerned with the rational organization of their metabolic relation to nature. This analysis was later to inspire Kautsky and Lenin." John Bellamy Foster and Paul Burkett, "Classical Marxism and the Second Law of Thermodynamics: Marx/Engels, the Heat Death of the Universe Hypothesis, and the Origins of Ecological Economics", *Organization & Environment* 21, no. 1 (March 2008), p. 27.

⁸ See Christopher Caudwell, *The Crisis in Physics* (New York: Verso, 2017).

that recognized the historical and dialectical character of the relationship between nature and society and was to serve the purpose of advancing a society of associated producers beyond the realm of natural necessity. Armed with this conception of science, the Bolsheviks expressed the "belief that communism made possible the development of science on a scale capitalist countries could only dream about".⁹

Finally, contrary to the ideological misconceptions about Lenin,¹⁰ throughout his life he exhibited an attitude of care and concern for nature which was later reflected in his policies.¹¹ From Marxism, Lenin had gleaned the importance of the metabolic relation between nature and society and understood that a rational and sustainably planned economy could only be achieved by advancing a form of technical and scientific knowledge that sought not to control nature for purposes of accumulation, but to approach nature in a sustainable way in order to advance society beyond the realm of material necessity, to that of true freedom.¹²

Lenin and the Bolsheviks were entrapped by the force of historical circumstances to deal with very particular issues of the time (namely, responding to intra-capitalist struggle in the early 20th century and challenging the Imperialist order). Our historically specific moment, however, forces our attention to the ecological crisis engendered by the capitalist mode of production and to challenging a global capitalist order actively bringing about the destruction of the conditions for (human) life on earth. While these two moments have their differences and specificities, Leninism remains the only viable dialectical and revolutionary theory and practice with which to confront their challenges. Leninist politics in the 21st century must be reconstituted in order to give primacy to the foremost capitalist crisis of our time – the socio-metabolic rift of the capitalist mode of production. We will now turn to an exegetical account of the dialectical materialist philosophy in which an Ecological Leninist politics is grounded.

⁹ DeJong-Lambert, *The Cold War Politics of Genetic Research*, p. 6.

¹⁰ As Ben Stahnke presciently notes: "Lenin's ecology was not overt. It was not the overarching point of his politics, and, as such, has been both overshadowed and obfuscated by history and time." Stahnke, "Lenin, Ecology, and Revolutionary Russia".

¹¹ Douglas Weiner remarks that "[d]espite his silence on the subject, Lenin appears genuinely to have loved nature and felt comfortable in the wild". While the importance of Lenin's attitude to nature is anecdotal, we know that Lenin had both a personal and theoretical appreciation for nature, reading books such as "M. N. Bogdanov's *From the Life of Russian Nature...*[and] V. N. Sukachev's *Swamps, Their Formation, Development and Properties*" (Weiner, *Models of Nature*, p. 23).

¹² "The realm of freedom really begins only where labour determined by necessity and external expediency ends [...]" Karl Marx, *Capital: A Critique of Political Economy*, vol. 3, trans. David Fernbach (New York: Penguin Books, 1991), p. 958–959.

Lenin, the Philosopher: Human-Nature Relations and Dialectical Materialism

"[T]here can be no 'impartial' social science in a society based on class struggle."¹³

The *necessity* of articulating a (Leninist) politics grounded in dialectical-materialist epistemology arises from the inseparability between ontology, epistemology, and political analysis within the Marxist materialist tradition. All too often, these fields appear disassociated, reinforcing the apolitical character of epistemological premises as "value-neutral", ontology as de-historicized empiricism,¹⁴ and politics as a realm standing independently from historically constituted and socially mediated conceptual frameworks. We, on the contrary, assert that a dialectical-ecological framework, an *Ecological Leninism*, combines the objectivity of a certain methodological approach (dialectical/historical materialism), and its ontological presuppositions, with the normative element of an intentionally directed political project. Far from being, "value-neutral", a dialectical materialist epistemology provides the ability of a *concrete* and *effective* discernment of objective political problems, in our case, the *protracted* ecological crises, premised on a normative ontological ground which affirms the reproduction of human life.

While Lenin's political theory has received due attention, here we show that his concern with ontology and epistemology throughout the entirety of his oeuvre reflects a systematically consistent approach to a determinate political project premised on an understanding of the human-nature relation as a social metabolic process. Grounding his ontological and epistemological concerns, his approach to the human-nature relation, to a theory of knowledge, allows us to show both his maturation as an original thinker, but also the coherence of his political praxis, one which remains relevant today.

Lenin's concern with the inseparability of a philosophical method and a praxically oriented politics developed early on. In 1904, Alexander Bogdanov presented Lenin with his book *Empiriomonism*. What struck Lenin was not simply Bogdanov's flirtation with the idealism of Mach and Avenarius, but the political implications of the philosophical approach itself,¹⁵ since for Lenin a Marxist political project is "inseparably bound up with its philosophical principles".¹⁶

¹⁵ Marcel Liebman, *Leninism under Lenin* (Chicago: Haymarket Books, 2017), pp. 442-443.

¹⁶ Vladimir Ilyich Lenin, *V. I. Lenin Collected Works*, vol. 15 (Moscow: Progress Publishers, 1972), p. 405.

¹³ Vladimir Ilyich Lenin, *V. I. Lenin Collected Works*, vol. 19 (Moscow: Progress Publishers, 1972), p. 23.

¹⁴ For an account of the early 20th century debates on ontology and the rise of Neo-Kantianism and positivism, see John Bellamy Foster, *The Return of Nature: Socialism and Ecology* (New York: Monthly Review Press, 2020), pp. 230–249.

In what would almost certainly be denounced by bourgeois theoreticians as "dogmatic", Lenin writes, "by following the path of Marxian theory we shall draw closer and closer to objective truth (without ever exhausting it); but by following *any other path* we shall arrive at nothing but confusion and lies".¹⁷ What is, or what did Lenin believe to be, the "path of Marxian theory"? How is this path different from a bourgeois approach to "objective truth" and what does this difference imply for a Leninist political project that remains acutely sensitive to ecological concerns?

The "dialectical method", Lenin writes, "requires us to regard society as a living organism in its functioning and development".¹⁸ Society understood as a "living organism" indicates the transformative character of social relations, on the one hand, and its necessary situatedness within nature, on the other. To regard society as a living organism is to approach sociality in a nonreductive form that retains its *relational* embeddedness within nature, as that from which it arises, that through which it develops, and that upon which it is necessarily dependent. Already, we see Lenin's insight as not falling prey either to binary categorization, nor to collapsing the identity between nature/society.

From a close study of Engels's writings on the dialectical character of nature, Lenin develops a relational conception of ontology, one which centers the unity yet irreducibility of motion and matter, and thus articulates the objective and inter-affective determinations which condition natural and social development, albeit in differing forms. For Lenin, a dialectical method captures precisely "the interdependence and the closest and indissoluble connection between all aspects of any phenomena (history constantly revealing ever new aspects), a connection that provides a uniform and universal process of motion, one that follows definite laws".¹⁹ There are several epistemological claims here. The first characterizes the classic materialist position: preceding and beyond the conceptions of the human mind, there exists an objective world, nature, which is both universal and consistent with itself - that is, contains its own internal laws that characterize the limits of its process of becoming, its motion. Secondly, this objective world standing independently of human thought (though to which the human is always in relation) is the framework through which all material determinations are connected and interdependent and thus is the causal ground of the motion of material becoming. Third, Lenin makes a subtle but very important parenthetical remark, which exemplifies his attentiveness to *non-linear*, dialectical change: the claim that "history constantly reveals new aspects". Against the fixity of metaphysical propositions, con-

¹⁷ Vladimir Ilyich Lenin, *V. I. Lenin Collected Works*, vol. 14 (Moscow: Progress Publishers, 1972), p. 143.

¹⁸ Vladimir Ilyich Lenin, V. I. Lenin Collected Works, vol. 1 (Moscow: Progress Publishers, 1972), p. 189.

¹⁹ Vladimir Ilyich Lenin, *V. I. Lenin Collected Works*, vol. 21 (Moscow: Progress Publishers, 1972), p. 54.

trary to the retroactive eternalization of the capitalist social form, Lenin shows how human knowledge, its relative social character within the absoluteness of nature, has the agential power to shift its understanding so as to reveal *new knowledge* about the past (both social and natural history) and thus reconsider its contemporary, existing social situatedness, and change it through conscious practice.

"The identity of opposites", Lenin notes, "is the recognition (discovery) of the contradictory, *mutually exclusive*, opposite tendencies in *all* phenomena and processes of nature (*including* mind and society)".²⁰ To say, "everything is connected" is empty. The relevant question is precisely how these connections arise, their social and natural historical origins, their material expression and consequences. *How* these connections are epistemologically determined represents the validity of the method applied, thereby revealing the determinate *political praxis* that emerges from it. The "*opposing tendencies in all phenomena and processes of nature*" identifies the objectivity of contradictions, relational contradictions. Here, contradictions are both internal to objects themselves, phenomena, and manifest *between* phenomena. The point of departure for human knowledge is the recognition of these two kinds of contradictions, which mediate each other and therefore reciprocally condition each other.

The reciprocal conditioning of these contradictions, however, represents an identity relation between subject and object. The subject, always already a social and historical subject, recognizes (even if they do not understand) the movement of the object, the object's ability to escape totalization, because the subject recognizes its own self-movement. But, both the subject and object have different forms of movement predicated on their own limited set of determinations, the laws that govern their processual material becoming: "The concept of law is one of the stages of the cognition of unity and connection of the reciprocal dependence and totality of the world process."²¹ The reciprocal dependence in question highlights the transformative character of both subjects and objects by means of an epistemological grasping of their unity and connection and, negatively, their forms of disconnection (their "oppositional tendencies"). In this way, the object and the knowledge that it provides are subject to change, subject to developing new meaning, new knowledge, precisely because the object's own self-movement (its internal contradictions) begets an excess that temporally extends itself. This extension, however, is relational: the extension occurs only by means of the interconnections through which its excess becomes. The excess, thus, represents at the same time, a lack. Contrary to a Hegelian absolute identity, the relationality between determinate subjects and determinate objects is characterized by the lack, absence - and the ontological and epistemological impossibility - of a totalizing identity in which difference

²⁰ Vladimir Ilyich Lenin, *V. I. Lenin Collected Works*, vol. 38 (Moscow: Progress Publishers, 1972), pp. 357–358.

²¹ *Ibid.*, pp. 150–151.

may be collapsed, "the unity of opposites". Thus, Lenin claims, "[t]he condition for the knowledge of all processes of the world [...] in their real life, is the knowledge of them as a unity of opposites".²² The processual motion of subjects and objects and their material becoming, their ontologically constitutive transformative character, is the ground out of which the very possibility of knowledge arises. The emergent character of processual matter-in-motion is at once that which unifies the subject-object identity relation *and* that which gives rise to their oppositional relation, both their interdependence and relative autonomy. Thus, human sociality itself represents a break, a qualitative "leap", a necessary contingency of nature's becoming that nevertheless remains embedded within nature itself and is conditioned by the *motion of nature*.

For Lenin, the proper conception of motion "is directed precisely to knowledge of the *source* of '*self*'-movement [...] [this] *alone* furnishes the key [...] to 'leaps', to the 'break in continuity', to the 'transformation into the opposite', to the destruction of the old and the emergence of the new".²³ To know the "source of self-movement" is to know the *necessary* causal determinations through which self-movement is propelled; that is, the process by which transformation and change occur. Lenin notes, "Causality [...] is only a small particle of universal interconnection, but [...] a particle not of the subjective but of the objectively real interconnection".²⁴ The overcoming of pure subjectivity, which is itself a metaphysical abstraction, is predicated on subjectivity's extension beyond itself toward the recognition of the necessary causal determinations that participate in conditioning its social, natural, *objective* existence.

Lenin further emphasizes the volatility of knowledge, its historically conditioned character as always belonging to a specific social form. The object of knowledge, consciousness' object, is itself in motion: "There is nothing in the world but matter in motion and matter in motion cannot move otherwise than in space and time."²⁵ Here, Lenin is not making arbitrary metaphysical claims. Matter-in-motion occurs determinately *through* objective spatiality and temporality. Consciousness is exposed to and confronts matter-in-motion within a spatial and temporal setting and approaches matter-in-motion *from* a situated history that has conditioned this *social* consciousness itself, since, Lenin notes, "materialism applied to the social life of mankind has to explain *social* consciousness as the outcome of *social* being".²⁶ Consciousness *grasps* the object, comes to know it, only in historical and social terms and thus the object appears not as such but in a relationally situated form.

²² Ibid., p. 360.
²³ Ibid.
²⁴ Ibid., p. 160.
²⁵ Lenin, *Collected Works*, vol. 14, p. 175.
²⁶ Lenin, *Collected Works*, vol. 21, p. 55.

Between historical-social consciousness and its object, a relation exists predicated on both a lack and an excess. The lack marks the *incompleteness* of absolute knowledge due to the *excess* of movement that the object contains within itself.²⁷ Knowledge must always be limited knowledge. Dialectical materialism, therefore, "recognizes the relativity of all our knowledge, not in the sense of denving objective truth, but in the sense that the limits of approximation of our knowledge to this truth are historically conditional".²⁸ Against the positivism of bourgeois science and the relativity of idealist philosophical ruminations, Lenin endorses the changing character of objectivity and thus the changing character of the social subjectivity which emerges from, is determined through, and agentially negotiates within this objectivity itself. Such endorsement is not, however, a rejection of the natural sciences. On the contrary, for Lenin, the natural sciences need to be taken seriously and interpreted dialectically. Here, Lenin shows the open-ended, non-dogmatic, character of a truly *dialectical* materialism that is consistent with his philosophical elucidation of a theory of knowledge when he notes, quoting Engels approvingly, that "Engels says explicitly that with each epoch-making discovery even in the sphere of natural science, materialism has to change its form".²⁹ Thus, a reconsideration of the normative intentions of a Marxist project through a dialectical interpretation of the findings of the natural sciences "[...] is an essential requirement of Marxism".³⁰

The methodological determination of this objectivity arising from a dialectical-materialist, scientific approach, contains a normative impetus predicated on the social relevance and purpose of the knowledge in question. Knowledge of the world is never merely for itself, it indicates the realm of differentiated potentialities expressed by relationally situated objects, their interconnections and causal relations, and the possible forms by which such potentialities can be actualized through social practice: "[m]an's consciousness not only reflects the objective world, but creates it [...]. The world does not satisfy man and man decides to change it by his activity."³¹ Social consciousness reflects the objective world not because of a mirroring, an immediate correspondence, but because social consciousness develops out of and through the objectivity of the world, a world imbued with heterogenous social mediations. The movement of the world objectively reflects *through* the subjectivity of social consciousness, not *from* it.

²⁷ This conception of lack or absence is particularly relevant to the development of a dialectical-materialist method in line with Lenin's thought. For more contemporary articulations consistent, in our view, with Lenin's method, see Roy Bhaskar, *Dialectic: The Pulse of Freedom* (London: Routledge, 2008) and Adrian Johnston's "Lacano-Hegelian" analysis in *Prolegomena to Any Future Materialism*, vol. 2: *A Weak Nature Alone* (Evanston: Northwestern University Press, 2019).

²⁸ Lenin, Collected Works, vol. 14, p. 137.

²⁹ *Ibid.*, p. 251.

³⁰ *Ibid.*, p. 251.

³¹ Lenin, Collected Works, vol. 38, pp. 212–213.

The limits of knowledge are predicated on the "active side", to borrow Marx's words, of social subjectivity's practice. Indeed, against the metaphysical conception of truth as fixed and immutable, against the positivist conception of truth as "value-neutral", for Lenin, "[t]ruth is a process. From the subjective idea, man advances towards objective truth *through* 'practice' (and technique)".³²

Truth, in Lenin's view, is a process, that is, the mediation between social subjectivity and the objective processes of material becoming that retains an ontological potential of transformation: truth can potentially become its opposite either from the development of new knowledge or because of the relationally conditioned "self"-movement of the object itself, since the object too is shaped by the causal interconnections, relations, and inter-affective dynamics of other phenomena. Thus, Lenin claims, "[i]ndividual being (an object, a phenomenon, etc.) is (only) one side of the Idea (of truth). Truth requires still other sides of reality, which likewise appear only as independent and individual. Only in their totality and their relation is truth realized".³³ This rigorous and original materialization of Hegelian philosophy exemplifies Lenin's systematic relational ontology. An individuated object theoretically disconnected from its relational situatedness can only result in a one-sided and necessarily incomplete account of the truth it brings forth. A dialectical-materialist method, however, grounds the individuated object through establishing the interconnections and historically specific totality in which it subsists, to which it belongs qua this individuated object, since, as Lenin notes, "[e]very individual enters incompletely into the universal".³⁴ The incompleteness here is predicated on the kinetic character of both the individuated object and the totality in which it emerges. Nonetheless, the specification of the conditions of its appearance, the cognizing of the determinate relations involved in the form of the individuated object's relational situatedness, does allow for human knowledge to approximate - to "realize" - its truth. This coherence requires the methodological prowess of accounting for the essence of the *interdependent* determinations which only "appear" as independent yet objectively participate in the realization of truth regarding the relationally situated individuated object; for, Lenin reminds us, "[e]very individual is connected by thousands of transitions with other kinds of individuals (things, phenomena, processes)".³⁵

Thus, for Lenin, truth is grounded through understanding why an object *appears* in a particular form in accordance with determinate, necessary relations that require its appearance in that form and not any other. Such appearance is never, in Lenin's view, dislocated from the essence of the object. Essence itself is not fixed but subject

³² *Ibid.*, p. 201.
 ³³ *Ibid.*, p. 195.
 ³⁴ *Ibid.*, p. 361.
 ³⁵ *Ibid.*

to change depending on the forms of interactions with other objects to which it is in necessary relation, depending, in other words, on the determinate movement of totality. Appearance, then, is fundamentally necessary: "the appearance is essential".³⁶ Epistemologically – even *phenomenologically* – appearance is the first indication that calls upon consciousness, that directs consciousness towards an intrigue of the object, as a knowable and relevant object. This moment of intrigue, in turn, demands further investigation from which the essence is made relationally coherent, that is, the investigation from which truth is cognitively retained in an approximate, historically specific form. Indeed, Lenin affirms, "[h]uman thought goes endlessly deeper from appearance to essence, from essence of the first order, as it were, to essence of the second order, and so on *without end*".³⁷

Lenin asserts, "Human knowledge is not (or does not follow) a straight line, but a curve, which endlessly approximates a series of circles, a spiral".³⁸ The process of human knowledge is defined as a spiral, that is, by the dialectic between linearity and non-linearity in terms of the truth it seeks to obtain. Human agency, expressed through social practice, is constantly negotiating between the novel achievements of knowledge, which are subject to redirection or reorientation by social mediations, the permeation of the historical, already existing knowledges, and the purpose to which this knowledge is applied. The non-linearity is present here insofar as the *spirality* of human knowledge is at once a return to, and superseding of, the historical elements of categories once confronted with the ontological excess of reality in persistent *processual motion*.

Thus, Lenin emphasizes that "[c]ognition is [...] the endless approximation of thought to the object". The truth that belongs to the historically, socially, relationally *situated* object can be grasped by cognition only through and in this situatedness, since both the object and cognition are subject to transformation by means of practical activity. Such processual truth, however, reflects the relevance of the object for human cognition in a specific space and time. Lenin continues: "[t]he *reflection* of nature in man's thought must be understood not 'lifelessly', not 'abstractly', *not devoid of movement*, *not without contradictions*, but in the eternal *process* of movement, the arising of contradictions and their solution."³⁹ Nature is reflected in human thought because of the contradictions internal to the human subject, internal to the object, and the incessant, dynamic relation between human subjects themselves and the objects to which they are exposed. Practice, however, "solves", so to speak, certain contradictions, immediate contradictions, without eliminating the propulsion of continuous contradictions,

³⁶ Ibid., p. 253.
 ³⁷ Ibid.
 ³⁸ Ibid., p. 357.
 ³⁹ Ibid., p. 195.

because the latter stand outside human determinations, are at once the lack and excess of an ontologically *kinetic* human-nature relation.

Lenin further complicates the naïve understanding of reflection: "But this is not a simple, not an immediate, not a complete reflection, but the process of a series of abstractions."40 Reflection, then, is not a relation of immediacy. Instead, it is an ontologically kinetic facet of the social, human dimension of nature - an internal differentiation of nature itself. Nature knows itself through the social mediations arising from the ontological condition of socialized humanity. Lenin continues, "[h]ere there are *actually*, objectively, three members: 1) nature, 2) human cognition = the human brain (as the highest product of this same nature), and 3) the form of reflection of nature in human cognition, and this form consists precisely of concepts, laws, categories".41 Notice that Lenin gives primacy to nature as the condition of possibility of human cognition, that out of which human cognition emerges and from which it develops a relative autonomy. Human cognition, therefore, presupposes its own lack, its own insufficiency, but satisfies this lack in a spatio-temporal sense through its appropriation of the natural world in a socialized form, a world that is *ontologically* always in a relational excess to it. The third moment, the "form of reflection", is determined by the historical situation in which human cognition actualizes itself. Thus, the specific form of reflection can only be understood by a method able to articulate the contradictory process of unity and distinctness, a universal claim about human beings as such, their natural proclivities qua cognizing beings, and the distinct character of the "form of reflection" as it pertains to and emerges from a concrete, historically specific social form.

Since, for Lenin, the form of reflection of human cognition is the material expression of a historically and socially situated human, the concepts that arise from this immediate reflection are mediated by previous "reflections". Lenin notes, "[h]uman concepts are not fixed but are eternally in movement, they pass into one another, they flow into one another, otherwise they do not reflect living life".⁴² An ontology premised on determinate and processual motion necessarily implies the fluid essence of concepts and their ties to the material conditions from which they emerge. Thus, concepts themselves – and, therefore, the truths they produce – require the methodological ability of determining the specificity of their movement, "of their interconnection, of their mutual transitions".⁴³ Without this methodological quality, "living life", the objective motion of natural and social processes falls prey to "dead being", becomes static and reified. Subjects and objects, the real composition of a social and natural world, lose their vitality, lose their actual potentialities, are emptied of their transformative character,

⁴⁰ Ibid., p. 182.
⁴¹ Ibid.
⁴² Ibid., p. 253.
⁴³ Ibid.

and thus the dominant thought of a historically specific social metabolic order is able to justify its eternality over-against the potential for revolutionary change.

Such fixity is, to be sure, incompatible with Lenin's approach to philosophy and praxis. It is not only the relations between concepts, and their changing forms, but also the relations of and between things, *and* the relations between things and concepts, that provide the key to Lenin's implicit understanding of the social metabolic relation between humans and nature. Lenin writes,

The totality of all sides of the phenomenon, of reality and their (reciprocal) relations – that is what truth is composed of. The relations (= transitions = contradictions) of notions = the main content of logic, by which these concepts (and their relations, transitions, contradictions) are shown as reflections of the objective word. The dialectics of *things* produces the dialectics of *ideas*, and not vice versa.⁴⁴

Totality implies both natural and social processes operating in irreducible yet necessary unity. For Lenin, both nature and sociality retain distinctive essential determinations that orient their kinetic ontological condition, their material becoming. Nonetheless, they develop relationally by means of each other. For any truth claim – and, therefore, any normative claim - to gain validity and social relevance, the dialectical-materialist method must account for the relationality of which the claim is composed in that it must show the reflections of the objective world to which it refers, that is, a historically specific and determinate totality that participates in and underlies the claim itself. That "the dialectics of *things* produces the dialectics of *ideas*" does not mean simply that objects give rise to the dialectic of and between concepts. Lenin's observation here is at once subtler and more profound, being predicated on his differentiation between the laws and determinations that condition the movement of nature, on the one hand, and human sociality, on the other. In other words, he is differentiating between the kind of dialectic that belongs to each and another dialectic that mediates their relation to each other. Namely, the objective dialectics of nature, of relationally situated and inter-affective objects themselves, actively engenders subjective (social) dialectics through the *practical dialectics* of their inter-relation. In this way, from the objective dialectics of nature, the objective dialectics of inter-active and inter-affective relationally mediated objects, unfolds a historically situated and determinately socialized human cognition, a subjective dialectics, the dialectics of (social) consciousness itself: "[n]ot only is the transition from matter to consciousness dialectical, but also that from sensation to thought".⁴⁵ This qualitative rupture, however, is not an absolute separation of externalized processes, but rather is *mediated* by a *practical dialectics*, a relational,

⁴⁴ *Ibid.*, p. 196.
⁴⁵ *Ibid.*, p. 281.

active, dialectic between the objective dialectics of nature and the subjective dialectic of human sociality. This "triadic" dialectics, as Zhang Yibing calls it,⁴⁶ is premised on a kinetic, relational ontology that emphasizes the changing, transformative character of determinate, mediated (social and natural) development.

Differentiating between the kind of dialectic that pertains to a particular ontological category is possible because of the "unity of opposites" in Lenin's account. Further exploring this differentiation will allow us to tease out Lenin's implicit understanding of the human-nature relation as a *social metabolic process* and, thus, demonstrate the ecological proclivities that can be constitutive of a politics emerging from his dialect-ical-materialist method.

The laws of the external world, which are divided into *mechanical* and *chemical* [according to Hegel] [...] are the bases of man's *purposive* activity. In his practical activity, man is confronted with the objective world, is dependent on it, and determines his activity by it. From this aspect, from the aspect of the practical (purposive) activity of man, the mechanical (and chemical) causality of the world (of nature) appears as though something *external*, as though something secondary, as though something hidden. Two forms of the *objective* process: nature (mechanical and chemical) and the *purposive* activity of man. The mutual relation of these forms. At the beginning, man's ends appear foreign ("other") in relation to nature. Human consciousness [...] reflects the essence, the substance of nature, but at the same time this consciousness is something external in relation to nature (not immediately, not simply, coinciding with it).⁴⁷

For Lenin, the laws that govern natural processes are not identical to the immanent laws of social processes, though they bear an obvious and necessary relation. The natural world is the framework that constitutes the limits and determinate possibilities of the subjective dialectics of human sociality. The relation between these objective limits – that is, existent actualities and determinate possibilities – and the subjective dialectic of human sociality is one mediated through *practical dialectics*. This practical dialectic encompasses the active, human appropriation of nature. Thus, out of this *relationally situated practical dialectic* emerges *purposiveness*. Socialized humanity engages in *purposeful, practical activity*. This conception of purpose is not metaphysically determined, not an *a priori* postulate of activity as such. On the contrary, purpose develops *immanently* through the *techniques of transformative activity* that arise from geopolitically distinct social formations. In this view, techniques of transformative activity that are purposeful characterize the aesthetically distinct, heterogeneous social practices that

⁴⁷ Lenin, Collected Works, vol. 38, pp. 187-188.

⁴⁶ See Zhang Yibing, *Lenin Revisited: His Entire Thinking Process on Marxist Philosophy* (London: Canut Publishers, 2012), pp. 399–416.

differentiate societies from one another; their respective traditions, cultures, arts, all of which are constitutive features of a historically specific mode of production. Purposive activity is, nonetheless, *objective* activity that acts upon an *objective* nature. These two objective processes retain a reciprocity in terms of mutual inter-affectivity, mutual conditioning, and mediated determinacy. Naïve social consciousness experiences this nature as "other", as *pure* externality. However, it can be methodologically determined that such externality is not absolute, not the "outside" of human sociality. Instead, human sociality itself is relatively, not absolutely, *subsumed* by the objective dialectic of nature, that is, embedded in the "universal metabolism of nature"⁴⁸ yet not reducible to it.

Lenin concludes by asserting that "human consciousness reflects the essence, the substance of nature". This claim makes sense only insofar as we are methodologically equipped to determine the essence of nature itself. Given the entirety of the preceding analysis, we may venture to assert that, for Lenin, the essence of nature is kinetic transformation, relationally determinate, processual motion that undergoes necessary and contingent *change*. The essence of nature - kinetic transformation - is reflected by human consciousness; that is, human consciousness contains and expresses this essence, kinetic transformation, within the limits of its own determinate materiality. Though relating by means of the same essence, human consciousness - always already social consciousness - actualizes itself, lets its essence shine (Hegel, Scheinen),⁴⁹ gives shape to its essence, differentiates itself (through kinetic, transformative activity), in a necessarily distinct form that diverges from the kinetic transformative unfolding of natural processes. For this reason, human consciousness is never reducible to nature alone, never coincides with it absolutely. Neither can human consciousness "comprehend = reflect = mirror nature *as a whole*, in its completeness", ⁵⁰ since both nature and socially situated human consciousness are undergoing, ontologically, ceaseless kinetic transformation and thus are by definition always incomplete.

Furthermore, despite this ontological excess that gives nature its incomplete quality and human knowledge a relative, interminable, lack, nature still gives itself to human sociality in immediacy. Herein, Lenin makes a phenomenological point: "Nature is both concrete *and* abstract, *both* phenomenon *and* essence, *both* moment and relation."⁵¹ In its actual immediacy, nature retains both the most obvious and most mystifying contradiction; for human consciousness intuitively realizes its natural condition, its belonging to nature, its relational finitude, at the same time that nature appears as an

⁵¹ *Ibid.*, p. 208.

⁴⁸ Karl Marx and Frederick Engels, *Marx and Engels Collected Works*, vol. 30 (London: Lawrence & Wishart, 2010), pp. 54–66.

⁴⁹ See, for example, Hegel's discussion of the relational determination of "shine" and "essence" throughout the *Doctrine of Essence* (G. W. F. Hegel, *The Science of Logic*, trans. George Di Giovanni (Cambridge: Cambridge University Press, 2010), pp. 341–353).

⁵⁰ Lenin, *Collected Works*, vol. 38, p. 182.

external aggregate of disconnected, individuated objects. Yet, human consciousness can come to know – indeed, *must come to know* – its own determinate and interconnected existence, because its self-reproduction requires a *practice* which, albeit expressed in multifaceted form, is dependent on nature itself, as Lenin writes, "[f]rom living perception to abstract thought, *and from this to practice*".⁵²

Though nature is always immediately and objectively present before human consciousness, the immediacy of nature is always dialectically mediated by a spatially arranged and temporally conditioned human consciousness. Human consciousness, thus, attunes to the immediacy of nature by means of the mediations of the historical and social purposeful activity from which it arose and through which it was conditioned. This position exemplifies, once again, the dialectic of linearity and non-linearity inherent to dialectical-materialist analysis. The necessity of mediated immediacy shows that human consciousness is, in this very immediacy, nothing more than the crystallized and condensed result of historical mediations through which practice must realize itself immediately and objectively. In this way, the past is not moving away from the present but makes its presence clear as the necessary, active mediation between the mediated-immediacy of consciousness in the present and the *practical* expression of consciousness, historical and social purposeful activity, oriented toward the future through purposive-transformative activity within the bounds of immediate actuality. Moreover, human consciousness qua social consciousness and human purposive-transformative activity as always already historically specific and socially distinct (the universal character of these categories necessarily implied), means that for Lenin world history itself operates in a multi-linear fashion: "It is undialectical, unscientific, and theoretically wrong to regard the course of world history as smooth and always in a forward direction, without occasional gigantic leaps back."53

Without a method that retains the normative dimension of objectivity – as processually determinate and differentiated forms of relationally interdependent social and natural motion – the existing state of society, and its mode of reproduction, is thought to be the *only* form of sociality possible. Against this, Lenin's dialectical materialism consists of positing an ontological incompleteness while emphasizing the value of human cognition's practical relevance for social transformation by means of purposeful transformative activity; thus, Lenin's politics emerges not as a ready-made program, nor as a predetermined, "authoritarian" and scientistic objectivism, but rather as a methodological application of Marxian dialectical materialism to the concrete, material conditions of a historically specific social form. In this way, Lenin's philosophical articulation of dialectical materialism is not, contrary to countless accusations, an

⁵² *Ibid.*, p. 171.

⁵³ Vladimir Ilyich Lenin, *V. I. Lenin Collected Works*, vol. 22 (Moscow: Progress Publishers, 1972), p. 310.

exaltation of matter as the primary metaphysical concept⁵⁴ which guides all concepts, nor is it an exaltation of motion as a metaphysical category that explains all things. If anything, it is an exaltation of *determinate and relational change*, a dialectics of matter-in-motion expressing itself through objective transformations within space and time; both in terms of natural processes *and* social processes (the latter understood by Lenin with impressive rigor as a universal heterogeneity). Thus, we argue that the category that implicitly reigns supreme throughout Lenin's oeuvre, that dialectically underlies and unites his ontological, epistemological, and, therefore, his political observations and prescriptions, is the category of $\mu \epsilon \tau \alpha \beta o \lambda \dot{\eta}$ (metabolē),⁵⁵ that is, metabolism or, what amounts to the same: *dialectical change, transformation*.

Ecological Leninism: Social Metabolism and the Political

We choose to highlight the category of metabolism because it accounts for the emphasis of motion, the difference between the forms of development of sociality and nature, the political directives arising from Lenin's articulation of dialectical materialism, and, consequently, allows us to initiate a dialogue between our reading of Lenin and the contemporary Metabolic Rift Theory, and therefore articulate an Ecological Leninism in congruence with it. Additionally, our analysis seeks to situate Lenin beyond his classification as a purely political thinker and politician (or vulgar dogmatist),⁵⁶ and instead position him as belonging to a lineage of original, creative, and rigorous materialist thought. What distinguishes Lenin in this regard is how seriously he engaged with the idea of the inseparability of matter and motion and how he explored the consequences of this unity in terms of ontology, science, method, and politics. For this reason, we suggest that,⁵⁷ beyond his existing notoriety as a revolutionary, Lenin also ought to be viewed as part of what Ernst Bloch termed the "Aristotelian Left",⁵⁸ as well as part of the Left Hegelian tradition concerned with *Naturphilosophie*, and as one of "[t]he Three Fathers of *Naturdialektik*", as Adrian Johnston correctly notes.⁵⁹

Briefly, for Aristotle, specifically in his *Physics* and *Metaphysics*, the category of metabolism plays a central, though subtle, role. There, metabolism is defined modally and

⁵⁴ For similar and even more vulgar critiques of Lenin, see Neil Harding, *Leninism* (London: Macmillan Publishers, 1996).

⁵⁵ Though Lenin does not mention this term explicitly, it is clear that he was very fond of Aristotle, writing approving notes of his *Metaphysics* (Lenin, *Collected Works*, vol. 38, pp. 365–372).

⁵⁶ Adorno castigates Lenin as an unsophisticated dogmatist. See, for example, Theodor Adorno, *Lectures on Negative Dialectics: Fragments of a Lecture Course 1965/1966*, ed. Rolf Tiedemann, trans. Rodney Livingstone (Malden: Polity Press, 2008), p. 21.

 57 As there is not enough space to develop this genealogy here, we will leave it for a future work.

⁵⁸ See Ernst Bloch, *Avicenna and the Aristotelian Left*, trans. Loren Goldman and Peter Thompson (New York: Columbia University Press, 2019).

⁵⁹ See Adrian Johnston, *Prolegomena to Any Future Materialism*, vol. 2.

through its direct connection to $\varphi \breve{v} \breve{o} \breve{\zeta} (nature)$ and $\kappa \breve{v} \acute{\varepsilon} \omega$ (motion, which for Aristotle is predicated on the combination of actuality and potentiality).⁶⁰ Relevant here is that the unity of motion and metabolism signifies the ontological necessity of change, of transformation by means or as the process of material motion.⁶¹

Here we move from Lenin proper to an *Ecological Leninism* and this can only be achieved methodologically. It has been argued that a properly dialectical materialism can methodologically determine objectivity while simultaneously retaining a normative basis.⁶² The question is, how is this expressed politically? How does Lenin's dialectical materialist method account for a *political ecological theory*?

Though Lenin does not use the term metabolism explicitly, our analysis above demonstrates that he methodologically stipulates *how* the necessary inter-affective relations between the subjective dialectics of human sociality and the objective dialectics of nature are mediated by a practical dialectics which structures the *form* by which the interchange between the two (between subjective and objective dialectics) can be understood as a *metabolic process*, that is, as purposive-transformative activity (that is, social labor) engaged in determinate and relationally situated *change*.

This metabolic process, as a "rational abstraction",⁶³ can be further specified by means of delineating a historically specific sociality, moving thereby from the abstract to the concrete. Therein, the geopolitically and relationally situated social form becomes the object of analysis, not as a static and fixed aggregate, but as a *self-transforming, determinate, and processual motion* of a practical dialectics *qua* human-nature metabolic mediation. Underlying this motion – indeed, what comprises the forms of this motion – is the objectivity of the purposeful-transformative activity of socialized humanity in its direct interchange, metabolic relation, with objective nature, that is, *labor*. In this way, the *political* component of Lenin's method seeks to reveal the organizational structure that governs the processual motion of such determinate and socially specific purposive-transformative activities (that is, social labor). It achieves this through an

⁶² For a similar account of how dialectical materialism can epistemologically determine objectivity while not shying away from its normative elements, see Kenny Knowlton Jr., "Motion & Materialism: On Tran Duc Thao's Philosophical Framework", in *Peace, Land, and Bread: A Scholarly Journal of Revolutionary Theory and Practice*, vol. 5, forthcoming.

⁶³ See Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy*, trans. Martin Nicolaus (New York: Penguin Books, 1993).

⁶⁰ See Remi Brague, "Aristotle's Definition of Motion and Its Ontological Implications", *Graduate Faculty Philosophy Journal* 13, no. 2 (1990), pp. 1–22.

⁶¹ A full exploration of Lenin's indirect relationship to Aristotle is outside the scope of this paper. For a brief discussion of Lenin's sympathy to Aristotle, see Savas Michael-Matsas, "Lenin and the Path of Dialectics", in *Lenin Reloaded: Toward a Politics of Truth*, ed. Sebastian Budgen, Stathis Kouvelakis, and Slavoj Žižek (Durham and London: Duke University Press, 2007), pp. 101–119. For a thorough analysis of Marx's indebtedness to Aristotle, see Scott Meikle, *Essentialism in the Thought of Karl Marx* (La Salle: Open Court Publishing Company, 1985).

immanent analysis predicated on differentiating the structural form of the existing political-economic relations which serve as the mediating forces of the aforementioned activity of social labor (practical dialectics), the organization of their particular relations of production. Thus, the method of Leninist political prescriptions arises not from a preset idea, but from an understanding of the relational social arrangements belonging to a historically specific, geopolitical social formation constituted through, and characterized by, historically antagonistic social relations – antagonistic as a result of conflicting material interests and the determinate relations of political power that mediate these interests.

To reiterate, this political method is premised on a relational ontology of processual motion. This relationally situated motion, however, is not motion as such. The move from an ontological account to a political account, however, is complex, since political relations are, on the one hand, mediated by historical-ideological tendencies and, on the other, affect the agency and conditions of reproduction of *living* human beings. Lenin notes, "all classes and all countries are regarded, not statically, but dynamically, that is, not in a state of immobility, but in motion (whose laws are determined by the economic conditions of existence of each class)".⁶⁴ Through the analytical ability to differentiate the causal relations of "self"-movement of socially situated subjects, Lenin captures the decisive conditions and mediations that determine the objectivity of this social motion - the motion between social subjects - by identifying that which antagonistically interconnects the social subjects in question: their class position. Specifically, any given society is composed of inter-related subjects, but such relations between subjects are not arbitrary. On the contrary, they are related determinately, express objective social relations, through an objective historical system that structures and positions - politically and economically arranges - them in terms of a definite social metabolic order, a given mode of production. The relation between social groups, as situated within and through the social metabolic process, reveals their *class position*. Lenin writes, "[c]lasses are large groups of people differing from each other by the place they occupy in a historically determined system of social production".⁶⁵ The class structure of society expresses the historically grounded relations between social subjects and determines the objective limits of the modalities through which members of different classes metabolically appropriate the necessities that sustain their (biological) reproduction. The differentiation between each class, their determinate location within the existing mode of production, can be methodologically discerned and, thus, the *causal* interconnections that enforce the dominance of one class over another, and the forms of their domination, become an object of knowledge, the result of a particular politi-

⁶⁴ Lenin, Collected Works, vol. 21, p.75

⁶⁵ Vladimir Ilyich Lenin, *V. I. Lenin Collected Works*, vol. 29 (Moscow: Progress Publishers, 1972), p. 421.

cal method. The "truth" expressed as a result of this method, then, is not a mere fact, independent of any normative commitment. Rather, the forms of social organization, class differentiation, relations of exploitation and domination indicate the *possible forms* of setting in motion a political praxis that seeks to abolish the very conditions that reproduce such relations.

Insofar as the social becoming of material life is constituted by an ontology of dialectically kinetic transformation, then, this Leninist political method must orient itself toward the historically and relationally situated process of such social becoming. But, Lenin notes, "[i]t is common knowledge that, in any given society, the strivings of some of its members conflict with the strivings of others", and he further asserts that "the conflicting strivings stem from the difference in the position and mode of life of the *classes* into which each society is divided".⁶⁶ The ecological component of Lenin's political method can be implicitly ascertained from the recognition that in a definite and determinate social metabolic order, there exists class-positioned social subjects impeded from actualizing their own self-movement - their "mode of life" - by force of the conflictive power relations that structure both their self-movement and exploitatively alienate their *purposive-transformative* activities, *their practical metabolism*, that is, historically situated, relationally embedded *living labor*. These limitations, viewed through the universalization of the capitalist social metabolic order, are not, however, merely *particular* social limitations. They are, at this point in time, in the beginning stages of a *protracted ecological crisis*, which will incessantly destabilize the already unstable conditions of their existence, their universal socio-ecological limitations.

Capital's historical emergence through the homogenization and universalization of the value-form continues to determine the historically specific character of the existing social metabolic order, the processual motion of existing sociality. The totalizing dynamic of the ontology of capital, *its essence*, "the self-valorization"⁶⁷ of value, has penetrated and subsumed all existing social formations,⁶⁸ albeit unevenly, while rendering the conditions of (social) reproduction ecologically precarious. An Ecological Leninism, which accounts for both the unity-and-distinctness of heterogenous social forms and their *objective* dependency on the natural world, maintains a dialectical commitment to the universal *ecological* character of the class struggle. Thus, an Ecological Leninism must determine political praxis as a decisive interruption of the capitalist social metabolic order.

We have shown that, although Lenin did not employ the vocabulary of social metabolism, his thought closely approximates much of contemporary ecosocialist and

⁶⁶ Lenin, Collected Works, vol. 21, p. 57.

⁶⁷ Karl Marx, *Capital: A Critique of Political Economy*, vol. 1, trans. Ben Fowkes (New York: Penguin Books, 1990), p. 255.

⁶⁸ The two steps of this historical process correspond to Marx's analysis of "formal" and "real" subsumption as articulated in the Appendix to *Capital*, vol. 1.

eco-Marxist thought in such a way as to contribute to the development of Metabolic Rift Theory and lay the theoretical ground for a revolutionary politics and praxis in the context of the ecological rift.

Lenin's recognition, following Marx and Engels, of the relational embeddedness of the social metabolism of human society within the larger context of the universal metabolism of nature enabled the development of an ecologically revolutionary political project. Lenin understood that the capitalist mode of production had to be comprehensively transformed in order to promote a more balanced, *socially rational*, socio-metabolic relation in the process of realizing communist society. Yet, despite being of a different time, the stakes remain the same: Socialism or Barbarism? Revolution or Rift? Communism or Climate Collapse? In other words, in facing Ecosocialism or extinction, what, then, we might ask, does an Ecological Leninist politic have to offer the struggle today?

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