

Kropotkin's Metaphysics of Nature

Graham Purchase

1991

An Introduction to Graham Purchase's Kropotkin

Graham Purchase's essay reveals what a subtle and revolutionary thinker Kropotkin was. While underestimating the importance of the mutual aid theory (certainly it was more than the one per cent of Kropotkin's theoretical perspective and his written work that Purchase claims, but this is a secondary point to the subject at hand), Purchase has demonstrated other aspects of the anarchist Prince's thinking that were vastly important and prescient in recognizing where ideas about nature (ecological nature but also the very structure of the cosmos) were going in this century. Readers familiar with the Gaia hypothesis and chaos theory will find much here of interest. Finally, the convergence of Kropotkin's perspective on anarchy and the modern synthesis of holism and organicism is a vindication of anarchy as both a theoretical perspective and a model or paradigm for nature.

The sections in bold type are direct quotes from Kropotkin. [Marked as unattributed quotes in Web archive version.] The text has been edited by the FE staff. Graham Purchase can be contacted c/o Jura Books, 110 Crystal St., Petersham NSW, Australia, 2049.

Peter Kropotkin (1842–1921) was a Russian anarchist, a prince who renounced his title after seeing the suffering of the peasantry. He escaped prison in Russia and lived abroad until the 1917 revolution, although he remained an opponent of the Bolsheviks. His books are among the classics of anarchism, many of which are available through our bookshop.

Prefatory Note

Since the late 1960s there has been a marked revival of interest in philosophical or theoretical anarchism. I have personally recorded over twenty articles on Kropotkin alone in respected academic journals written over the last two decades. Nearly all of these, however, have tended to focus on Kropotkin's theories of mutual aid, for example, his thesis in *Mutual Aid: A Factor of Evolution* (1902), and his concept of natural political community. The concern shown for Kropotkin's mutual aid theory (which represents about one percent of an enormous literary output) has tended to distort his concept of nature and its evolutionary and self-regulating process.

The scholarly focus on his mutual aid theories, although far from unhealthy (as it is undoubtedly one of the cornerstones of communitarian anarchist theory), has, I think, led people to assume that Kropotkin supported a naively holistic view of natural process in which nature is regarded as a seamless web of symbiotic interconnectedness. Careful attention to what in fact Kropotkin actually says about natural processes reveals an entirely different and much more complex conception of nature than that which is frequently (by implication) attributed to him.

Given the enormous role (since its conception with Locke, Hobbes and Rousseau in the 17th and 18th centuries) that the idea of an "original state of nature" has played in modern political theory, and combined with the fact that Kropotkin is frequently regarded as one of the founders of modern ecology, the absence of detailed consideration of his philosophical naturalism has resulted in a serious misrepresentation of his view on the foundations

of anarchist life philosophy. This essay attempts to correct this problem by presenting a brief interpretation of Kropotkin's metaphysics by considering a number of fundamental assertions that Kropotkin makes in his more abstract reflections on nature and the philosophical bases for anarchism.

~~~~~

“How ceaselessly heaven revolves! How constantly earth abides at rest! Do the sun and the moon contend about their respective places? Is there someone presiding over and directing these things? Who binds and connects them together? Who causes and maintains them without trouble or exertion? Or is there perhaps some secret mechanism in consequence of which they cannot but be as they are?”

—Chuang Tsu

“The fairest universe is but a heap of rubbish piled up at random.”

—Heraclitus

“As to the harmony that the human mind discovers in nature, and which harmony is on the whole but the verification of a certain stability of phenomena, the modern man of science no doubt recognizes it more than ever. But he no longer tries to explain it by the action of laws...Harmony...results from the disorderly and incoherent movement of numberless hosts of matter, each of which goes its own way and all of which hold each in equilibrium.”

—Peter Kropotkin, *Anarchism: Its Philosophy and Ideal*

## 1. Diffuse or Non-centralized Organization Over Concentrated or Centralized Organization

It is still a commonly held belief that organization and stability must be the result of some central organ, some centrally concentrated source of organizational force. This power, it is thought, must be concentrated either individually, in the tribal chief or patriarchal father, or centrally, in the state. Nature and the universe are organized by god, the tribe by its chief, society by the state, and the body by the brain. Natural, societal, and bodily organization must, it is assumed, be concentrated, enforced and imposed by some omnipotent being or centrality. Society, without some concentrated organizational force or nervous system “radiating from Paris or from Berlin as far as the most remote game keeper, and ruling the most distant hamlet by orders from the capital,” [1] will, it is thought, simply disintegrate.

“There was a time when man imagined the earth placed in the center of the universe. Sun, moon, planets and stars seemed to roll round our globe: and this globe inhabited by man represented for him the center of creation.

“An immense change in all conceptions of the civilized part of mankind was produced in the sixteenth century when it was demonstrated that far from being the center of the universe, the earth was only a grain of sand in the solar system—a ball much smaller even than the other planets.

“Take any work on astronomy of the last century. You will no longer find in it our tiny planet placed in the center of the universe. But you will meet at every step the idea of a central luminary—the sun—which by its powerful attraction governs our planetary world. From this central body radiates a force guiding the course of the planets; and maintaining the harmony of the system. Issued from a central agglomeration, planets have, so to say, budded from it. They owe their birth to this agglomeration; they owe everything to the radiant star that represents it still: the rhythm of their movements, their orbits set at wisely regulated distances, the life that animates them and adorns their surfaces. And when any perturbation disturbs their course and makes them deviate from their orbits, the central body re-establishes order in the system; it assures and perpetuates its existence.

“This conception, however, is also disappearing as the other one did. After having fixed all their attention on the sun and the large planets, astronomers are beginning to study now the infinitely small ones that people the universe. And they discover that the interplanetary and interstellar spaces are peopled and crossed in all imaginable directions by little swarms of matter, invisible, infinitely small when taken separately, but all-powerful in their numbers.

“Thus the center, the origin of force, formerly transferred from the earth to the sun, now turns out to be scattered and disseminated. It is everywhere and nowhere. With the astronomer, we perceive that solar systems are

the work of infinitely small bodies; that the power which was supposed to govern the system is itself but the result of the collision among those infinitely tiny clusters of matter, that the harmony of stellar systems is harmony only because it is an adaptation, a resultant of all these numberless movements uniting, completing, equilibrating one another.

“The whole aspect of the universe changes with this new conception. The idea of force governing the world, pre-established law, preconceived harmony, disappears to make room for the harmony that Fourier had caught a glimpse of: the one which results from the disorderly and incoherent movements of numberless hosts of matter, each of which goes its own way and all of which hold each in equilibrium.” [2]

When we study the ecology of a natural system, be it a rainforest, a coral reef or an area of grassland, the organizational structure of which often survive for several million years, we perceive neither internally or externally, even limited concentrations of organizational force. For there is no king of the jungle, no lord over nature.

In a forest, a particular fungus grows upon the rootlets of a particular tree, each giving and receiving in turn the nutrients they require. One animal specializes in eating the fruits of a specific species of plant thereby helping to spread the thousands of seeds contained in each and every one. Two species are in constant conflict for resources and a third accidentally benefits, etc. The forest is a natural and complex web of alliance and antagonism, cooperation and conflict, symbiosis and dominance.

Natural systems, at whatever level, even the biosphere itself, must be represented as dynamic organizational configurations, as stabilities of enormous complexity in which life “without being subordinated to a central organ” [3] is held in a subtle and ever-temporary, but permanent, balance of conflict and interrelationship. Organizational force is dissipated and widely dispersed within a vast diversity of separate yet interdependent energies.

Indeed, the very stability of a natural system is developed and maintained precisely because there exists no overriding or concentrated monopoly of organizational power. Each individual or species adapts its behavior according to the dictates of an entire environment—the needs, energies, and habits of countless others.

“Each,” Kropotkin argues, “reacts on all the others.” [4] Everything is adapted, ordered and organized to, and about, everything else.

Kropotkin does not commit himself here to the religion of super-organicism, or a naive holistic outlook in which nature is regarded as a seamless and unbroken whole. Stability is not the result of a fixed web of cooperation and symbiotic interrelatedness. Nor does Kropotkin idealize nature, for in nature, areas of sustained interconnectedness and symbiosis are typically counterposed by areas of “reaction,” “conflict” and “opposition.”

Stability is not represented as an unbroken unity, but rather is seen as a continuous “adjustment” and a “fugitive equilibrium” [5] in which a “multitude of...autonomous tendencies...balance and oppose one another continually.” [6] Stability is a volatile disequilibria held in balance through an ongoing interaction of diverse, and often autonomous energies.

## **2. Internal Over External Organization**

In Western thought a strong and external organizational force was for many centuries regarded as a necessary precondition of natural order. Rather than resulting from the internal processes of nature itself, the source of organizational power was seen as the product of an all-powerful organizational force that was in some sense above, external or “placed outside nature which, it was assumed, had been created or pre-established by an external, indeed, transcendental, god or deity.

Evolutionary theory, Kropotkin maintained, destroyed forever the notion of “pre-conceived harmony in nature.” The “harmony that the human mind discovered in nature” was but the “verification of a certain stability of phenomena.” This durable organizational equilibrium resulted from the “collisions and encounters” of “millions of blind forces” over “millions of centuries.” [7] Biospheric homeostasis, far from being the product of some mysterious “unknown” external force or authority, is rather the evolutionary result of an infinitely complex and astoundingly long process of self-assimilated organization (Cf. Gaia hypothesis).

Kropotkin’s concept of complex self-regulation lies at the heart of our modern conception of natural process and stability. When we wish to preserve a piece of unspoiled wilderness, a forest or a marsh, we do not begin by

attempting to externally impose some unnecessary order or organization. On the contrary, we automatically acknowledge that it is in essence internally self-organizing and accordingly attempt to disturb it as little as possible.

The principle of “local” or “internal” self-regulation, Kropotkin believed, was not merely a characteristic of large scale organizational processes (e.g., the subtle rhythms of the seasons, the equilibrium of a rainforest or the biospheric maintenance of sufficient oxygen) but was an essential feature of all living systems that extended downwards and was observable in the smallest particles or organized living matter.

The individual human blood cell, though but a small part of a much larger and infinitely more complex entity, nonetheless exhibits some recognizable degree of internal or independent self-organization. Indeed, even the smallest components of the individual cell are, by virtue of their surrounding membranes, capable of self-regulating the flow of nutrients, water and wastes. Self-organization is a fundamental principle of life which is observable throughout nature, from the simple organization of the individual cell to the infinitely more complex organization of the biosphere or universe.

Kropotkin believed that the anarchistic concept of society which stressed the need to encourage as much autonomy as was possible to the smallest feasible federative or societal unit was entirely compatible with the natural principle of local or internal self-regulation. Although the various elements of society were conceived as being interdependently arranged in a complex federative patterning, each was conceived as remaining an internally self-organized and “sovereign” entity. A society in which each neighborhood, community or locality, every “group, circle branch or section,” [8] would be left to organize its affairs according to its own needs and aspirations.

The concept and practice of the state was thus for Kropotkin an unnatural one. For although “statist” history continually promotes the idea that the historical function of the state was that of the benevolent orderer of some dark and primitive pre-social chaos, in reality, the development of the state or an empire has been intimately dependent upon the suppression and eventual elimination of local and independent social life.

The state, to be effective in fulfilling its historical mission of imposing a uniform and centrally administered ordering of society, first has to establish itself as the primary source or organizational force. The imposition of external state control thus necessitated the destruction of the internal and self-determining, self-organization of the independent region or community. [9] Even today, minorities and independent communities do not give up their autonomy to the state willingly, but are actively forced to accept what is undoubtedly perceived as brutalizing, exploitative, and external authoritative force.

External organization is nearly always alienated from the living, natural or social systems it is endeavoring to control. For it is incapable of integrating itself with their unique, and often highly complex internal dynamic. Such alienation leads to misunderstanding, indifference and intolerance. Subtle divergences and intricate internal associations are not understood as evidence of some internal and complex order, but rather as symptomatic of chaos. Diversity is confused with disorder, variety with chaos and uniqueness with defiance.

This confusion is what motivates the process of external classification and uniformalization. Rigid and external organizations attempt to discover and catalogue some hidden simplicity, an overall mechanism or explanation. Hence, what is internally at variance with this externally conceived and imposed order must be repressed, leveled and eventually ironed out by a brutalizing external uniformalization. External organization, even if it does not become an actively destructive force, will always represent a brutalizing and tyrannical one.

#### **Organization from the “simple” to the “complex”**

Rather than attempting to externally organize society in a hierarchical fashion “from the top downwards,” Kropotkin’s anarchism hopes that society will internally and horizontally organize itself “from the bottom upwards.” It seeks to take advantage of the “simple” self-organization of the particular branch or locality and hopes that by means of “free federation” they can organize themselves into the “complex.”

Anarchism, Kropotkin asserts, in accordance with the natural principle of local or internal organization aims at the total abolition of the state and its replacement by the “social organization from the simple to the complex by means of free federation of popular forces...according to mutual agreement and to the infinitely varied, ever-changing needs of each locality.” [10]

### 3. Fluidity Over Crystallization

Spontaneity and relative instability were for Kropotkin two hallmarks of a living and developing system. He saw the universe in a continual state of flux. Nature could not be conceived or represented as a static and unchangeable order. The organization of life, precisely because it was living, necessitated an ongoing and spontaneous adaptation to the ever-modified needs and requirements of continual evolutionary change. Likewise, for human society to remain vital and healthy, it has to continually develop and adapt:

“...the idea of stability which was hitherto attached to everything which man saw in nature, is broken down, destroyed and put to naught! Everything changes in nature, everything is incessantly modified: systems, wages, planets, climates, varieties of plants and animals, the human species—Why should human institutions perpetuate themselves?

“Nothing remains, everything modified itself, from the rock which appears to us immovable and the continent which we call “terra firmis,” to the inhabitants, their manners, their customs, their ideas.

“What we see around us is only a passing phenomenon which ought to modify itself, because immobility would be death. These are the conceptions to which modern science accustoms us.

“But these conceptions date almost from yesterday. Arago is almost our contemporary. And yet when he spoke one day of continents which sometimes arose out of the seas and were sometimes submerged by the waves, a learned friend made this remark, “But your continents spring up then like mushrooms,” so much was the idea of immobility, of stability in nature, rooted in the mind as in this epoch, to-day continual change, evolution, is one of the most popular terms.” [11]

Likewise:

“The life of society we understand, not as something completed and rigid, but as something never perfect, something ever striving for new forms in accordance with the needs of the time. This is what life is in nature.” [12]

Kropotkin frequently uses this naturalistic argument to criticize the concept and practice of laws and the elephantine and overly centralized bureaucracies needed to impose and implement them.

“When we study the characteristics of law, instead of perpetual growth corresponding to that of the human race, we find its distinctive trait to be immobility, a tendency to crystallize what should be modified day by day.” [13]

For Kropotkin, anarchism recognizes the inadequacies of fixed and unalterable social laws and looks forward to

“A society to which pre-established forms, crystallized by law, are repugnant; which looks for harmony in an ever-changing and fugitive equilibrium between a multitude of varied forces and influences of every kind.” [14]

### 4. Diversity Over Uniformity or Homogeneity

Although a great deal of scholarly and intellectual attention has been focused upon Kropotkin’s mutual aid theories, the theory was never intended to provide anything approaching a comprehensive account of bio-historical development. The mutual aid tendency was but “one factor” among many, and in any case was merely intended to serve as an exaggerated and rhetorical rejoinder to the Social Darwinist assertion that fierce, individualistic conflict represented the primary mechanism of evolution, progress and improvement.

The history of social and biological evolution, Kropotkin claimed, was not comparable to a “rolling ball” or “marching column” [15] with a single or overriding direction, but was better characterized as a multi-faceted development resulting from the bio-historical development of many, diverse and often conflicting tendencies. The evolution of life was not the product of a small set of unalterable evolutionary laws or mechanisms, but rather an ongoing and probabilistic process necessarily involving degrees of uniqueness, spontaneity and irreversibility.

Kropotkin saw the natural disposition toward spontaneity and variation, like the tendency for life at all levels to engage in cooperative and symbiotic behavior, to be of particular relevance to anarchist life-philosophy.

Variation allowed for evolutionary change and adaptation, and led to the development of new species, new ideas and new ways of surviving in a constantly changing world. Without variation and change, nature becomes static, immobile and lifeless. “Variety,” exclaims Kropotkin, “conflict even, is life, uniformity is death.” [16]

The stress which Kropotkin placed on variation and diversification in nature is entirely consistent with our modern conceptions of natural process. Although cultural and biological evolution is still unfortunately regarded by many as a steady and unidirectional progression of ascension and elimination which leads to the development, and eventual dominance of a single or superior culture of species, our attention has been increasingly focusing on other, but no less important tendencies, such as those toward diversity and increasing complexity.

Kropotkin believed that anarcho-federalist society, no longer subject to the centralized uniformization of the state, would through decentralization and the formation of local independence, create a richer, more varied and sustainable cultural and environmental mosaic.

### **Integration through diversity**

Kropotkin suggests in the 1898 preface to his *Fields, Factories and Workshops* that the complex and decentralized self-organization of anarcho-federalist society, which endeavors to encourage diversity would further two major and complementary evolutionary trends—“differentiation” and “integration.” [17] The organization of life “from the bottom upwards,” “according to the infinitely varied and ever-changing needs of each locality” [18] would create a society more “integrated” with regional ecological variation and allow for a more balanced and environmentally sustainable relationship with the natural world.”

## **Endnotes**

1. Kropotkin, *Revolutionary Studies*, Section IV, The Commonweal (London), January 2, 1892.
2. Kropotkin, *Anarchism: Its Philosophy and Ideal*, Collected Pamphlets, pp. 115–18.
3. *Ibid.*, p. 120.
4. *Ibid.*, pp. 119–20.
5. *Ibid.*, p. 124.
6. *Ibid.*, p. 119.
7. *Ibid.*, pp. 120–21.
8. *Ibid.*, pp. 131–32.
9. See for example Kropotkin’s *The State: Its Historic Role* (1898).
10. *Anarchism...*, p. 133.
11. *Revolutionary Studies*, Section III, p. 2.
12. Kropotkin, *Modern Science and Anarchism*, Collected Pamphlets, p. 124.
13. Kropotkin, *Law and Authority*, Collected Pamphlets, p. 200.
14. *Anarchism...*, p. 124.
15. *Ibid.*, p. 142.
16. *Ibid.*, p. 143.
17. Kropotkin, preface to the first edition of *Fields, Factories and Workshops* (London: 1898).
18. *Anarchism, Its Philosophy and Ideal*, p. 133.

# fifth Estate

Graham Purchase  
Kropotkin's Metaphysics of Nature  
1991

<https://www.fifthestate.org/archive/337-late-summer-1991/kropotkins-metaphysics-of-nature>  
Fifth Estate #337, Late Summer, 1991

**[fifthestate.anarchistlibraries.net](https://fifthestate.anarchistlibraries.net)**