Vertov: Between the Organism and the Machine

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> *In every living being, we find that those things which we call parts are inseparable from the Whole to such an extent, that they can only be conceived in and with the latter; and the parts can neither be the measure of the Whole, nor the Whole be the measure of the parts.*
>
> — Goethe

I

The standard reading of the work of Dziga Vertov argues that, due to his affiliation with the Constructivist group of avant-garde artists that emerged in the Soviet Union after the Bolshevik Revolution of 1917, Vertov employed the machine as the model for both his films and the new Soviet society depicted in them. In *The Material Ghost*, Gilberto Perez writes:

> [Vertov's] *Man with a Movie Camera* [1929] pictures the city as a vast machine seen by the omnipresent seeing machine that is the camera. The structure of Vertov's films, their aggregate space pieced together in the cutting room out of all the manifold things the mechanical eye can see, suggests the constructions of the engineer so prized in [the] new Soviet society.[1]

The centrality of the machine to Constructivist theory and practice, as well as to Vertov's work, is beyond dispute. However, it has obscured the influence of other models on Vertov as he came to make *Man with a Movie Camera* in the late 1920s, including one that is often thought of as antithetical to the machine, namely, the organism.

Most obviously, *Man with a Movie Camera* is structured according to the daily cycle of a complex living organism such as an animal or human being—sleep,

1. Gilberto Perez, *The Material Ghost: Films and Their Medium* (Baltimore, Md.: Johns Hopkins University Press, 1998), p. 159.

OCTOBER 121, Summer 2007, pp. 5–18.

waking, work, and relaxation—a structure established in earlier city films such as Walter Ruttmann's *Berlin, Symphony of a Great City* (1927). More importantly, as Annette Michelson has pointed out, the model for the new Soviet society depicted in the film is an organism, not a machine:

> This film . . . joins the human life cycle with the cycles of work and leisure of a city from dawn to dusk within the spectrum of industrial production. That production includes filmmaking . . . mining, steel production, communications, postal service, construction, hydro-electric power installation, and the textile industry in a seamless, organic continuum. . . . The full range of analogical and metaphorical readings thereby generated signify a general and organic unity.[2]

Michelson does not explain why she uses the term "organic" as opposed to "mechanical" here. What, precisely, do these concepts mean, and is Michelson correct to apply one rather than the other to *Man with a Movie Camera*? If so, why would Vertov have employed the organism as a model for the new Soviet society, and where in Soviet culture and society of the 1920s might it have come from?

II

The terms "organic" and "mechanical" are often applied to art works, as well as to many other phenomena, but their meanings are rarely made clear. In order to clarify these concepts, it is helpful to examine briefly the debate between two scientific-philosophical paradigms, which I will label, for the sake of convenience, machinism or mechanism on the one hand, and organicism on the other. It is in large part the insistence of the organicist paradigm that there are essential differences between the organic and the inorganic that has shaped the oppositional meanings of the terms "organic" and "mechanical." Although the debate between these two paradigms has taken place since the end of the eighteenth century primarily among philosophers and scientists, it is part of the much larger debate about the political, social, ethical, and existential ramifications of modern science that has been such a fundamental feature of Western culture since the scientific revolution.

By the end of the eighteenth century, the conception of the natural universe as a causal mechanism, a "blind watchmaker," to use Richard Dawkins's felicitous analogy,[3] was firmly in place. According to this conception, nature has no teleology, purpose, or meaning, but instead consists of elementary particles of matter

2. Annette Michelson, introduction to Dziga Vertov, *Kino-Eye: The Writings of Dziga Vertov*, ed. Annette Michelson, trans. Kevin O'Brien (Berkeley: University of California Press, 1984), p. xli.

3. Richard Dawkins, *The Blind Watchmaker: Why the Evidence of Evolution Reveals a Universe without Design* (1986; New York: Norton, 1996). Dawkins is, of course, appropriating and correcting eighteenth-century theologian William Paley's "argument from design" that the natural universe is like a watch made by a (sighted) watchmaker.

meaninglessly and purposelessly interacting in space according to physical laws. Alfred North Whitehead referred to this conception as "scientific materialism" in his classic work *Science and the Modern World*, and described it as follows:

> [Scientific materialism] presupposes the ultimate fact of an irreducible brute matter, or material, spread throughout space in a flux of configurations. In itself such a material is senseless, valueless, purposeless. It just does what it does, following a fixed routine imposed by external relations which do not spring from the nature of its being.[4]

One of the scientific-philosophical paradigms that emerged out of this materialist conception of nature is what philosophers and historians of science commonly refer to as mechanism. According to mechanism, the chief, and indeed for many the only, valid method of scientific explanation is reductive. It consists of explaining the nature and behavior of something in terms of the nature and behavior of its constituent parts, all the way down, if necessary, to the elementary particles of matter out of which it is made.[5]

Needless to say, mechanism has generated a great deal of hostility over the last two hundred years, in part because it appears to reduce all phenomena, including human beings and other living organisms, to meaningless, purposeless interactions between particles of matter. Many have argued that, because of this, mechanism has been responsible for creating a profound existential and ethical crisis in modernity. Schiller called the existential emptiness putatively opened up by materialism and mechanism the "disgodding" of nature, and a century later, Weber coined the phrase "the disenchantment of the world" to describe it. According to the historian of science Anne Harrington, Weber's

> assessment of science as a "disenchanting" force in the modern world would hardly have surprised [his audience]. Since the 1890s, an intensifying stream of German-language articles and monographs had been identifying the rise of a certain kind of mechanistic thinking in the natural sciences as a chief culprit in a variety of failed or crisis-ridden cultural and political experiments. Science had declared humanity's life and soul a senseless product of mechanism, so people now treated one another as mere machines.[6]

The hostile reaction to mechanism has taken many shapes over the last two hundred years, and is much too vast and complex to describe. What is important here is that one form it has taken is the antireductionist claim that living, organic

4. Alfred North Whitehead, *Science and the Modern World* (New York: Free Press, 1967), p. 17.
5. There is still much debate about reductionism. For a contemporary critique, see John Dupré, *The Disorder of Things: Metaphysical Foundations of the Disunity of Science* (Cambridge, Mass.: Harvard University Press, 1993).
6. Anne Harrington, *Reenchanted Science: Holism in German Culture from Wilhelm II to Hitler* (Princeton, N.J.: Princeton University Press, 1996), p. xv.

phenomena are fundamentally different from dead, inorganic phenomena such as particles of matter or machines, in that their nature and behavior cannot be explained by being reduced to the nature and behavior of their parts. According to this argument, mechanist reduction can only explain inorganic phenomena, which can be reduced to the meaningless, purposeless mechanics of elementary particles. Organic phenomena cannot be explained in this way because of their meaningful, purposive design and behavior.

The roots of this claim lie in Kant's *Critique of Judgment.* There, Kant argues that the a priori categories, such as causality, that human beings bring to their cognition of nonliving phenomena are deficient with respect to living phenomena. In cognizing living phenomena, Kant argues, human judgment is forced to postulate a principle of teleological causality that Kant calls "natural purpose." According to this principle, the parts of a living organism have to be explained by appealing to the teleology or purposive functioning of the organism as a whole. Whereas the parts of a mechanical model cause their effects independently of each other and can be explained separately, the parts of a teleological model are both cause and effect of each other:

> The first principle required for the notion of an object conceived as a natural purpose is that the parts, with respect to both form and being, are only possible through their relationship to the whole. . . . Secondly, it is required that the parts bind themselves mutually into the unity of a whole in such a way that they are mutually cause and effect of one another.[7]

This argument has been very influential over the last two hundred years, and has been taken up by a number of philosophical and scientific movements. Almost immediately, it inspired Goethe to claim that nature's teleology is revealed in the small number of basic forms or *Gestalten* that all natural phenomena are the product of, as well as the way these metamorphose into ever more complex forms. Kant's argument was also used as one of the foundation stones of nineteenth-century vitalism in biology. Associated with figures such as Johann Blumenbach and Johannes Müller in the early nineteenth century, vitalism argued for the need to postulate irreducible teleological principles at work in living organisms that could explain their seemingly purposive design and behavior. Meanwhile, Kant's argument about teleological causality was also taken up, in different ways, by the antimechanistic and antimaterialist, idealist, so-called natural philosophers of the nineteenth century such as Schlegel, Fichte, Schelling, and Hegel, and has continued to exert an influence into the twentieth century due to philosophers such as Henri Bergson, as we shall see.

7. Immanuel Kant, *Critique of Judgment*, quoted in Timothy Lenoir, *The Strategy of Life: Teleology and Mechanics in Nineteenth-Century German Biology* (Chicago: University of Chicago Press, 1982), p. 25.

The arguments of these various scientific and philosophical individuals and movements differ in many important ways. The reason I refer to them collectively as organicist is that repeated in them again and again are two basic claims about the difference between living organisms and inorganic phenomena such as machines, claims that are used to criticize mechanistic reduction with respect to organisms. First, organicists argue that the parts of an organism cannot be explained without appealing to the purpose of the organism as a whole. Unlike an inorganic phenomenon such as a machine, whose parts interact purposelessly and therefore blindly and can be explained independently of each other, the parts of an organism work toward the purpose of the organism as a whole, as if intentionally, as if possessed of knowledge about what that purpose is. Second, organicists claim that a living organism interacts creatively with its environment, adapting to it in order to survive, while inorganic phenomena such as machines interact blindly with their environments. The environment plays an essential role in the life of an organism, since organic life consists largely of adapting to an environment in order to survive; but the environment is extraneous to an inorganic phenomenon such as a machine. If an organism is removed from one environment and placed in another, it will adapt to it; a machine, however, will keep on functioning the same way regardless of whatever environment it is in.

Of course, all of this is open to dispute from a scientific and philosophical point of view. What is important here is not whether the arguments of organicists are true or not, but rather that they have shaped the meanings of the terms "organic" and "mechanical."

III

With this conceptual clarification in mind, it becomes clear why Michelson is correct to describe the new Soviet society depicted in *Man with a Movie Camera* as an "organic continuum" rather than as a machine. First, and most importantly, Vertov does not represent the parts of this society as interacting purposelessly and blindly, independently of each other, in the manner of the parts of a machine. Instead, he constantly shows how each part is working toward the purpose of the whole, as if intentionally, as if possessed of knowledge about what that purpose is. Almost every part of this society, to paraphrase Kant, is both cause and effect of every other part. This Vertov does by depicting Soviet citizens engaged in different activities in different places at different times in order to give "everyone working behind a plow or a machine the opportunity to see his brothers at work with him simultaneously in different parts of the world," thereby overcoming the blindness that artificially separates them.[8] He then links them together, as Michelson points out, through "strategies of visual analogy and rhyme, rhythmic

8. Vertov, "Kino-Eye" (1926), in *Kino-Eye*, pp. 73–74.

patterning, parallel editing, superimposition, accelerated and deaccelerated motion, camera movement—in short, the use of every optical device and filming strategy then available to film connection."[9] The most famous and obvious example of this is the exhilarating sequence in which filmmaking and textile production are connected through editing, graphic matches, and then superimposition. But the film as a whole, as Vlada Petric has shown in his meticulous analysis, is replete with more subtle linking techniques, such as the circular motion of the cameraman's hand as he cranks the camera, which is rhymed by various other activities and objects throughout the film, including the concluding superimposition of circular human eye over circular camera lens.[10] As Vertov himself puts it in his article on the film,

> Each item or each factor [in the film] is a separate little document. The documents have been joined with one another so that, on the one hand, the film would consist only of those linkages between signifying pieces that coincide with the visual linkages and so that, on the other hand, these linkages would not require intertitles; the final sum of all these linkages represents, therefore, an organic whole.[11]

By way of these visual linkages, Vertov emphasizes the essential oneness of the new Soviet society, the fact that every human being and human activity, whether it be mining, steel production, or filmmaking, is an indispensable part of a larger whole in which it participates and to which it makes an essential contribution, rather than a separate part that, like the part of a machine, functions independently of the larger whole. In this way, according to Michelson, his films attempt to instill in his Soviet viewers the belief that they are all interdependent on each other and all equally owners of the means of production, "the euphoric and intensified sense of a shared end: the supercession of private property in the young socialist state under construction."[12]

Furthermore, unlike a machine that will, according to organicists, blindly keep on functioning regardless of its environment, human beings in this film are shown creatively interacting with the new industrial environment emerging around them, including machines. In an early manifesto, Vertov declared his desire to "introduce creative joy into all mechanical labor . . . causing the worker to love his workbench, the peasant his tractor, the engineer his engine,"[13] and throughout *Man with a Movie Camera*, workers exhibit this creative joy in their labor and the technology they use, including the Kinoks themselves, whose creative use of the machines of cinema is one of the major themes of the film. The

9. Michelson, introduction to *Kino-Eye*, p. xxxvii.
10. See Vlada Petric, *Constructivism in Film: The Man with the Movie Camera, A Cinematic Analysis* (Cambridge: Cambridge University Press, 1987), chap. 3.
11. Vertov, "*The Man with a Movie Camera*" (1928), in *Kino-Eye*, p. 84.
12. Michelson, introduction to *Kino-Eye*, p. xl.
13. Vertov, "We: Variant of a Manifesto" (1922), in *Kino-Eye*, p. 8.

film's viewers are also implicated in this creative labor. For as Petric has shown, through the use of "disruptive-associative montage," which consists of "the apposition of often unrelated and contradictory themes," the viewer is required to creatively infer what the connections between many shots are, connections which are only revealed by the film retroactively.[14] For these reasons, Michelson is correct in describing this society as an organic, rather than a mechanical, one.

IV

From where might this organic model have suggested itself to Vertov, and why might he have used it? As is well known, the standard view of Soviet culture and society in the 1920s is that it was swept up in a "cult of the machine."[15] However, scholars have shown that there were other influential, antimechanistic paradigms in the '20s, including an organicist one. Boris Gasparov, for example, has claimed that

> By the second half of the 1920s . . . [the mechanistic] frame of thought was challenged by another trend, which could be called "organic, "existential," or "neoromantic." Based on a sharp distinction between what is and is not "life" . . . it approached phenomena of the former order in a way radically different from that fit for describing phenomena of the latter order. The "organic" phenomenon's wholeness, its dynamic, ever-evolving nature, and its ability to interact "creatively" with the environment were acknowledged as its most fundamental characteristics.[16]

Gasparov cites a number of examples of this organicist paradigm in the late 1920s, including the biologist Trofim Lysenko's theory of biological evolution, which won favor over so-called mechanistic genetics under Stalin; and the linguistic theories of Mikhail Bakhtin and his disciples, which treat language as an organism. Meanwhile, Christina Lodder, in her classic work *Russian Constructivism*, points to an organicist trend in Constructivism itself, represented most clearly by Tatlin and Miturich. According to Lodder, these artists self-consciously eschewed the machine as a model for at least some of their art works, and attempted to find ways to create art works with organic relations to nature and the environment.[17]

Another possible source of Vertov's organicism has been pointed to perhaps unwittingly by Gilles Deleuze, who argues in *The Movement Image* that Dziga Vertov "realizes the materialist programme of the first chapter of [Henri Bergson's]

14. Petric, *Constructivism in Film*, pp. 95–107.
15. Richard Stites, *Revolutionary Dreams: Utopian Vision and Experimental Life in the Russian Revolution* (New York: Oxford University Press, 1989), chap. 7, pp. 145–64.
16. Boris Gasparov, "Development or Rebuilding: Views of Academician T. D. Lysenko in the Context of the Late Avant-Garde," in *Laboratory of Dreams: The Russian Avant-Garde and Cultural Experiment*, ed. John E. Bowlt and Olga Matich (Stanford, Calif.: Stanford University Press, 1996), pp. 147–48.
17. Christina Lodder, *Russian Constructivism* (New Haven, Conn.: Yale University Press, 1983), chap. 7.

Matter and Memory through the cinema." By this, Deleuze seems to mean that Vertov's films depict social reality very much like material reality as described by Bergson's metaphysics, a ceaselessly changing reality in which everything interacts with everything else. As Deleuze puts it, "Whether there were machines, landscapes, buildings or men [being filmed] was of little consequence: each—even the most charming peasant woman or the most touching child—was presented as a material system in perpetual interaction."[18] In Vertov's cinema, claims Deleuze, "everything is at the service of variation and interaction."[19]

Deleuze's interpretation of Vertov's films aside, it is not implausible to link Vertov to Bergson. As Hilary Fink has shown, Bergson's philosophy exerted a major influence on Russian modernists from the 1890s through the 1920s, and she argues that "Bergsonian ideas were so much in the air during the second and third decades of the twentieth century that most Russian intellectuals were likely to be familiar with the basic themes of Bergson's *Introduction to Metaphysics* and *Creative Evolution*."[20] While Bergson most likely did not have a direct influence on Vertov, echoes of some of his ideas can be heard in Vertov's work, especially in his conception of Soviet citizens as being interconnected in a larger organic whole that must be revealed by art due to the limitations of human perception. Whether or not this means it is the "materialist program" of Bergson's philosophy that Vertov "realizes," as Deleuze argues, is another question.

Russian modernism from the 1890s until the ascendancy of socialist realism in the late 1920s consisted of a number of individuals and movements who disagreed with each other, often vehemently, and who pursued different artistic strategies and objectives. Nevertheless, Fink and others have argued, they were unified by "the theurgic impulse to transform reality through art."[21] By "theurgic impulse" is meant the idea, inherited from Russian orthodox religion, that "one continually strives to uncover and to build what is already present all around—the kingdom of God."[22] Russian modernists, of course, transformed and, in many cases, secularized this idea, but it survives in their theories and practices. All tended to argue that the true nature of reality was hidden from human beings and needed to be revealed by the creative act of the artist. By revealing the true nature of reality through art, the artist would enable human beings to participate in reality. The division between art and life would therefore be overcome. It is this shared, theurgic conception of art, Fink claims, that explains the appeal of Bergson's philosophy to otherwise very different artists and artistic movements within Russian modernism, for his work gave this conception philosophical legitimacy.

18. Gilles Deleuze, *Cinema 1: The Movement Image*, trans. Hugh Tomlinson and Barbara Habberjam (Minneapolis: University of Minnesota Press, 1986), p. 39.
19. Ibid., p. 80.
20. Hilary Fink, *Bergson and Russian Modernism, 1900–1930* (Evanston, Ill.: Northwestern University Press, 1999), p. xiv.
21. Ibid., p. xv. See also Bowlt and Matich, introduction to *Laboratory of Dreams*, pp. 8–9.
22. Fink, *Bergson and Russian Modernism*, p. 27.

As is well known, the point of departure for Bergson's philosophy is his conception of time and his critique of Western philosophy and science for conceiving of time spatially. By this, Bergson means that time is reduced by most Western thinkers to a series of separate, static states much like a series of still photographs. In reality, he argues that time is duration, "the continuous progress of the past which gnaws into the future and which swells as it advances."[23] Time does not consist of the replacement of one state by another, but rather one state constantly changing. The past endures into the present and the future, like a "flux of fleeting shades [of color] merging into each other," or the "flow" of a river.[24] The reduction of time to a series of separate, static states is due to the intellect's practical need to measure time and predict the future. Geometry exemplifies this tendency of the intellect, and this is why philosophers such as Descartes praise geometry as the valid method for achieving true knowledge of reality. Bergson does not dismiss the intellect because of its important practical function, but he does argue that the knowledge of reality it produces is relative because it dispenses with time as duration, which any absolute knowledge of reality must incorporate. In addition, the nature of time as duration entails that reality is fundamentally unpredictable, for "to foresee consists of projecting into the future what has been perceived in the past."[25] Because time does not consist of a series of separate, static states but one state changing, there is no such thing as one state repeating another in the future. Hence, one cannot predict the future precisely from the past, and "duration is irreversible."[26] "Duration means invention, the creation of forms, the continual elaboration of the absolutely new."[27]

On the basis of this conception of time, Bergson makes a number of other claims. First, he argues that reality is not composed of separate entities, such as particles of matter, interacting in predictable ways, as mechanistic physical theories argue. Rather, reality is an indivisible, continuous whole that is constantly changing in unpredictable ways. Everything is connected to everything else throughout time and space, and reality is mobile. As Bergson puts it in *Matter and Memory*, "Matter thus resolves itself into numberless vibrations, all linked together in uninterrupted continuity, all bound up with each other, and traveling in every direction like shivers through an immense body."[28]

Second, Bergson claims that human beings cannot perceive the mobility of reality with their sense organs because "to perceive means to immobilize."[29]

23. Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (Mineola, N.Y.: Dover , 1998), p. 4.
24. Ibid., pp. 2–3.
25. Ibid., p. 6.
26. Ibid.
27. Ibid., p. 11.
28. Henri Bergson, *Matter and Memory*, trans. N. M. Paul and W. S. Palmer (New York: Zone Books, 1988), p. 208.
29. Ibid.

Perception subtracts everything that the thing being perceived is connected to throughout time and space.[30] Hence, Bergson talks about perception as an act of isolating what is perceived from its surroundings, by which he means the larger spatial whole and temporal becoming of which it is a part:

> I should convert [objective reality] into representation if I could isolate it, especially if I could isolate its shell. . . . It [is] necessary, not to throw more light on the object, but, on the contrary, to obscure some of its aspects, to diminish it by the greater part of itself, so that the remainder, instead of being encased in its surroundings as a *thing*, should detach itself from them as a *picture*. . . . [Objects] becomes "perceptions" by their very isolation.[31]

In *Creative Evolution*, Bergson describes the objects we perceive as being "cut out of the stuff of nature by our perception," as if perception were a pair of scissors.[32] It is for this reason that Bergson believes that "to perceive is to immobilize" and that he uses his famous analogy between perception and photography. Perception cuts out objects from their temporal becoming and the spatial whole of which they are a part, much like a still camera does.

Third, artists in particular possess a special mental power, which Bergson calls "intuition," that enables them to overcome the epistemic limitations of perception and achieve absolute knowledge of reality. Through "an effort of intuition," the artist is able to penetrate to the inner becoming of things, restoring the spatial and temporal connections between things that human perception subtracts and thereby revealing that any one thing is part of a larger whole that is constantly changing in unpredictable ways.[33]

Finally, by penetrating to the inner becoming of things, the artist reveals to human beings that they themselves are part of a reality that is constantly changing in unpredictable ways. Hence, human beings are revealed to be free to participate in this ever-changing reality, to evolve creatively. "We are creating ourselves continually," Bergson claims, and he likens this self- and world-creation to artistic creation, thereby legitimizing the theurgic conception of art, the idea that, through artistic creation and revelation, the artist is participating in reality, which itself is one great work of art in progress.[34]

These arguments were appropriated and transformed in a variety of ways by Russian modernists, not least the Futurists, to whom Vertov was exposed as a young man prior to the revolution. How about Vertov himself? At first sight, it might appear that Vertov would reject most if not all of these arguments, as did

30. Ibid., pp. 35–36.
31. Ibid., p. 36.
32. Bergson, *Creative Evolution*, p. 12.
33. Ibid., p. 177.
34. Ibid., p. 7.

Soviet Marxists in general during the 1920s. To begin with, the claim that it is intuition that enables us to access the true nature of reality is antithetical to the Marxist faith in reason and science. So is the argument that reality is constantly changing in unpredictable ways, which runs counter to the Marxist belief in a Communist utopia as the inexorable telos of history conceived of as a dialectical process. Bergson's philosophy was also accused by Marxists of being, like Kant's, too idealist, as allowing the human mind too great a role in our knowledge of reality. It is for these reasons that it was increasingly attacked by Soviet intellectuals in the 1920s, and that, as the Communist party increased its control over artists in the late 1920s and socialist realism became the ruling artistic orthodoxy, its influence on artists waned.[35]

Nevertheless, there are several tantalizing similarities between Vertov's arguments and Bergson's, which suggest that Vertov, whether consciously or not, tried to find a rapprochement between Marxism and the theurgic conception of art as filtered through Bergsonianism by his Futurist predecessors. Like Bergson, Vertov emphatically and repeatedly argues that the true nature of reality is hidden from human beings due to the limitations of human perception, particularly vision. And he conceives of these limitations in much the same way as Bergson does, arguing that the fundamental problem with human perception is that it is "immobile," confined to one spatial-temporal section of reality. Meanwhile, the cinema is "free of the limits of time and space,"[36] and Vertov repeatedly emphasizes its greater mobility in comparison to the human eye: "The position of our bodies while observing or our perception of a certain number of features of a visual phenomenon in a given instant are by no means obligatory limitations for the camera."[37] In terms of space, the cinema can "put together any given points in the universe, no matter where [it has] recorded them."[38] And just as it can traverse large expanses of space quickly (though camera movement) or instantaneously (through editing), so it can move backward and forward in time. This can be achieved by way of editing: "The coffins of national heroes are lowered into the grave (shot in Astrakhan in 1918); the grave is filled (Kronstadt, 1921); cannon salute (Petrograd, 1920); memorial service, hats are removed (Moscow, 1922)."[39] Or it can be achieved by fast, slow, and reverse motion: "[The camera] experiments, distending time, dissecting movement, or, in contrary fashion, absorbing time within itself, swallowing years, thus schematizing processes of long duration inaccessible to the normal eye."[40] Because of its mobility, the cinema, Vertov asserts, allows for "the possibility of seeing without limits and distances."[41]

35. See Fink, *Bergson and Russian Modernism*, chap. 5, pp. 101–11.
36. Vertov, "Kinoks: A Revolution" (1923), in *Kino-Eye*, p. 18.
37. Ibid., p. 15.
38. Ibid., p. 18.
39. Ibid., p. 17.
40. Ibid., p. 19.
41. Vertov, "The Birth of Kino-Eye" (1924), in *Kino-Eye*, p. 41.

What the mobility of the cinema reveals, according to Vertov, is precisely what is hidden through the immobility of human perception, namely, the connections between things throughout time and space. However, because of his Marxist beliefs, Vertov conceives of these connections as *social* in nature, and it is in this way that he reconciles Marxism and the theurgic conception of art. As Vertov puts it, the cinema, due to its mobility, "opens the eyes of the masses to the connection . . . between the social and visual phenomena interpreted by the camera."[42] In other words, the camera (or cinema) reveals various social connections between things that the eye is too weak to see because it is immobile.

In general, as Michelson has shown, these social connections come in many different shapes and sizes in Vertov's films: relations of economic interdependency between town and city, between different types of labor and sectors of the economy, and between different ethnicities, regions, and nationalities within the Soviet Union. The cinema is able to reveal these social connections because of its mobility, its capacity to move through space and time between citizens engaged in different activities in different places, at different times throughout the Soviet Union, and to link them together.[43]

It is precisely this dimension of Vertov's work that is so important to Deleuze, who follows Vertov in arguing that the cinema is more mobile than the human eye. According to Deleuze, Vertov's films are able to represent the ceaseless interaction between things at the core of Bergson's metaphysics because of the cinema's mobility, its capacity, through camera movement and editing, to move from "a point where an action begins to the limit of the reaction, as it fills the interval between the two, crossing the universe and beating in time to its intervals."[44] Following Bergson's theory of the epistemic limitations of human perception, this capacity to reveal actions and reactions throughout space and time means that the cinema in Vertov's hands escapes its limitations and is therefore "superhuman." "This is not a human eye—even an improved one. For, although the human eye can surmount some of its limitations with the help of contraptions and instruments, there is one which it cannot surmount, since it is its own condition of possibility."[45] This condition is of course immobility because, as we have seen, for Bergson "to perceive is to immobilize." Vertov's cinema, in Deleuze's view, reveals within the domain of social reality the surroundings that are of necessity subtracted when human perception cuts what it perceives out of reality: everything it interacts with throughout the universe spatially and temporally.

Where one could perhaps disagree with Deleuze is over his earlier quoted claim that "Whether there were machines, landscapes, buildings or men [being filmed] was of little consequence: each—even the most charming peasant woman

42. Vertov, "On the Film Known as Kinoglaz" (1923), in *Kino-Eye*, p. 35.
43. Ibid.
44. Deleuze, *Cinema 1: The Movement Image*, p. 40.
45. Ibid., p. 81.

or the most touching child—was presented as a material system in perpetual interaction." Without getting into the vexed issue of precisely what Deleuze means by materialism, what this comment implies is that Vertov is much more concerned with the interaction between the human beings in his films than the human beings themselves, which are simply "at the service of variation and interaction." But is it really of "little consequence" what Vertov depicts as interacting throughout time and space? Does Vertov's real interest lie in a "material system in perpetual interaction"? I think not. As we have seen, Vertov depicts the social connections between human beings that are revealed by the mobility of the cinema as an *organic* continuum, and it is in this notion of an organic continuum or whole that we can once again hear echoes of Bergson's philosophy. For Bergson also conceives of reality, "the totality of the material universe," as an organic whole, a "living organism."[46] The breaking down of reality into separate entities by mechanistic physical theories in order to measure and predict it is a principle of organization that is external to reality, argues Bergson, one imposed on it by the human intellect. In truth, reality, like an organism, is a whole that consists of parts that are internally organized and interdependent rather than separate.[47]

Vertov's use of the organism as a model for Soviet society points to an important dimension of his work, which is its propagandistic function, its attempt to make citizens of the new Soviet society *want* to participate in its construction. In "Artistic Drama and Kino-Eye," a text from 1924, he argues that "to follow the growth of the young Soviet organism, to record and organize the individual characteristics of life's phenomena into a whole, an essence, a conclusion—that is our immediate objective" because of its "high propagandistic pressure."[48] In other words, Vertov sees the task of revealing to his Soviet viewers that they are indispensable parts of a larger organic whole as a way of making them want to participate in the building of the new Soviet society. Rather than being dispensable cogs in an indifferent, impersonal machine, they are indispensable, organic parts of the new society. Hence, Deleuze is wrong, I think, to argue that "everything is at the service of interaction" in Vertov's films. It is precisely the opposite. Interaction, the revelation of the social connections between human beings and human activities throughout the organic continuum of the new Soviet society, is in the service of making human beings want to participate in its construction, to overcome the division between art and life by engaging in creative labor and becoming artists, to "build what is already present all around," namely, the great work of art of the Marxist utopia.

But regardless of Deleuze's interpretation, there are echoes of Bergson's philosophy in Vertov's work, which suggests not that Vertov was in some sense a

46. Bergson, *Creative Evolution*, p. 15.
47. Ibid., pp. 12–15. See also Ruth Lorand, "Bergson's Concept of Art," *British Journal of Aesthetics* 39, no. 4 (October 1999), p. 402.
48. Vertov, "Artistic Drama and Kino-Eye" (1924), in *Kino-Eye*, pp. 47, 48.

Bergsonian, but that Bergson's ideas, including his organicism, were very much "in the air," as Fink puts it, in Russian modernism, and that they might have constituted one source of the organic model that was exerting an influence on Vertov by the end of the 1920s.[49] It would be wrong to argue that the machine and mechanism were not also continuing to play a vital role in Vertov's work during this period,[50] or that there were not other sources for the organic model.[51] Not only would such an argument attribute too much coherence to Vertov's work, a common interpretative fallacy committed routinely by scholars and critics of art, but it would do a disservice to Vertov himself, whose artistic brilliance lay partly in his ability to creatively synthesize a number of different, even contradictory paradigms and models, including the organism and the machine.

49. This confirms Bowlt and Matich's observation that, although the post-revolutionary generation of artists ostensibly repudiated much of their predecessors' work as "bourgeois" and "reactionary," in fact they inherited many of their ideas, even as they adapted them to the needs of revolutionary art. See Bowlt and Matich, introduction to *Laboratory of Dreams*, p. 4.

50. I examine the role of the machine and mechanism in Vertov's work in my "Can the Camera See? Mimesis in *Man with a Movie Camera*," *October* 89 (Summer 1999), pp. 25–50.

51. Another source might be the poetry of Walt Whitman, as Ben Singer demonstrates in his "Connoisseurs of Chaos: Whitman, Vertov, and the 'Poetic Survey,'" *Literature/Film Quarterly* 15, no. 4 (1987), pp. 247–58.