# DRAFT: NOT FOR CITATION WITHOUT PERMISSION OF AUTHOR

#### NUMBER 162

### DIALECTICS IN CONTEMPORARY SOVIET PHILOSOPHY

A DRAFT OF A CHAPTER OF THE PROJECTED BOOK: <u>MARXISM IN THE USSR:</u> A CRITICAL SURVEY OF CURRENT SOVIET PHILOSOPHY

by James P. Scanlan Fellow, Kennan Institute for Advanced Russian Studies

Colloquium Paper

September 24, 1982

Kennan Institute for Advanced Russian Studies, Woodrow Wilson International Center for Scholars Washington, D.C.

# Chapter Three

OBJECTIVE DIALECTICS: DIALECTICS IN THE NATURE OF THINGS

If, with respect to materialism, a systematically ambiguous Marxist-Leninist "orthodoxy" has been created which both satisfies Soviet philosophers and does no violence to modern science or secular common sense, the same cannot be said for dialectics. Called the "living soul" of the Marxist doctrine by Lenin,<sup>1</sup> dialectics is also its most troubled element, a center of fundamental disagreements not simply between philosophers, scientists, and ideologists, but among the philosophers themselves. To many Western observers, moreover, it is dialectics that renders Marxist philosophy puzzling and suspect, as if a familiar outlook—materialism which most people find intelligible even if they regard it as false, has suddenly been transformed into an alien and quite possibly nonsensical set of views. In short, the dialectics component of dialectical materialism is a controversial subject both inside and outside the USSR, and for that reason we shall consider it in some detail in this chapter and the next.

Among the complexities of the subject is the fact that Soviet philosophers include within it both an ontological theory concerning the character of the material world (named "objective dialectics" by Engels) and an epistemological theory concerning the character of our knowledge of the material world ("subjective dialectics").<sup>2</sup> Since, in good materialist fashion, our knowledge is held to be derivative from and to reflect the world itself, we shall begin with objective dialectics, and reserve Chapter Four for an examination of the corresponding epistemological theories of subjective dialectics. 2

### A. Basic Elements of Dialectics as an Ontology

For all their disagreements, Soviet dialecticians unanimously endorse a number of broad characterizations of reality which originally were adapted from the philosophy of Hegel by Marx, Engels, and Lenin. Most Soviet textbook expositions of dialectics limit themselves to these characterizations, which are typically summarized under the three headings of <u>principles</u>, <u>categories</u>, and laws of dialectics.

The <u>principles</u> of dialectics are identified variously by different writers, but a prominent place is always given to two which a recent work calls "the principles of universal connection and development."<sup>3</sup> The superiority of dialectics to "metaphysics," as we saw in Chapter • One, is that the former acknowledges just those two features of the world. To approach something dialectically, it is held, is to consider it, first, as interacting with its environment; to approach it metaphysically, by contrast, is to view it as a separate entity unrelated to other things. For the dialectician, furthermore, reality is changeable and develops over time; the metaphysician, on the other hand, sees reality as static and ahistorical. Hence whatever else a dialectical world may be for Soviet philosophers, it is an interconnected and dynamic world.

Even at this level of generality, it is easy to see that a dialectical outlook inclines the Soviet philosopher toward certain modes of thought. A leaning toward historical analysis, an expectation of evolution and revolution, a tendency to raise questions of genesis and direction, to expand an inquiry to include additional sides of a question, to link an item of investigation with other things or events--all these attitudes are to be expected of a dialectician. Similarly it is easy to understand the dialectician's readiness to dismiss as "metaphysical" such beliefs as that there is a fixed, timeless "human nature" or that a spiritual phenomenon like religion can fruitfully be examined in isolation from its socio-economic setting. Many such particular convictions of the Soviet Marxist, even if not rigorously entailed by dialectics, are at least given strong support by the general stress on linkages and change.

A second broad way in which Soviet dialecticians characterize the world is by the use of categories -- philosophical concepts of the greatest generality which are held to identify the most essential, universal properties and relations of everything that is. Every science has its basic concepts, which capture the fundamental features and connections of its distinctive subject matter, the Marxist-Leninist argues; dialectics, ontologically exhaustive in scope, deals with concepts of maximum abstraction, applying equally to the realms of nature, society, and thought. In elementary Soviet treatments of dialectics there is some variation in the lists of categories presented, for reasons we shall examine later in this chapter. Virtually every list, however, includes 'matter', 'motion', 'space', 'time', 'infinity', and such correlative pairs as 'particular' and 'universal', 'quantity' and 'quality', 'cause' and 'effect', 'necessity' and 'chance', 'possibility' and 'actuality', 'content' and 'form', 'essence' and 'appearance'.4 Often all categories are held to come in pairs, and there is frequently an attempt to tabulate or otherwise group the entire set of categories in some order.

The significance of the categories is of course that they locate universal features of the real world. For the Soviet philosopher, to

identify 'cause' and 'effect' as categories is equivalent to asserting the principle of universal causal determinism. "All phenomena in the world, all changes and processes must be induced by certain causes," we read in Fundamentals.<sup>5</sup> Similarly, the categorial status of 'essence' and 'appearance' signifies the universality of a real distinction much appealed to in Soviet philosophy -- the distinction between the underlying, inner nature of a thing or process (the deep currents of a river, in Lenin's example) and some changeable, superficial phenomenon which is consequent upon that essence (the foam on the river's surface) $\frac{1}{6}$  this distinction gives the Soviet philosopher a doctrine of natural kinds, and one moreover which, because of its categorial universality, applies to social and intellectual entities as well as natural. A related Soviet doctrine of broad significance is linked with the categories of 'necessity' and 'chance'. 'Chance', for the Soviet philosopher, means neither that a phenomenon is uncaused nor that we are ignorant of its cause; it signifies, rather, the absence of necessary causal determination, or determination which proceeds from the essence of the phenomenon in question. Given the material, cubical nature of a die, when cast on a flat surface it comes to rest of necessity on one of its sides or another; which side is a matter of chance, being dependent on causes inessential to the die. Capitalists hire workers of necessity; workers sometimes become capitalists by chance.7

A third traditional way of characterizing the dialectical real world, and the way most textbooks dwell upon, is by specifying general <u>laws</u> that it purportedly obeys. Many such laws are identified by Soviet philosophers in one or another context, but chief among them are the three "basic laws" named by Engels and often regarded as constituting

the principal subject matter of philosophy, as we saw in Chapter One. They are the law of the transformation of quantity into quality and vice versa, the law of the interpenetration of opposites, and the law of the negation of the negation.<sup>8</sup> Even Soviet philosophers who reject the "general laws" definition of philosophy pay homage to these three laws, which are held to capture critical features of a dialectical reality.

The universal respect accorded the laws is not matched, however, by consensus concerning their exact statement or sphere of application. Neither Engels nor Lenin formulated the laws in so many words, and there is much debate about their content in Soviet philosophy; for those reasons the laws are far more often named than stated, even in specialized studies. Popular texts are almost invariably vague, often to the point of incoherence, in their efforts to suggest the substance of the laws while at the same time avoiding troublesome questions of interpretation. One of the virtues of <u>Fundamentals of Marxist-Leninist</u> <u>Philosophy</u> is that it hazards actual formulations, which we shall follow here.

The law of the transformation of quantity into quality and vice versa states, according to the authors of <u>Fundamentals</u>, that there is

interconnection and interaction of the quantitative and qualitative aspects of an object thanks to which small, at first imperceptible, quantitative changes, accumulating gradually, sooner or later upset the measure of that object and evoke fundamental qualitative changes which take place in the form of leaps and whose occurrence depends on the nature of the objects in question and the conditions of their development in diverse forms.<sup>9</sup>

Central to this formulation, as to most other statements of the law by Soviet philosophers, are the notions that quantitative aspects of things or events can be distinguished from qualitative aspects, and that the two are related in such fashion that relatively gradual quantitative changes precipitate relatively sudden qualitative changes.

According to this law, all processes of development are punctuated by what Engels (following Hegel) called "nodes," at which change is both accelerated and deepened. Hegel and Engels used the illustration of the boiling and freezing points of water. The temperature/of water changes gradually as quantities of heat are added; at 100 degrees centigrade (the "node"), however, a more sudden and radical alteration takes place: the water changes in character ("quality") from liquid to vapor. The range of temperature changes between 0 and 100 degrees is a "measure"---that is, a range over which quantitative change proceeds without producing qualitative change. The transition from one quality to another that takes place at the node is called a "leap"--a term that appropriately suggests both relative suddenness and movement to another level.<sup>10</sup> Other favorite illustrations in Soviet philosophical literature are the change effected when the division of some quantity of a chemical compound reaches the level of a single molecule, beyond which the substance is no longer (say)  $H_2O$  but separate atoms of H and O; the emergence, after long processes of evolution, of organic life from nonliving matter; and, of course, social revolutions--sudden qualitative leaps such as the transition from capitalism and socialism, precipitated by gradual quantitative changes in society. The point of the "and viceversa" addition (which is often, as in the Fundamentals formulation above, tacitly understood rather than stated) is simply to acknowledge

that quantitative changes are preceded as well as followed by qualitative changes. In real development, for the Soviet dialectician, periods of evolution alternate with revolutionary leaps to ever different qualitative levels.

The second basic law of dialectics--Engels' "law of the interpenetration of opposites"---is now usually called by Soviet philosophers "the law of the unity and struggle of opposites." In <u>Fundamentals</u> it is formulated as follows:

All things, phenomena and processes possess internal contradictions, opposing aspects and tendencies that are in a state of interconnection and mutual negation: the struggle of opposites gives an internal impulse to development, leads to the building up of contradictions, which are resolved at a certain stage in the disappearance of the old and the appearance of the new.<sup>11</sup>

According to this law the real world is a scene of dynamic contention. There are, of course, apparent stabilities and unities, but these are without exception analyzable into deeper oppositions which are the seeds of change. From the positive and negative electrical charges within an atomic nucleus to the conflict of economic classes in a social system, the presence of what the Soviet philosopher calls 'objective contradictions' is a universal feature of reality.

Whereas the first law characterizes the <u>manner</u> in which development occurs, the law of the unity and struggle of opposites is often said by Soviet philosophers to indicate the <u>source</u> of development: development results from the dynamism of conflicting elements within matter itself.<sup>12</sup> Here we encounter once again the notion of the self-movement of matter,

so important to Soviet ideologists as obviating the need for an external "First Mover" of the material world. No less important is the ideological application of the law in the social sphere. Affirmation of the reality of "objective contradictions" in society is often seen as the first line of defense against "opportunists" and "revisionists" who argue that the relations of bourgeoisie and proletariat under capitalism can be cooperative rather than antagonistic.<sup>13</sup>

The third basic law of dialectics--the "law of the negation of the negation"--is the least fixed in its formulation. In some starements it appears to add little to the first two laws; the Soviet <u>Philosophical</u> <u>Encyclopedia</u>, for example, presents it as the law according to which "development unfolds in definite cycles, within the framework of which the contradictions characteristic to each are resolved."<sup>14</sup> Considerably richer is the formulation in Fundamentals:

The law of the negation of the negation is a law whose operation conditions the link and continuity between that which is negated and that which negates. For this reason dialectical negation is not naked, "needless" negation, rejecting all previous development, but the condition of development that retains and preserves in itself all the progressive content of previous stages, repeats at a higher level certain features of the initial stages and has in general a progressive, ascending character.<sup>15</sup>

This formulation, like many others in Soviet philosophical literature, captures Engels' Hegelian notion that dialectical development is both progressive and conservative---that successive qualitative leaps beyond ("negations of") a previous state do not simply annihilate it

but eventually return on a higher level, spiral-fashion, to what was positive in the old state. In Engels' example, the barley plant "negates" the seed from which it grows, in the sense of replacing the seed in the natural cycle; but the plant is in turn replaced ("negated") not by one seed but by the dozens it produces; and if we bring in "the gardener's art," Engels adds, the result of the double negation could be not simply more but better seeds.<sup>16</sup> More commonly cited by Soviet philosophers is a socio-historical example used by both Marx and Engels: the institution of private property negated the communal form of land ownership found in primitive societies, on the Marxist reading of history; but the proletarian revolution, in negating the institution of private property, returns to common ownership, not in its original form but in "a far higher and more developed form" in which it is no longer an obstacle to high economic productivity.<sup>17</sup> Because of this emphasis on what is called in Fundamentals the "positive, ascending character" of development, the third law is sometimes said to indicate the direction of development, as the first two indicate its manner and source.<sup>18</sup>

### B. The Fortunes of Dialectics under Stalin and After

Popular Soviet treatments of dialectics typically give no open indication that there are theoretical difficulties with the subject. In fact, however, it is in dialectics that the intellectual problems of Soviet philosophy are at their most acute, as discussions on the more specialized, technical level of philosophy amply testify.

The problems go back to the very beginnings of systematic dialectical materialism, and specifically to the tensions created by grafting an essentially idealist conceptual apparatus—dialectics—onto a materialist philosophy. These tensions first surfaced in Soviet philosophy in the

nineteen-twenties in the form of bitter disputes between a group of scientifically inclined materialists called "mechanists" (among them were Aleksandr Bogdanov and Nikolai Bukharin) and a group of dialecticians with a strong admiration for Hegel, called "Deborinists" after their leader, A. M. Deborin.<sup>19</sup> When in 1929-1930 the dispute between the two sides was terminated, it was not by any philosophical resolution but by the imposition of a Stalinist philosophical orthodoxy which - required the denaturing of both positions and the acceptance of a purely external combination of "dialectics" and "materialism." Under the banner of "the unity of theory and practice," a new Soviet philosophical establishment, led by M. B. Mitin and P. F. Ludin, stressed ardent Communist partisanship and the practical application of dogmas at the expense of serious philosophical investigation.

Although in principle dedicated to a dialectical outlook, the Marxist-Leninist orthodoxy of the 'thirties and 'forties permitted little attention to the finer points of dialectics as presented in Engels' <u>Dialectics of Nature</u> or Lenin's <u>Philosophical Notebooks</u>, not to mention Hegel's <u>Science of Logic</u>. The intellectual level of the treatment of dialectics in the Stalin era was set by the essay entitled "Dialectical and Historical Materialism" which appeared in 1938 as part of Chapter Four of <u>A History of the Communist Party of the Soviet Union</u> (Bolsheviks): <u>Short Course</u>. Written by Stalin himself, this superficial exposition of Marxist doctrine quickly became the gospel for Soviet philosophers. In it Stalin eschewed all talk of "categories" and "laws" and instead presented a simplified version of dialectics in which he identified four "features" of the dialectical world--interconnectedness, dynamic development, the transition from quantity to quality,

and the presence of internal contradictions.<sup>20</sup> Although the first two of Engels' laws were preserved in germ as the last two of Stalin's "features," no trace remained of the law of the negation of the negation--an omission which cynics have attributed to Stalin's fear of being "negated" himself. Hailed by sycophants, on the other hand, as the liberation of dialectics from Hegelian mystification, Stalin's presentation fixed the limits of the philosophical treatment of dialectics in his time.

Release of Soviet philosophers from the straitjacket of Stalinist orthodoxy after 1953 has meant a return to the classic texts of Lenin, Engels, and Hegel and the reopening of the many questions raised by the attempt to develop dialectics on a materialist foundation and in a modern scientific world. Very soon after Stalin's death, a multidimensional dialogue on dialectics began, the results of which have been the production of an enormous body of literature and the reemergence of the mechanist-Deborinist controversy without the old labels.

To characterize the post-Stalin debate briefly, let us take only one of the standard Soviet approaches to dialectics--namely, category theory. A problem confronting Soviet dialecticians was the lack of any model to follow in developing a <u>materialist</u> theory of dialectical categories. Neither Marx nor Engels attempted to construct such a theory. Lenin gave considerable attention to categories in his <u>Philosophical</u> <u>Notebooks</u> (1914-15), but he did so in the form of a detailed running commentary on Hegel's <u>Science of Logic</u>, without offering an explicit system of his own.<sup>21</sup> Indeed Lenin seemed to suggest that the Hegelian categorial system would be perfectly adequate once freed from its idealist trappings. Further reflection, however, suggests that

freeing it would be no easy task, for the very identification and ordering of the categories in the Hegelian system was grounded in the equation of being with thought. Surely a materialist dialectician could endorse neither Hegel's relegation of the category 'matter' to a subordinate position nor his giving so prominent a role to the category 'nothing'-a notion that can have no outological significance for the materialist. And many other Hegelian categories as well--'contradiction' and 'the absolute' prominently among them--seem appropriate for a world of thought but not a world of matter. What, then, are the categories of a <u>materialist</u> dialectics, and how are they related?

Serious attempts to answer these questions began early in the post-Stalin period. V. P. Tugarinov in The Correlation of the Categories of Dialectical Materialism (1956) drew selectively on Hegel to present a system of more than fifty categories, beginning with the fundamental categories of substance ('nature', 'being', 'matter', 'phenomenon'), proceeding to attributive categories ('motion', 'space', 'time', and others), and concluding with relational categories ('quantity-qualityleap', 'content-form', and many more).<sup>22</sup> In the same year, M. M. Rozental' and G. M. Shtraks in Categories of Materialist Dialectics suggested that since all knowledge of reality begins with the perception of phenomena, the initial categories might be the pair 'phenomenonessence'; following these, the authors proposed a succession of categories each with some conceptual link to its predecessor-'cause', 'effect', 'necessity', 'chance', 'law', and so on, through a total of eighteen categories.<sup>23</sup> Both of these disparate efforts met with some favor, but they also stimulated other Soviet philosophers to try their hands; and in the ensuing years a wide variety of categorial systems have been

suggested by a large number of writers, including V. S. Bibler, B. M. Kedrov, P. V. Kopnin, V. S. Lutai, V. I. Mal'tsev, A. P. Sheptulin, D. I. Shirokanov, and others. The diversity of these schemes with respect to both the number and the order of the categories is seen by one recent Soviet observer as proceeding from differences in "images of dialectics, in ideas of what the essence of the theory of dialectics is and of what are the ways of constructing it and the methods of expounding it."<sup>24</sup>

The diversity, in fact, extends beyond those philosophers who seek to construct finished systems of traditional philosophical caregories. For they are the modern-day Deborinists, neo-Hegelians who see the world as fitting a web of interdependent philosophical concepts essentially discerned by Hegel, for all his idealistic errors. Ranged against them are the neo-mechanists--the more scientifically minded, less traditionalistic Soviet philosophers who reject what one of them, I. S. Narskii, has called "a kind of 'cult' of the idealistic dialectics of Hegel." Fundamentally opposed to the notion of a system of timeworn categories ringing a few materialist changes on the Science of Logic, these philosophers argue that dialectics must be responsive to conceptual developments in the sciences. "It would be a great mistake," writes Narskii, "to limit epistemological investigations to categories of dialectical materialism developed earlier"; and he argues for the recognition and study of new categories such as 'sign', 'structure', 'fact', 'information', and 'model'.<sup>25</sup> V. I. Sviderskii, contending that Hegel's concepts have been superseded, speaks of "the urgent need to develop ever newer and newer categories of dialectics." Sviderskii himself has devoted much attention to the categories of 'element' and 'structure', which he holds to be central to ontology.<sup>26</sup>

13

Ŷ

Some anti-traditionalists in Soviet philosophy, finally, reject the very idea of a categorial "system," whether composed of old, "philosophical" (i.e., Hegelian) concepts or newer, scientific ones. One argument, advanced by A. S. Arsen'ev and others, is that systematization is contrary to the true spirit of dialectics as a science of pervasive change and genuine qualitative novelty.<sup>27</sup> A quite different, thoroughly anti-Hegelian argument was presented by the late formal logician K. S. Bakradze (1898- ) and his followers. For there to be a "system" of categories, Bakradze contended, the categories must be, as Hegel thought they were, immanently and necessarily related; each must be conceptually "contained" in the others, must "pass into" the others. But all such talk is purely figurative, Bakradze believed, and he held that to avoid intellectual confusion and the idealistic imposition of the characteristics of the world of thought on the world of being we must keep categories separate and distinct, each doing its own job.<sup>28</sup>

Thus on a broad range of questions concerning the most general concepts available to philosophy to describe the real world, contemporary Marxism-Leninism is marked by fundamental and persistent disputes. The number and identity of the categories, their relations to each other, the need for and the possibility of new categories, the possibility and the character of a categorial system-on all these questions Soviet philosophers continue to disagree.<sup>29</sup>

The existence of such basic disagreement is met with ambivalence in the Soviet philosophical community. On the one hand the disputes are welcomed--especially by the more independently minded philosophers--as a sign of intellectual vitality and a precondition for philosophical progress. The path to truth, G. S. Batishchev reminded his colleagues

in 1979, lies through "disputatious interactions among different conceptual tendencies."<sup>30</sup> On the other hand the persistence of disputes at the very heart of dialectical materialism is something of an embarrassment to many Soviet philosophers, and the embarrassment is the more acute the closer the philosopher to the seats of power and orthodoxy in Soviet life. How can the "world-view" functions of philosophy be performed, how can dialectical materialism play its crucial role of orienting progressive forces in the struggle to build communism, if it is not clear what concepts, in what relations, constitute a materialist dialectics, or even whether the model for constructing one is to be Hegel or modern science? Concern over such matters has lent urgency to the troublesome questions of dialectics, and has led to the lavishing of bureaucratic and academic attention on the field.

Scholarly conferences on dialectics have abounded in the post-Stalin period. The earliest major conference, held in Moscow in the spring of 1958, was devoted to the issue of dialectical contradiction.<sup>31</sup> The largest and most ambitious gathering, which sought to encompass the whole range of problems of materialist dialectics, met in Moscow in April, 1965; some six hundred philosophers took part, and the published proceedings covered four volumes.<sup>32</sup> Since then, national, regional, and local conferences on dialectics have continued at an active pace.

Research and publication in dialectics has been given special impetus by the establishment of high-level "task forces" (<u>problemnye gruppy</u> or <u>problemnye sovety</u>) on the subject in various regions of the country. One such group, organized at the Institute of Philosophy in Moscow in the late 'fifties, has been directly responsible for much work in the field; headed by B. M. Kedrov (Director) and V. A. Lektorskii (Deputy

Director), this group recently published a volume of papers entitled <u>Dialectical Contradiction</u> (1979), in which the current status of Soviet discussion on that topic is clearly and straightforwardly presented.<sup>33</sup> Another task force operates in Leningrad under the auspices of the Ministry of Higher and Middle Special Education of the Russian Soviet Federated Socialist Republic; its publications include a series of volumes entitled <u>Problems of Dialectics</u>.<sup>34</sup> And special "collectives" to deal with questions of dialectics have been established in other parts of the country as well, particularly after the 25th Party Congress in 1976. A 1979 list mentions the Ukrainian Institute of Philosophy, the Kazakh Institute of Philosophy and Law, and the University of Rostov as among the institutions having such collectives, the aim of which is said to be "the creation of fundamental works in the theory of materialist dialectics."<sup>35</sup>

For all this activity, however, Soviet philosophers have not, in the three decades since Stalin's death, brought dialectics to a state of perfection acceptable to the Communist Party. The Party newspaper, <u>Pravda</u>, addressing itself in 1975 to what it called "The Lofty Duty of Soviet Philosophers," wrote that "among the tasks confronting philosophical science at the present time, development of the theory of dialectics is central."<sup>36</sup> <u>Kommunist</u>, the Party's chief theoretical journal, was more openly critical of Soviet philosophers in a 1979 editorial, in which it reproached them for "still not fulfilling the heightened demands of social practice and scientific knowledge." "The chief shortcoming of philosophical investigations," the editorial went on, "continues to be the slow resolution of the task, bequeathed us by Lenin, of developing the theory of dialectics as an integral system of

doctrines." The work of the special groups on dialectics, <u>Kommunist</u> announced, must be "activated" (<u>aktivizirovana</u>).<sup>37</sup> One consequence of this heightened recent concern has been the establishment of still more task forces with still more ambitious programs.<sup>38</sup>

What has been accomplished by this massive attack on the problems of materialist dialectics? It is impossible in a chapter to assess the entire sweep of current Soviet work in dialectics as an ontological theory. By focussing on the traditional three basic laws of dialectics, however, we can judge the accomplishments of Soviet philosophers on some matters of critical importance for dialectical theory.

### C. An Appraisal of Soviet Work on the Three Basic Laws of Dialectics

Not long after the death of Stalin the law of the negation of the negation made its reappearance in Soviet philosophy books, and Engels' three laws replaced Stalin's four features as the favored format for presenting dialectics. Subsequently, despite attempts on the part of individual philosophers to reduce one or another of the laws to a lesser status or to add new laws, Engels' three laws have retained their hold on the consciousness of Soviet dialecticians, all of whom affirm their importance.

More than that, they affirm the <u>truth</u> of the laws: they all accept the thesis that each of the laws is a correct description of the objective world. Perhaps surprisingly, however, this element of ideologically inspired dogmatism does not forestall disputes concerning the laws in the USSR; it simply affects the form which those disputes take. For the problem, as the Soviet philosopher sees it, is to find the <u>sense</u> in which the laws can be said to describe the objective world correctly. Instead of asking, as another philosopher might, whether or not these

. 17

laws are true, and what facts of the world tell for or against them, the Soviet philosopher asks, rather, to what facts of the world these laws must be addressed, and what must they say about those facts, given that the laws are true. The Soviet philosopher confronted with the laws of dialectics is in a position comparable to that cited by Naan with respect to infinity in the previous chapter: he "knows" that the laws are true, but he does not know what they mean. Nonetheless his search for meaning, provided it is honest and informed (as it often is), can be as solicitous of the facts of the world as the other philosopher's search for truth. Let us see what progress has been made in interpreting each of the three laws in recent years.

1. The Law of the Transition from Quantity to Quality and Vice Versa

Discussion of this law (pp. 19-30) is not included in this draft.

### 2. The Law of the Unity and Struggle of Opposites

In the jottings on dialectics contained in Lenin's <u>Philosophical</u> <u>Notebooks</u>, the second of Engels' three dialectical laws occupies the central place. Dialectics, Lenin writes, may be defined briefly as "the doctrine of the unity of opposites."<sup>72</sup> Because of this Leninist emphasis, and because the "opposites" in question are the "internal contradictions" that account for dialectical development, as we have seen, many Soviet philosophers regard Engels' second law as the fundamental law of dialectics, and place it first in the order of exposition.<sup>73</sup> Also recommending the law is its "world-view" significance: by rooting opposition in the nature of things, one imparts ontological justification to the class struggle.<sup>74</sup>

Indeed the very aptness of the law to describe social conflict has led many commentators, Soviet as well as non-Soviet, to question its supposed status as a universal law of nature. Only by an anthropomorphization, it is held, can the term 'struggle' (in Russian, <u>bor'ba</u>, the same word used for wrestling) be applied even to living nonhuman nature; and when it comes to describing relations in the inorganic world such

as that of the positive and negative poles of a magnet (one of Engels' favorite examples), 'struggle' seems completely out of place. For such reasons, and noting that Lenin himself in places set the word off in quotation marks, some Soviet philosophers as early as 1956 suggested rephrasing or at least renaming the law, perhaps by going back to Engel's original designation, "the law of the interpenetration of opposites."<sup>75</sup> At a conference in 1980, S. T. Meliukhin proposed 'interaction' and 'counteraction' as appropriate replacements for 'struggle.'<sup>76</sup>

In this case as in so many others in Soviet philosophy, however, lexical conservatism has generally prevailed--aided, no doubt, by the revolutionary ring of the term in question. Instead of reserving the term 'struggle' for special, chiefly social cases of interpenetrating opposites, the term has been diluted to allow it to apply to all cases in nature, society, and thought, even those most free of conflict. In nature, the concept of a "struggle" of opposites must cover, the authors of Fundamentals write, "all kinds of mutual negation and exclusion of opposites," and they specify an extremely broad range of natural processes as encompassed by this description: all cases of action and counteraction, attraction and repulsion of every kind, the movement of a living thing toward its death or end, the fact that an organism loses old components and acquires new ones, and so on.<sup>77</sup> 'Struggle', in other words, must be interpreted broadly enough to include both the mortal combat of wild animals and the blooming of a rose. In view of the extreme breadth allowed the concept, we must of course resist the temptation to attribute anything resembling a Manichaean ontology to Soviet Marxism-Leninism, despite the images of conflict which the second law's title may conjure up.

Even in the social field, a weak interpretation of 'struggle' is required to accommodate Marxist-Leninist doctrines. A difficult question faced by Soviet theorists has been that of how socialist society develops. Capitalism, of course, is an arena of dynamic conflict between opposed economic forces. After the revolution, however, when those oppositions have been overcome, we seem to face a dilemma: either society will stagnate in the absence of social "contradictions," or new antagonisms, new struggle and conflict will develop, leading to another revolutionary leap. The first alternative is ontologically unacceptable, for a dialectical world knows no rest; the second is politically unacceptable, for socialism must be a realm of harmony, not strife, and must require no revolutionary negation. The way out of this dilemma was provided by the introduction in the late 1940s of a distinction between antagonistic and nonantagonistic contradictions.<sup>78</sup> The former are those which hold between hostile social forces, whose interests are irreconcilably opposed; polarization and disruptive struggle ensue, ending with the destruction of one of the forces. Socialism, on the other hand, is said to be characterized by the existence of nonantagonistic contradictions, such as that between the workers and the peasantry, whose "struggle" takes place on a foundation of broad common interests; the contradictions between them can thus be overcome peacefully, without a revolution. Through the resolution of nonantagonistic contradictions, socialism can move forward dynamically along an unbroken path to full communism.79

Whatever we may think of this conceptual maneuver, it seems clear that if the second law is to retain any substantive meaning, it must do so in virtue of its claim that oppositions which can be called "contra-

dictions"--whether the "contradictory" elements are antagonistic or not, whether they may be appropriately said to "struggle" or not-nonetheless inhere in all things and account for their development. For that reason it is on the interpretation of the term 'contradiction' that most philosophical discussion of the second law has centered. In this discussion sharp and fundamental disagreement among Soviet philosophers has been disclosed; and given the key position of dialectics in the Marxist-Leninist outlook, this dispute has been regarded by many Soviet philosophers as the central controversy of contemporarý, dialectical materialism.

The concern that fuels the dispute within Soviet philosophy is the same one that has led non-Marxists from Dühring on to question dialectical materialism at its foundations--namely, the puzzle of what it can mean to say that there are contradictions in the real world. For the Soviet dialectical materialist, the second law is ontologically descriptive; it characterizes reality as containing what are called 'objective contradictions' as essential constituents of all things. And these contradictions are held to be not only real but functional: they are the source of change. For the philosopher trained in traditional, Aristotelian logic, on the other hand, there are no such things as contradictory objects. Contradiction is not something that "exists" in the real world, but rather a relation that holds between two thoughts--or better, two assertions (hence the term 'contradiction')--such that, if one of them is true, the other is necessarily false: for example, 'today is Monday' and 'today is not Monday'. The original phrasing of the principle of noncontradiction rules out a contradictory thing as an object of meaningful speech: the same attribute, Aristotle wrote, cannot both

belong and not belong to the same subject at the same time and in the same respect. Grass can be both green and not green, but only if it is, say, green today and not green tomorrow, or green with respect to its leaves and not green with respect to its roots.<sup>80</sup> For traditional logic, a contradiction arises from some confusion, error, or incompleteness in thought or speech; it is not "real," and certainly is no source of develment in the real world.

The question of what to do about this apparent clash between dialectics and logic was at one time "settled" in Soviet philosophy by the facile assumption that the latter in its Aristotelian form is simply "metaphysical" and hence incapable of dealing with a dynamic, dialectical world.<sup>81</sup> With the rehabilitation of formal logic as a field of study in the late 1940s, however (see the following chapter), a search began for ways of harmonizing its principles—including the principle of noncontradiction—with dialectics. Here again, however, the tensions between the scientifically oriented neo-mechanists and the Hegelian dialecticians came into play, and by the time of the Moscow conference on contradiction in 1958 the split between them on this question was sharp and open.

On one side were such independently minded anti-Hegelians as Arnosht Kol'man, the philosopher M. K. Mamardashvili, and the mathematical logician Aleksandr Zinoviev, who argued that dialectics does not require us to give up or to weaken the logical law of noncontradiction. Logical contradictions, they argued, are the result of error (or of the use of an inadequate conceptual framework) and must be avoided in any context, however "dialectical." They are not a sign of a contradictory state of the world; "there are no such things," Mamardashvili stated, as "logical

contradictions which reflect real contradictions."<sup>82</sup> <u>Real</u> contradictions, nonetheless, can be said to exist, but they are not analogous to the logical variety. What they are, according to these thinkers--whose position was subsequently labelled 'polarism'--is empirically manifested oppositions between antithetical forces, tendencies, or aspects of things in the real world. Hence Kol'man's definition of (objective) contradiction at the 1958 conference:

Contradiction is a material difference, a lack of correspondence between two different, polar aspects of one and the same real object which leads them to clash with each other. Such polar aspects are the different internal and external forces and tendencies which act on a given body (phenomenon) within the limits of a given motion or in the course of the development of society.<sup>83</sup>

To the polarists, then, the second law of dialectics asserts the universality of oppositions such as those between forces of attraction and repulsion in physics and conflicting economic classes in history--oppositions the existence and the causal role of which are matters of straightforward scientific identification. The acknowledgement of such real or objective "contradictions" requires no logical concessions; "the presence of opposing tendencies," Zinoviev wrote in 1971, "is not a logical contradiction."<sup>84</sup> Nor is a logical contradiction even required to state a real contradiction; the latter is in effect a "contradiction" <u>in different respects</u>, and therefore can be expressed in logically noncontradictory form. This interpretation of dialectical "contradictions" as signifying opposing forces or conflicting sides or aspects of a situation continues to be advocated vigorously by many Soviet philosophers.

Among its most prominent defenders in the present day are I. S. Narskii, V. I. Sviderskii, V. I. Metlov, and V. N. Porus.

Yet polarism is far from enjoying a monopoly on the subject of objective contradiction in Soviet dialectical materialism. It is rejected by many Soviet philosophers who see its "opposing forces" approach to ontology as a mechanistic retreat from a truly dialectical view of the world. These philosophers, whose position may be called 'antinomism', argue on the contrary that there are genuine, "same respect" logical contradictions that reflect real features of the world. In particular they point to the antinomies that arise in the course of our attempts to understand the world-the wave-corpuscle "contradiction" in quantum mechanics, for example-and above all to two classic antinomies formulated by Marx and Engels. One occurs in the chapter of Marx's Capital entitled "Contradictions in the General Formula of Capital." Seeking to explain the origin of capital, Marx argues that it can only arise in processes of economic exchange ("circulation"), but also that it appears impossible for it to arise in that way; capital, he writes, "must have its origin both in circulation and yet not in circulation."85 The second antinomy derives from Engels' Hegelian interpretation of Zeno's paradoxes of motion, such as the Greek philosopher's contention that the flying arrow is really at rest. Instead of concluding from the paradoxes, as Zeno did, that motion is illusory, Engels argues that it is real but inherently contradictory: "Even simple mechanical change of position," he writes, "can only come about through a body being at one and the same moment of time both in one place and in another place, being in one and the same place and also not in it." Here we have, in Engels' view, a contradiction which is "objectively

present in things and processes themselves," and since the argument is generalizable for all changes of state of whatever sort, such fundamental contradictions must pervade the universe.<sup>86</sup>

In its extreme form Marxist-Leninist antinomism is more an attitude than a developed philosophical position--an attitude which V. A. Lektorskii ascribed to those who believe that "truly dialectical thinking consists in the formulation of a multitude of unresolved antinomies."<sup>87</sup> At the 1958 conference V. M. Boguslavskii complained of "those comrades who contend that every object possesses one or another feature and at the same time and in the same sense and respect doesn't possess it."<sup>88</sup> Many seem to think, G. S. Batishchev wrote in 1979, that to be accepted as a dialectician one need only swear that one admits "contradiction in the same respect."<sup>89</sup> We must get beyond these "antinomian prophets of contradiction," he urged.<sup>90</sup>

The developed position that is closest to extreme antinomism is that of Il'enkov, who, although he did not regard antinomies as unresolvable, saw their contradictory form as directly and truthfully reflecting a contradictory reality. Resisting the very distinction between "logical" and "objective" contradictions, Il'enkov distinguished instead between those trivial "contradictions" which result from careless thinking, on the one hand, and real contradictions, which are both logical and objective, on the other. In the latter cases, he argued in 1958, the violation of the traditional law of noncontradiction is not a product of error but "flows of necessity from the most correct movement of thought in accordance with the logic of the subject." Such, he contended, are the paradoxes of motion, which point to genuine problems in the nature of motion which cannot be dismissed verbally but will be

resolved only by advancing to deeper levels in our, understanding of space and time. Thus for dialectics a contradiction is not an impassable obstacle but "a springboard from which thought should effect a leap forward in the concrete theoretical and experimental investigation of the object."<sup>91</sup>

One of the most forceful presentations of Il'enkov's influential antinomist position came just before his death in 1979. In it, Il'enkov states that contradiction, like all the dialectical categories, is "a universal form of the development of 'being'--that is, the natural and socio-historical development of the world outside consciousness-reflected in the consciousness of man."92 Marx's paradox of capital. for example, is "the theoretically correct expression of a real antinomy," for it is in the "unfolding" of this real contradiction that capital in fact arises.<sup>93</sup> Hence what we need in order to understand the world is "the art of thinking objective contradictions dialectically."94 Formal logic, long since superseded by Hegel's more adequate dialectical logic, should be relegated to the instruction of young people, as Lenin suggested; nothing should prevent an adult from confronting the contradictions in things "without fearing these contradictions and without trying to evade them through linguistic dexterity."95 The correct approach to the study of reality, Il'enkov affirms, is first to "fix the real contradictions in the makeup of the object under investigation precisely and with maximum sharpness," and then proceed to investigate "that processthe real process-through which these opposites are transformed into each other."96

The polarists today do not dismiss antinomies as abruptly as they once did. They acknowledge that antinomies may signal the need for

further investigation of a subject, and they grant that some antinomies have a kind of objective basis. But they continue to deny that antinomies provide an adequate picture of reality--that they are a kind of knowledge of the world, as Il'enkov's supporters insist. Marx's paradox of capital, though treated with respect, is not interpreted by polarists as directly mirroring a "contradictory" reality. As early as the 1958 conference Zinoviev argued that what Marx meant was that exchange is a necessary but not a sufficient condition for the origination of capital, which requires processes of production as well as exchange. $9^{2\prime}$ , A fuller recent analysis by V. N. Porus adds to Zinoviev's treatment the concession that Marx's antinomy may be seen as a way of formulating a genuine scientific problem, and to that extent is "an element of the reflection of a specific reality." But for Porus the "reality" in question is not the contradictory nature of the origin of capital but rather the inner contradictoriness of the conceptual apparatus of classical economics which led to the paradoxical expression, and which in its turn is grounded in "the root contradictions of bourgeois reality itself."98 Thus for Porus the "objective basis" of Marx's contradictory statement is a highly indirect and distant one-and one which, it will be noted, is thoroughly analyzable in the polar terms of social antagonisms. The statement is certainly not taken, as it is by Il'enkov and his followers, as directly true of the world. There is no "contradictory situation," Porus states, called "capital arises and does not arise in circulation."99 Rather, through that paradoxical assertion Marx was able to advance to the more adequate conceptual structure of Marxian economics which truly (and non-antinomially) reflects the origin of capital.

As for Engels' paradoxes of motion, they are accorded still less attention by the polarist philosophers. Zinoviev at the 1958 conference rejected them for the reason most often adduced by mathematicians and scientists everywhere--namely, that the appearance of contradiction depends on confusing an interval of time (over which, of course, a thing can be in more than one place "at the same time") with a durationless moment of time (in terms of which we can speak of neither motion nor rest, both of which make sense only with respect to duration.<sup>100</sup> A few courageous Soviet philosophers have criticized Engels publicly on this score. Kol'man did so at the 1958 conference, offering in excuse for Engels that in speaking of a moving object's being simultaneously "in one and the same place and also not in it," he was unfortunately employing almost verbatim a locution of Hegel's, and moreover that he was limited by the state of scientific knowledge in the 1870s.<sup>101</sup> Bakradze and other Soviet philosophers are also reported to have openly rejected Engels' conception.<sup>102</sup> The majority of polarists today, however, simply do not refer to the subject, apparently finding the case adequately made by their predecessors.

Meanwhile, Soviet antinomists continue to affirm that "motion itself is a contradiction."<sup>103</sup> The difficulty, however, is that neither in the case of motion nor in any other have antinomists been able to present a coherent explanation or a convincing case of a "contradictory" object or state of affairs which does not resolve upon analysis into a case of opposed forces or aspects. The central problem for antinomists, B. A. Lastochkin wrote in 1979, remains this: "How to understand and how to express in the logic of concepts the <u>contradictoriness of a</u> single thing 'in the same place', 'at the same time', and 'in the same

respect'."<sup>104</sup> Il'enkov, for all his Hegelian erudition, was unable to present a convincing conception, and the attempts of his many sympathizers have been no more successful.

Some attempts, indeed, have bordered on the ludicrous. F. F. Viakkerev offers, as an example of the working of "internal contradictions," the case of the struggle for survival among individuals of the same biological species. The clue to such contradictions, Viakkerey believes, is provided by Darwin when he points out that it is almost always among representatives of the same species that the struggle for survival is the most harsh, since they inhabit a common locality, require the same food, and are exposed to the same dangers. Viakkerev's presentation of the "contradiction," then, is as follows: "From what has been said it is clear that the coincidence, the identity of opposites (opposite tendencies among individuals of the same species) in the same respect (in respect to food, to place of habitation, etc.), and at the same time are the necessary condition of the interspecies struggle (of the internal contradiction)." "Real contradictions" are best understood, then, according to Viakkerev, as "coinciding opposites."<sup>105</sup> But surely this won't do. The "coinciding opposites" which the classical conception of contradiction excludes are the simultaneous ascription and denial of the same attribute to the same subject in the same respect; the "coincidence" of opposite (i.e., different and struggling) individuals in respect to food and place of residence, on the other hand, involves no logical contradiction whatever, and is easily understandable in polarist terms.

Lastochkin, for his part, attributes the lack of progress by his fellow Soviet dialecticians in this area to the failure to develop a

sufficiently rich modal ontology, in terms of which contradiction in the essence of an object could be described. The way to conceive of an object as essentially contradictory, Lastochkin believes, is to see it as containing real possibilities over and above its actual states at any moment. The essence of an object, on this view, is not simply what it is, but the "opposite" thing it may become by inner necessity.<sup>106</sup> Once again, however, this won't do. There is no actual contradiction "in the same respect" in Lastochkin's conception, for being in actuality and being in possibility are manifestly distinguishable respects. Presumably Lastochkin has in mind such seemingly contradictory yet intelligible assertions as 'the acorn both is and is not an oak tree.' But this is simply an abbreviated way of saying that the acorn is potentially but not actually an oak, so that clearly there is no contradiction present.

One of the most ambitious attempts in current Soviet philosophy to defend at least a modified form of antinomism against polarism is that which has been undertaken by Zaid Orudzhev of Moscow State University. Conceding the polarists' contention that there is a fundamental distinction between logical contradictions and dialectical or "real" contradictions, Orudzhev argues that a cardinal aspect of that distinction has been overlooked. Logical contradictions, he writes, are bare, immediate oppositions of incompatibles; in dialectical contradictions, on the other hand, mutually exclusive opposites are mediated by intervening stages or steps—"intermediate links" which make possible the coexistence, coincidence, and intertransformation of the extreme elements.<sup>107</sup> By way of example Orudzhev presents such "dialectical contradictions" as that between the input and the output of a computer system, which are, he says, mediated by the system's organization, through which input

is transformed into output; and that between production and consumption in an economic system, where the intermediate links are the activities of exchange and the other economic processes which characterize the system in question. Quantum mechanics, Orudzhev believes, stands today at the threshold of resolving its basic contradiction--that between the undulatory and the corpuscular characteristics of microobjects; and the contradiction will be resolved, on his view, by the disclosure of the intermediate links in the internal structure of matter which allow the otherwise incompatible poles to be joined.<sup>108</sup> But these poles, Orudzhev insists, are not simply contraries, for he argues that <u>in themselves</u> (taken apart from their intermediate links) they are contradictories <u>in the same respect</u>. A dialectical contradiction, then, is defined by Orudzhev as "a unity of opposites, mediated by intermediate links, which opposites are taken at one and the same time, in one and the same respect (and sense)."<sup>109</sup>

It should be evident from Orudzhev's examples, however, that there is still another difference between logical and "dialectical" contradictions which he fails to acknowledge. For in Orudzhev's analysis the extreme members which are "mediated" in a dialectical contradiction are not affirmations and denials, like the relata of a logical contradiction, but features, aspects, or characteristics of the real world such as production and consumption. For logical contradiction, it is only in regard to pairs of affirmations and denials that the condition "in the same respect" makes sense. To speak, as Orudzhev does, of "opposites . . . taken in the same respect" is without meaning when the "opposites" in question are objects or features of objects. What does it mean to "take" undulatory and corpuscular characteristics in the same respect? To

44

ø

<u>ascribe</u> undulatory features to a given microobject and simultaneously <u>and</u> <u>in the same respect</u> deny such ascription would of course be contradictory. But none of that is going on in the microobject itself; in it the "opposite" characteristics simply coexist, respectlessly, and it is up to our scientific analysis of the situation (as Orudzhev rightly observes) to show us how the two are compatibly related. "Respects" come into play when we wish to <u>talk</u> about them meaningfully, but then we are operating in a domain of conceptions, not objects. Orudzhev attempts, to use the "same respect" condition in order to get the appearance of a genuine contradiction, but he transports it to a realm in which it has no application.

Confusion of the two realms is an unfortunate product of the Hegelian heritage in Soviet Marxism, by which even moderate antinomists like Orudzhev are greatly affected. They seek to describe a world of material objects, but the conceptual apparatus they use confounds it with a world of thoughts. To say such things as that "an object relates negatively to itself" or that opposites "mutually presuppose" each other is possible in a Hegelian universe, in which conceptual relations like negation and presupposition are relations of real things.<sup>110</sup> The Hegelian wing of Soviet philosophy, although supposedly rejecting Hegel's identification of things with thoughts, nonetheless assumes that the same relations that Hegel developed for his world of thought-things must fully and directly reflect analogous relations in the material world apart from thought. And with that assumption comes conceptual trouble. In seeking a direct analogue for contradiction in the material world, the antinomists are engaged in a quest for a conceptual impossibility-a real thing that has the same structure as a logical contradiction.

Logical contradiction joins one relatum with its <u>denial</u>, and that is something no material entity can do. And when we add that for the antinomist the contradiction not only must be "real" but must <u>account</u> <u>for development</u>, the enormity of the problem becomes still more obvious.

Narskii, Sviderskii, and the other neo-mechanists are surely correct in believing that polarism, with its appeal to opposing "forces" or "aspects" of real things, comes as close as one can get to a defensible analogue to Hegel's antinomism in the material world. But that is not very close, as the antinomists are quick to point out. To present opposition "in different respects" as an adequate analysis of dialectical contradiction is, for the antinomists, to commit a kind of philosophical treason. "The whole grandiose history of dialectics," Orudzhev writes, "is thus reduced to the allegation that a non-contradictory form of relation, long since regarded in formal logic as noncontradictory, is declared to be a dialectical contradiction." 111 The power of intellectual traditions remains strong in Soviet philosophy, and the departure of polarism from a truly dialectical spirit is keenly felt by many Soviet philosophers. The facts, moreover, that polarism is associated with the more independently minded, scientific segment of the Soviet philosophical community and that leading polarists such as Kol'man and Zinoviev became (for other reasons) politically undesirable to the Soviet state, have not helped the polarist cause.

The polarists, however, have the distinct advantage of defending a coherent position: they can explain what a "real contradiction" is, provide plausible examples such as the struggle of one economic class against another, and claim by this approach to provide a genuine explanation of development as the product of the interaction of opposing forces.

This is not to say that the polarist interpretation establishes the law of the unity and struggle of opposites as a universal truth. But at least it makes the law scientifically assessable. <u>Is</u> the interaction of opposing forces at the root of every change in nature, society, and thought? Probably not, but only concrete investigation by the special sciences can really answer the question.

The polarists' sense of 'contradiction', moreover, is all that is needed for normal political and ideological purposes in the USSR. The Party can no longer do without the word 'contradiction', that, much is clear; the word is omnipresent in the Soviet ideological vocabulary. But the uses to which it is put plumb no antinomian depths. Sometimes it is simply synonymous with a (usually regrettable) difference of some sort, such as the "contradiction" between the living standards of different regions of the USSR or the "contradiction" between the wealth of resources available for economic production and the limited utilization of those resources.<sup>112</sup> In most cases something more than a mere inequality or disproportion is intended, but in all of those the polarists' language of opposing forces or tendencies is entirely adequate, for they consist invariably in the counterposing of elements which, though they work against each other in fact, are perfectly compatible logicallybourgeoisie and proletariat, the world systems of capitalism and socialism, nationalistic and internationalistic tendencies within a given state, and so on.<sup>113</sup> By providing a simple, readily intelligible conceptual framework for such oppositions, polarism makes its contribution to the "world-view" role of philosophy. Thus the interests of ideological effectiveness reinforce those of philosophical coherence in promoting the anti-Hegelian, neo-mechanist cause of the polarists.

In 1875, Marxist philosophy's early critic, Eugen Dühring, remarked on "the uselessness of the incense which has been burnt here and there in honor of the dialectics of contradiction."114 If Dühring had known what clouds of incense would be lavished on the subject in a Marxist state. he might have redoubled his critical efforts. Still, progress has been made in recent years. Not even the antinomist philosophers are any longer guilty of what Karl Popper once charged all dialecticians with doing--namely, discarding the law of noncontradiction altogether.<sup>115</sup> The polarist majority fully accepts the law in its traditional, Aristotelian sense, and the antinomists accept it at certain levels of discourse. Most Soviet philosophers agree that contradictions must be 'resolved' in some manner--though the polarists see the resolution as a matter of intellectual clarification whereas the antinomists view it as taking place through the development of "being." But such issues are now clearly and openly joined. The antinomists know what the law of noncontradiction requires, and they recognize that the "oppositions" the polarists (and the Communist Party) are content with are not really contradictions. Perhaps eventually they too will stop trying to square the circle and will cease their attempts to write a materialist sequel to "the grandiose history of dialectics."

3. The Law of the Negation of the Negation

Discussion of this law (pp. 49-57) is not included in this draft.

Marxist-Leninist dialectics is sometimes regarded by casual critics as a set of dogmas on which there is total if blind agreement among Soviet philosophers. Soviet philosophers themselves, on the other hand,

. .

•.

. <del>n</del> n n

· .

.

typically view dialectics as an area in which there is unanimity among them on basic questions, but disagreement on a number of subsidiary issues.

The foregoing analysis suggests that neither of these assessments is accurate. In fact there are very few significant points of agreement among Soviet philosophers on the subject of dialectics--points, that is, that go beyond the trivial ("the world changes," "things are interconnected"), the ultra-sensitive ("communism is the goal of history"), or the purely verbal ("there are real contradictions"). In case after case, expressed agreements prove not to be grounded in substantive agreements. Dialectics, the heart of Marxist-Leninist philosophy, is an accepted vocabulary but not an accepted body of claims about the world.

In good part the reason for this is that no claims are being made. When one's only assertion is that change will come "sooner or later," one is committed to nothing. When "measures" may be indefinitely short or long, when "negations" may succeed each other endlessly without a return to the starting point, when "struggle" may be without conflict and "leaps" without speed, <u>anything</u> can happen--and it cannot be the function of a description of the world to say no more than that. Regrettably, refusal to make commitments has become a familiar phenomenon in Soviet philosophical life. Kedrov links it directly with the rubbery use of terms: "The imprecision of the concepts with which some [Soviet] authors operate," he writes, "reaches at times the point that they adopt deliberately undefined and even clearly equivocal definitions of very important philosophical concepts, so that the reader himself, at his own discretion, may invest them with whatever meaning he wishes."<sup>150</sup>

Such obliging but fatal vagueness, however, does not tell the whole story of current Soviet dialectics. Through the work of serious

- 59

philosophers such as Kedrov, Il'enkov, Meliukhin, Rutkevich, Sviderskii, Tugarinov, and others, the weaknesses of traditional doctrines and familiar modes of argumentation are being recognized and addressed. Meaningful claims are being made and real issues are being joined. These issues, however, are proving to be not secondary or derivative but fundamental. There are no more basic questions in dialectics than those concerning the number, the definitions, and the relations of the categories; but Soviet philosophers take a range of positions on all these questions. There is no more important dialectical category than contradiction; but Soviet philosophers view it very differently. The "basic" laws of dialectics were thought to be basic because they applied in every domain of reality; but it is debated whether this is true of all the laws. Clearly, much of the consensus that exists is verbal; it masks profound substantive disagreements.

It has been a thesis of this chapter that many of the disagreements are products of a conflict, inherent in dialectical materialism, between the Hegelian dialectical heritage elaborated by the Deborinists in the 1920s and the scientific, empiricist proclivities associated with materialism, developed by the mechanists in the same period. The fact that this dispute has emerged once more in the present day shows that there is increased opportunity for philosophical debate in the post-Stalin period, but it also testifies to the depth of the antagonism between dialectics and materialism. Soviet philosophers acknowledge that an ontology harmonizing the two has yet to be constructed, despite Herculean efforts since the 1950s. One wonders what it will take to convince them that the task is not simply difficult but impossible.

## Chapter Three

## NOTES

a

<sup>1</sup>V. I. Lenin, <u>Polnoe sobranie sochinenii</u>, 5th ed. (55 vols.; Moscow: Izd. politicheskoi literatury, 1967-70), Vol. 20, p. 84.

<sup>2</sup>Frederick Engels, <u>Dialectics of Nature</u>, trans. Clemens Dutt (New York: International Publishers, 1940), p. 206.

<sup>3</sup>Yu. A. Kharin, <u>Fundamentals of Dialectics</u>, trans. Konstantin Kostrov (Moscow: Progress Publishers, 1981), pp. 110f, 164. For a much more elaborate treatment, which includes partisanship and "the unity of "theory and practice" as principles of dialectics, see <u>Materialisticheskaia</u> <u>dialektika v piati tomakh. Tom 1. Ob"ektivnaia dialektika</u>, ed. F. F. Viakkerev <u>et al</u>. (Moscow: "Mysl'," 1981), pp. 13-81; this work is cited hereafter as <u>Ob"ektivnaia dialektika</u>.

<sup>4</sup>The Fundamentals of Marxist-Leninist Philosophy, trans. Robert Daglish (Moscow: Progress Publishers, 1974), pp. 160ff. This work is cited hereafter as <u>Fundamentals</u>.

<sup>5</sup>Ibid., p. 170.

<sup>6</sup>Lenin, Polnoe sobranie sochinenii, Vol. 29, p. 116.

<sup>7</sup>A. P. Sheptulin, <u>Marxist-Leninist Philosophy</u>, trans. S. Ponomarenko and A. Timofeyev (Moscow: Progress Publishers, 1978), p. 209.

<sup>8</sup>Engels, <u>Dialectics of Nature</u>, p. 26.

<sup>9</sup>Fundamentals, p. 140.

<sup>10</sup>Frederick Engels, <u>Anti-Dühring: Herr Eugen Dühring's Revolution</u> <u>in Science</u> (Moscow: Progress Publishers, 1947), pp. 59, 151. This work is cited hereafter as <u>Anti-Dühring</u>. For Hegel's discussion of these points, see the section entitled "Nodal Line of Measure Relations" in Hegel's Science of Logic, trans. W. H. Johnson and L. G. Struthers, 2 vols. (London: George Allen and Unwin, 1929), Vol. 1, pp. 386-390.

<sup>11</sup>Fundamentals, p. 152.

\*

<sup>12</sup>M. F. Vorob'ev, "O soderzhanii i formakh zakona otritsaniia otritsaniia," Vestnik Leningradskogo universiteta, 1956, No. 23, p. 57.

<sup>13</sup>A. P. Sheptulin, <u>Osnovnye zakony dialektiki</u> (Moscow: Izd. "Nauka", 1966), p. 101.

<sup>14</sup>Filosofskaia entsiklopediia (5 vols.; Moscow: Izd. "Sovetskaia entslikopediia," 1960-70), Vol. 4, p. 188.

<sup>15</sup>Fundamentals, p. 159.

<sup>16</sup>Anti-Dühring, pp. 162f.

<sup>17</sup>Ibid., p. 165.

18Vorob'ev, "O soderzhanii i formakh zakona otritsaniia otritsaniia,"
p. 57.

<sup>19</sup>A good brief summary of the controversy may be found in Richard T. De George, <u>Patterns of Soviet Thought: The Origins and Development of</u> <u>Dialectical and Historical Materialism</u> (Ann Arbor: The University of Michigan Press, 1966), pp. 179ff. The tensions between dialectics and materialism have been noted by many critics of Marxist philosophy. See, for example, <u>ibid</u>., p. 214; B. P. Vysheslavtsev, <u>Filosofskaia nishcheta</u> <u>marksizma</u>, 2nd ed. (Frankfurt am Main: Possev, 1957), pp. 45ff; and Gustav A. Wetter, <u>Dialectical Materialism: A Historical and Systematic</u> <u>Survey of Philosophy in the Soviet Union</u>, trans. Peter Heath (London: Routledge and Kegan Paul, 1958), pp. 364f.

<sup>20</sup><u>History of the Communist Party of the Soviet Union (Bolsheviks):</u> Short Course. Edited by a Commission of the Central Committee of the C.P.S.U. (B.) (New York: International Publishers, 1939), pp. 106-109. <sup>21</sup>Lenin, <u>Polnoe sobranie sochinenii</u>, Vol. 29, pp. 79-218.

<sup>22</sup>V. P. Tugarinov, <u>Sootnoshenie kategorii dialekticheskogo</u> materializma (Leningrad: Izd. Leningradskogo universiteta, 1956).

<sup>23</sup>M. M. Rozental' and G. M. Shtraks, eds., <u>Kategorii materialisti-</u> <u>cheskoi dialektiki</u> (Moscow: Gos. izd. politicheskoi literatury, 1956), pp. 50, 62ff.

<sup>24</sup>A. P. Kapustin, "Spory o putiakh izlozheniia dialektiki (Obzor)," <u>Voprosy filosofii</u>, 1979, No. 6, p. 169. For further details concerning the range of Soviet positions on categorial systems, see the following: Z. M. Orudzhev, <u>Dialektika kak sistema</u> (Moscow: Izd. politicheskoi literatury, 1973), pp. 13-23; Guy Planty-Bonjour, <u>The Categories of</u> <u>Dialectical Materialism: Contemporary Soviet Ontology</u>, trans. T. J. Blakeley (New York: Frederick A. Praeger, Inc., 1967), pp. 39ff.; and T. V. Bogomolova and V. I. Kirillov, "Problema vzaimosviazi kategorii dialektiki (obzor literatury)," Filosofskie nauki, 1981, No. 2, pp. 43-55.

<sup>25</sup><u>Dialektika i logika nauchnogo poznanija. Materialy Soveshchanija</u> <u>po sovremennym problemam materialisticheskoi dialektiki, 7-9 aprelia</u> <u>1965 g.</u> (Moscow: Izd. "Nauka," 1966), p. 366. For earlier comments on the continuation of the Deborinist-mechanist debate in the post-Stalin period, see De George, <u>Patterns of Soviet Thought</u>, p. 180, and J. M. Bochenski, "Philosophy Studies," <u>Soviet Survey</u>, 1960, No. 31 (January-March), pp. 73f.

<sup>26</sup>v. I. Sviderskii, <u>0 dialektike elementov i struktury v ob"ektivnom</u> <u>mire i v poznanii</u> (Moscow: Izd. sotsial'no-ekonomicheskoi literatury, 1962). For a concise presentation of Sviderskii's view see <u>Dialektika i</u> logika nauchnogo poznaniia, pp. 250ff.

<sup>27</sup>Orudzhev, Dialektika kak sistema, pp. 16-18.

<sup>28</sup>K. S. Bakradze, <u>Sistema i metod filosofii Gegelia</u> (Tbilisi: Izd. Tbilisskogo gos. univ., 1958), pp. 433ff.

<sup>29</sup>For a summary of these disputes see the essay by Bogomolova and Kirillov cited above.

<sup>30</sup>Dialekticheskoe protivorechie (Moscow: Politizdat, 1979), p. 40. <sup>31</sup>For a summary of the proceedings of this conference, see G. A. Volkov, "Konferentsiia po voprosam protivorechii," <u>Voprosy filosofii</u>, 1958, No. 12, pp. 163-173.

<sup>32</sup>The four volumes, all published by the Nauka publishing house in Moscow in 1966, are <u>Leninskaia teoriia otrazheniia i sovremennaia nauka</u>, <u>Dialektika i logika nauchnogo poznaniia</u>, <u>Dialektika sovremennogo obsch-</u> <u>chestvennogo razvitia</u>, and <u>Dialektika material'noi i dukhovnoi zhizni</u> obshchestva v period stroitel'stva kommunizma.

<sup>33</sup><u>Dialekticheskoe protivorechie</u> (Moscow: Politizdat, 1979). Kedrov describes the objectives and the accomplishments of his group in "Lenin's Plans for Elaborating the Theory of Materialist Dialectics" in <u>Marxist Dialectics Today</u>, ed. V. Lorentson and B. Yudin, 2nd ed. (Moscow: "Social Sciences Today" Editorial Board, USSR Academy of Sciences, 1979), pp. 48-82.

<sup>34</sup>See, for example, <u>Problemy dialektiki. Vypusk III. Voprosy</u> <u>dialektiko-materialisticheskoi teorii protivorechiia</u>, ed. F. F. Viakkerev and V. V. Il'in (Leningrad: Izd. Leningradskogo universiteta, 1973).

35°O sostoianii i napravleniiakh filosofskikh issledovanii," Kommunist, 1979, No. 15, p. 71.

<sup>36</sup>"Vysokii dolg sovetskikh filosofov," <u>Pravda</u>, 19 September 1975, p. 3.

37"O sostoianii i napravleniiakh filosofskikh issledovanii," p. 71.

<sup>38</sup>One group, established under the highly official auspices of the Presidium of the Philosophical Society of the USSR (headed by F. V. Konstantinov), the Northwest Section of the Philosophical Society, and the Ministry of Higher and Middle Special Education of the RSFSR, proposes to produce a comprehensive and systematic five-volume study of dialectics; the first volume--<u>Ob"ektivnaia dialektika</u>, was published in 1981. A six-volume study is planned by a large team, under the direction of M. B. Mitin, drawn from the Philosophy Faculty of Moscow Swate University, the Institute of Philosophy of the Academy of Sciences of the USSR, and other institutions (see M. A. Maslin, "Nauchnye issledovaniia na Filosofskom fakul'tete MGU v desiatoi piatiletke. Ot XXV k XXVI c"ezdu KPSS," <u>Vestnik Moskovskogo universiteta. Seriia 7. Filosofiia</u>, 1981, No. 3, p. 5).

<sup>39</sup>Teilhard de Chardin, <u>The Phenomenon of Man</u>, trans. Bernard Wall, 2nd Harper Torchbook ed. (New York: Harper and Row, 1965), p. 152.

<sup>40</sup>Short Course, p. 107.

<sup>41</sup>See, for example, <u>Dialektika nauchnogo poznaniia.</u> Ocherk dialekticheskoi logiki (Moscow: Izd. "Nauka," 1978), p. 16.

<sup>42</sup>Fundamentals, pp. 134f, 140.

<sup>43</sup>Engels, <u>Dialectics of Nature</u>, pp. 30ff. Hegel also stressed chemistry, and indeed the oxides of nitrogen, in his discussion of the quantity-quality connection (Hegel's Science of Logic, pp. 388ff).

<sup>44</sup>Gustav A. Wetter, <u>Soviet Ideology Today</u>, trans. Peter Heath (New York, Washington: Frederick A. Praeger, 1966), p. 115.

<sup>45</sup>0b"ektivnaia dialektika, p. 278.

<sup>46</sup>Even when they provide an interpretation of 'measure' which does accord with Engels' examples, however, Soviet philosophers sometimes lapse into the old formulations. Thus on another page (p. 296) of <u>Ob"ektivnaia.dialektika</u> we read that "in every fixed relationship there exists an interval of quantitative changes within the bounds of which they do not lead to qualitative changes."

47Fundamentals, p. 140.

<sup>48</sup>H. B. Acton, <u>The Illusion of the Epoch: Marxism-Leninism as a</u> <u>Philosophical Creed</u> (London: Cohen and West, Ltd., 1955), p. 86.

<sup>49</sup>Sheptulin, Marxist-Leninist Philosophy, p. 256.

<sup>50</sup>Joseph Stalin, <u>Marxism and Linguistics</u> (New York: International Publishers, 1951), pp. 26-28.

<sup>51</sup>Engles, Anti-Dühring, p. 83.

<sup>52</sup>Fundamentals, p. 138.

<sup>53</sup>Sheptulin, Marxist-Leninist Philosophy, pp. 254f.

<sup>54</sup>Fundamentals, p. 132.

<sup>55</sup>Sheptulin, Osnovnye zakony dialektiki, pp. 38ff.

<sup>56</sup>Ibid., p. 45; Sheptulin, <u>Marxist-Leninist Philosophy</u>, p. 248.
<sup>57</sup>Ibid., p. 249.

58Ibid., pp. 248f.

<sup>59</sup>Sheptulin, Osnovnye zakony dialektiki, p. 45.

<sup>60</sup>Loc. cit.

<sup>61</sup>Sviderskii, <u>0 dialektike elementov i struktury</u>, pp. 60ff. See also 0. S. Zel'kina, <u>Sistemno-strukturnyi analiz osnovnykh kategorii</u> <u>dialektiki</u> (Saratov: Izd. Saratovskogo universiteta, 1970).

62v. Tiukhtin, "Perekhod kolichestvennykh izmenenii v kachestvennye," Filosofskaia entsiklopediia, Vol. IV, pp. 239f; Naftali Prat, "Diamat and Contemporary Biology," <u>Studies in Soviet Thought</u>, Vol. 21 (1980), pp. 189ff.

630b"ektivnaia dialektika, p. 163.

<sup>64</sup>Tiukhtin, "Perekhod kolichestvennykh izmenenii v kachestvennye," p. 239. See also Sviderskii, O dialektike elementov i struktury, pp. 60ff.

<sup>65</sup>In fact, Stalin's notorious endorsement of gradual qualitative changes in the development of language was phrased in terms of elements and structure: qualitative changes in language, Stalin wrote in 1950, take place "by the gradual and prolonged accumulation of the elements of the new quality, of the new language structure, and the gradual dying away of the elements of the old quality" (Stalin, <u>Marxism and Linguistics</u>, p. 26). Compare Sheptulin's 1978 reference to nonexplosive leaps as "occurring comparatively slowly, by way of gradually accumulating the elements of a new quality and discarding those of the old." (<u>Marxist-</u> Leninist Philosophy, p. 255)

<sup>66</sup>0b"ektivnaia dialektika, p. 161.

<sup>67</sup>Ibid., p. 282.

68Prat, "Diamat and Contemporary Biology," p. 201.

<sup>69</sup>Dialektika i logika nauchnogo poznaniia, p. 143.

<sup>70</sup>Loc. cit. For a broad Soviet critique of the systems-structural approach to category theory, see Orudzhev, <u>Dialektika kak sistema</u>, pp. 6f, 20f, 53ff.

<sup>71</sup>For a recent study of Bogdanov's thought, see Kenneth M. Jensen, Beyond Marx and Mach: Aleksandr Bogdanov's Philosophy of Living Experience (Dordrecht: D. Reidel Publishing Co., 1978).

<sup>72</sup>Lenin, Philosophical Notebooks, p. 223.

<sup>73</sup>Vorob'ev, "O soderzhanii i formakh zakona otritsaniia otritsaniia," p. 57; <u>Dialektika i logika nauchnogo poznaniia, pp. 47, 223, 244.</u>

<sup>74</sup>This point is made by Z. A. Jordan in "The Dialectical Materialism of Lenin," <u>Slavic Review</u>, Vol. XXV, No. 2 (June, 1966), p. 283, and by Gustav Wetter in Dialectical Materialism, pp. 341f.

<sup>75</sup>Lenin, <u>Philosophical Notebooks</u>, p. 360; S. P. Dudel' and G. M. Shtraks, <u>Zakon edinstva i borby protivopolozhnosti</u> (Moscow: Izd. "Vysshaia shkola", 1967, p. 65.

<sup>76</sup>N. I. Gribanov and S. A. Lebedev, "Aktual'nye voprosy teorii materialisticheskoi dialektiki," <u>Vestnik Moskovskogo universiteta</u>, Series 7, "Filosofiia," 1981, No. 4, p. 75.

<sup>77</sup>Fundamentals, p. 143.

<sup>78</sup>On the introduction of this distinction see Wetter, <u>Dialectical</u> Materialism, p. 342.

<sup>79</sup><u>Fundamentals</u>, pp. 147f. Although most Soviet philosophers restrict the distinction between antagonistic and nonantagonistic contradictions to the social sphere, the view that it may also be found in the natural world is defended by some. See G. V. Platonov, "Protovorechiia i ikh rol' v razvitii zhivoi prirody," <u>Vestnik Moskovskogo universiteta</u>, Seriia 7 (Filosofiia), 1981, No. 5, pp. 11-13.

<sup>80</sup><u>The Works of Aristotle</u>, Vol. VIII: <u>Metaphysics</u>, trans. W. D. Ross (Oxford: Clarendon Press, 1954), 1005b, 19-20.

<sup>8</sup>lwetter, <u>Dialectical Materialism</u>, p. 524.

<sup>82</sup>Volkov, "Konferentsiia po voprosam protivorechii," pp. 170f. The position is called 'polarism' by G. S. Batishchev in <u>Dialekticheskoe</u> protivorechie, pp. 42ff.

\*

<sup>83</sup>Ibid., p. 165. In Western Marxist philosophical literature the polarist position is expounded and defended by Erwin Marquit in "Contradictions in Dialectics and Formal Logic," <u>Science & Society</u>, Vol. XLV, No. 3 (Fall, 1981), pp. 306-323.

<sup>84</sup>A. A. Zinov'ev, Logika nauki (Moscow: Izd. "Mysl'," 1971), p. 206.

<sup>85</sup>Karl Marx, <u>Capital: A Critical Analysis of Capitalist Production</u>, trans. S. Morse and E. Aveling, ed. F. Engels, Vol. I (Moscow: Progress Publishers, 1965), p. 166.

<sup>86</sup>Engels, <u>Anti-Dühring</u>, pp. 144f. On the lively discussion of this paradox in Soviet journals in the 1960s, see Orudzhev, <u>Dialektika kak</u> sistema, pp. 251ff.

<sup>87</sup>Dialekticheskoe protivorechie, p. 336. Batishchev uses the term 'antinomism' to refer only to this extreme position (p. 43).

<sup>88</sup>Volkov, "Konferentsiia po voprosam protivorechii," p. 172.

<sup>89</sup>Dialekticheskoe protivorechie, p. 246.

90Ibid., p. 249.

<sup>91</sup>Volkov, "Konferentsiia po voprosam protivorechii," pp. 168f.

<sup>92</sup>Dialekticheskoe protivorechie, p. 131.

<sup>93</sup>Ibid., p. 256.

94Ibid., p. 265.

95Ibid., p. 133.

96Ibid., p. 260.

97 Volkov, "Konferentsiia po voprosam protivorechii," p. 169.

<sup>98</sup>Dialekticheskoe protivorechie, pp. 167f.

99Ibid., p. 280.

100Volkov, "Konferentsiia po voprosam protivorechii," p. 169. Compare this criticism of Engels' point with that by Irving M. Copi in John Somerville and Howard L. Parsons, eds., <u>Dialogues on the Philosophy</u> of Marxism. From the Proceedings of the Society for the Philosophical <u>Study of Dialectical Materialism</u> (Westport, Conn.: Greenwood Press, 1974), pp. 72-74.

<sup>101</sup>Volkov, "Konferentsiia po voprosam protivorechii," p. 165.

102Somerville and Parsons, Dialogues on the Philosophy of Marxism, p. 65.

103Dudel' and Shtraks, Zakon edinstva i borby protivopolozhnostei, p. 167.

<sup>104</sup>Dialekticheskoe protivorechie, p. 181 (italics in original).
<sup>105</sup>Ob"ektivnaia dialektika, p. 305.

<sup>106</sup>Dialekticheskoe protivorechie, pp. 181ff.

107Z. M. Orudzhev, "Some Problems of Dialectical Logic," in Philosophy in the USSR: Problems of Dialectical Materialism, trans. R. Daglish (Moscow: Progress Publishers, 1977), p. 240. For Orudzhev's position see also <u>Dialekticheskoe protivorechie</u>, pp. 78-95 and 223-232, and A. V. Aver!ianov and Z. M. Orudzhev, "Dialectical Contradiction in the Evolution of Knowledge," <u>Soviet Studies in Philosophy</u>, Winter, 1979-80, pp. 63-82.

108Dialekticheskoe protivorechie, pp. 89f.

<sup>109</sup><u>Ibid.</u>, pp. 92, 94. For a discussion of a similar position presented by the German Marxist Gottfried Stiehler, see Marquit, "Contradictions in Dialectics and Formal Logic," pp. 320-322.

<sup>110</sup>Ibid., p. 61; Ob"ektivnaia dialektika, pp. 300f.

<sup>111</sup>Orudzhev, "Some Problems of Dialectical Logic," p. 240.

<sup>112</sup>V. E. Kozlovskii, "XXVI c"ezd KPSS i problemy materialisticheskoi dialektiki," Filosofskie nauki, 1981, No. 5, pp. 10f.

<sup>113</sup>Ibid., pp. 3f, 7.

114 Quoted in Engels, Anti-Dühring, p. 143.

115Karl R. Popper, "What Is Dialectic?" in <u>Conjectures and Refuta-</u> tions: The Growth of Scientific Knowledge, 3rd ed. (London: Routledge and Kegan Paul, 1969), p. 316.

\*\*

116Lenin, Philosophical Notebooks, p. 222.

<sup>117</sup> Ibid., pp. 359-363.

118Fundamentals, pp. 154f.

<sup>119</sup>The Russian verb translated here as "to sublate'-<u>snimat'</u> (perfective aspect: <u>sniat'</u>)--is the equivalent of Hegel's <u>aufheben</u>, and it contains much of the latter term's semantic richness, combining elements of 'canceling', 'preserving', and 'gathering up'.

<sup>120</sup>Lenin, <u>Polnoe sobranie sochinenii</u>, Vol. 29, p.

<sup>121</sup>Fundamentals, p. 280.

122Dialektika nauchnogo poznaniia, p. 91.

<sup>123</sup>For the first fully developed presentation of the view, see M. N. Rutkevich, <u>Dialekticheskii materializm.</u> Kurs lektsii dlia estestvennykh <u>fakul'tetov</u> (Moscow: Izd. sotsial'no-ekonomicheskoi literatury, 1959), pp. 373ff.

124 Dialektika i logika nauchnogo poznaniia, pp. 217f.

125 Ibid., pp. 220ff.

126 Ibid., p. 219.

127 Ibid., p. 218.

128 Engels, Anti-Dühring, p. 165.

129 Sheptulin, Marxist-Leninist Philosophy, p. 273.

otritsaniia otritsaniia (Moscow: Gos. izd. "Vysshaia shkola," 1961), p. 6.

131<u>Ibid</u>., pp. 7f.

1320b"etktivnaia dialektika, pp. 234f.

133Ibid., p. 352.

<sup>134</sup>Rutkevich, <u>Dialekticheskii materializm</u>, p. 385; <u>Dialektika i</u> logika nauchnogo poznaniia, p. 201.

135Loc. cit. (italics in original).

<sup>136</sup>Rutkevich, Dialekticheskii materializm, pp. 385f.

<sup>137</sup>Dialektika i logika nauchnogo poznaniia, pp. 190, 193.

<sup>138</sup>S. T. Meliukhin, <u>Problema konechnogo i beskonechnogo</u> (Moscow: Gos. izd. politicheskoi literatury, 1958), p. 202; S. T. Meliukhin, <u>O dialektike razvitiia neorganicheskoi prirody</u> (Moscow: Gos. izd. politicheskoi literatury, 1960), pp. 8f.

<sup>140</sup>Dialektika nauchnogo poznanija, p. 16; Engels, <u>Anti-Dühring</u>, p. 168.
<sup>141</sup>Meliukhin, <u>O dialektike razvitija neorganicheskoj prirody</u>, p. 8.
<sup>142</sup>Ibid., pp. 8f.

<sup>143</sup>L. M. Krechetovich, <u>Voprosy evoliutsii rastitel'nogo mira.</u> Sbornik <u>statei</u> (Moscow: Izd. Moskovskogo obshchestva ispytatelei prirody, 1952), pp. 158f.

144Ernst Mayr, "Evolution," <u>Scientific American</u>, Vol. 239, No. 3 (September, 1978), p. 51.

1450b"ektivnaia dialektika, p. 344.

146Mayr, "Evolution," p. 51.

<sup>147</sup>Sheptulin, Marxist-Leninist Philosophy, p. 258.

<sup>148</sup>Dialektika i logika nauchnogo poznaniia, pp. 203f.

<sup>149</sup>Ibid., pp. 204f (italics in original).

<sup>150</sup>Dialekticheskoe protivorechie, p. 320.

-\* \*

· · ·