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THE FORMATION OF PANNEKOEK’S MARXISM
by JOHN GERBER

The Dutch Marxist theoretician and astronomer, Anton Pannekoek (1873-1960), has remained a largely neglected and unknown figure in the history of European socialist thought. Yet Pannekoek’s long life and political career spanned several distinct stages of socialist history, resulting in some of the most significant and fundamental contributions to twentieth-century Marxist thought. His political maturity coincided with the rise of Social Democracy,

1. Obscurity was not always the case for Pannekoek. Prior to the First World War, and for a few years afterward, Pannekoek was a widely known figure in the international socialist movement. Commenting on the impact of Pannekoek’s thought on the formation of American Communism, Theodore Draper has noted: “...Pannekoek and Gorter were familiar names to many American Socialists when Lenin and Trotsky were virtually unknown.” Theodore Draper, The Roots of American Communism (New York: Viking Press, 1957), pp. 65-66. More recent interest in him has developed only after the May 1968 events in France. Because of this emphasis has been placed on the later “Council Communist” aspects of his career. Most work on Pannekoek thus far has consisted almost exclusively of anthologies of his writings. These include: Serge Brichianer, Pannekoek et les conseils ouvriers (Paris: Etudes et documentation internationales, 1969); Cajo Breidel, Anton Pannekoek Theoreticus van het Socialisme (Nijmegen: Socialistische Uitgeverij Nijmegen, 1970); Joop Kioosterman, Anton Pannekoek: Neu-bestimmung des Marxismus (Berlin: Karin Kramer Verlag, 1974); Fritz Kool, Die Linke gegen die Parteiherrschaft (Olen, Germany: Walter Verlag, 1970); Hans Manfred Bock, Anton Pannekoek en Herman Gorter: Organisatie en Taktik der bolsjevistischen Revolutie (Frankfurt: Verlag Neue Kritik, 1969). Also useful is Paul Mattick’s short obituary, “Anton Pannekoek,” New Politics, Winter, 1962. For an analysis—though somewhat misleading—of the impact of Pannekoek’s thought on Lenin’s political development see H. Schurer, “Anton Pannekoek and the Origins of Leninism,” The Slavonic and East European Review, June, 1963. A valuable assessment of Pannekoek’s pre-1914 activity is contained in Hans Manfred Bock, “Anton Pannekoek in der Vorkriege-Sozialdemokratie: Bericht und Dokumentation,” in Arbeiterbewegung. Theorie und Geschichte, Jahrbuch 3 (Frankfurt: Fischer Verlag, 1974). A major source of background material is Herman de Liagre Böhl’s outstanding biography of Pannekoek’s closest friend and political collaborator, Herman Gorter (Nijmegen: Socialistische Uitgeverij Nijmegen, 1973). Several factors account for Pannekoek’s relative obscurity. The most important of these is that following his break with the Comintern Pannekoek lost touch with any movement of consequence. Another, perhaps, is that Pannekoek, unlike other theorists such as Lenin, Trotsky and Rosa Luxemburg, was more a “pure theorist” than a party leader (Pannekoek’s highest party position was chairman of the Leiden branch of the Dutch SDAP). And finally, there is the problem of the inaccessibility of many of his writings. In the most immediate sense this arises from the fact that a large proportion of his writings are in Dutch. But this is further compounded by the variety of pseudonyms he used throughout his career (known pseudonyms include: Karl Horner, John Harper, P. Aarts, Krable, J. Fraak and van Loo), and by the obscure nature of many of the publications his later writings appeared in.
his death with the rise of the New Left; his writings left their imprint on both movements. Despite his professional commitment to science, the contours of Pannekoek's political activity are almost without parallel. Prior to 1914 he participated as a militant in both the Dutch and German Social Democratic parties, taught in the German Social Democratic Party (SPD) schools, and collaborated with Kautsky on the Neue Zeit. Along with Rosa Luxemburg, he emerged as one of the leaders of the left wing of the German SPD, gaining fame with his 1912 Neue Zeit polemic against Kautsky. Pannekoek was one of the first in Europe to understand the fundamental contradictions and weaknesses of the Social Democratic movement and to anticipate its eventual collapse. Following the outbreak of the First World War, Pannekoek was the first to call for the formation of a new International, and later became a leading figure in the Zimmerwald anti-war movement. Although he had played a major role in the initial formation of European Communism and was a leader of the Comintern's Western European bureau, Pannekoek emerged in 1920 as a formidable left-wing critic of Leninism, becoming a leading theoretician of the left-Communist Kommunistischen Arbeiter-Partei Deutschlands (KAPD). Under the pseudonym Karl Horner he gained fame as Lenin's adversary in Left-Wing Communism; An Infantile Disorder. From 1929 until his death in 1960 he was the intellectual mentor of the quasi-syndicalist "Council Communist" movement.

Given its enormous circumference, it seems difficult to find a single entry into Pannekoek's theoretical work. Yet in seeking out those categories which unify his thought, one finds one particular area in which his thinking remains remarkably constant: the set of philosophical assumptions undergirding his political theories. Pannekoek's Marxism can, therefore, be made more intelligible by focusing on the key philosophical concepts he built his Marxism on early in his career and which he retained with only slight revision and reformulation throughout his life. The aim of this essay will be to explore these philosophical foundations and their implications through an examination of: (1) The basic Marx-Dietzgen synthesis on which his thought rests; (2) His extension and broadening of these categories into a conception of science and Marxism; (3) Some of the main implications these philosophical and scientific conceptions had for his political thought; (4) The final crystallization of these ideas in his unified philosophical, scientific and political assault on Leninism. In posing the question of Pannekoek as philosopher, it must be noted that his concern was not philosophy in the formal sense, but one of developing and understanding certain philosophical and scientific categories of analysis for practical application to a variety of more immediate political questions.

Pannekoek and Dietzgen

Unlike most Second International Socialists, Anton Pannekoek came to Marxism directly out of natural science, a fact that was to have considerable significance in the formulation of his thought. For Pannekoek, the personal transition to Marxism came in 1898, while a doctoral student at Leiden University, following a reading of Edward Bellamy's novel, Equality. The effect of this American utopian novel, he later noted, "was as if a blindfold had been removed." "For the first time it dawned on me that all theories have a social basis and significance and develop in response to real material interests rather than abstract reasoning." The acceptance of Marxist ideology led him to undertake a painstaking study of Marx's economics in collaboration with Frank van der Goes, the major figure in the introduction of Marxist Socialism into the Netherlands. Dissatisfied with what he felt was the determinism inherent in Marxian economics and concerned above all with the problem of developing a scientific framework for analyzing the relationship of human consciousness and action to the material world, Pannekoek went on in 1900 to a systematic examination of the philosophical basis of Marxism. It was at this point that he discovered the writings of the German autodidact ("the worker-philosopher") Joseph Dietzgen, which marked the decisive turning point in his theoretical development. To understand the precise nature of the impact of Dietzgen in Pannekoek's thought requires a brief summary of Dietzgen's philosophy.

Like Pannekoek, Dietzgen has remained a largely neglected theorist. This

2. Anton Pannekoek, "Herrinneringen uit de arbeidersbeweging," p. 2. This unpublished document was written by Pannekoek as a personal memoir for his family in 1944 during the Nazi occupation of Holland at a time when his personal fate remained uncertain. A copy is contained in the International Institute for Social History (Amsterdam).

3. Ibid., pp. 4-5.

4. Joseph Dietzgen was born in 1828 near Cologne. His father was a tanner and it was in this profession that he was trained and worked. In his leisure time he studied literature, economics and philosophy and learned to speak French and English fluently. He became a class conscious Socialist upon reading the Communist Manifesto. A participant in the events of 1848, he was forced to flee to America where he worked at a variety of jobs. Throughout the next 30 years Dietzgen alternated between the U.S. and Europe, participating in the socialist movements on both sides of the Atlantic. In 1886, as an editor of several socialist papers in Chicago, he played a major role as a defender of the Haymarket martyrs. He died in 1886 and is buried at the side of the Haymarket anarchists in Chicago. For further information on Dietzgen see: Loyd Easton, "Empiricism and Ethics in Dietzgen," Journal of the History of Ideas, January, 1958; Adam Buick, "Joseph Dietzgen," Radical Encyclopedia of the Social Sciences (London: 1951); G. Bammel, "Joseph Dietzgen," La Revue Marxiste, April, 1939; Adolf Hepner, Josef Dietzgens Philosophische Lehren (Stuttgart: 1916); Henriette Roland-Holst, Joseph Dietzgens Philosophie, gemeinsverständlich erläutert in ihrer Bedeutung für das Proletariat (Munich: Eugen Dietzgen Verlag, 1910); Fred Casey, Thinking: An Introduction to its History and Science (Chicago: Charles H. Kree, 1926).
status, however, was not always the case. At the Hague Congress of the First International, Marx introduced Dietzgen as "our philosopher." Although critical of certain aspects of Dietzgen's thought, Marx pronounced it "excellent and—as the independent product of a working man—admirable." Engels, in *Ludwig Feuerbach*, subsequently credited Dietzgen—somewhat loosely in view of their different conceptions—with the independent discovery of "materialist dialectics." Indeed, it was Dietzgen who first coined the term "dialectical materialism." Due in part to a major popularization campaign—in which Pannekoek played a prominent role—Dietzgen's writings also gained fairly widespread currency among rank-and-file working class militants.

Considered in overall terms, Dietzgen was essentially a philosopher of science, attempting to develop the methodology for a comprehensive view of the world for the purposes of prediction and control, a fact which doubtless made a marked impression on the young Pannekoek. In particular, Dietzgen was concerned with establishing: (1) The objective reality and unity of both the natural and social processes; (2) The relative and tentative validity of all knowledge obtained about these processes; (3) The unity of human activity (particularly thought activity) with the natural and social environment and its importance as a factor conditioning it.

Although his dialectics rejected any rigid laws of a universal system, Dietzgen accepted (at least in a relative sense) Marx's social theories that explain social change and class ideologies in terms of the fundamental relations of economic production. But Dietzgen sought to clarify these theories by making explicit their psychological assumptions through an inductive theory of cognition. The human thought process, he felt, was as accessible to scientific analysis and elaboration as any other natural or social process: "If we could place this general work of thinking on a scientific basis, if we were able to discover the means by which reason arrives at its understanding, if we could develop a method by which truth is produced scientifically, then we should acquire for science in general and for our individual faculty of judgement the same certainty of success which we already possess in special fields of science." Dietzgen's first and best-known study, *The Nature of Human Brainwork* (1869), represents his most systematic attempt to formulate such a scientific and materialistic theory of understanding. Summarily rejecting Kantian dualism, Dietzgen argued that since all knowledge derives from and cannot go beyond sensations, it cannot make definitive statements about objective reality; it can merely fill in the gaps in experience by the ideas, concepts and abstractions which experience suggests. Conceptual thought is, therefore, formed out of the continuous clarification, systematization and classification of sensual data through a process of abstracting the particular qualities from the general qualities in such data. This abstraction process is dialectical in the sense that it mediates differences and distinctions in a particular object of thought. For Dietzgen, however, dialectical did not always mean absolute opposites or contradictions. These distinctions existed only through the mental separation of the component parts of a particular object of thought. Without the mental act there could be no contradictions. The mind merely constructs them and makes them relative and equal as part of the classification and systematization process. From this perspective, the objective world of matter, space, time and causality common to both "mechanical materialism" and Marxist materialism represented simply a set of artificial and relative conceptions.

For Pannekoek, the discovery of Dietzgen provided a critical link between Marxism and his professional role as a natural scientist: "Here I found for the first time everything that I had been looking for; a clear, systematic elaboration of a theory of knowledge and an analysis of the nature of concepts and abstractions... Through this reading I was able to completely clarify my conception of the underlying relationship between Marxism and epistemology and develop it into a unified whole." In his first major work as a Marxist,
"De Filosofie van Kant en het Marxisme" (1901), Pannekoek sought to establish Dietzgen's real significance in the history of philosophy and socialist thought. This analysis was broadened the following year when, with Kautsky's assistance, he made contact with Dietzgen's son Eugen and was invited to write an introduction to a collection of Dietzgen's writings. Together these two works constitute the basic core of Pannekoek's early approach to Marxism.

In Pannekoek's view, Marx had elaborated only on the nature of the social process of production and its fundamental significance for social development without really concerning himself with the question of the human "spirit" (Geist), other than to show that it derived its content from the material world. The question thus remained open: what was the exact content of human consciousness and what was its real relation to the material world? This gap in Marxian theory, Pannekoek felt, coupled with the traditional influence exercised by bourgeois thought, was one of the main reasons for the erroneous understanding of Marxism by anti-Marxists and revisionists alike. Dietzgen, by making the human mind the special subject of investigation, and by attempting to show the exact content of the process of human consciousness, had made a major contribution toward filling this gap. Because it validated empirical methodology itself, Dietzgen's scientific and experienced-based theory of human thinking constituted the "essence and foundation" of Marx's theory of society and man. 12 By constructing out of philosophy a "science of the human spirit," Dietzgen "raised philosophy to the position of a natural science, the same as Marx did with history." 13 For this achievement, Dietzgen could be ranked "third among the founders of 'socialist science,' next to Marx and Engels." 14 As a result, Pannekoek contended that a "thorough study of

Dietzgen's writings is an immediate necessity for anyone desiring to learn the philosophical fundamentals of Marxism and of the proletarian outlook on life." 15

To lend additional credence to his assessment of Dietzgen, Pannekoek also attempted to render a critical and dynamic account of the development of "proletarian philosophy" itself, using both Dietzgenian and Marxist categories of analysis. Starting from Dietzgen's argument that the reduction of reality to ideas is essentially an historical and social mode of abstraction, Pannekoek outlined several distinct stages in the development of "proletarian philosophy."

The first stage in this process, Pannekoek maintained, began with Kant. The significance of Kantian philosophy was twofold: it was at once "the purest expression of bourgeois thought," and a precursor of modern socialist philosophy. 16 Since "freedom" of production, competition and exploitation were at the heart of the ideology of the developing capitalism of the late eighteenth and early nineteenth century, Kant's emphasis on "freedom" and "free will" corresponded to the needs and aspirations of a rising bourgeoisie. By challenging the mechanistic materialism of the French rationalists, Kant also provided a firmer foundation for religious belief, clearing the way for a revised form of faith and freedom of the will. Yet in focusing on sensory experience and on the organization of the human mind, Kant made the first valuable contribution to a scientific theory of understanding and human causation that was a necessary component of socialist thought.

A second stage in the development of a scientific theory of understanding came with Hegel. In strictly social terms, Hegel's thought was the product of the reaction against both bourgeois society and bourgeois philosophy that developed after the French Revolution. Historically, Hegel's aim of a practical critique of bourgeois philosophy was but one part of a large intellectual effort to develop a theoretical justification of the Restoration. Stripped of its social origins and transcendental character, the real significance of Hegelian philosophy lay in the fact that it provided an excellent theory of the human mind and its working methods: "The vicissitudes of the absolute spirit in the course of its self-development are but a fantastical description of the process which the real human mind experiences in its acquaintances with the world and its active participation in life." 17

and Henriette Roland-Holst, in particular on Gotter's epic poems Pan and De Arbeidersraad. A useful discussion of this literary impact can be found in Robert Antonissen, Herman Gotter en Henriette Roland-Holst (Antwerp: De Sikké, 1945); and Yves van Kempen et al., Materialisme Literatuurtheorie (Nijmegen: Socialistische Uitgeverij Nijmegen, 1975).


13. Ibid., p. 28.

14. Anton Pannekoek, "Dietzgen's Work," Die Neue Zeit, 1915, vol. 2, pp. 37-47. In Pannekoek's view, Dietzgen's methodology was not limited to social science alone, but had equal relevance for physical science: "It is a proof of the deep validity of a clear Marxist insight that Dietzgen, a layman and an amateur in the scientific area, fully clarified the basis of modern natural science long before the modern natural scientists themselves were able to do so. The most well known of them, Ernst Mach, has admitted his astonishment upon learning that many of his newly developed theories had been discovered a quarter century earlier by Dietzgen." Anton Pannekoek, "Twee natuuronderzoekers in de maatschappelijk-geestelijken strijd," De Nieuwe Tijd, 1917, pp. 300-314, 375-392. Throughout his career Pannekoek consistently attempted to apply a Dietzgenian methodology to his scientific research. For an example of this

see Anton Pannekoek, De Evolutie van het Heelaal (Lieden: Venn Boekdrukkerij, 1918).

15. Ibid., p. 27.

16. Ibid., p. 27.
The materialist conception of history, as formulated by Marx, was meant to be an anti-metaphysical theory based on the evidence of human sense data, to be examined "in the manner of the natural sciences." While the later writings of Marx reflected an increasingly positivistic trend, it was primarily Engels, and later his spiritual heir, Karl Kautsky, who generalized the historical materialism advanced by Marx into a form of natural science. This conception, which later became a theoretical cornerstone of the Marxism of both the Second and Third Internationals, was one which viewed the dialectic as the supreme science governing the general laws of movement and development of nature, human society, and thought. In Engels' words: "...that in nature, amid the welter of innumerable changes, the same dialectical laws of motion force their way through as those which in history govern the apparent fortuitousness of events; the same laws as those which similarly form the thread running through the history of the development of human thought and gradually rise to consciousness in the mind of man." Marxism, through this methodology, had been turned into a cosmography, a total scientific synthesis of universal validity for all questions of social, historical and natural development.

In developing his conception of the relationship between socialism and science, Pannekoek directed his inquiry on two levels: an examination of the methods, meanings and objects of inquiry behind scientific knowledge; and an analysis of the position of science in human social and mental activity. Starting from Dietzgen's premise that human thought represents a mediation between the social factors that shape men and their expression in human action, Pannekoek advanced the proposition: "Thinkers can only work with the pre-existing conceptual materials of their era. The form in which new problems are posed often creates a consciousness about the insufficiency or falseness of the traditional views, and new 'truths' are then put forward as an improvement of the traditional views." Among the various forms of "thought activity" of an historical epoch none has more importance than science, "which stands as a mental tool next to the material tools and, itself a productive power, constitutes the basis of technology and so is an essential part of the productive apparatus." As part of a larger

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18. Ibid., p. 21.
19. Ibid., p. 29.
20. Ibid., p. 27.
24. Anton Pannekoek, Lenin as Philosopher: A Critical Examination of the Philosophical Basis of Leninism (New York: New Essays, 1948), p. 19. On the concept of technology, Pannekoek has elaborated elsewhere: "The basis of society—productive power—is formed chiefly through technology, though in primitive societies natural conditions play a major role. Technology does not merely involve material factors such as machines, factories, coal mines and
historical mode of abstraction, science has always reflected a particular epoch in its subject matter, its laws, its metaphysical propositions and in its embedded values. The new scientific "truths" (or forms of consciousness) that evolve out of each epoch represent an important and indispensable source of "spiritual power," both for the development of new technologies and for the new social relationships that arise out of them. Consequently, the emergence of a particular form of scientific consciousness or structure of ideas cannot be separated from the social conflicts of its era: "A new rising ruling class is able to understand through its particular class situation the new 'truths' that serve its interests. These new 'truths' then become a powerful weapon in the struggle against the rulers of the declining social order, who have neither interest in, nor understanding of, the new doctrines and perceive them only as a threat. . . . So it was with the natural science that accompanied the rise of the bourgeoisie; so too is it with political economy, which is a science of the proletariat." 25 Viewed in such a manner, the scientific disciplines of the nineteenth century were all expressions of the growing historical self-understanding of an emerging bourgeoisie and a necessary pre-condition for industrial expansion. As such, they represented the "spiritual basis of capitalism." 26

But such a conception of science as "class science" did not entail the view that every class maintains its own special set of scientific views, but "that a certain form of science can be both an object and a weapon of class struggle, and that a class has an interest only in the investigation and diffusion of railroad but also the ability to make them and the science which creates this ability. Natural science, our knowledge of the forces of nature, our ability to reason and cooperate are all important as factors of production. Technology rests not only on material elements alone, but also on a strong spiritual elements." Anton Pannekoek, "Het historisch materialisme," De Nieuwe Tijdf, 1919, pp. 15-22, 51-58. By analogy "socialist politics" could be viewed as the "technology of the proletariat" since it had a similar scientific and spiritual relationship to their productive relationships. Anton Pannekoek, "Sozialistische Politik," "Zeitungsberichter" article, May 1, 1909. From 1908 to 1914, while a full-time militant in the German SPD, Pannekoek wrote a regular series of weekly articles which were sent to subscribing local SPD papers (the number varied between 15 and 30). Pannekoek's intention with these articles was to develop a body of popularized theory easily understandable to the average worker. Dates cited are those of the proof copies contained in the Pannekoek archives, International Institute for Social History (Amsterdam). These articles can be found most regularly in the Leipziger Volkszeitung and Bremer Bürgerzeitung, usually several days to several weeks after the proof date copy.


those truths which directly advance its own living conditions." 27 Thus, while the natural sciences of the nineteenth century could be termed "bourgeois" on the basis of their objects and interests, there could be, in strictly methodological terms, no such thing as a "bourgeois science" to be replaced by a "proletarian science." The question was one of a larger form of historical consciousness. What a Marxist critique of science must be directed against is the class-determined ideological interpretation and class-determined practical utilization of science whenever it conflicts with the needs of humanity. Historically, science, like the utilization of all other productive and human resources, was subordinated to the requirements of class relations within a given social system. As inheritors of a new social order, the proletariat will have a much greater interest in building upon the scientific traditions of the past since they would eventually reap the full benefits from it. The science and technology of the hypothetical socialist future—no matter how altered—could, therefore, only be based on all previous scientific and social developments.

In a more immediate sense, Pannekoek saw a major alteration in the social character of twentieth-century natural science which had potentially great significance. Whereas the natural scientists of the mid-nineteenth century "had stood in the avant-garde of the spiritual struggle as leaders themselves, or as spokesmen of the new class, professing the doctrines and ideals of a new form of progress," those of the twentieth century were "either isolated in their narrow specialities or bearers of reactionary ideas or old illusions." This did not mean that the natural scientists of the past were "a better breed of scientists," but illustrated simply "a difference of social significance caused by changed social conditions." 28

This social decline and fragmentation of the natural sciences, Pannekoek felt, was paralleled by the development and expansion of a new and qualitatively different form of scientific consciousness: historical materialism—"the class science of the proletariat." The principal gap in the scientific outlook of the bourgeoisie, he argued, was that a "science of society lay outside of its grasp," since it represented a class that could not see its own limitations and eventual downfall. 29 It could not, therefore, view the world in its interconnected unity, with complete clarity and without illusions. As in the case of the natural sciences of the nineteenth century the new "proletarian science" of Marxism was both a "theoretical expression" of a new stage of

29. Ibid.
social development and one component of the worldview of a new ascendant class. As representatives of a rising new class, and bearers of a new science of society, Marx and Engels were the first to transcend the limitations of bourgeois thought, and could, therefore, be viewed as “the first class scientists of the proletariat.”

The new science of historical materialism, moreover, could arise only with the development of the modern proletariat, since the bourgeoisie has no interest in allowing the truth about society to be discovered; a truth which would show the transient nature of its rule: “The proletariat, therefore, has every interest in discovering the inner laws of society and the sources of their endless torment. Because the working class is the only class which has nothing to conceal, and, therefore, can look at social phenomena in an unbiased manner, it alone is in a position to discover and advocate the truth about society.” Epistemologically, this new social or “spiritual science” (Pannekoek uses the terms interchangeably along with historical materialism and Marxism) also differed fundamentally in the sense that for the bourgeois science represented a system of abstract ideas and concepts for the intellectuals, while for the proletariat “his science” constituted an integral part of “his own life’s experience.” Viewing science in the broad-Dietzgenian sense as the systemization and conceptualization of experience, this meant that for the worker “spiritual science” was merely a form of “ordered knowledge, a short summary of reality” based on his productive experiences, which both explains and clarifies these experiences and serves as a guide for his daily praxis: “It is very unlikely that many of the socialist workers have ever read Kant or Hegel, and perhaps not even Marx, Engels or Dietzgen. But they have something entirely different, life itself...it is their own life experiences which represent the study form that gives them their determined convictions.”

Although the new “spiritual science” of Marxism was linked with the bourgeois scientific methodologies of the past through the process of social and historical development, Pannekoek’s fundamental distinction between social and natural science ruled out any connection between Marxism and physical theory: “The spiritual sciences differ from the natural sciences on the basis of both their object and method. The goal of natural science is to develop an abstraction out of reality; while the goal of spiritual science is to discover and describe a fixed progression and unity in general and particular phenomena.” The central methodological question for both forms of science concerns the nature of their laws and predictions. Responding to those who claimed that physical science is characterized by the exactness of its natural laws and predictions, Pannekoek contended: “What certainty do I have that the event thus asserted and computed really takes place? The answer can only be: None...No scientist assumes that for predictions on the basis of known laws there is absolute certainty. Hundreds of times it happened, contrary to expectations, that it did not come true, and on such cases depended the progress of science.” On this basis, it stood to reason that an even more tentative causal relationship between laws and predictions existed for the social sciences: “Through the immense complication of social relations ‘laws’ of society are much more difficult to discern, and they cannot now be put into the form of exact formulas.” Still more than in nature they may be said to express not the future but our expectations about the future. It is already a great thing that, whereas former thinkers were groping in the dark, now some main lines of development have been discovered.” Thus, just as the history of astronomy, for example, was “full of predictions that did not come true, of disagreements that alarmed the scientists and had to be explained by new unforeseen circumstances,” so too would the new “class science of Marxism.” To speak, therefore, of Marxism as a set of absolute laws and predictions would be “a half-defeat, a laying down of one’s arms.”

Pannekoek’s most sustained effort to apply his conception of science and Marxism can be found in his treatment of the question of Marxism and Darwinism. Few questions had more centrality to the ideology of the Second International than the question of Darwinism. The link between Marx and

37. Anton Pannekoek, “What About Marxism?” Industrial Worker, February 7, 1948. On the question of objectivity Pannekoek has noted: “Striving for objectivity as a principle of science is part of the struggle for self-preservation. Thus, for the bourgeoisie striving for objectivity in natural science is a class interest, a norm of action. In terms of maintaining themselves as a ruling class Marx’s doctrine about capitalism and its development represents a pernicious threat since its validity would destroy their self-confidence and will to struggle. For the proletariat the scientific validity of Marxism is equally necessary as a means of self-preservation since it gives them the will to struggle. For the bourgeoisie it is a question of the validity of another doctrine. Both, therefore, strive for objectivity as defined within their class.” Anton Pannekoek to Maximillian Rubel, August 1, 1951, Pannekoek Archives, map 108, International Institute for Social History (Amsterdam).
38. Anton Pannekoek to Maximillian Rubel, April 23, 1953, op. cit.
Darwin was officially formalized from a Socialist perspective when Engels, speaking at the graveside of Marx, stated: "Just as Darwin discovered the law of development of organic nature, so Marx discovered the law of development of human history." 39 This verdict of Engels on the fundamental parallel between Marxism and Darwinism was eventually to become a cornerstone of Marxist theory — orthodox and revisionist alike — receiving particular emphasis in the works of Karl Kautsky. As a young man, Kautsky, in fact, had initially come to socialism through his interpretation of Darwinist evolutionary doctrine, and some of his earliest theoretical efforts were devoted to developing a Marx-Darwin synthesis. 40 Early in his career Kautsky had written: "The theory of history wishes to be nothing else than the application of Darwinism to social development." 41 It was this conclusion which Kautsky derived from Darwin that was to serve as a major theoretical foundation of the determinist Marxism of the Second International.

Unlike most Marxists of the Second International Pannekoek, however, rejected the determinism inherent in such a conception of Marxism and Darwinism. Pannekoek first addressed himself systematically to this question in his 1909 brochure, *Marxism and Darwinism*, a work he considered as among his best. His immediate practical aim was one of combatting, on the one hand, the "bourgeois Darwinists" who sought to use Darwinism as an intellectual justification for capitalism, and the orthodox Marxists, on the other, who saw it as "natural proof" of the inevitability of socialism. The basis of Pannekoek's analysis was outlined in his earlier distinction between the methodologies of natural and social science and their historical interconnection as scientific forms of class thought. "The scientific importance of Marxism as well as Darwinism," he wrote: "consists in their following out the theory of evolution, the one upon the domain of the organic world . . . the other upon the domain of society." 42 What this meant was that: "Marxism and Darwinism should remain in their own domains; they are independent of each other and there is no direct connection between them." 43 To carry this theory from one domain into another where different laws were applicable would necessarily entail wrong conclusions. This did not mean that they were opposed to each other, but that "they supplement each other in the sense that according to the Darwinian theory of evolution the animal world develops up to the stage of man, and from there on . . . the Marxian theory of evolution applies." 44 What was important in Darwin's work was the recognition that "under certain circumstances some animal kinds will develop into other animal kinds," through a mechanism of natural law. 45 The fact that this "natural law" became identified with a struggle for existence analogous to capitalist development did not affect the validity of his theory, nor, conversely, did it make capitalist competition a "natural law." The differences between Marx and Darwin were just as significant as their similarities. And the failure of Marxists to recognize them was a major weakness of their scientific position.

Darwinism, like all scientific formulations, was not mere abstract thought but an integral part of the class struggles of its epoch. In this case Darwinism functioned as a "tool of the bourgeoisie" in its struggle against both remnants of feudalism and the proletariat. 46 By undermining the entire foundation of orthodox Christian dogma, Darwin's theory destroyed the main ideological prop of the reactionary bourgeoisie. But Darwinism worked equally well for the new bourgeoisie as a weapon against the proletariat. By seeming to offer "scientific proof of inequality" and teaching that "struggle is unavoidable," Darwinism could serve as a powerful counterweight to the socialist doctrines of equality and cooperation. 47 What Marx and Darwin really had in common was to shatter an old, rigid, immobile worldview. For socialists, therefore, the real significance of Darwinism lay in the fact that it represented a precondition for the understanding of historical materialism, rather than a doctrine directly related to it in any way.

- It will readily be seen that the conception of Marxism that emerges from Pannekoek's treatment of the problem of science and socialism represents a radical departure from the orthodox Marxism of his contemporaries. As early as 1901 Pannekoek had contended that it mattered very little whether or not

43. Ibid., p. 35.
44. Ibid., p. 53.
45. Ibid., p. 11.
46. Ibid., p. 22.
47. Ibid., pp. 28-29. Pannekoek sought to expand upon the ideas expressed in *Marxism and Darwinism* some four decades later in a work entitled *Anthropogenesis*, in which he attempted to provide a more unified social and biological explanation for the rise of man in the animal world, examining in particular the question of the development of abstract thought. This effort can be seen as an attempt to provide a biological foundation for Dietzgen's theory of understanding. Anton Pannekoek, *Anthropogenesis: A Study of the Origin of Man* (Amsterdam: North Holland Publishing Co., 1953).
Marx's theories, or even his basic methodology, were completely valid, but rather that they produced results through practice just as the natural sciences had continually produced significant findings with wrong methods. When Pannekoek addresses himself to the scientific character of Marxism, he conceives of it as a new science founded on the constitution of a new theoretical object: the social formation. For this reason, it has no connection with physical theory, neither by analogy with physical process, nor by inferring "laws of development" from nature. It is simply a set of practical hypotheses and not an abstract philosophy of the universe. Marxism is concerned with physical theory only insofar as such theory is used for specific class purposes. It is a science to the extent that the social development and revolutionary activity which it reflects and seeks to explain requires the comprehension of its own subject matter, methodological concepts and procedures. The conditional validity of its propositions depends both on the state of its external subject matter and on the internal articulation and development of its own discourse. - The dialectic, rather than a special scientific theory, represents simply a "doctrine of historical development" which seeks to clarify and distinguish the "special properties" in a particular object by considering it as an interconnected totality. From such a perspective, no statement about Marxism can ever be considered final. Marx's teaching does not stand outside the course of social evolution but undergoes a constant process of transformation, development and regression. In a broader historical sense, it is not the ideas of Marx per se that have the greater significance, but the fact that these ideas represent the first systematic formulation of the ideology of a rising revolutionary working class movement. The theoretical and philosophical fight of ideas is, from a proletarian point of view, not the basis, but just the transitory ideological form of the revolutionary class struggle. A Marxism ossified in the doctrines of Marx and Engels not only is not, but can never be, a theory of proletarian revolution.  

48. Anton Pannekoek, "Inlichting," *De Kroniek*, August 31, 1901. There is a certain similarity here with George Lukacs's celebrated statement: "Let us assume for the sake of argument that recent research has disproved once and for all every one of Marx's individual theses. Even if this were to be proved, every serious 'orthodox' Marxist would still be able to accept all such modern findings without reservations and hence dismiss all of Marx's theses in toto—without having to renounce his orthodoxy for a single moment." George Lukacs, *History and Class Consciousness* (London: Merlin Press, 1971), p. 1.  

49. Anton Pannekoek, "Professor Treub over het historisch materialisme," *De Nieuwe Tijd*, 1904, pp. 87-97, 159-172, 295-308. Pannekoek also states elsewhere that it was Dietzgen and not "Historischer Materialismus und Religion," *Die Neue Zeit*, 1904, pp. 133-142, 180-186.  

50. In addition to the above, the most comprehensive source for Pannekoek's views on the nature of Marxism in his unpublished, 284-page manuscript "Historischer Materialismus," Pannekoek Archives, map 169, International Institute for Social History (Amsterdam). Also useful are the Pannekoek-Rubel and Pannekoek-Mattick correspondence, *ibid.*, map 108. Toward the end of his life Pannekoek argued the need for a completely new socialist terminology, starting first with the word Marxism itself: "So I think we must make a close with the old slogans and traditions of socialism and make a new start... The science of Marx, the true lasting part of his work, remains the basis of all our opinions and thoughts. But to put it crudely: the word Marxism should disappear from our propaganda. Everything we tell is based upon what we see and what every worker can see. Every explanation based on 'Marxism' floats over the heads of the masses and disappears... Future propaganda has to go to the masses because its contents are, and are only, understandable by the workers themselves." Anton Pannekoek to Paul Mattick, June 11, 1946, *op. cit.*  

consciousness of the proletariat is as much a factor affecting historical evolution as the social and economic factors it arises from. The class struggle, while it corresponds to the material environment of society, is actually a struggle of consciousness.

It followed from these assumptions that the subjugation of the working class was not entirely due to economics and force alone, but in no small measure to 'the spiritual superiority of the ruling minority' which 'presides over all spiritual development, all science.' Through its control over institutions such as the schools, the church, and the press, 'it contaminates ever-larger proletarian masses with bourgeois conceptions.' It is this 'spiritual dependence of the proletariat on the bourgeoisie' that Pannekoek regards as the "main cause of the weakness of the proletariat." As an obstacle to social revolution this "spiritual domination of the bourgeoisie" is just as dangerous, if not more so, as its power of material domination and exploitation. The proletariat is totally dependent intellectually and culturally on the bourgeoisie and acquiesces in its own enslavement. Viewed according to the traditional Marxist categories of base and superstructure, this formulation—which assigns an equal, if not predominant, role to the superstructure—represents a major departure from the traditional Marxist position expressed by Marx in "Preface to the Critique of Political Economy." The similarity of these ideas with Antonio Gramsci's theory of hegemony is also readily apparent.

Given the "spiritual superiority" of the ruling class and the need for a "spiritual revolution" of the working class, the corollary question arises: what is the precise nature of this proletarian consciousness and how is it developed? Proletarian class consciousness, according to Pannekoek's conception, was not identified with a particular set of doctrinal beliefs, but with a certain historical mode of abstraction. For Pannekoek, proletarian thought exists on two mutually interacting levels: the level of science (or theory) and the level of ideology or unconscious ideas. While both levels represent "abstract, generalized expressions of concrete reality," they differ in the sense that ideology (ideas) rests on unconscious feelings, perceptions and drives, while science (theory) is an attempt to give conscious insight and understanding to these spontaneous perceptions by abstracting the particular from the general and giving it concrete historical content. What emerges from the interaction between the two levels is a series of "categories of understanding" unique to proletarian thought that Pannekoek considers the real content of proletarian class consciousness—Pannekoek, however, is vague in specifying precisely what these categories really imply other than to state that they are dialectical in the sense that they are based on conceptual opposites (which are later resolved in proletarian strategy and action) such as: revolution vs. evolution, theory vs. practice, ends goals vs. daily activity. Although opposites, the categories are united in the sense that they are all different sides of the same process of development—the historical transition to socialism. They differ from bourgeois categories of understanding that are static and can only look at the present.

Pannekoek's conception of "false consciousness" was tied to his view of the relation of ideas to economic reality. Rather than a direct reflection of economic conditions, ideas arise out of "present reality and the system of ideas transmitted from the past." For the formation of proletarian class consciousness the "thought systems" of the past were of particular importance since, although detached from their material roots, they still constituted a major "spiritual force" of great social significance. That certain thought patterns persist long after the conditions of life which produced them have disappeared was not simply a consequence of the human mind, but of what might be termed the "social memory," or "the perpetuation of collective ideas, systematized in the form of prevailing beliefs and ideologies, and transferred to future generations in books, in literature, in art and in education." It was this continued predominance of traditional thought that has caused the development of ideas to lag behind the development of society.

Although this "time lag" of ideas was viewed by Pannekoek as the main component of false consciousness, he foresaw it being eventually resolved through a process of "spiritual evolution" culminating in a sudden "ripening of new ideas." Through its encounter with new productive forces and relationships, "new and different impressions enter the mind which do not fit in with the old image. Then there begins a process of rebuilding, out of parts of old ideas and new experiences. Old concepts are replaced by new ones.

54. Anton Pannekoek, Die taktischen Differenzen in der Arbeiterbewegung (Hamburg: Erdmann Dubber, 1909), p. 130. This work represents one of the most developed and systematic products of Pannekoek's pre-war thought.
55. Ibid., p. 27.
57. Anton Pannekoek, "Society and Mind in Marxist Philosophy," Science and Society, Summer, 1937. Expressed more simply, it might be said that these ideas constitute "the mental store of the community."
former rules and judgments are upset, new ideas emerge." 58 This process is uneven in the sense that not every member of a class or group is affected in the same way or at the same time. Intensive ideological strife then arises which further accelerates the revolutionization of ideas. Since outdated ideas often prevent gradual adjustment of ideas and institutions, their continued predominance can also, under the impetus of certain unforeseen events, lead to "explosions," to sudden "revolutionary transformations." 59

For Pannekoek, the question of false consciousness also had a more immediate second dimension. Taking the view that tactical and ideological differences (i.e., anarchism and revisionism) within the international socialist movement had a distinct social base, Pannekoek sought to explain these differences as a struggle of social interests between different layers of the proletariat based on different modes of thought. Given the uneven course of social development, it stood to reason that the socialist movement would be heterogeneous, composed of several different social groups. From this perspective, anarchism could be viewed as the expression of the ideology of declasse petit bourgeois elements within the socialist movement. Their ideology was merely a continuation of bourgeois individualism and the tradition of bourgeois revolution. Their vision of a new society, unlike that of socialism, failed to recognize the necessity of establishing a completely new mode of production. 60 Revisionism, on the other hand, was based both in the petit bourgeoisie and in certain groups within the industrial proletariat who had achieved high wages and a shorter work week through strong organization and a relatively privileged position, and who consequently no longer felt the same need to overthrow capitalism as the other levels of the proletariat. 61 For them, "Socialism is not based on a completely new proletarian worldview but represents merely a framework for achieving practical goals, while the earlier bourgeois goals quietly continue to coexist." 62 Their peaceful evolutionary doctrines and narrow conceptions of day-to-day struggles remained unconnected to the larger goal of proletarian liberation. As a thought form, revisionist ideology was based on bourgeois moral categories such as freedom, justice and equality. Like anarchism, revisionism failed to perceive the need for new forms of productive relationships. For these reasons, "both anarchism and revisionism, by combining a bourgeois mode of thought with a proletarian temperament, represent bourgeois tendencies within the workers' movement." 63

If there is a fundamental gap in Pannekoek's theory of class consciousness, it lies perhaps in his failure to work out the precise details of how false consciousness is transcended. His view, on one hand, is that it occurs spontaneously through "spiritual evolution," which is an outgrowth of the process of both historical development (in this case "large industrial concentration") and working class self-activity. Yet, from another perspective, he feels that it can be consciously accelerated by an organized socialist movement, through its education and propaganda capabilities, its ability to channel working class self-activity toward specific socialist goals, and by its capability to wage intense ideological struggles. Propaganda, here, was viewed as an "amplification and explanation" of what the workers already see and perceive rather than something directed at them. 64 The ultimate objective of this process of "clarification" was the development of a "social ideal" or "mental picture" of a subsequent, more highly developed social system: "Since everything which man does must first exist in his mind as purpose and will, therefore, every new order, before it becomes a reality, must first exist as a more or less adequate conscious ideal." 65 But shorn of their philosophical underpinnings, both of these views were little more than variations of standard Social Democratic assumptions of the era.

In view of his emphasis on consciousness and the ideological subjugation of

58. Ibid.
59. Ibid.
60. Anton Pannekoek, Die taktischen Differenzen in der Arbeiterbewegung, op. cit., pp. 61-67. These ideas first appeared in less developed form in his earlier, "Theorie en beginselin de arbeidersbewegung" De Nieuwe Tijd, 1900, pp. 602-62.
61. Ibid., pp. 125-126. Pannekoek was also among the first in Europe to employ the concept of the "labor aristocracy" which held that a certain segment of the trade union movement had been imbued with bourgeois values. This concept was first used in his 1905 article, "Lessen uit de mijnonwerkertasking," De Nieuwe Tijd, 1905, pp. 250-258. By 1910 Pannekoek had become a public debate with the trade union leader Karl Legien before an audience of 2,000 persons. Further information on Pannekoek's "Zeitungskorrespondenz" articles: "Marx und die Gewerkschaften," November 15, 1901; "Unteroffiziere," November 27, 1909; "Amerikanische Arbeiterbewegung," January 10, 1910; "Gewerkschaftliche Demokratie," December 17, 1910; "Das Vertreibungssystem in der Arbeiterbewegung," April 27, 1911.
62. Ibid., pp. 54-55.
63. Ibid., p. 60.
64. Anton Pannekoek to Frank van der Goes, August 7, 1900, van der Goes archives, map 1803, International Institute for Social History (Amsterdam). It is perhaps of some significance that the bulk of Pannekoek's practical activity as a militant was devoted to developing and participating in socialist educational structures in Leiden, Berlin and Bremen. An account of his educational work in Bremen and its impact can be found in: Karl Ernst Morin, Die Sozialdemokratische Partei in Bremen, 1890-1914 (Hanover: Verlag für Literature, 1968); and Gottfried Mergner, Arbeiterbewegung und Intelligenz (Starnberg: Raith, 1973). Pannekoek's efforts to develop a body of popularized theory with his "correspondence articles" can also be viewed as an attempt to address himself to this question.
the working class, it is not surprising that Pannekoek would move to displace the problem of revolution from the party and trade unions to the masses. — Prior to 1910 Pannekoek's theoretical work viewed party and trade union organizations as central factors constituting the "power of the proletariat," along with its size, role in the productive process, consciousness and theoretical knowledge. Organization, in this case, was conceived of as a "process"—one facet of the phenomena of social evolution—rather than as something independent and mechanically separated from the other factors. Integral to this conception was a theory of revolutionary parliamentarianism which stressed the subjective effects of parliamentary activity, in this case its possibilities as a mechanism for educating the working class on the nature of society and the state. 66 As early as 1908, however, in a document intended for the factional struggle in the Dutch SDAP, Pannekoek had expressed serious reservations about the utility of both traditional working class organizations and the strategy of parliamentarianism. Noting that "Dietzgen teaches us not to doubt the truth but to have doubts about the absolute validity of a truth," Pannekoek cautioned: "This truth is not absolute; it has its limitations. The labor movement has adapted itself to the strategy of parliamentarianism more than is really necessary and it is impossible to attain our goals through these methods alone. A revolutionary struggle with other more powerful mediums is necessary." 67

— Starting in 1910, Pannekoek, under the impetus of the sharpening factional struggle within German Social Democracy, and grounding his views in what he felt were "new experiences in the class struggle" (i.e., the growing wave of mass actions starting with the Russian Revolution of 1905), began to see the problem of revolutionary organization in a completely different way. By now it seemed clear to him that the fundamental problem of conscious revolution was no longer one of leadership, but one of direct organization for revolution at the level of class, with the party and trade union organizations acting as agents of the working class, especially on its assault on the state. Speaking of the capacity of the workers to undertake revolutionary mass actions on their own initiative, Pannekoek noted: "And it is not merely a question of the laboring masses simply acquiring consciousness of this task, but one of them grasping it firmly and decisively. The movement will never be able to take its proper course as long as they sit around waiting for their leaders to give the word. An acceleration of our struggle is possible only when the masses themselves seize the initiative, leading and pushing their organizations forward." 68

— This conception was deepened and articulated during the following years into a full-fledged theory of revolutionary "mass action," which received its most detailed expression in his 1912 Neue Zeit polemic with Kautsky. What Pannekoek envisioned was a continuous and expanding series of mass actions, ranging from ordinary street demonstrations to the general strike. These actions would serve to educate, collectivize and strengthen the proletariat for the coming struggle for power while simultaneously weakening the foundations of the capitalist state. For Pannekoek, the main rationale of these actions lay not in their objective aims but in their subjective impact on the consciousness of the working class. Central to this process was his notion of "organizational spirit" (Organisationsgeist) or the spirit of solidarity, collectivity, commitment, self-sacrifice, sense of purpose and class identity inherent in working class organization: "The organizational spirit is the living soul of the labor movement which derives its power and capability for action from its body. But this immortal soul, unlike the soul of Christian theology, does not float around lifeless in the sky, but remains, in fact, always grounded in an organizational body, living in the common organized actions of those it joins together. This spirit is not something abstract, put forward in place of the 'real, concrete organization' of the existing organizational forms, but it is in fact something just as real and concrete as these forms. It binds individual persons just as firmly together as any principles and statutes could ever do so that even if the external bond of principles and statutes were removed these individuals would no longer be loose atoms competing against each other." 69 It is this spirit that creates the capacity to struggle and receives its fullest expression in mass actions. And it is this above all that would give a "completely new character" to the coming mass actions of the future. To ignore this principle, as Kautsky did, was to ignore what distinguished proletarian organization from any other form of organization.

69. Anton Pannekoek, "Massenaktion und Revolution," op. cit. For further elaboration of various aspects of this theory see Anton Pannekoek, Die Machtmittel des Proletariats (Stuttgart: Sozialdemokratischen Vereins Stuttgart, 1910), and the following "Zeitungskorrespondenz" articles: "Proletarische Kriegsaktik," April 16, 1910; "Die Opfer des Kampfes," April 23, 1910; "Geist und Masse," February 10, 1912; "Zum neuen Kampf," May 25, 1912; "Der Instinkt der Massen," August 24, 1912; "Volkinteresse und Massenaktion," October 26, 1912. Pannekoek's theory of mass action also paralleled in many respects the revolutionary theories of Rosa Luxemburg and was an outgrowth of the same historical situation. The main differences lie in the lack of a philosophical base and the greater emphasis placed on the mass strike in Rosa Luxemburg's thought.
Several variations of this theme of socialism as a process of spiritual struggle were restated by Pannekoek as events pushed his theoretical development forward. Thus, in a 1916 article analyzing the collapse of German Social Democracy in 1914, Pannekoek rejected the notion that it collapsed simply because it was too weak. The weakness was not that of a material force but was much worse: "a general inability to struggle, a lack of spiritual force, a lack of will for class struggle." 70 The resurrection of a new International and the development of a qualitatively different "new socialism of the working masses" would only be possible through a long-drawn-out process of spiritual renewal: "Now is the time to gather together everything in the way of new ideas, new solutions, new propositions, to inspect them, to clarify them by means of discussion and thus to make them of service to the new struggle.... But this struggle is only made possible by a simultaneous relentless struggle against all the elements of the former Social Democracy, which would bind the proletariat to the chariot of imperialism...." 71 It was on these grounds that Pannekoek opposed Lenin's wartime tactics of splitting the existing socialist movement in favor of a strategy of appealing directly to the masses. 72 Here the germ of what was later to be at the root of the differences between Pannekoek and Lenin is already apparent. A similar view was again advanced in his analysis of the defeat of the German revolution in 1918. How was it possible, he asked, that victory eluded the workers at a time when the state was powerless and they were seemingly in control? This defeat, he felt, proved that "still another source of power of the bourgeoisie existed," which permitted them to newly construct their domination: "This secret power is the spiritual power of the bourgeoisie over the proletariat. Because the proletarian masses were still completely ruled by a bourgeois mode of thought they rebuilt bourgeois domination again with their own hands after its collapse." 73 It was a corollary of this that to return to an outdated strategy of parliamentarianism and trade unionism—as Pannekoek felt Lenin and the Third International were attempting to do—was to revert to a bourgeois mode of domination.

In shifting the problem of revolution to the subjective consciousness of the masses, it followed that Pannekoek would criticize with particular force the different nuances of "death crisis" theories of capitalist collapse which held that the collapse of capitalism was an inevitable consequence of the "laws" of capitalist reproduction. In Pannekoek's view, "nothing is more foreign to Marxism than the notion that capitalism will collapse through an unavoidable economic crisis." 74 As early as 1900, Pannekoek, in a letter to his mentor, the economist Frank van der Goes, had outlined what was to be the basis of his conception. For him, the critical link between economics and revolution was not crisis but the understanding and active intervention of the revolutionary class which translates changes in the economic structure into "social reality" through political action. Viewing all human actions as "equal products" of material conditions, Pannekoek ruled out a sharp distinction between evolution and revolution. Both form a "similar part" of the same process of development and it is only their external appearance that gives them the designations evolution and revolution. 75 This formulation was subsequently expanded to encompass an analysis of both the nature of economic "laws" and the particular mode of thought underlying "death crisis" theories. The fulcrum of his analysis is a rejection of what he terms "mechanical necessity" in the laws of capitalist reproduction in favor of the concept of "social necessity." Rather than either a predetermined and necessary course of development or pure voluntarism, "social necessity" represents a major connecting link between economic conditions and the desires and actions of men: "What has occurred economically must first be understood in the thoughts and desires of men and then translated into action." 76 Thus imperialism, for example, was not an absolute economic necessity for the reproduction of capitalism but was something capitalism understood as useful and desirable and had the capability to achieve. 77 Similarly, socialism would come only when the working class understands it as necessary, wills it and has the power and capability to attain it: "Only the self-liberation of the proletariat will signify the collapse of capitalism." 78 To

70. Anton Pannekoek, "Der Imperialismus und die Aufgaben des Proletariats," Vorbote, number one, 1916.
72. These differing conceptions are detailed most concisely in Anton Pannekoek to William van Ravesteyn, October 24, 1915, van Ravesteyn archives, map 15, International Institute for Social History (Amsterdam).
75. Anton Pannekoek to Frank van der Goes, August 7, 1900, op. cit.
78. Anton Pannekoek, "Die Zusammenbruchstheorie des Kapitalismus," Rätekorrespondenz, June, 1934. This work, which was directed against the theories of the German economist Henryk Grossmann, was part of a series of polemics within the International Council Communist movement.
speak of a “final crisis” of capitalism apart from the intervention of a revolutionary class is to revert to a mechanistic bourgeois mentality, a dangerous illusion not based on revolutionary practice. In bourgeois thought capitalism is a mechanistic system which views men entirely in economic roles as capitalists, wage earners, buyers, sellers, etc. Their role is a completely passive one dictated by the structure of the capitalist market. Marxist thought, by contrast, views the social forces of development as not entirely economic, but as part of a larger totality of the human environment in which the thoughts, desires and actions of men, although externally conditioned, still play a prominent role.  

Pannekoek Against Lenin

The decisive turning point in Pannekoek’s political career came with his break with the Comintern in 1920. By the late 1920s Pannekoek’s political development had carried him to a theory of the revolutionary self-organization of the working class based on the workers’ council structure, which he counterposed to all other existing forms of working class organization. The “Council Communist” movement, according to this theory, represented both the beginning of a qualitatively new revolutionary labor movement and the embryonic structure for a socialist reorganization of society. Although this conception represented a major departure from his previous thought, many of his main Council Communist themes are directly related to the problems Pannekoek had worked out earlier. The Dietzgenian dialectical theory of knowledge is here broadened into a political-philosophical theory uniting subject and object, in this case a completely autonomous thinking and acting working class fully conscious of itself in the context of a particular stage of development—a stage in which historical consciousness is reunited with practical organization, one in which the workers are transformed from “obedient subjects” into “free and self-reliant masters of their fate, capable to build and manage their new world.”

For Pannekoek, this new consciousness could only arise through the daily experience of the proletariat, in particular through their experience in the shops: “In the factory the workers grow conscious of the content of their life, their productive work, their work community as a collectivity that makes it a living organism, an element of the totality of society. Here in shop occupations a vague feeling arises that they ought to be entirely masters of production, that they ought to expel the unworthy outsiders, the commanding capitalists, who abuse it in wasting the riches of mankind and in devastating the earth.” Within this process the role of the workers’ councils was conceptualized as one of an “organ of collective thought”—in practical terms a mechanism for organization, clarification and discussion, and in a larger sense the “spiritual form of the proletariat.”

Complementing this theory was his view of the Soviet Union as a state capitalist society sustained by a pseudo-Marxist ideology. Although others had advanced similar theories justified on social and economic grounds, Pannekoek sought to go a step further by giving his theory a philosophical base as well. To show what he felt the Marxism of the Russian Revolution really implied, Pannekoek undertook a detailed critical examination of the philosophical basis of Leninism, published as Lenin as Philosopher in 1938. Lenin’s philosophical ideas were first expressed systematically in his 1908 work, Materialism and Empirio-criticism, which was later to become a canon of Soviet Marxism. Shortly after the turn of the century certain intellectuals in the Russian socialist movement had taken an interest in Western natural philosophy, particularly in the ideas of the physicist Ernst Mach and Richard Avenarius. A kind of “Machism” with Bogdanov and Lunatcharsky as the leading spokesmen had developed as an influential trend within the Bolshevik party, which Lenin sought to undermine in Materialism and Empirio-criticism. Characterizing their position as a form of subjective idealism, Lenin defended dialectical materialism on what he regarded as the chief points at issue: the status and character of matter and the nature of knowledge. Opposing the view that matter is a construct of sensations, Lenin argued that matter is ontologically primary, existing independently of consciousness. Likewise, space and time are not subjective modes of ordering experience but objective forms of the existence of matter. On the question of knowledge Lenin affirmed a “copy theory,” of perception which contended that sensations depict or mirror the real world. On this basis, Lenin defended the possibility of objective truth, emphasizing practice as its criterion.

Pannekoek’s aim was to confront the scientific and philosophical content of Leninism by a consideration of the philosophical and social background out

79. Ibid.
80. For details on the break with the Third International see: Hans Manfred Bock, Syndikalismus und Linkskommunismus von 1918-1923 (Meisenheim: A. Hain, 1969); Herman de Liagre Böhl, Herman Gorter, op. cit.
82. Ibid., p. 78.
84. Pannekoek’s most succinct analysis of the social nature of the Russian Revolution and Soviet state is contained in his unsigned article, “Theses on Bolshevism,” International Council Correspondence, December, 1934.
of which Lenin’s *Materialism and Empiriocriticism* arose. Fundamental for Pannekoek’s analysis is his attempt to establish a definition of matter based on a synthesis of the concepts of modern physics with the philosophical ideas of Dietzgen. For Lenin, matter was defined exclusively as a physical concept based on atoms and molecules, the movement of which was governed by unchangeable natural laws. Pannekoek, however, challenged this conception and sought to show that the physical matter which was so central to Lenin’s work was in reality nothing but an abstraction. The whole course of modern physics, says Pannekoek, denies the material notion of matter and replaces it instead with an abstract mental concept (abstract in the sense that it is a concept based on an attempted expression of what is general and common in a particular set of phenomena): “Atoms, of course, are not observed phenomena themselves; they are inferences of our thinking. As such they share the nature of all products of our thinking; their sharp limitation and distinction, their precise equality belong to their abstract character. As abstractions they express what is general and common in the phenomena, what is necessary for predictions.” 85 In a larger philosophical sense, this definition was broadened—following Dietzgen—to define matter as everything which actually exists, whether in nature or in the human mind: “If... matter is taken as the name for the philosophical concept denoting objective reality, it embraces far more than physical matter. Then we come to the view... where the material world was spoken of as the name for the entire observed reality. This is the meaning of the word *materia*, matter in Historical Materialism, the designation of all that is really existing in the world, ‘including mind and fancies,’ as Dietzgen said.” 86 Lenin, therefore, in criticizing Mach and Avenarius (and for that matter Dietzgen to whom he devoted a chapter entitled: “How Could Joseph Dietzgen Have Found Favor with the Reactionary Philosophers?”) for their alleged subjectivism (i.e., their view that reality is composed of purely mental elements) had failed even to reach the conceptual sophistication of their systems. This was not to say that Marxist criticism of Mach and Avenarius was not needed; it clearly was, but on different grounds than Lenin chose to do so.

Pannekoek, however, did not content himself with demonstrating the distance between Lenin’s *Materialism and Empiriocriticism* and the developments in modern physics, but attempted to pinpoint the basis of these errors and assess their implications for the revolutionary movement. Pannekoek’s main pole of reference was a distinction between bourgeois materialism and historical materialism. Bourgeois materialism, says Pannekoek, initially developed as an ideological weapon of the bourgeoisie in their fight against the aristocracy. For this reason, it was a type of materialism whose reference point was individualistic, a materialism whose principal tool was natural science and whose principal enemy was the religious ideology in which the absolutist status quo rationalized itself. According to this doctrine, all phenomena of human life, including human ideas, have their origins in the chemical and physical processes of cellular substance and ultimately can be explained by the dynamics and movements of atoms. Historical materialism, on the other hand, was a weapon of the proletariat in their struggle against the bourgeoisie. Its reference point is society, and its science is a social rather than a natural science, which reveals to the proletariat their true relationships within the capitalist system. For these reasons it considers ideas a social rather than a physical phenomenon. Thus, for example, in the case of religion it seeks to explain its social base and does not fight it directly, but attacks the economic structure of society.

For Pannekoek, it was neither an accident nor an aberration that Lenin used an outdated form of mechanistic bourgeois materialism for his point of departure, but a natural outgrowth of the prevailing socio-economic conditions in pre-revolutionary Russia. In tsarist Russia the revolutionary intellectuals, Lenin among them, were confronted with the same task and problems as had been the bourgeois revolutionaries of a previous historical epoch: the overthrow of an absolutist land-based ruling class which was impeding the development of modern industry. But in Russia the bourgeoisie was too weak and too dependent upon tsarism to carry out this revolutionary task itself. This role, therefore, fell to the intelligentsia, a class composed of technical and professional people of non-noble origin often employed by the state, who were aided in their task by Russia’s rather limited and backward proletariat. Lenin provided not only the organizational form (the vanguard party of professional revolutionaries) for carrying out an essentially bourgeois revolution, but also a philosophy suitable for its practical activity. Since a major ideological prop of the tsarist aristocracy was religion it was necessary that the militant wing of the rising bourgeoisie devote first priority to waging a campaign against it. Lenin’s reversion to the militant bourgeois materialism of the past historical epoch provided the necessary ideological and philosophical basis for this struggle. Indeed, the last paragraph in *Materialism and Empiriocriticism* seems to suggest that the most important ideological struggle in the world is between materialism and religion. Consequently: “To the Russian Marxists the nucleus of Marxism is not contained in Marx’s thesis that social reality determines consciousness but in the sentence of the young Marx inscribed in big letters on the Moscow

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85. Anton Pannekoek, Lenin as Philosopher, op. cit., p. 20.
86. Ibid., p. 61.
Peoples’ House that religion is the opium of the people.” 87 Both in his obsolete materialist philosophy and in his theory of revolution Lenin hid himself from the historical truth that the Russian Revolution was bound to remain a belated successor to the great bourgeois revolutions of the past. On these grounds, Pannekoek concluded that “the alleged Marxism of Lenin and the Bolshevik party is nothing but a legend. Lenin never knew real Marxism.” 88 The question was not so much that Lenin was wrong or that his logic was fallacious, but that his thought was bourgeois. Leninism was, therefore, the theory of a new state capitalist middle class revolution installing a new ruling class which signified for the workers just another form of slavery and exploitation. This was the true significance of Lenin as philosopher.

How, then, shall one assess Pannekoek’s legacy? The theoretical and political conceptions that evolved out of his basic Marx-Dietzgen synthesis, as we have seen, are far removed from the scholastic interpretation of Marx embodied in the Marxism of both the Second and Third Internationals. Rather than a finished theory in itself, Pannekoek’s work represents a critical methodology open to all new social developments, in which all hypotheses are admissible, all conclusions tentative. Yet, viewed in its entirety, the architecture of Pannekoek’s thought contains a collection of elements of critique, analysis and constructive conceptions with sufficient coherence to fit together into a single conceptual framework. And while it remains true that his theories never became identified with a political movement of any significance, or even any cogent political practice, it is Pannekoek’s chief merit to have probed into the problems of both the nature of Marxism and working class self-activity far more persistently and coherently than perhaps any other revolutionary theorist before or since. It seems clear on these grounds alone that Anton Pannekoek, if nothing else, has appreciably widened the classical perspective of Marxist analysis.

87. Ibid., p. 71.
88. Ibid. Pannekoek’s analysis of the philosophical content of Leninism possesses certain close affinities with the theories developed contemporaneously by the German Marxist Karl Korsch, also a Council Communist. Although Korsch, like Pannekoek, concluded that Lenin was entirely different starting point and through entirely different theoretical formulations. See in particular: Karl Korsch, Marxism and Philosophy (London: New Left Books, 1970).

AUTHOR’S INTRODUCTION
by Serge Bricianer

In a period marked by the eclipse of the revolutionary movement in the industrialized countries, Anton Pannekoek could scarcely have been the focus of much attention. This man never exercised the least power, nor did his life ever take a tragic turn. His name was, of course, mentioned with some frequency by the most prominent Marxist theoreticians of the early twentieth century, and today this earns him a footnote when early pamphlets are reissued. However, his own writings are muted by a thick veil of silence, since they contain nothing to captivate the refurbishers of old ideas — no ready-made aphorisms, no system to excite the exquisites, no manifest links with a state or with any organized political tendency. His was a body of thought attached solely to the cause of communist revolution, presenting an intellectual development linked with types of action whose very echoes had almost ceased to feed the panic and the hatred of the dominant classes.

Anton Pannekoek died, alone, in the little Dutch village of Wageningen on April 28, 1960. A few articles were then published about him, and again a veil of silence descended. During the past few years, however, his name has been cropping up, not in learned works but in conversations among young people in quest of a new direction. Who, then, was this Pannekoek of whom Lenin speaks well in The State and the Revolution and with suspicion in Left-Wing Communism: An Infantile Disorder, which, as it happens, are the only easily accessible sources?

The aim of the present collection of his writings is to answer this question, not just to sing the praises of a dead man but to disengage broad outlines of a highly significant development. The life of Anton Pannekoek is inseparable from the various controversies which have raged since the beginning of the century among the ranks of the world workers’ movement, especially in the midst of its most extremist tendencies — particularly within council
communism (as distinct from parliamentary communism)—also derogatively called “the ultra-left.” Pannekoek, of course, was not intensively involved (quantitatively speaking) so much in these controversies as in the organizational patterns of which they were the special expression, except during the great period extending roughly from 1900 to 1920. This by no means precludes the fact that the most developed of his political writings—the part which today, especially since the May Days of 1968, assumes indisputable relevance—was written during subsequent periods.

Pannekoek’s work includes two key interconnected ideas: 1) the idea of a development which is both anthropological and cosmological, based on historical materialism; 2) the theory of mass action, which, with the first great revolutionary crisis of the twentieth century, became the idea of the workers’ councils. Hence the introduction to this collection will be devoted mainly to the first, and the anthropological part will be pivoted on the second.

This collection is presented, therefore, as a contribution to the history of ideas or, more precisely to the history of the formation of communist theory in the twentieth century. For this reason its method and organization will infringe somewhat the usual rules of the genre. In particular, the reader will not find a compactly organized biography, the biographical material being dispersed through the various chapters and interwoven more or less with the historical development or with that of theoretical problems. Of course, this formula will entail repetition; at the same time, limitations of space will constrain us to pass over questions of relatively minor importance within this framework. The introductory parts to each section of the book and the notes will attempt to meet any such deficiency. Where necessary, a summary of passages which had to be omitted will be given, remaining as close as possible to the original text.

In our view, the attempt to place the changing direction of the class struggle in historical perspective, especially in the developed countries, is infinitely more important than to inform the reader that Pannekoek was of rather small stature, that he had startling blue eyes, that the Pannekoeks were on calling terms with their neighbors, the Kautskys, during their stay in Berlin, or that they lived in an elegant bungalow in one of the best districts of Amsterdam.

Antonie (German form: Anton) Pannekoek was born on January 2, 1873, at Vassen, a little village of Gelderland, an agricultural region, then one of the most backward provinces of the Netherlands. From his rural childhood he seems to have kept a taste for a simple language little graced with literary artifice, and at times somewhat rough. He studied mathematics at the University of Leyden which, in 1902, was to confer on him a Doctorate in Astronomy. Among the professors under whom he studied was the illustrious Kapteyn of Groningen, one of the first to apply photographic techniques systematically to the observation of celestial bodies and to the study of their distribution in space. It was, then, to studies concerning the precise motion of the stars that the young Pannekoek first devoted his intellectual energies.

After several series of observations over a period of four years (1891-94), he published a paper on the brilliance variations of B Lyrae, a binary star—one composed of two stars revolving around a common center of gravity. This movement entails partial eclipses which cause periodic brilliancy variations. The intrinsic luminosity of these stars varies, therefore, with their period, in accordance with a law which can be experimentally expressed by a curve. Pannekoek’s work consisted in correcting this curve, such as it had been established upon the basis of former series of observations and statistics. (His doctoral thesis—1902—is about another variable binary star, Algol—or B Persei—and belongs to the same field of research.)

He then carried out various geodetic undertakings as attaché to the Royal Dutch commission for the measurement of the meridian (1896-99). After that, he worked at the Leyden Observatory until 1906, when, married and with a family, he began a long stay in Germany—we shall come back to this—returning to live in Holland only upon the declaration of war. There he taught mathematics in various high schools, and in 1916 he was awarded his agrégation in the history of astronomy at the University of Leyden. In the same year he published a work of popularized scholarship, The Wonders of the World (De wonderbouw der wereld) which was to have a considerable and lasting success.

In 1918, his peers, in recognition of his competence, proposed him for the then vacant post of Director of the Leyden Observatory; but, “as though his propaganda activities might be a risk to the stars,” the minister flatly turned down the proposal. Pannekoek remained, therefore, in that part of the educational field where nominations were in the hands of the municipal authorities rather than the ministerial bureaucracy. The University of Amsterdam, where he also gave courses in mathematics as part of the pre-degree course in chemistry, duly offered him a lectureship post. Assigned to the astronomy course in 1925, he became titular professor in 1932. Eleven years later, in 1943, he retired.

3. Anders and Wauters, "Qu’est-ce que l’école hollandaise?" la Correspondance Internationale, 21:12, 1921.
"While still young," writes one of his biographers, "Pannekoek was enthralled by the beauties of the Milky Way." Later, in his early twenties, he was to compose two authoritative atlases of these stellar groups. This body of work brought him fame in scientific circles; and, in 1925, he was elected to the Netherlands Academy of Science. In 1927 he was appointed to lead a small research group on an expedition to Lapland to study the chromosphere—a classic undertaking on the occasion of a solar eclipse. As a result, he made some important observations concerning spectrum rays and the intensity variation of certain of these rays, works necessitating the adaptation of an appropriate method.

However, it was in the domain of research into stellar atmosphere that Pannekoek made his special mark. In 1921 (later we shall see in what political context), he established the Institute of Astronomy of the University of Amsterdam. Situated in the suburbs of the town, this institute was also quite close to Kapteyn's laboratory at Groningen, whose equipment our researcher was therefore able to use: for, while the construction of models of stellar atmosphere involves an essentially theoretical problem, it would be inconceivable without empiric spectrographic verifications. As one specialist stresses, however, it primarily involves appealing to "the physical intuition of the theoreticians." From the study of certain questions linked with such work (radiation), some of the fundamental laws of modern physics had already been derived.

By and large, it can be said that Pannekoek was particularly interested in the interatomic Stark effect, and that he proposed more sophisticated models designed better to account for the structure of hydrogen rays. (The formulation of a statistical and physical theory of the expansion of rays demanded calculations of formidable complexity at that period.) In a passing reference to this research, Bruun Van Albada has some illuminating things to say: "It is not only what Pannekoek did that is characteristic, but also what he did not do. While showing a keen interest in theories about the internal arrangement of the stars, he made no personal contribution to the elaboration of such theories. In fact, as long as the origin of stellar radiation remained unknown, these theories could do little to advance the theory of evolution; and statistics never ranked among Pannekoek's primary concerns." That is why he centers his works on the physical nature of the stars, thus highlighting "the immense importance of the study of the spectrum in regard to the determination of mass."8

Besides astronomy proper, Pannekoek's scientific activities covered the whole history of this science, a history to which he ascribed exemplary value: "In early times, when physical theory was only abstract speculation, astronomy was already an ordered system of knowledge giving practical orientation in time and space. In later centuries, astronomical research was directed more and more towards theoretical knowledge of the structure of the universe, far beyond any practical application, to satisfy the craving for truth, or, in other words, for intellectual beauty. Then the mutual relation of the sciences became the opposite of what it had been. Physics, chemistry, and biology took off with increasing rapidity. Through technical applications they revolutionized society and changed the face of the earth. But astronomy stood aside in this revolution. How could the stars contribute to our technical development, our material life, or our economic organization? So their study became more and more an idealistic pursuit tending toward a physical knowledge of the universe. While the other sciences won brilliant triumphs in a transformation of the human world, the study of astronomy became a work of culture, an adventure of the mind."10 And, on this basis, Pannekoek presented "the development of the notion of astronomy as a manifestation of humanity's growth."11

This aspect of the biography of Anton Pannekoek can be sketched here only in broad outline. It would often supply his social-democratic or Bolshevist adversaries with an opportunity for facile sneers as "the Cosine scholar," implying that an astronomer cannot fail to have his impractical head in the clouds. It did not matter that the man so contemptuously

4. Van Albada, loc. cit.
7. Subsequently, the basic hypothesis adopted by Pannekoek proved inadequate along with its results, as is usual in science. Besides, the problem has long been "a nightmare for the theoreticians," and only recently has it begun to be clarified (Barbier, op. cit., pp. 158ff).
8. Van Albada, loc. cit.
9. Cf. in particular Pannekoek's preface and erudite notes to an edition of the astronomical works of Simon Stevin (vol. III [Amsterdam, 1961]). Stevin was a famous Flemish mathematician and physicist of the second half of the sixteenth century.
10. Disciplines in astronomy have certainly taken a turn since World War Two. Celestial mechanics is used to calculate the orbits of artificial satellites; solar physics has brought to the fore the influence of solar eruptions on the propagation of radio waves on the surface of the globe; the most advanced study of the properties of the ionosphere will probably facilitate progress in the transmission of certain radio signals; etc. But Pannekoek's thesis in no way rules out this return to practical applications of astronomy (or rather of peripheral disciplines).
12. As a sample of the type of denigration, cf. Radek, "An astronomer who spends his life contemplating the stars, and therefore never sees a flesh and blood worker," Protokoll der III
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labelled was in his day the only Marxist theoretician of repute capable of tackling any question connected with the natural sciences. No claim is made, of course, that this competence automatically implies any superiority whatsoever; but it can be urged that this type of professional activity must have greatly developed certain intellectual qualities in Pannekoek: the gift of theoretical intuition, the power of intellectual abstraction, an impressive range and depth of knowledge, intellectual exactitude and mental serenity, a sense of team-work. Such qualities, invigorated by revolutionary enthusiasm, would enable him to organize and to generalize ideas brought to the surface by the development of the proletarian struggles of the twentieth century. Consequently this Dutchman was one of the few Marxists to attempt a real assessment of contemporary scientific ideology.

In this connection, his article in De Nieuwe Tijd, published in 1917, is among the most interesting. "There was a time," he writes, "roughly towards the middle of the nineteenth century—the period marked by the rapid development of the bourgeoisie—when the intellectuals, the scientific researchers, figured as leaders in ideological warfare, and, as the mouthpiece of the new class, provided new slogans and ideals of progress." This time has long passed. "Another type of researcher has now appeared," professing reactionary ideas and fostering old illusions. "Of course, this does not imply that these researchers have sold out to the existing order;" there is no question of abusing or deploring a degeneration "or a retreat, or of regarding yesterday's researchers as superior to those of today. This development is quite simply the result of the transformation of society."

In the eighteenth century, says Pannekoek, the bourgeoisie waged a merciless war against the crumbling old order, a war in which the natural sciences played a role of the first importance both as a factor of technical development and as forceful element in the combat of this new class against spiritual traditions, especially belief in God. However, as soon as the bourgeoisie, having strengthened its grip on society, saw the proletariat facing up to it, it abandoned what had up to then been its special war horse—the theory of evolution. While the natural sciences continued to progress, doubts were cast on the evolutionist optimism of the preceding era, on ideas such as the physico-chemical origin of all life processes, which were reducible—it had been maintained—"to a mechanics of atoms."

"There was no question, of course, of a complete and immediate about-face; these tendencies appeared at first sporadically and gradually strengthened each other before emerging fully defined in a systematic, explicit form. In political and social practice the old progressivist or liberal tradition counted for less and less and was slowly reduced, in an almost imperceptible way, to a few basic representations; while the old formulas in their pristine purity were defended only by a few individuals, and the masses remained indifferent to them. The same was true at the spiritual level. The majority of scientific scholars stood aside from political and social life, seeing in the latter little more than sordid conflicts of interest and cheap demagogy. Some, for ethical or humanist reasons, joined the camp of the reformers, but from sentiment much more than from a critical knowledge of the social situation; others, on the contrary, reverted to the formulas of another age and were caught up in reactionary currents of Christian inspiration."

Going on to analyze in detail the works of the two Dutch intellectuals, Lotsy and Kohnstamm, Pannekoek traced the conservative qualities in them. The first advocated a mystique of "life," generally very close to Bergsonian speculations—the elan vital and the rest. In other respects, Lotsy reduced human social behavior to impulses which were by nature essentially instinctive and incomprehensible. The masses, he said, act blindly, governed by a deep spirituality at once religious and patriotic. In Pannekoek's view, we have here another example of the necessity to unite the nation by diminishing class antagonisms in the age of imperialism. Kohnstamm, on his part, deduced from the Boltzmann theory—and from the substitution of statistical laws for the old causal determinism—that nearly all the accepted laws of physics had to be set aside, and that, in the last resort, the origin of the world was inconceivable without the existence of a Creator. Against this view Pannekoek set the idea of the universe as a process of constant interactions. Not content, however, to argue within his adversary's field of modern physics, Pannekoek showed how "in the twentieth century, a positive Christianity arose in the ranks of the bourgeoisie and the intellectuals" which postulated an immutable order of things and fundamentally contested the idea of evolution. We have already seen the material reasons for this attitude. Twenty years later, in Lenin as Philosopher, Pannekoek was to criticize anew a reactionary attempt to base a theory of knowledge on data with scientific pretensions which, this time, was aimed at restoring the old bourgeois

15. Clearly, Kohnstamm did not make assertions of this kind without having previously attempted to buttress them with long considerations concerning various theoretical aspects of contemporary physics. Here we cannot enter into the details of this argument and its refutation. We merely note that Pannekoek, in support of his thesis, appealed to examples drawn from astronomy and from the kinetics of gases.
materialism.  

The special field for the application of the theory of evolution is, needless to say, the human sciences. Pannekoek devoted many studies to this subject. The following is a summary of one of the principal of these: Marxism and Darwinism.  

Both Darwin and Marx have placed the principle of evolution at the basis of modern science. The former has shown that the evolution of the species is subject to a law—the law of natural selection—by virtue of which the species best adapted to an environment survive in the struggle for life, while the others succumb. Marx, for his part, maintains that the basic cause of the evolution of societies was the development of the implement, and, in a broader sense, of technique. Technical progress issued in a modification of the social forms of labor through confrontations, at certain times, between the classes which make up society and to which men belong according to the place they hold in production. Thus, social development has a determined direction. For both thinkers, evolution is the outcome of a struggle: the struggle for life for Darwin; the class struggle for Marx.  

Pannekoek, however, that while the tremendous forward surge of technique necessitates the replacement of capitalism by socialism, this substitution depends on the struggle waged by the masses—and that this, in turn, depends on the transformation, in and through this struggle, of the mentality of these masses. Like Marx's theory, Darwin's is something other than an abstract scientific truth. Did it not serve the bourgeoisie, especially, in Germany, as a weapon in their fight against the aristocracy and the priests, since it substituted the play of natural laws for Divine intervention?  

In this sense, the Social Democrats could justifiably see here a confirmation of their materialist theses. However, "socialism has as its fundamental premise natural equality among men, and seeks to give practical expression to their social equality." On the other hand, Darwinism, having modeled itself on capitalist competition, constitutes "the scientific basis of inequality." Hence it not only encounters socialist opposition, but also arouses the objections of reformers and other bourgeois philanthropists. They are concerned only with the ethical aspect of the social question and rely on certain legal improvements to abolish the most flagrant excesses which create the struggle for life in a capitalist régime, a struggle which they see as embodying a natural law. Is it not clear, however, that the laws governing the animal kingdom are not applicable to human societies, since each society adapts to conditions peculiar to itself?  

Certainly, man belongs to the animal kingdom, but he is a very special animal whose social existence, after a certain stage of development, is no longer entirely subject to the laws of nature. The cohesion of the human group is maintained by one power, the social instincts (which Pannekoek lists as "renunciation, courage, devotion, discipline, loyalty, honesty"—all of which are ideas envisaging not the individual person but the group, the class). This power of social instincts is developed by the struggle for life, which tends to endow it with an absolutely primordial character. We have here, then, an altruistic consciousness which exists, though to a lesser extent, in the animal kingdom, and which is in basic opposition to the values of bourgeois egoism, especially to the nationalist sentiment.  

What radically distinguishes man from all the other animal species is, on the one hand, the ability to make implements and to use them for pre-designed purposes; and, on the other, "language, and therefore abstract, conceptual thought, rational thought, the first having directly engendered the second and the implement serving as an extension of the human hand." In short, "practical life, labor, is at the origin of technique and of thought, of the implement and of science. It is thanks to labor that the ape-man has been raised to the condition of man." Thus the division of labor, the distribution of functions linked with different applications of the implement, has opened up to man unlimited perspectives of development. And on this point Pannekoek concludes: "With the animal, the fight for life has led to a constant development of the bodily organs (for example, the muscles and teeth of the lion); this is the basis of the transformist theory, the nucleus of Darwinism. With man, it has led to a constant development of the implement, of technique, of productive forces; this is the basis of Marxism." In this respect, the two doctrines have a fundamental common principle: the law of evolution.  

Life in society and the use of the implement, therefore, form the basis of man's evolution, a long evolution at whose end the vast majority are deprived of the implement, and become the machine for the benefit of a small minority. But the class struggle unites recently separated groups—no longer a struggle against nature by means of the implement, it is a struggle for the implement, a struggle to put technical equipment at the disposal of all humanity by means of organized action, the movement of the working class. And this struggle will end in the abolition of classes, in the emergence of a
single great community of united producers.20

On the whole, this booklet conforms with the views on the subject, at least at that time, held by the "orthodox" Marxists of Social Democracy. However, if it is compared today with one of the many works which Kautsky wrote at that time on the same question, one striking difference appears: the emphasis on "the social instincts" developed, according to Pannekoek, in the class struggle. Certainly, Kautsky stresses the "new moral ideal," the "ethical indignation," constituting a "power," a "weapon" for the socialist class struggle. But, in his view, this power is not a direct product of the class struggle and of a radical transformation of attitudes, but the product of a factor linked "with determined material conditions"—with the economic development which, he says, assures the imminent abolition of the classes.21 We shall see later that this difference, scarcely noticeable at the time, is much more than a matter of words.

This, of course, does not imply that Pannekoek ever held that the ethic, the moral sentiments predominating in a given society, could be separated from the mode of production characterizing that society. On the contrary, indeed, he strongly emphasized this relationship in a booklet, Ethics and Socialism, published the same year as the one we have just been discussing. This was a contribution to a debate in connection with the great quarrel about revisionism then raging within German22 and international Social Democracy. "Bernstein," wrote Pannekoek, "has frequently appealed to the ideas of Kant to combat the dogmatic materialism in our ranks; the neo-Kantians maintain that the historical-causal foundations which Marx and Engels have ascribed to Socialism operate with a certain coldness which should be countered with the warmth of Kant's moral ideal."23 The Dutchman inserts in this connection a materialist critique of Kantian philosophy, the essential arguments of which we shall deal with soon.

But he also stresses that the moral sentiment had not been disposed of by having been presented "for what it really is: a mystified expression of class interests." He continues as follows:24 "Just as immediately and vigorously as other men, we Social Democrats judge this or that act to be moral or immoral. Thus, therefore, the moral sentiment is a phenomenon linked with human nature, a sentiment which science can take into account without being subjected to its influence, and not an imposture or an illusion which it is the duty of science to eliminate. If moral ideas are engendered by class needs, they are not necessarily identical with such needs; that is why the analysis must be carried further. The immediate moral judgment cannot be replaced by a detailed and attentive consideration of what is useful or harmful to the community; there is a difference, therefore, between what is moral and what is useful to the community, and it is this difference which we shall now examine."

To make his point more clearly, Pannekoek uses a concrete example. "In 1903," he recalls, "the Dutch railway workers stopped work in sympathy with the striking dockers of Amsterdam. They had to choose between a struggle against the powerful private companies who owned the Dutch railways—a struggle involving considerable risk to their own interests—and a neutrality which would make them strike-breakers. They chose the first alternative, and the railway traffic in the western provinces was interrupted for a whole day. Had one asked a bourgeois person what he thought of this, no doubt he would have voiced his horror and indignation at seeing the personal interests of some individuals given precedence in this way, with chaos in society as a result. His view would have been that the government ought immediately to condemn such actions as criminal, a 'crime' being, in his view, anything which disturbs 'order'—the conditions necessary to peaceful profitmaking, allowing the rich to get richer while hunger torments the workers. By contrast, the workers would react very differently, applauding and admiring the courageous men who had sacrificed their own interests to solidarity with their class brothers.

"Thus the ethical judgments would differ completely in accordance with the class differences. The cleavage between these respective opinions was to be most clearly shown in the press controversy which followed. It was impossible to get the two sides to understand each other. The workers could not be made to understand what wrong they had committed by stopping work for a day in support of a group of workers at war with their employers. The bourgeois

20. This latter theme is omitted in the much more searching study which Pannekoek later devoted to anthropogenesis, the "birth of man." The reason for this is simply that the work was published under the auspices of the Academy of Sciences. On the other hand, he there deals in detail with the connections between the use of the implement and the emergence of the upright position, the development of the brain, the gradual elaboration of articulate language, etc. ("Anthropogenese. Een studie over de ontstaan van de mens," Verhandelingen der Kon. Akad., II, 1, 1945; the current edition appeared in 1951 with the subtitle as title). By far the most outstanding work on anthropogenesis to appear recently is that of M. Leroi-Gourhan, le Geste et la Parole (Paris, 2 vols., 1965), a study somewhat marred, however, by an excessive "end of civilization" pessimism, whose social origins Pannekoek would no doubt have liked to trace.
22. We refer the reader to Lucien Goldman's summary of this discussion (Recherches dialectiques [Paris, 1939], pp. 280-298), from a viewpoint different in several respects from Pannekoek's.
24. Ibid., pp. 20ff.
journalists argued along these lines: 'If it had been a matter of defending the legitimate and particular interests of the railwaymen, then nothing could have been more natural; but to go on strike for others, through solidarity! Sheer madness indeed! What would things come to if such ideas became widespread among workers in general? Do these people imagine that the splendors of exploitation could one day lose their luster? One thing at least was clear: while these journalists had their own particular way of understanding the interests of the workers, the working class virtues seemed to them to be expressions of insanity. This example shows clearly that, in practice, each regards as moral and good what suits the community, and therefore the class, to which he belongs. This is a fact of general application, and therefore the present experience throws light on the moral ideas of other eras and other nations.'

Returning a little later to this question—in order to illustrate, he said, the nature of ethics according to Dietzgen—Pannekoek writes: "After the railwaymen's victory, the bourgeoisie began to clamor for a special law which it would be the government's duty to implement. The working class, in a united front, declared their solidarity with the railwaymen, who had resolved to force the issue of their right to strike by again stopping work. This time, however, the strike failed. The workers sustained a terrible defeat which dealt a devastating blow to the whole workers' movement, from which it was able to make even a partial recovery only after several years of indefatigable propaganda. Thus, the first, glorious 'sympathy' strike set up repercussions which, for some years at least, proved more disastrous than advantageous to the workers movement. Does it follow that this strike was immoral? If it were true that whatever is useful to the community and therefore to the class involved is moral, and whatever is harmful is immoral, then one should regard this strike as immoral. And yet no worker would so regard it. He would say: 'Quite possibly this strike has been disastrous, but nonetheless it represents a beautiful, admirable action, a highly moral act.' So we see that an act can be regarded as good even if it has proved more harmful than useful to the class. This example will also enable us to highlight the difference between the useful and the moral.

"Let us then ask ourselves the question: Why did the workers see in this action a pattern of virtue? The answer is self-evident: because in this action solidarity—the individual's sacrifice of self-interest to what he regarded as the interests of his class—was plainly shown. But why regard as virtue the mere fact that he showed his solidarity? Because, as a general rule, a show of solidarity is useful to the working class: not always (we have just considered a case in which solidarity had harmful effects), but nearly always it is useful and even indispensable to the extent that without it a definitive victory would be out of the question. In this sense there is virtue even in the exceptional cases where, because of special circumstances, the action is useful without involving risk. The difference between class interest and the moral element is therefore plain: what is moral is not what is useful to the class, but what is useful in general to the class, what generally serves its interests. A moral act is not always an act to be recommended, a rational act; in practice, one should not respond to the spontaneous promptings of the heart but act so that, as a result of mature reflection, the action is seen to be in accord with its purpose in the given circumstances. What is suited to its purpose, what is useful, is inscribed in our feelings and determines the moral judgment; but the rationality of an action is decided by the test of what, in the particular case, is suited to the purpose.""
motivations, new virtues, are developing within the working class. These motivations and virtues form a considerable source of power and are necessary for the transformation of the world, since without this power there can be no social upheaval of any magnitude, no passage to socialism. And if we now enquire into the source of this power, the answer is simple: it is not a power descending from the skies; it is the product of effective earthly conditions, and quite simply shows that each member of the working class has a potential which can enable him to rise above his own personal, limited interests and to lift his mind from the particular to the general, to the level of what is demanded by his class and by society as a whole. 27

In these lines at least one fact is clear: we are not dealing with a university philosophy, a system of precepts primarily intended as logical speculation (in the final analysis obeying, like everything else, the class imperatives, a situation in the age). In another article on the same subject, 28 Pannekoek replies to those (then numerous among the intellectual revisionists) who, discovering in Marx the existence "of an indignation which erupts whenever he describes disgraceful exploitation," take this as evidence of an ethical attitude. Now, Pannekoek stresses, "the materialist theory of Marx does not rule out the ethical, and therefore does not deny the power of the moral sentiments. What it does deny is that these sentiments originate in an ethic which hovers above the human race. It sees the ethical itself as a product of material, social factors. The virtues which are now growing among the workers—solidarity and discipline, the spirit of sacrifice and of devotedness to the class community and to socialism—represent the basic condition for the abolition of exploitation; without this new proletarian morality, the active fight for socialism would be inconceivable. But this morality does not just appear without apparent cause in the worker; it is the fruit of capitalism, of exploitation, of the concentration of capital, of conflictual experience—in a word, of the whole of the material living conditions of the proletariat."

In fact, our author's target is precisely "the civil and unctuous morality of the preacher, the ideology of the self-contented bourgeois" who aspires only to conciliation between the classes without the need to censure the excesses of capitalism too severely. "The praxis of the workers' movement has nothing in common with this ethical way of looking at the world. When we denounce the frightful crimes of capitalism against the life and the health of the workers, and when we take a stand against governmental violence and injustice, our point of view is quite distinct from that of the redresser of wrongs who is morally indignant at such flagrant wrongdoing. It is the cry of indignation of the victims and the oppressed themselves, the cry of hatred and of menace against the torturer; it is the shout of the fighter calling on his comrades, still drowsy and crushed with anguish, to join with him, reminding them of the torments they are enduring. And this cry of indignation, this rousing battle cry, has as little to do with ethics as has the anguished cry of a tortured animal or the exciting shouts of men fighting for their freedom. It is nature itself which decides the matter. A person who finds himself crushed and mastered must defend himself, and cannot do otherwise. There is no question of any moral indignation whatsoever toward the oppressor; such a person acts quite simply from the sheer natural instinct of self-preservation. The same is true of the workers' movement: it does not come forward like a valiant knight moved by ethical indignation, who seeks to free the human race from the immorality of capitalism; rather, it fights capitalism because it must, because for it there is no other way of salvation, because otherwise it will quite simply be pulverized by the enormous weight of capitalism."

Thus the splendid discourses about Marx the ethicist are false for two reasons. Far from ethics being the basis of Marxism, it is the latter which provides a materialist interpretation of ethics. And the strong critical, fighting passion emanating from the works of Marx has just as little to do with ethics. It simply proves that, in his scientific works and in his critique of capitalism, he was merely the representative and one of the vanguard fighters of the proletariat who acted as the interpreter of their feelings and who gave them his works as a weapon in their fight for freedom."

Here we are poles apart from speculative research and exegesis. But this appeal to evidence of a primary kind, expressed in words as simple as they are vigorous (perhaps a little crude for the academic), should not be allowed to obscure the fact that Pannekoek, throughout his life, took a learned interest in philosophical questions. We can only make passing reference to the very first article he published at the time when he formally accepted Dutch Social Democracy: a detailed critical analysis of Kantian philosophy which was followed by a list of "the philosophical attainments" of Marxism according to Dietzgen and concluded with a discussion of neo-Kantian revisionism, particularly that of Bernstein. 29 Instead, we shall examine a more concise study of precisely the same subject, which serves as a preface to an American

27. Ibid., pp. 23-24.

29. Anton Pannekoek, "De Filosofie van Kant en het Marxism," De Nieuwe Tijd (1901), pp. 549-564, 605-620, 669-688. (Pannekoek once said that the starting point of his political evolution had been the critique of Kantian philosophy [cited by Van Albada in "In Memoriam..."]; he also liked to remark, in conversation, that this evolution was in a sense a natural extension of his scientific activities.)