
How Anton Pannekoek Planned to Storm the Heavens

BY

ALEX DE JONG

Before Anton Pannekoek, astronomers sought only to interpret the cosmos – his goal was to change it. The renowned Dutch scientist who gave his name to an asteroid and a moon crater was also a Marxist revolutionary who debated with figures like Lenin about the road to power.

There has always been a healthy crossover between Marxism and the natural sciences. Frederick Engels kept abreast of the latest scientific knowledge in his own time. In his work *Dialectics of Nature*, Engels warned that no matter how far humans were able to perfect their forms of social organization, a time would inevitably come when the Earth could no longer sustain organic life:

And what will happen to our solar system will happen sooner or later to all the other systems of our island universe; it will happen to all the other innumerable island universes, even to those the light of which will never reach the Earth while there is a living human eye to receive it.

From the other side of the intellectual fence, leading twentieth-century scientists like John Desmond Bernal and J. B. S. Haldane had strong Marxist sympathies. In recent decades, figures like Stephen Jay Gould and Mike Davis have continued this dialogue, crossing the bridge between human and natural history in search of insights for both fields of study.

However, there is one figure who stands out for combining the roles of an important socialist thinker and a prominent scientist: Antonie “Anton” Pannekoek. The Dutch Marxist had two great passions in his life, the emancipation of the working class and the study of the universe. We can find traces of Pannekoek’s influence everywhere from the writings of Lenin to the surface of the Moon.

Red Moon

Born in the Netherlands in 1873, soon after Darwin published *The Origin of Species* and Marx published *Capital*, Pannekoek died in 1960, just as humanity entered the space age. The final sentence of his popular work, *A History of Astronomy* (1951), captured the two sides of his work:

It is time for mankind to ensure itself of material abundance by establishing a free, self-managed world-society of productive labor, thereby freeing its mental powers for perfecting its knowledge of nature and the universe.

This was an unusual conclusion for a book that became a standard introduction to the field. The 1961 English-language edition omitted it from the text.

When he passed away at the age of eighty-seven, Pannekoek could boast two illustrious careers. As an astronomer, he had received an honorary degree from Harvard and the Gold Medal of the British Royal Astronomical Society. A moon crater and an asteroid bear his name, along with the Anton Pannekoek Astronomical Institute at the University of Amsterdam.

As a Marxist, Pannekoek had been a prominent theoretician in the European socialist movement. In the years before the First World War, he defended Marxist radicalism against the reformist ideas of Eduard Bernstein, and later, along with Rosa Luxemburg, criticized the so-called “popo of Marxism,” Karl Kautsky.

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These arguments earned him the admiration of Lenin, but the Russian revolutionary leader subsequently took issue with Pannekoek's ideas in his famous pamphlet *Left-Wing Communism: An Infantile Disorder*. Pannekoek became one of the leading thinkers for a dissident current known as "council communism" that rejected all political parties and states. By the end of his life, he was a marginal figure in the world of politics, even as his scientific reputation grew.

Spirit and Matter

Pannekoek grew up in a liberal, bourgeois family in the Netherlands. In 1898, after he had completed his studies, the observatory in the Dutch university city of Leiden took him on. Pannekoek felt that his social standing required him to join the bourgeois liberal party: this was his first step into politics.

The turning point in his political development came when he read, more or less by accident, the 1897 novel *Equality* by US utopian Edward Bellamy. Pannekoek described the experience as if a blindfold had been lifted from his eyes, "revealing to me that theories have a social foundation and meaning, from the abstract they became embedded in material, real interests."

Pannekoek's search for the social foundation of ideas led him toward Marxism. The following year, he joined the Sociaal-Democratische Arbeiderspartij (Social-Democratic Workers Party, SDAP) — the main Dutch Marxist party, which had just won two parliamentary seats.

In 1919, Pannekoek wrote down his thinking on the development of ideas in the brochure "Historical Materialism." Pannekoek started from the basic Marxist insight that history was made by human beings — but what drove people in making history? According to Pannekoek, in each society there existed "deeper thoughts and emotions, general conceptions of what is good and necessary for the world."

As far as a person's individual consciousness is concerned, such ideas determine their acts, and Marxist materialism

...does not deny the importance of spiritual motives, but returns them to their material origin, to the real relations of human society. We call these real relations material in the sense that they can be objectively observed ... not in the sense of opposing matter to spirit.

People did not freely choose to enter into such relations, as they had been formed by the societies around them. Each society had to constantly reproduce not only its economic organization but also the relations that "fill people's lives, and hence determine their thoughts, desires and feelings."

Pannekoek differed from many self-described orthodox Marxists of his era in his refusal to counterpose "spirit" to "matter." He saw "spirit," the ensemble of a person's knowledge and convictions, as the link between the conditions in which people found themselves and their various attempts to influence those conditions.

Like several of his Dutch comrades, such as the poets Herman Gorter and Henriette Roland Holst, Pannekoek had been deeply influenced by the ideas of Josef Dietzgen (1828–88), a German socialist thinker who developed a theory similar to that of Marx and Engels in parallel to the founders of Marxism. According to Dietzgen, a tanner and self-taught philosopher, everything that existed in the universe, including "thought objects," formed part of material reality.

Pannekoek felt that this insight of Dietzgen's offered a necessary corrective to the approach of many socialists who thought that they could reduce "material reality" to an economic foundation. He insisted that "thought objects" — such as spirit, political convictions, and class consciousness — had their own role to play in the struggle for socialism.

"Science and knowledge are important sources of power," Pannekoek wrote in 1909. To liberate itself, the working class needed to master science and knowledge while developing its class consciousness and a disciplined commitment to the goal of socialism — what Pannekoek called "socialist spirit."

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Pannekoek, Lenin, and Kautsky

For Pannekoek, spreading this socialist spirit was a full-time job. In 1906, Karl Kautsky, the leading theoretician of the German Social Democrats (SPD), invited him to become a lecturer at his party's school. Pannekoek also wrote extensively for journals and newspapers published by the SPD, which at the time was considered the flagship of international socialism.

The most radical SPD branches in particular printed his articles and invited Pannekoek to give lectures. He became known as a critic of "revisionist" socialists such as Eduard Bernstein who believed in a gradual socialist transformation of society. Increasingly, he also started to criticize the ideas of Karl Kautsky himself.

In a 1912 article, "Marxist Theory and Revolutionary Tactics," Pannekoek spelled out the differences between his thinking and that of figures like Bernstein:

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Revisionist' socialists Bernstein who actual socialist of society.”

Whereas Revisionism seeks to limit our activity to parliamentary and trade-union campaigns, to the achievement of reforms and improvements which will evolve naturally into socialism — a perspective which serves as the basis for reformist tactics aimed solely at short-term gains — radicalism stresses the inevitability of the revolutionary struggle for the conquest of power that lies before us, and therefore directs its tactics towards raising class consciousness and increasing the power of the proletariat.

Pannekoek explained that he did not consider Kautsky himself to be a revisionist but disagreed with what he called his “passive radicalism.” He accused Kautsky of seeing revolution as “an event in the future, a political apocalypse,” with nothing to do in the meantime but “prepare for the final showdown” and wait on events:

In our view, revolution is a process, the first stages of which we are now experiencing, for it is only by the struggle for power itself that the masses can be assembled, drilled and formed into an organization capable of taking power.

Lenin later quoted favorably from Pannekoek’s polemics against Kautsky in his 1917 work *The State and Revolution*.

Pannekoek did not reject the struggle for reforms but insisted that they had to form part of the wider struggle for the socialist goal. So long as the bourgeoisie remained in power, reforms would also be under threat of rollback. “Hard-won social reforms,” Pannekoek wrote in 1909, “are steps on the way to the goal in as far as they strengthen our power.”

He called on workers to take matters into their own hands and force their leaders to adopt a more radical course:

Everything depends on the masses ... so long as the masses look up towards their leaders while waiting for them to formulate the watchwords, the movement cannot take the right course. Only when the masses themselves take the initiative ... is a powerful upsurge of our movement possible.

This was a productive period for Pannekoek, during which he allied with Gorter, Roland Holst, and Luxemburg in support of the revolutionary wing in European socialism.



Anton Pannekoek and his wife Anna.

In 1909, he published “The Destruction of Nature,” a remarkable early “ecological” critique of capitalism. Pannekoek argued that “a rational social order will have to use the available natural resources in such a way that what is consumed is replaced at the same time, so that society does not impoverish itself and can become wealthier.” Capitalism, he insisted, was incapable of doing so: it was “an economy which does not think of the future but lives only in the immediate present. In today’s economic order, nature does not serve humanity, but capital.”

However, Pannekoek’s writings from these years do betray a tension between the view that historical developments would force working people to become socialists in quasi-automatic fashion, and a conflicting emphasis on the need for socialist ideals and self-organization. This tension would increase in the years to come.

A New Era

The First World War constituted a break in Pannekoek’s personal and political lives. When the war began, Pannekoek and his wife were on holiday in the Netherlands, a neutral country, and found themselves unable to return to Germany. From 1915 to 1919, Pannekoek worked as a high school teacher and private tutor.

In 1919, the prospect of an appointment at the Leiden Observatory fell through when newspapers reported that Pannekoek was an honorary member of the leadership of the new soviet republic declared by revolutionaries in Hungary. The Hungarian revolutionaries had neglected to inform Pannekoek before granting him this honor. The Amsterdam municipality then offered Pannekoek a job with the University of Amsterdam, where he would stay for the rest of his professional life.

By now, Pannekoek had joined the newly formed Communist Party of the Netherlands. In 1919, the Communist International (Comintern)

was established, and in the same year, its leaders created a secretariat with the task of organizing the West European members of this new body. The base of the secretariat was to be in Berlin, with a bureau in Amsterdam. The Comintern asked Dutch communist S. J. Rutgers, who was living at the time in Moscow, to recruit Dutch radicals like Gorter, Roland Holst, and Pannekoek to the Amsterdam bureau.

A highpoint of this bureau's activity was a conference held in 1920. The gathering adopted a resolution, under Pannekoek's influence, that rejected the involvement of communists in trade unions. In an earlier time, according to Pannekoek and his co-thinkers, such organizations had been tools with which the working class had won social improvements, but that era was now over.

With the outbreak of the war and the revolutions in Russia and Germany, they argued, the contradictions of capitalism had become too profound for meaningful reforms to be possible. In this new age, unions had become diversions from the revolutionary struggle.

The conference also called for a clear separation of communists from so-called "centrist" political parties. This term referred not to centrists in the modern sense, but to socialist forces that wavered between reform and revolution. This orientation contradicted that of many other communists, including Bolshevik leaders such as Lenin and Leon Trotsky. They believed that communists would have to take part in unions and in united fronts with other parties if they wanted to reach the mass of working people.

Barely a year after its launch, the Comintern dissolved the Amsterdam bureau. In the same year, Lenin published *Left-wing Communism: An Infantile Disorder*, directly attacking the ideas of Pannekoek (whom he addressed by his pseudonym, Karl Horner). In 1921, Pannekoek left the Communist Party.

Left Communism

He sympathized with a breakaway group from the German communist movement, the Kommunistische Arbeiter-Partei Deutschlands (KAPD, Communist Workers' Party of Germany). The KAPD was the most important organization of the "communist left." Pointing to the German experience, where the official trade unions and the SPD, a self-declared socialist party, had presided over the suppression of the revolution, this current rejected involvement in parliaments or trade unions.

The left communists argued that such organizations had become a brake on the revolutionary self-activity that was needed in an era of wars and revolutions that had begun in 1914. Pannekoek became an influential theoretician of this current, which gathered tens of thousands of supporters in its early years. "Spirit" was as decisive as ever for Pannekoek, but he now believed that this spirit could only develop through revolutionary

struggle.

However, Pannekoek differed from many other "ultra-lefts" by predicting that this revolutionary struggle would be protracted. In a way that was reminiscent of Antonio Gramsci's later argument in his *Prison Notebooks*, Pannekoek contrasted the path followed by the Russian revolution with the likely course of events in West European countries. He expected it to be "much slower and more difficult" because the bourgeoisie was "much more powerful here than in Russia." The roots of that power ran deep, he argued:

They lie in the reign of bourgeois culture over the population as a whole, as well as over the proletariat. Over the span of one hundred years of the bourgeois era, the spiritual life of the bourgeoisie has soaked into all of society, and has created a spiritual structure and discipline which, by way of thousands of channels, penetrated and dominated the masses. This will have to be gradually purged from the proletariat through a long and tenacious struggle.

Pannekoek's ideas went on to play an important role in the development of "council communism." As the name suggested, this current favored the creation of councils (soviets) in which workers would organize themselves, overthrow capitalism, and organize the new, communist society. The council communists rejected not only electoral politics, but trade unions and political parties as well. In their eyes, such organizations stunted the necessary self-activity of the workers.

In his memoirs, written during the German occupation of the Netherlands, Pannekoek recalled that he used to be plagued by doubts about his political views and activism. But these doubts melted away when he "suddenly saw the simple answer ... the workers themselves must decide and take full responsibility." The "workers themselves" would remake the world — if they did not do so, it meant they were not yet ready for the task.

In the Netherlands, a country that lacked a strong revolutionary tradition, council communists were loosely organized in the small Group of International Communists. Strictly adhering to the principle that the workers themselves must be the ones who take action, the group refrained from launching political initiatives and limited itself to hosting discussions and publications.

The View From the Observatory

During the earlier debates in the Communist International, the Bolshevik representative Karl Radek had sneered at Pannekoek, describing him as a figure who studied the heavens from his astronomical observatory, "not the turmoil of poor, sinful people who are not pure Communists." It was an unfair remark to make about someone who only a few years earlier had been a full-time party worker. However, as time progressed and the revolutionary tide receded, Pannekoek's ideas increasingly became detached from the workers' movement.

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Radek's criticism of the left communists — that their refusal of alliances and compromises would condemn them to empty verbal radicalism — proved to be correct. As the 1930s progressed, Pannekoek did not seem to be greatly interested in what workers were actually doing, focusing instead on what he thought they would be forced to do in the future.

Instead of abandoning their supposedly outdated unions and parties, most active workers were still organized through such bodies. Pannekoek expected the working class to unite as the crisis of capitalism deepened after the Wall Street Crash of 1929, but it remained divided along political and national lines.

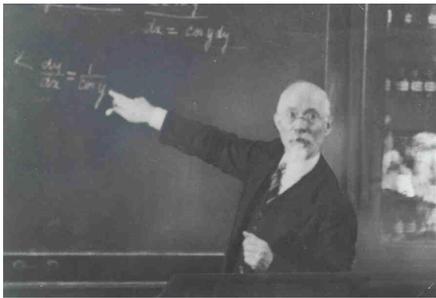
Pannekoek initially missed the threat of fascism as well and did not take the danger that it posed to left-wing organizations seriously. After all, he considered those parties and unions to be worse than useless — brakes on the proletarian struggle.

Three years after the Nazi seizure of power, Pannekoek even claimed that the Nazis had inadvertently aided the workers' movement in Germany. Fascism, he wrote had “restored the natural class unity of the workers” by wiping away unions and left-wing parties — “outdated things that hinder progress.”

He quickly changed his mind and acknowledged that the banning of all workers' organizations weakened the working class. However, he could not bring himself to admit what the implications of this point were for his own theories.

Lenin's Philosophy

In 1938, Pannekoek published one of his best-known books: *Lenin as Philosopher*. Strictly speaking, it was a critique of one of Lenin's own books, 1909's *Materialism and Empirio-Criticism*. Drawing on his scientific training, Pannekoek demonstrated that Lenin had misrepresented the epistemological views of his philosophical opponent, Ernst Mach.



Anton Pannekoek taught at the University of Amsterdam for most of his professional career.

The conclusions that Pannekoek drew from Lenin's interpretation of Marxist materialism in *Materialism and Empirio-Criticism* were more important. Pannekoek sought to argue that Lenin had never been a proper Marxist, since Marxism was the theory of the workers' struggle against capitalism, but capitalism as such barely existed in Russia.

He insisted that the French and Russian Revolutions were similar processes, brought about by predominantly pre-capitalist socioeconomic conditions. In Pannekoek's view, both were bourgeois revolutions that had paved the way for the development of capitalism.

For Pannekoek, Lenin's views were those of bourgeois materialism, and the Bolshevik revolution had nothing to do with Marxism or socialism. Only in the industrially developed West was a revolution along the lines envisaged by Marx possible. The tension between historical determinism and the importance of ideas and action in Pannekoek's ideas now disappeared as determinism became the dominant element.

An Unexpected Future

In February 1942, two years before he was due to retire, the German occupation regime ousted Pannekoek from his university position in Amsterdam. He spent the war years writing, composing his memoirs in two parts — one covered his years in the workers' movement, the other described his life as an astronomer.

Pannekoek no longer enjoyed the fame he had once known in the political world, but his renown as an astronomer had grown during the same period. In 1932, he had become a professor at the university. Initially, his work focused on mapping the Milky Way, mapping stars, and determining distances. But he was a pioneer in the field of astrophysics as well, applying new insights from physics to the study of the development of stars.

Pannekoek also won recognition for his detailing drawings of the Milky Way, having travelled to Java in 1926 to facilitate this work. He argued that such drawings constituted a superior way of mapping our galaxy when compared to static photographs, as the human mind could synthesize information from a continuous flow of disparate observations.

During the occupation, Pannekoek began writing a book called *The Workers' Councils* in which he systematized his later political views. Throughout the work, he made claims and predictions that he then quickly played down. Pannekoek held onto his deterministic view of history but admitted that history had not been working out as he predicted so far.

In a conclusion omitted from the English translation of the work, Pannekoek wrote that the working class had essentially ceased to exist as a class during the Second World War. He argued that it “no longer had a will to decide whether or not to follow the bourgeoisie,” with any sense of class identity having been “washed away by the general submission of all classes to the ideology of capital.”

What remained was Pannekoek’s faith in the unfolding of history. He argued that a new phase of capitalism would wipe away pre-existing traditions, “opening people’s minds for the direct effects of new realities” so that the idea of workers councils could be revived. Again, history was to disappoint Pannekoek. “All we have written in these last few years,” he lamented shortly before his death in 1960, “remained completely unsold and unread.”

Pannekoek’s Marxism was characterized by a tension between historical determinism and his emphasis on “spirit” — conscious action and commitment. In his later life, he resolved this tension by subordinating the latter to the former, claiming that spirit would inevitably develop in a specific way as the result of economic developments. Pannekoek, who had a tendency to perceive “spirit” as a thing in its own right, did not recognize that parties and movements could embody the socialist spirit and kept it alive. The “real relations” that he had written about in 1909 included such organizations.

When workers moved away from socialism, Pannekoek could only explain it as the result of “outdated” ideas or the influence of bourgeois ideologies. He did not see the ways in which the working class was divided by structures such as imperialism, colonialism, and the nation-state. While Pannekoek eventually found himself overtaken by history, his earlier insights into spirit, self-organization, and the importance of the socialist goal remain valuable contributions to the movement for working-class emancipation.

ABOUT THE AUTHOR

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