# Economic Crisis and Socialist Revolution: Henryk Grossman's *Law of accumulation*, Its First Critics and His Responses

Rick Kuhn

#### **ABSTRACT**

Henryk Grossman was the first person to systematically explore Marx's explanation of capitalist crises in terms of the tendency for the rate of profit to fall and to place it in the context of the distinction between use and exchange value. His The law of accumulation and breakdown of the capitalist system remains an important reference point in the Marxist literature on economic crises. That literature has been plagued by distortions of Grossman's position which derive from early hostile reviews of his book. These accused Grossman of a mechanical approach to the end of capitalism and of neglecting factors which boost profit rates. Grossman, in fact, contributed a complementary economic element to the recovery of Marxism undertaken by Lenin (particularly in the area of Marxist politics) and Lukács (in philosophy). In both published and unpublished work, Grossman also dealt with and even anticipated criticisms of his methodology and treatment of countertendencies to the tendency for the rate of profit to fall. Far from being mechanical, his economic analysis can still assist the struggle for working class self-emancipation.

## INTRODUCTION

In 1929, Henryk Grossman¹ sought to provide an economic analysis of the conditions under which the struggle for socialism could be successful. His book, *The law of accumulation and breakdown of the capitalist system, being also a theory of crises*, contrasted what he regarded as fundamental aspects of Marx's theory with the ideas of other interpreters of Marxism. They included reformists, like Rudolph Hilferding and Otto Bauer, who held that capitalism could avoid economic crises and be peacefully transformed into socialism, as well as voluntarists, like Fritz Sternberg, for whom the lack of sufficient working class will and consciousness was the only serious obstacle to socialist revolution.

Contradictions at the heart of the capitalist production process itself, Grossman insisted, give rise to economic crises. This he identified as the 'law of capitalist breakdown'. In his book and an essay published before it appeared, Grossman anticipated his critics' main objection, that he was guilty of a mechanical, purely economic theory of the demise of capitalism. He carefully situated his argument in the context of Lenin's work on the politics of revolution and the perspectives which informed the foundation of the Communist International (Comintern) in 1919, contending that crises can be a crucial objective condition for workers' revolution.

The orthodoxy of the Second International in the period before the First World War, particularly as expounded by its leading theoretician, Karl Kautsky, had emphasized the importance of organization and ideas. But is was much less clear about the role of revolutionary working class action (as opposed to the consequences of inexorable historical forces or the deeds of social democratic parliamentarians, trade union officials and party leaders) in simultaneously transforming workers' consciousness, overturning the capitalist state and establishing new relations of production. Most of the parties of the International paid lip-service to the principal of independent working class politics. But on the outbreak of the World War, a large majority of them supported the ruling classes of their 'own' countries in a conflict between rival imperialist blocks. Kautsky had come to

regard wars under capitalism as avoidable. Even after the killing machines had started to grind the bodies of millions of workers and peasants, he still insisted that the interests of the modern imperialist bourgeoisie were incompatible with war (Kautsky 1909; Kautsky 1915; Salvadori 1979; Schorske 1983; Haupt 1972).

Eduard Bernstein's 'revisionist' argument in 1899, that capitalism need not suffer from general and severe economic crises, was rejected by mainstream Marxists at the time (Bernstein 1899, Kautsky 1899). After the War, this idea was incorporated into the orthodoxy of social democracy from which most radicals had split to establish Communist parties.

Lenin, especially in *State and revolution*, reasserted the active role of the working class in Marxist politics. For millions of working class militants, the Bolshevik revolution demonstrated the proletariat's capacity to make revolution. György Lukács, whose *History and class consciousness* Grossman regarded very highly (Grossmann 1932a p. 316), reinstated the working class at the core of Marxist philosophy, in his analysis of 'reification' and of the working class as both the object and (potentially) the subject of history. Grossman made a parallel contribution to the recovery of Marxism, in the field of economics, conditioned by the intense class struggles in Europe from 1916 to 1923 and his own experiences as a revolutionary leader in Galicia from the turn of the 20<sup>th</sup> century until 1908 (Kuhn 2000, Kuhn 2001). Drawing attention to the importance of the use value side of commodities and hence the labor process aspect of production, he was the first Marxist to systematically explore the tendency for the organic composition of capital to rise and hence for the rate of profit to fall as a fundamental feature of Marx's explanation of economic crises in *Capital*.

The current period is one of profound political and economic instability at a global level. Henryk Grossman's work can help us explain why the 'new economy' of sustained economic growth, proclaimed during the 1990s (Shepard 1997, Greenspan 1997), came unstuck, the relationships between economic crisis, imperialism and war, and to identify the potential for radical social change opened up by economic crises. Paul Mattick, David Yaffe and Chris Harman recognised the importance of Grossman's contribution to Marxist economic theory (e.g. Mattick 1934b, Mattick 1974, Yaffe 1973, Harman 1984, Harman 1993). But the most widespread interpretations of his work still reproduce objections in the earliest reviews, which ignored his careful specification of the task he had set himself, as well as his preceding and subsequent publications (e.g. Howard and King 1989 pp. 316-336, Hansen 1985 pp. 65, 142). In these, Grossman dealt with many of their arguments. He also addressed them, even more explicitly, in correspondence and unpublished manuscripts (Grossman 1969, Scheele 1999 pp. 63-70).

Instead of relying on a few passages selected from *The law of accumulation*, the following discussion seeks to understand Grossman's breakdown theory in the context of his work as a whole. The section below sketches Grossman's critique of Fritz Sternberg's *Imperialism*, which foreshadowed the case made in his own book. It is followed by a brief account of key elements of the theory of economic crisis and breakdown in *The law of accumulation*. They include important steps in Grossman's argument that have consistently been ignored by those who reject his approach. The fourth section deals with the generally hostile reception the book received during the years immediately after its publication. The preoccupations of his first critics and Grossman's responses to them are discussed in the following two sections. One is devoted to his unpublished replies. The next examines responses in his publications. Some implications of this attempt to recover Grossman's analysis are considered in the conclusion.

#### I. PREPARING THE WAY

After arriving at the Institute of Social Research in Frankfurt, on 4 November 1925,<sup>2</sup> until late 1926, Grossman spent most of his time writing a large manuscript on Marxist economics, 'The Laws of Development of "Pure" and Empirical Capitalism'. He had begun the study in 1922 or 1923. But it encompassed the preparations he had made for a 1919 lecture on economic crises and even, perhaps, research on economic theory before the War.<sup>3</sup> The first published fruit of this major project was a

substantial article criticising Sternberg's *Imperialism*. This book, published in 1926, was an account of contemporary capitalism, which the Institute for Social Research had supported financially (Gangl 1987 p. 91).

Sternberg made a living as a publicist in the extensive socialist space between the *Sozialdemokratische Partei Deutschlands* (Social Democratic Party of Germany, SPD) and *Kommunistische Partei Deutschlands* (German Communist Party, KPD). Like Rosa Luxemburg, he thought that Marx's analysis was flawed by the assumption that non-capitalist consumers did not exist. To overcome this problem, Sternberg offered his own theories of the accumulation of capital, economic crises, the reserve army of labor, wages, the labor movement and revolution (Sternberg 1926 pp. 7-10, Grebing 1977 pp. 121-136).

*Imperialism* had attracted considerable attention on the left and its subject matter intersected with the issues in the major study Grossman was working on. The most important areas of overlap were economic crises (the longest chapter in Sternberg's book) and Marx's method. So Grossman took a break from the tasks directly associated with his own book to clear the way for it, by taking *Imperialism* apart in a long article.

Grossman maintained that there was no connection between the economic analysis in *Imperialism* and its political stance. Sternberg did not see beyond Bernstein's horizon, accepting his critique of Marx's economics. Bernstein had argued that the severity of economic crises had diminished for generations; that the distribution of property had been decentralized rather than centralized; that class contradictions had declined, as workers' conditions improved; and particularly that the size of the capitalist and middle classes had increased absolutely and in proportion to the whole population. Sternberg agreed. But, as Sternberg justified socialism in essentially ethical terms, rather than as a consequence of economic development, he could still hold to a revolutionary standpoint in politics:

More than anything else, his book supports a particular *political* tendency. It places the necessity of revolution to the fore. Not, however, revolution understood as a necessary result of an historical process dominated by class struggle, but revolution understood as a categorical ethical postulate, the sole means to save humanity from falling into ahistoricity (Grossmann 1928 p. 142).

Sternberg had no conception of Marx's method in *Capital* or his political outlook. Grossman's manuscript on 'The Laws of Development of "Pure" and Empirical Capitalism', his monograph on Sismondi and even his 1919 lecture on economic crisis had already explained Marx's method. *Capital* was far from being a study of 'pure' capitalism, whose conclusions did not apply to capitalism as it really existed. Marx, Grossman explained, progressively lifted the simplifying assumptions he made early in this work, in order to grasp fundamental processes, as he introduced complicating factors, step by step, and the analysis came closer and closer to empirical capitalism (Grossmann 1928 pp. 145, 149-150, 183). Contrary to Sternberg's assertions, Marx, in his political writings, seriously considered the importance of the relationship between the proletariat and middle classes and the way that intermediate social groups might be won to the side of the revolution (Grossmann 1928 p. 155).

Working class consciousness, according to Sternberg, had to be created by a socialist party and intellectuals, notwithstanding economic circumstances and outside day to day politics. He saw himself as rounding out Luxemburg's work. This was 'a wicked misuse of the great fighter's name', Grossman wrote, as she, like Marx, had argued that socialism was the product of capitalist development (Grossmann 1928 pp. 158-160). Behind this critique of Sternberg's position was irritation at a perversion of Marxism and Grossman's awareness, based on his own experience in building a socialist organization, that class consciousness and revolution can only grow out of the experience of struggle.

For Sternberg's argument was not an academic matter. Both the German and Polish Communist Parties had engaged in voluntarist policies in the period following the First World War. The

German March Action of 1921 was one of the most serious of these adventures. In criticising Sternberg's position, Grossman drew on the arguments Lenin had made about the nature of revolutionary situations in 1915. The Russian revolutionary had reiterated these in his 1920 polemic against ultra-left currents in the Communist International, *Leftwing communism--an infantile disorder* (Lenin 1920b pp. 84-85, 94). This intervention and debates in the International briefly had a salutary effect on the Communist movement. But, in the course of the factional conflict in the Russian Party that characterized the degeneration of the Russian revolution, the Comintern line lurched leftwards again in 1924-25. Communist Parties in several countries, including Poland and Germany engaged in ultra-left rhetoric and activity. The results were declines in their memberships and credibility. The Comintern leadership in 1928 declared the opening of a new 'Third Period' since the War and imposed a similar policy, even less in touch with reality, on the movement.

Against Sternberg's conception of revolution, Grossman quoted 'a specialist in revolutionary matters and at the same time a Marxist',

Marxists, said Lenin in 1915, know perfectly well that a revolution cannot be 'made', that revolutions develop from crises and turns in history, which have matured objectively (independently of the will of parties and classes)... Marxism appraises interests on the basis of the class antagonisms and the class struggle which find expression in millions of facts of daily life... To the Marxist it is indisputable that a revolution is impossible without a revolutionary situation... For a revolution to break out, it is usually insufficient for the 'lower classes not to want' [to live in the old way]; it is also necessary that the upper classes should be unable [to live in the old way], that is, that it becomes **objectively impossible** for the ruling classes to maintain their domination in an unchanged form. Secondly, that 'the suffering and want of the oppressed classes have grown more acute than usual'. Without these objective changes, which are independent of the will, not only of individual groups and parties, but even of individual classes, a revolution, as a general rule, is impossible. The totality of these objective changes is called a revolutionary situation. Only then is a further subjective condition of significance. This is not simply 'revolutionary consciousness' (that cannot be created, moreover, simply by hammering the final goal into people's heads, in the absence of a revolutionary situation). It is, on the contrary, something quite different, 'the capacity of the revolutionary class for mass revolutionary action', which presupposes an **organization** of the unified will of the masses and **long experience** in everyday class struggles (Grossmann 1928 pp. 161-162).4

Like Lukács, in his 1924 essay on the leader of the Russian revolution, Grossman endorsed Lenin's account of the circumstances under which a socialist revolution can take place (Lukács 1924 pp. 31-34). Grossman counterposed Lenin's position to both Sternberg's voluntarist argument-that revolution was an act of the will--and his mistaken view that Marx believed revolution would be the 'automatic' consequence of entirely economic forces (Grossmann 1928 p. 156).

In fact, Marx's conception of the revolutionary process was a dialectical one, which Lenin, Lukács and Grossman recovered and developed in complementary ways. Capitalism created the working class, forced it to defend its interests, and generated the circumstances under which it struggled against the capitalist class. In the course of its struggle, the proletariat could become aware that the destruction of capitalism was a necessary prelude to the full realization of its interests. A revolutionary party was necessary to sustain and generalize working class consciousness, gained through class struggle, and, under the right conditions, to coordinate revolution. Lukács used Hegelian language to express their common position: the working class was both the object and the subject of history.

Having dealt with Sternberg's politics, Grossman turned to the more strictly economic analysis in *Imperialism*, which suffered from two layers of misunderstanding. Sternberg grasped neither the content of Marx's arguments nor real economic processes.

According to Sternberg, the existence of 'surplus population' (a reserve army of unemployed workers) is a precondition for the production of surplus value and imperialism facilitates improved conditions for workers. Marx, however, had identified the fact that workers do not own means of production and so have to work for the capitalist class as the basic condition for the production of surplus value. He had also pointed out that, in the longer term, the absolute level of wages tends to rise, while they decline as a proportion of total output (Grossmann 1928 pp. 164-168, 180). Sternberg's explanation of the determination of wages under capitalism was a confused amalgam of Marxist and bourgeois economic theories, especially Franz Oppenheimer's.<sup>5</sup> It did not allow for increases in the productivity of labor and hence increased exploitation alongside increases in real wages. Marx had dealt extensively with the factors which influenced the level of wages. So, to Sternberg's account, Grossman counterposed a basic lesson in Marxist economics (Grossmann 1928 pp. 169-179).

The lesson extended to the questions of imperialism and foreign trade. Sternberg (following Luxemburg) regarded non-capitalist markets as essential for the realization of surplus value. Without them, he maintained, some commodities would remain unsold, as a purely capitalist economic system cannot provide a market for the whole of its own output. Marx had, however, introduced foreign trade into his analysis after showing how realization is *not* a problem for a closed capitalist system. The fundamental cause of economic crises, Grossman argued, is that capital accumulation itself undermines the valorization of capital. Foreign trade is only one of a series of factors which can, for a time, blunt this contradiction (Grossmann 1928 p. 185).

Grossman's explanation of the difference between Luxemburg's and Marx's accounts of imperialism provided an overview of the central theme of the book he was working on.

Only the methodological connection between the tendency [for capitalism] to collapse and factors deriving from the world market which weaken it indicates what an important role, though a different one from that assumed by Rosa Luxemburg, Marx saw foreign trade playing. A role he described to the last detail. It only testifies to the unbelievably low level of research on Marx that this central issue in the Marxist system has remained unnoticed until now (Grossmann 1928 pp. 185-186).

# II. THE LAW OF ACCUMULATION AND COLLAPSE OF THE CAPITALIST SYSTEM

The law of accumulation appeared in 1929 (Grossmann 1929a, Grossman 1929b). In it, Grossman still maintained, as he had a decade before, that a theory of economic crisis and collapse was not just some added optional extra in the socialist critique of capitalism. Bernstein had correctly regarded the argument that capitalism was inherently prone to crisis and collapse as central to the logic of Marxism: 'If the triumph of socialism were truly an immanent economic necessity, then it would have to be grounded in a proof of the inevitable economic breakdown of the present order of society'. Denial that such a proof was possible constituted an important part of Bernstein's case against classical Marxism (Grossmann 1929b p. 39). If capitalism can go on forever, increasing the production of wealth all the time, then economic problems, at least, could either be overcome through working class action to reallocate wealth or ameliorated into unpleasant but bearable irritants. In these circumstances, Grossman pointed out, the working class could just as easily reconcile itself with capitalism as voluntaristically attempt to realize socialism (Grossmann 1929b pp. 56-57).

Although his preface made it clear that he intended to focus on economic questions, Grossman did not regard politics as unimportant or as an automatic reflex of economics. On the contrary, he guarded against such an interpretation of his work.

Because I deliberately confine myself to describing only the economic presuppositions of the breakdown of capitalism in this study, let me dispel any suspicion of 'pure

economism' from the start. It is unnecessary to waste paper over the connection between economics and politics; that there is a connection is obvious. However, while Marxists have written extensively on the political revolution, they have neglected to deal theoretically with the economic aspect of the question and have failed to appreciate the true content of Marx's theory of breakdown. My sole concern is to fill this gap in the Marxist tradition (Grossmann 1929b p. 33).

Grossman's political activities since the early 1920s make it clear that, for him, Lenin was the preeminent figure amongst Marxists who 'have written extensively on the political revolution'. Grossman had embraced Lenin's renovation of Marx's politics and Lukács's recovery of Marxist philosophy. He argued that Marxist theory was now in greatest need of repair in the area of economics. As in his first publication on the proletariat and the Jewish question and his major study of Austrian trade policy, the deficiencies of previous understandings of the issues required a somewhat one-sided attention to specific topics and arguments, the procedure Lenin called 'bending the stick' (Grossman 1905 p. 42, Grossmann 1914 pp. ix-x; Cliff 1975, pp. 235-236). In this sense, Grossman's book, by emphasising the importance of economic circumstances for a successful revolution, was a critique of left-wing putschism (Grossmann 1932a p. 336).

Yet the fundamental argument of *The law of accumulation* was also directed against social democratic theorists, 'neo-harmonists' such as Karl Kautsky, Rudolf Hilferding and Otto Bauer, who believed that state action could eliminate economic crises, which were the consequence of disproportion in investments in different industries. In their pre-War economic studies, they had 'refuted' Bernstein by asserting there was no theory of collapse in Marx's account of capitalism (Grossmann 1929b pp. 40-41, 51). The political implications of Bauer's rejection of Luxemburg's argument that imperialism, war and crises were necessary features of capitalism complemented his earlier theoretical capitulation to the German-Austrian ruling class over the national question (Bauer 1907).

During the 1920s, Hilferding and Bauer were leaders of the largest parties of the German speaking working class. They provided justifications for reformist economic policies. Hilferding was an SPD member of the German parliament from 1924 until 1933 and German Finance Minister in 1923 and 1928-29. Bauer was the most important figure in Austrian Social Democracy after the War. Despite their *formal* adherence to Marxist orthodoxies, therefore, they drew the same *practical* conclusions as Bernstein and the top officials and ideologists of labour and social democratic parties into the 21<sup>st</sup> century.

Luxemburg had identified the centrality of a theory of economic breakdown to Marxism and the implication of Bernstein's position in both her critique of reformism, *Social reform and revolution* and her major economic work, *The accumulation of capital* (Luxemburg 1898-1899 pp. 26-27; Luxemburg 1913 p. 325). Grossman's book was designed, in the same spirit, to offer a coherent Marxist account of capitalism's vulnerability to crisis and collapse as a basis for revolutionary politics. Why then did he engage in extensive polemics against Luxemburg's economic analysis? The reason is given early in *The law of accumulation*:

It was a great historical contribution of Rosa Luxemburg that she, in a conscious opposition to the distortions of the 'neo-harmonists' adhered to the basic lesson of *Capital* and sought to reinforce it with the proof that the continued development of capitalism encounters absolute limits.

Frankly Luxemburg's efforts failed ...

... Her own deduction of the necessary downfall of capitalism is not rooted in the immanent laws of the accumulation process, but in the transcendental fact of an absence of non-capitalist markets. Luxemburg shifts the crucial problem of capitalism from the sphere of production to that of circulation. Hence the form in which she conducts her proof of the absolute economic limits to capitalism comes close to the idea that the end

of capitalism is a distant prospect because the capitalization of the non-capitalist countries is the task of centuries (Grossmann 1929b pp. 41-42, 125-126).

For all the flaws in her economic analysis, Grossman regarded her grasp of the significance of capitalist collapse as correct. He sought to expose her mistaken arguments, the most influential and systematic account of capitalist breakdown to date, in order to replace them with a more solid foundation for her conclusions.

In 1919, Grossman had identified the difficulty of maintaining simultaneously proportional output of use and exchange values as a source of economic crisis, even in a very abstract model of simple reproduction, where the scale of investment does not expand. He still adhered to this position. But *The law of accumulation* spelt out a new economic argument for Luxemburg's political conclusions, within the framework of his thoroughly Leninist conception of working class revolution. The book developed and was structured by the understanding of Marx's method which Grossman had outlined in earlier publications (Grossmann 1929b pp. 29-33, 63-67, 83-86, 130; Grossman 1922; Grossman 1924 pp. 9-10, 13, 15-17). After surveying previous Marxist discussions of the question of capitalist collapse, the book moved from an abstract to progressively more concrete levels of analysis. The second chapter examined the law of collapse when a number of simplifying assumptions were made. The third dealt with counter-tendencies to the law, as these simplifying assumptions were lifted. The conclusion<sup>7</sup> took this further by considering the relationship between the law, the class struggle and the concentration of capital.

## A. The logic of capital accumulation

In his 1919 lecture and the study of Sismondi's economic theory, Grossman had maintained that the contradiction between use value and exchange value is vital to Marx's theory of crisis, a point neglected by earlier Marxists (Grossman 1922, Grossman 1924 p. 59).8 A presentation of capitalist production as the contradictory unity of a labor process and a valorization process also lay at the heart of the different, but complementary argument that was the core of *The law of accumulation* (Grossmann 1929b pp. 61, 144-147).

Commodities, as use values, satisfy human needs. The process of capitalist development involves the potentially unrestricted growth of the production of use values, given the capacity of human needs to expand and change. Production, however, is not undertaken to satisfy human needs, but to produce profits, that is additional exchange value for capitalists.

From a purely technological aspect, as a labor process for the production of use values, nothing could impede the expansion of the forces of production. This expansion encounters a barrier in the shape of the valorization process, the fact that the elements of production figure as capital which must be valorized. If profit disappears the labor process is interrupted (Grossmann 1929b pp. 119, 123-124).

Grossman demonstrated how this happens by using a reproduction scheme based on one elaborated by Bauer (1913), who in turn drew on Marx's model in the second volume of *Capital*. This model involves assumptions about the combination of constant capital and variable capital and generates a specific pattern of growth. As a first stage in the analysis of the tendency to capitalist collapse, Grossman used the model because it abstracted from less fundamental aspects of the system such as momentary fluctuations in prices, deviations of prices from values, unevenness in the development of productivity. These considerations were reintroduced at a later stage, as in Marx's analysis, once the basic features of capitalism had been exposed.

The choice of Bauer's model was, in part, a political one, designed to discredit Bauer's conclusions on the basis of his own assumptions.

Bauer's model realistically assumed a higher rate of accumulation of constant than variable capital. Capitalists will try to reduce the value of the commodities they produced so that they can undercut their rivals. Increasing the productivity of their workers by introducing new and more expensive

machinery and technology is an effective way of doing this. As total output grows, constant capital will tend to expand more rapidly than variable capital. So there will be a rise in the relative weight of constant capital in capitalists' total outlays, known as 'the organic composition of capital'. It is the variable capital alone, however, that produces new value. As profits are measured against total outlays, a decline in the weight of value-creating variable capital will mean a fall in the rate of profit, if the rate of surplus value (the ratio of new value to the value of the labor power which created it) is held constant. To the extent that capitalism increases the productivity of human labor and accelerates the production of use values, it is therefore also characterized by a tendency for the rate of profit to fall. For Grossman, this tendency was the key to capitalist breakdown.

The rate of profit declined in Bauer's model. But he and his fellow neo-harmonists thought that the rate of profit could tend downwards, indefinitely getting closer and closer to zero without ever disappearing entirely. Grossman demonstrated why this is not the case and his explanation remains important.

Bauer had let his model run for seven years and argued that it demonstrated that capitalism could go on forever, without crises so long as the output of exchange values from different industries (simplified in the model to two 'departments' of production, producing means of production and means of consumption) was kept in the correct ratios. Grossman simplified the model even further, eliminating distinct departments of production, and let the model go on for 36 years. He found that it ran into difficulties after year 34 and collapsed entirely in year 36 (Grossmann 1929b pp. 74-77, 168).

Beyond a certain point in the accumulation process, although the mass of profit continues to rise, it is insufficient to sustain production. In the Bauer/Grossman model, the incentive for capitalist investment already begins to decline after 20 years when the absolute amount of surplus value available for the private consumption of the capitalists has to fall, if the rate of accumulation of constant and variable capital is to be maintained. At this stage, capitalists will start seeking other outlets for profitable investment, outside production, notably in speculative activity and the export of loan capital (Grossmann 1929b p. 189, 191-192). In year 35, no surplus value is available for capitalists' private consumption and surplus value is insufficient to cover investment in additional constant and variable capital, as specified in the assumptions of the model.

So either working class wages have to be reduced or previous assumptions [of the model] must be broken. In particular the assumption that, with a 5% annual increase in population, constant capital must accumulate at 10% a year if technological progress is to match population growth has to be lifted... The tempo of accumulation must decline **from now on** and indeed slow down continuously and progressively. Accumulation cannot keep up with population growth. Fewer and fewer machines etc than are really required can be put in place, which means nothing else than that the development of the productive forces is constrained. As a consequence, from this year on an increasingly large reserve army [of unemployed workers] emerges. The slowing of the tempo of accumulation and the emergence of a reserve army occur, not as Bauer thinks, because wages have risen, but despite the fact that, in accord with our assumption, wages have been constant for the whole time! (Grossmann 1929a pp. 136-137)

Not only does the rate of profit in the Bauer/Grossman model fall but the rate of growth of the mass of profit (which remains constant at 5% per annum, reflecting the rate of growth of variable capital) also falls behind the rate of growth of the total value of production, (which asymptotically approaches 10% per annum). So a point is eventually reached when the increase in mass of profit is not large enough to cover the projected increase in investment, which is growing at a higher rate. The rate of profit cannot, therefore, fall indefinitely. Whatever the rate of accumulation assumed in the model, the rate of profit eventually declines to a level at which the mass of surplus value is not great enough to sustain that rate of accumulation (Grossmann 1929b p. 103, Grossmann 1932a pp. 331-332). It was this mechanism, which he saw as intrinsic to the process of capital accumulation,

that Grossman regarded as 'the decisively important' factor in Marx's theory of economic crisis and breakdown (Grossmann 1929b p. 183). What is more,

The limits to accumulation are specifically capitalist limits and not limits in general. Social needs remain massively unsatisfied. Yet from the standpoint of capital there is superfluous capital because it cannot be valorized. (Grossmann 1929b pp. 189-190)

Grossman developed a formula for calculating when this point is reached, in order to highlight the factors which slow down or accelerate the collapse. The crisis is accelerated by a higher organic composition of capital and a faster rate of accumulation of constant capital. The effect of a rise in the rate of accumulation of variable capital is ambiguous, while a higher rate of surplus value slows down the tendency for capitalism to break down (Grossmann 1929b pp. 96-101).

The onset of a crisis, as a consequence of capitalism's tendency to break down, does not mean, Grossman insisted, that capitalism is doomed.

Obviously, as Lenin correctly remarks, there are no absolutely hopeless situations. In the description I have proposed the breakdown does not necessarily have to work itself out directly. Its absolute realization may be interrupted by counteracting tendencies. In that case the absolute breakdown would be converted into a temporary crisis, after which the accumulation process picks up again on a new basis. In other words the valorization of the overaccumulated capital can be met through capital exports to countries at a lower stage of accumulation. Or a sharp devaluation of the constant capital during the crisis might improve the prospects for valorization. Or wage cuts could have the same effects in terms of warding off the catastrophe. But quite apart from the fact that all these situations violate the assumptions postulated in Bauer's scheme, these solutions would have a purely temporary impact. Restored accumulation will again generate the very same phenomena of overaccumulation and imperfect valorization. (Grossmann 1929b pp. 95-96)

Before, in and after *The law of accumulation*, the purpose of Grossman's argument about capitalism's tendency to break down was to clarify the necessity for revolutionary practice and the context in which it could take place: the relationship between objective and subjective factors in the revolution. Lenin's (and Grossman's) point about the mistake of identifying even deep crises as insoluble was that '[t]he revolutionary parties must now "prove" in practice that they have sufficient understanding and organization, contact with the exploited masses, and determination and skill to utilize this crisis for a successful and victorious revolution' (Lenin 1920a pp. 226-227).

By following Marx in progressively dropping the simplifying assumptions of his initial model, Grossman brought his analysis closer to concrete reality. With the introduction of offsetting mechanisms, capitalism's tendency to break down will take the form of recurring crises, rather than an uninterrupted collapse. 'In this way the breakdown tendency, as the fundamental tendency of capitalism, splits up into a series of apparently independent cycles which are only the form of its constant periodic assertion' (Grossmann 1929b p. 85). A crisis is itself, what is more, 'from the standpoint of capitalist production, a healing process through which the valorization of capital is restored' (Grossmann 1929b p. 99). As part of the process of approaching the real world step by step, after using a simple model to identify fundamental features of capitalism, now labelled 'Marx's *Annäherungsverfahren*' (Grossmann 1929a p. vi), Grossman also brought the credit system into the discussion. This enabled him to identify the characteristic lower interest rates in the early stages of a recovery and, subsequently, rising levels of interest, as the pace of accumulation increased (Grossmann 1929b pp. 112-117).

#### B. Countertendencies

The third chapter in *The law of accumulation* examined modifying countertendencies to the tendency for the rate of profit to fall.

The capitalist's continual efforts to restore profitability might take the form of reorganising the mechanism of capital internally (for instance, by cutting costs of production, or effecting economies in the use of energy, raw materials and labor power) or of recasting trade relations on the world market (international cartels, cheaper sources of raw material supply and so on). This involves groping attempts at a complete rationalization of all spheres of economic life. (Grossmann 1929b p. 133)

The process of capital accumulation itself lowers the value of both variable and constant capital. A consequence of the introduction of new technology and superior means of production is that commodities can be produced with the expenditure of less labor. This applies to both means of production, equipment, machinery etc, and to the means of consumption that workers require to reproduce their labor power. If means of production are produced at a lower cost, the organic composition of capital will decline and the rate of profit will rise. Nevertheless,

the factors which bring about the tendency for the rate of profit to fall indeed win the upper hand 'in the long run', because in the end there really is an increase in the productive forces of *all* branches of industry. Temporarily, in specific branches of a particular industry, the tendency for the rate of profit to fall can, however, be checked and indeed because the elements of constant and variable capital are cheapened. (Grossmann 1929a pp. 311, 329, also Grossmann 1929b pp. 137-138)

In the short term, random improvements in the productivity of labor may reduce the value of the constant capital more than that of the variable capital in a branch of industry, lowering the organic composition of capital and raising the rate of profit. But in the longer term, declines in the value of constant and variable capital balance out. What remains is the incentive, outlined by Marx at the end of the chapter on 'The law itself' in the third volume of *Capital*, to increase the productivity of human labor (and the profitability of the first capitalists to innovate) by raising the organic composition of capital (Marx 1894 p. 338).

Cheapening the cost of variable capital increases the rate of surplus value, by reducing the proportion of the working day workers have to spend reproducing their labor power. The depression of wages below the value of labor power has a similar effect. Both raise the rate of surplus value, increasing the rate of profit and postponing the onset of crises. What is more, according to Marx '[t]he tendency for the rate of profit to fall is tied up with a tendency for the rate of surplus value, that is the rate at which labor is exploited, to rise' (Grossmann 1929b p. 316). Desirable as the defence of working class living standards is for its own sake, Grossman pointed out that

Once this connection is clear, we have a means of gauging the complete superficiality of those theoreticians in the trade unions who argue for wage increases as a means of surmounting the crisis by expanding the internal market. As if the capitalist class is mainly interested in selling its commodities rather than the valorization of its capital (Grossmann 1929b p. 140).

Workers are, of course, entirely right to struggle for higher wages or against wage cuts. But, to the extent that they are successful, their actions will prevent employers from increasing the rate of profit or will reduce it. Wage increases intensify rather than alleviate crises deriving from the tendency for the rate of profit to fall.

Grossman identified a series of other factors which affect the rate of profit. Decreasing the turnover time of capital means that it can give rise to more surplus value. This can also free a portion of money capital for productive investment. New commodities may emerge whose organic composition of capital is lower than the average, giving rise to a higher average rate of profit (Grossmann 1929b pp. 147-149). The extension of capitalist production on the basis of existing technology--simple accumulation--will slow the tendency for the rate of profit to fall (Grossmann 1929b pp. 154-155). As the ability of productive capitalists to dominate the whole of the circuit of capital grows, they are in a better position to reduce deductions from surplus value, in the form of

the claims of landowners (groundrent), commercial capitalists (commercial profit) and banks (interest) (Grossmann pp. 149-152, 199-200). Decreasing the income of intermediate social strata, bureaucrats and professionals, who are not involved in production has a similar effect (Grossmann 1929b pp. 153-154). 'From the Marxist theory of accumulation it follows that war and the destruction of capital values bound up with it weaken the breakdown and necessarily provide a new impetus to the accumulation of capital'. Militarism 'pulverizes values instead of "saving" them' and slows down the rate of accumulation (Grossmann 1929b p. 158).

For Grossman, as for Luxemburg, 'the growing tendency to break down and the strengthening of imperialism are merely two sides of the same empirical complex'. He expanded the argument, previewed in his critique of Sternberg, that imperialism was a means of 'securing the flow of additional surplus value from outside' a country (Grossmann 1929a pp. 296-297, 300). Just as the diversification of domestic economies into new areas of production expands the scope for creating surplus value by making different use values, so foreign trade slows the breakdown tendency by increasing the variety of use values. Foreign trade also raises profit rates by allowing greater economies in the scale of production and distribution (Grossmann 1929b pp. 166-168).

The formation of a world rate of profit means that trade involves the transfer of surplus value from less to more developed countries. Commodities produced with a lower organic composition of capital sell below their value, while those produced with a higher organic composition sell above theirs. This was a rigorous formulation of a theory of 'unequal exchange', a term Grossman used, long before the idea became fashionable in the 1970s (Grossmann 1929b p. 172; also Grossmann 1929c pp. 305-338). 4 'At advanced stages of accumulation, when it becomes more and more difficult to valorize the enormously accumulated capital, such transfers [from underdeveloped to developed countries] become a matter of life and death for capitalism. This explains the virulence of imperialist expansion in the late stage of capital accumulation' (Grossmann 1929b p. 172).

Other aspects of imperialism, the pursuit of cheap raw materials and efforts to achieve monopoly control over them, at the expense of competitors, can help overcome falling profit rates in particular enterprises, industries or countries (Grossmann 1929b pp. 174-179). The export of capital, in the form of loans, credits and speculative investments, is also driven by concern over the rate of profit (Grossmann 1929a pp. 498-499, Grossmann 1929b pp. 180-181 193). At best, previous Marxist treatments of the subject, after Marx, had only provided empirical descriptions. Although 'he makes many acute observations', Grossman wrote that this was true of Lenin's treatment of capital export (Grossmann 1929a pp. 519-520). Rather than being directly related to the level of monopolization of industry, as Lenin suggested, capital export is a consequence of the lack of opportunities for adequate returns on investments of liquid funds, due to low profit rates, and the inability of productive investments at home to increase the mass of surplus value, that is, of capitalism's tendency to break down (Grossmann 1929a pp. 527-529, Grossmann 1929b pp. 180, 187-188). Gambling on the stock exchange has a similar logic (Grossmann 1929b p. 192).

Today, Grossman argued, because of the advanced stage of accumulation and obstacles to profitable new investment, capital export is an ongoing phenomenon (Grossmann 1929b p. 194).

It is also, therefore, clear that the struggle for spheres for investment is also the greatest danger to world peace. That this does not involve prediction of the future should be clear to anyone who studies the methods of 'Dollar Diplomacy' with the appropriate attention. (Grossmann 1929a p. 572, Grossmann 1929b p. 197)

#### C. Breakdown and revolution

The final chapter of *The law of accumulation* was designed to demonstrate the relationship between capitalism's tendency to break down, the class struggle and revolution. It completed the transition from studying capitalism's breakdown tendency at a highly abstract, simplified level of analysis to a concrete account of its operation in the real world of contending classes. On the basis of the preceding discussions of the logic of capital accumulation, the argument returned to the book's

fundamental concern, announced in its preface, the 'economic aspect' of political revolution: the implications of the breakdown tendency for the working class's seizure of political power.

At the heart of the relationship between accumulation and class struggle is the question of workers' conditions of life. In his version of Bauer's model, Grossman demonstrated how real wages rise for a period but then run into an obstacle.

Here is the objective limit of trade union action. Beyond a certain point in accumulation, the surplus value available does not suffice to maintain accumulation at a given level of wages. Either wages must be depressed **below** their previous level--or accumulation must come to a halt, the breakdown of the capitalist mechanism. The development thus presses on, unfolding and sharpening the inner contradictions between capital and labor, until a resolution can only be achieved through **struggle** (Grossmann 1929a pp. 590-591, 595-599)<sup>13</sup>

Under these circumstances, capital's success in the struggle means that wages are pushed down below the value of labor power and labor power cannot be fully renewed.

If the largest and most important force of production, human labor power, is thus excluded from the fruits of civilized progress, it is at the same time demonstrated that we are approaching ever closer to the situation which Marx and Engels already foresaw in the *Communist Manifesto*: 'the bourgeoisie is unfit to rule because it is incompetent to assure an existence to its slaves within their slavery'. This is also the reason why wage slaves must necessarily rise against the system of wage slavery. (Grossmann 1929a p. 600)

Hilferding and other reformist economists argued that the theory of breakdown should be rejected because it led to the conclusion that the working class should fatalistically await the mechanical demise of capitalism. The relationship between capitalism's breakdown tendency and the class struggle is, according to Grossman, a more complicated and dialectical one. Class struggles over the level of exploitation shape the actual course of the system's tendency to break down. Which side, bosses or workers, wins in confrontations over wages and conditions has important implications for capitalism's ability to survive. If workers are successful in such conflicts,

a decline in the rate of surplus value and consequently an **accelerated** breakdown of the capitalist system will occur ... It is thus apparent that the idea of breakdown, necessary on objective grounds, definitely does not contradict the class struggle. Rather, the breakdown, despite its objectively given necessity, can be influenced by the living forces of the struggling classes to a large extent and leaves a certain scope for active class intervention.

. . .

Only on the basis of our description of capital accumulation is it possible to understand the fact that, at higher levels of accumulation, the struggle over the division of revenue is not merely a struggle over the living standards of the classes involved. It is also a **struggle over the existence of the capitalist mechanism** itself. Only now is it possible to understand why, at a high level of capital accumulation, every serious rise in wages encounters greater and greater difficulties, why every major **economic** struggle necessarily becomes a question of the existence of capitalism, a **question of political power**. (Note the English miners' struggle, 1926.)

The struggle of the working class over everyday demands is thus bound up with its struggle over the final goal. The final goal for which the working class fights is not an ideal brought into the workers' movement 'from outside' by speculative means, whose realization, independent of the struggles of the present, is reserved for the distant future. It is, on the contrary, as the law of capitalism's breakdown presented here shows, a

result of immediate everyday struggles and its realization can be accelerated by these struggles. (Grossmann 1929a pp. 601-603)

Grossman's argument about the relationship between immediate struggles and revolution recalled that against the opportunism of the Polish Social Democratic Party in his Bundism in Galicia. There he not only rejected the reformist separation of the socialist goal from day to day struggles, but affirmed the role of the working class as both a product and a creator of history (Grossman 1907 pp. 35, 41, 45-46). Later, these were precisely two of Lukács' main arguments in *History and class* consciousness. Giacomo Marramao was spot on in pointing out that '[i]t is no accident that it is precisely in Lukács' History and class consciousness that one finds the philosophical equivalent of Grossmann's great attempt at a critical-revolutionary re-appropriation of Marxian categories' (Marramao 1975 p. 64 also Marramao 1975-76 pp. 162-163, Lukács 1923 pp. 30, 40, 70). Just as Lukács restored contradictory class interests and perspectives to the centre of Marxist philosophy, Grossman restated the way they had been at the centre of Marx's economic theory. Both drew on Lenin; something that neither Marramao nor Grossman's Council Communist supporter, Paul Mattick, acknowledged. Lukács and Grossman endorsed Lenin's reappropriation of Marx's argument that the capitalist state had to be smashed through conscious working class action, and the lessons of his work in building a political party that grew out of and sustained working class struggles.14

At the end of his book, Grossman sought to influence the shape of working class consciousness which he (and Lenin and Lukács) regarded as so crucial for the success of the socialist revolution. He did so by demolishing the economic foundations for the most influential reformist argument in the labor movement.

As both an economic theorist and parliamentary leader, Hilferding was a particularly prominent contemporary advocate of a peaceful road to socialism. He maintained that there was a spontaneous evolution towards 'organized capitalism' with the concentration of capital and establishment of trusts and cartels. Such a development increased the scope for planning under capitalism, as opposed to competition, and the possibility of avoiding economic crises due to the anarchy of production. It was therefore possible for the working class to take state power, by parliamentary means, and thus take control of the economy which was being more and more centrally organized and directed by the capitalists. From this perspective, the transition to socialism was already underway (Hilferding 1982 pp. 214-236).

Hilferding, Grossman pointed out, had a restricted understanding of competition:

The more free competition is replaced by monopoly organization on the domestic market, the more competition sharpens on the world market. If a river's flow is artificially blocked with a dam on one side of the stream, it presses on with even less restraint on the side that is still open. Whether accumulation of capital within the capitalist mechanism occurs on the basis of competition amongst individual entrepreneurs or a series of cartelized, capitalist production associations struggling against each other is irrelevant for the emergence of the tendency to break down or crisis. (Grossmann 1929a p. 606)

Capitalism is a global system that makes effective planning in individual countries impossible.

If, as Grossman had argued in the previous six hundred pages, capitalism's crisis tendency does not arise directly from competition and the anarchy of production but rather from the overaccumulation of capital and its effects on the rate of profit, then organized capitalism will not resolve the underlying problem (Grossmann 1929a pp. 610-619).

Grossman ultimately attributed capitalism's breakdown tendency to the contradiction between capitalist production as both a labor process and a process driven by the creation of value through the exploitation of wage labor:

As a consequence of this fundamentally dualist structure, capitalist production is characterized by insoluble conflicts. Irremediable systemic convulsions necessarily arise from this dual character, from the immanent contradiction between value and use value, between profitability and productivity, between limited possibilities for valorization and the unlimited development of the productive forces. This necessarily leads to overaccumulation and insufficient valorization, therefore to breakdown, to a final catastrophe for the entire system (Grossmann 1929a pp. 619-620).<sup>15</sup>

The capitalist valorization process also conceals the labor process. Both the fetishism of commodities and capitalism's tendency to break down therefore have their roots in the double nature of production under capitalism. Freed of the valorization process, Grossman argued, production could be organized on a social basis and become a technical labor process, without crises and without the mystification that arises from the commodity form:

Where the social interrelations of individual production processes are directly determined and planned, there is no room for the law of value, whose most important task consists in the production of these social interrelations. Social equilibrium, **calculated in advance**, no longer has to be restored **subsequently** by means of the mystical veil of value. (Grossmann 1929a pp. 621, 622)

Capitalism's crisis-prone logic and its mystification of that logic were core features of Grossman's and Lukács's understanding of Marxism, as both a critique of the established order and a practical theory of socialist revolution. *History and class consciousness*, however, focused on 'the ideological problems of capitalism and its downfall' and did not 'discuss the central importance of this problem for economics itself' (Lukács 1923 pp. 83-84). *The law of accumulation* therefore directly complemented Lukács's analysis, by exploring the economic roots and implications of commodity fetishism and their relationship to capitalist crises and revolution.

# III. AN ECONOMIC THEORY WITHOUT A POLITICAL HOME: THE RECEPTION OF GROSSMAN'S ARGUMENTS

Grossman's book quickly attracted very widespread attention in the German speaking world. Reviews appeared in at least five mainstream journals and the liberal daily *Frankfurter Zeitung*. The official theoretical journals of the German speaking social democratic parties reviewed *The law of accumulation*, the German Party's organ, *Die Gesellschaft*, twice. It was also discussed in the long established journal of the German Party's right and a publication of its left. Sternberg devoted a whole book to refuting Grossman's work and vindicating his own *Imperialism*. Not only did the KPD's most serious journal carry a long review, two substantial assessments appeared in the Comintern's German language theoretical organ. A little later, anti-Leninist Council Communists also debated the significance of Grossman's work (bourgeois reviews: Brauer 1929, Miksch 1930, Caspary 1930, Oppenheimer 1930-31, Vogel 1931, Muhs 1931; social democratic reviews: Braunthal 1929, Helene Bauer 1929, Schmidt 1929, Otto 1929, Gurland 1930, Sternberg 1930, Neisser 1931; communist reviews: Benedikt 1929, Kraus 1930, Varga 1930; council communist reviews and debates: Korsch 1933, Grundlagen 1933, Pannekoek 1934<sup>16</sup>).

The book soon had an impact on audiences who could not read German. Paul Mattick embraced Grossman's approach in 1931 and expounded it in the United States, in German and then in English (Mattick 1933, Mattick 1934a, Mattick 1934b). An extremely favorable French review appeared in 1932. In it Mohan Tazerout mentioned that a French translation was underway in Brussels (Tazerout 1932a p. 308 also Tazerout 1932b). The following year, Jean Duret also offered an account and a superficial critique of Grossman's theory (Duret 1933). Japanese Marxists were the first to benefit from a translation of the book, organized by the Marxist scholar Professor Yoshitaro Hirano and published in 1932 (Grossman 1932).

A few exceptions aside, *The law of accumulation* received a hostile reception. The judgments of the first reviews have been regurgitated ever since.

A brief description of Grossman's relationships with and comments, in his book, on eight of the people who subsequently reviewed it helps to explain their hostility. Helene Landau had been a supporter of the Polish Social Democratic Party when the Jewish Social Democratic Party of Galicia, under Grossman's leadership, split from it (Kuhn 2000, Kuhn 2001). Later she married Otto Bauer. Grossman used Otto Bauer's own reproduction model to refute his economic and political conclusions. The efforts of Professor Karl Muhs to refute Marx were given ungentle treatment in *The law of accumulation*, with its accessible and very aggressive polemical style (Grossmann 1929b pp. 93-94). Sternberg's views came in for a further drubbing in the book, on top Grossman's essay razing his *Imperialism*. By comparison, Grossman's criticism of Alfred Braunthal, who worked for the social democratic Research Center for Economic Policy in Berlin, was mild. Emanuel Hugo Vogel was dismissed as a typical bourgeois economist who denied the periodicity of crises and the possibility of determining the length of their phases. Grossman briefly paraded the early work of the grand old man of German social democratic economics, Conrad Schmidt, as an example of the impoverished state of the Marxist theory of wages. Much more space was devoted to attacking the arguments of his colleague at the University of Frankfurt, Oppenheimer, though Grossman acknowledged him as 'a sharp thinker' (Grossmann 1929a pp. 48, 88, 127, 165; Grossmann 1993 pp. 200-201, 500, 583). On the other hand, there was no qualification of the identification, in The law of accumulation, of the Communist Jenö Varga as an epigone of Marx, whose arguments were self-contradictory (Grossmann 1929a p. 517).<sup>19</sup>

Broader political considerations, however, underpinned the way Grossman's book was received. It is easy to understand the hostile responses of bourgeois critics: Leonhard Miksch, in the daily organ of the Frankfurt bourgeoisie, Adolf Caspary and Emanuel Vogel, a reactionary like Karl Muhs (who was soon praising the National Socialist 'revolution' (Muhs 1934 p. 2)), social reformers like Franz Oppenheimer or, for that matter, the social democrats. The contention that capitalism entails periodic and profound periods of economic crisis which generate revolutionary situations was bound to antagonize supporters of the existing order and advocates, even 'Marxist' ones, of reforming capitalism into socialism.

Communist attitudes were conditioned by the emergence of an orthodoxy in economic theory, based on Stalin's unchallengeable utterances and paralleling developments in many other areas, as his dictatorial, state capitalist regime in Russia consolidated its power. In 1930 Stalin anointed Varga as the high priest of this economic orthodoxy.

Many of the criticisms made of Grossman's book were based on politically expedient (deliberate or unintended) misrepresentations of his position. One, from social democrats and Communists, that he had a mechanical conception of capitalist breakdown and the transition to socialism, became the standard case for dismissing his analysis.

There was an important exception to the hostile Communist response to *The law of accumulation*. At the end of the 1920s, many Soviet economists 'were becoming alarmed at the tendency, particularly by Varga, to encourage revolutionary expectations by compromising Marxist theory', that is, by subordinating economic analysis to the immediate political priorities of the Russian state. Spektator (Miron Isaakovich Nakhimson), who explained crises in terms of disproportion between spheres of production, was one of those who attacked Varga's analysis. He also respected Grossman's analysis.

In *The law of accumulation*, Grossman had endorsed some of Nakhimson's positions and criticised others (Grossmann 1970 pp. 309, 437-438, 576). Spektator and his intellectual allies in the Soviet Union were no doubt happy to read Grossman's book. Their comrade in Frankfurt not only rejected Luxemburg's approach, which underpinned Varga's (Day 1981 pp. 148-151, 187, 202-211), and made sharp criticisms of Varga himself, but did so in a very prominent publication, from a standpoint which was not only Marxist but obviously sympathetic to Communism. In November

1930, Grossman was made a member of the International Agrarian Institute in Moscow, in recognition of the value of his book.<sup>21</sup> Nakhimson also invited his colleague in Frankfurt to visit the Soviet Union.<sup>22</sup> Grossman received the award just in time. 'After 1931 Soviet writers would disagree with one another within the bounds of discourse established by Stalin and Varga, but rarely would they overstep them' (Day 1981 p. 221).

#### IV. UNPUBLISHED RESPONSES TO CRITICS

The law of accumulation anticipated the two main criticisms made of it. One was that the book expounded a theory of automatic breakdown. The other, that there were countervailing mechanisms to the tendency for the rate of profit to fall, Grossman not only recognized but made a cornerstone of the structure of his book and of his discussion of Marx's method. While his critics focused on the cheapening of constant and variable capital as mechanisms which offset falls in the average rate of profit, Grossman identified not only these but numerous other processes which served to sustain or increase profitability.

In articles published during the 1930s and 1940s Grossman tacitly replied to accusations he had a mechanical theory of capitalist collapse which neglected the class struggle (by Braunthal, the Council Communist Pannekoek and the Communists 'Kraus', Otto Bendikt and Varga,) and that there were flaws in Bauer's original scheme (by the social democrats Arkadij Gurland, Sternberg and Hans Neisser). These responses are considered below. In correspondence during the early 1930s and unpublished notes Grossman also replied to criticisms of his book. He drafted rebuttals of Braunthal and Helene Bauer, in particular, refuting their assertions that his model was arbitrary, that it neglected the effects of the devaluation of constant and variable capital (as Braunthal, Helene Bauer, Vogel, Miksch, Muhs and Neisser had claimed) and that it predicted capitalism would break down solely because of low profit rates. Grossman addressed the relationship between his analysis of the class struggle and commented on the positions of Varga, Pannekoek and Korsch, in letters to Paul Mattick. He saw no point in replying to objections to his analysis (by Schmidt, Vogel, Oppenheimer, Caspary, Miksch and Muhs), based on the rejection of Marx's labor theory of value.

In notes on the reviews by Helene Bauer and Alfred Braunthal, Grossman wrote that their

proposition that devaluation of capital neutralizes the tendency to break down, necessarily entails the proposition that there is no development of an ever higher organic composition of capital in contemporary capitalist society!

The Marxist concept of a progressively higher organic composition of capital entails 2 different conclusions. First, the development of the productivity of labor means that the same mass of living labor (L) can set in motion an ever larger mass of means of production, that, as a consequence, the progress of the human economy is expressed in a progressively higher technical composition [of capital], in the relative increase of MP [means of production] in relation to L.

Second, with this technical progress, which is just another expression for the increase in the productivity of labor, the products of human labor (means of production and consumption) are <u>devalued</u>, that is cheapened. So we have two counterposed movements. On the one hand an ever <u>greater mass</u> of MP, on the other hand a cheapening of this mass of products.

Considered abstractly, one can imagine that the devaluation is <u>greater</u> than the increase in the <u>mass</u> of means of production. In that case, despite the ever larger mass of MP per worker, there would be a progressively <u>declining value</u> of this larger mass. Then it would be possible to speak not of a progressively higher organic composition, but merely a higher technical and a declining value composition [of capital]. A higher organic composition of capital implies that the means of production grow in both their

mass <u>and their value</u> compared with living labor. Both will move in the same direction (even if not at the same rate).

The question arises, how do things develop in reality? Is the <u>pace</u> of these two counterposed movements, growth in mass and decline in value, equal so that they <u>paralyse each other</u>? Or does the movement of one or the other predominate?

. .

Now the question of which of the two tendencies, growth in the mass or devaluation is stronger, that is, the question of whether devaluation occurs to the same extent as the growth in the mass of the MP and thus the growth in mass is paralysed by the decline in value, or rather whether devaluation is not as great and consequently that despite the devaluation of the MP, its value in relation to v grows, cannot be abstractly, deductively decided and has to be decided through empirical observation. Experience, indeed the experience of more than one hundred years, teaches that the value of constant capital, thus also of the total capital, in relation to variable capital grows more quickly than variable, that is, in the relationship c:v, c [constant capital] grows faster than v [variable capital].<sup>23</sup>

Grossman illustrated his case with US statistics for the period 1849 to 1919, which he had already cited, in part, in *The law of accumulation* (Grossmann 1929a pp. 289, 453). He also drew on Otto Bauer's observations about the relationship between the organic composition of capital and the ratio of the amount of new value created in a period (variable capital plus surplus value, V) to the total value of production (the sum of constant and variable capital and surplus value, P). From this empirical demonstration, Grossman moved on to reassert the connection between the tendency for the organic composition of capital to rise and capitalism's proneness to break down.

If, then, Helene Bauer wants to contradict the tendency to collapse and show that, through the devaluation of capital the mass of surplus value in relation to this total capital is <u>not</u> exhausted, does <u>not decline</u>, she has to demonstrate the <u>incorrectness</u> of the empirical fact of the progressively higher organic composition of capital or, to speak with Otto Bauer, she has to demonstrate that the law of the 'decline of V/P is incorrect'.

It is an impermissible contradiction--thoughtlessness[--]to talk about the fact of the progressively higher organic composition of capital and at the same time to assert that <u>devaluations</u> neutralize the tendency to break down, i.e. to deny the fact of the higher organic composition of capital...

But if the tendency to a higher organic composition of capital, that is to a relative decline in living labor, exists then the tendency to break down results from the progress of capital accumulation and at a certain level a <u>continuously larger part</u> of the newly created value product will be accumulated as additional capital.<sup>24</sup>

The portion of surplus value that has to be invested to sustain the accumulation process

grows relative to the total mass of living labor and, with a correspondingly large growth of constant capital, entirely swallows the <u>mass of value</u> created by living labor, surplus value and the wage fund.<sup>25</sup>

Beyond this point, accumulation cannot continue.

Having used Otto against Helene Bauer, Grossman restated the importance of taking the use value side of the process of accumulation into account. When commodities are treated as use values as well as exchange values, Otto's utopia of proportional accumulation falls apart.

In addition, when one does not start with the <u>individual commodity</u> but considers the <u>total mass of commodities</u>, devaluation has indifferent consequences. The 100,000 workers in the scheme indeed produce a tremendously greater mass of use values with

the same amount of labor, as the total outlay on labor has not changed. The total mass of value is unchanged even if the individual commodity is cheaper. There are now more things that the value (v+s) represents, but the amount of new value v+s produced by the same number of workers has not changed. And the same is the case with the c part in Department II [producing means of consumption]. It incorporates more commodities, useful things. Each individual commodity is cheaper, but the size of the total mass of commodities has, nevertheless, the same value which is consumed and carried over to the annual product.

If the objection that devaluation is not considered has any meaning at all, then it is only that one's starting point is <u>useful things</u>. Let us assume that the entire rural economy uses 1,000 electric ploughs (each with a value of £80=£80,000) which are sufficient to work the available land. If productivity now doubles, so that with the same labor 2,000 electric ploughs can be produced, then the rural economy will not be able to buy them, as they are superfluous. Devaluation must have the consequence that the rural economy now only buys 1,000 ploughs, each with a value of £40=£4,000. Consideration of devaluation shows the unsaleability of the product, the disruption of all the proportions worked out so arduously by Otto Bauer.<sup>26</sup>

In response to Braunthal's assertion that the devaluation of variable capital and a higher rate of surplus value would counteract the long term tendency for the rate of profit to fall, Grossman, in another manuscript, asked for references and evidence. Braunthal had provided neither.<sup>27</sup> Elsewhere, he dealt with Braunthal's joke about impoverished capitalists (also told by Helene Bauer and retold by Muhs), the role of the class struggle and the place of Otto Bauer's reproduction scheme in his own work.

Br referred, with a comic smile, to the fact that Marx predicted an intensification of proletarian poverty, whereas I, on the other hand, deduce the breakdown of capitalism 'from a kind of impoverishment of the capitalists'. From Otto Bauer's numerical example, I deduce the 'amazing result' that the entrepreneur's revenue not only declines relatively, but after the 21st year declines absolutely and finally in the 35th year disappears entirely. That is, supposedly, 'in brief the idea underlying' my theory of socalled overaccumulation (p. 294). There is not a trace of this in my work. Nowhere have I said that capitalism will go under due to the impoverishment of the capitalists. I showed, rather, that an increasingly large part of surplus value (A<sub>c</sub>) is, under the assumptions of Bauer's scheme, devoted to accumulation. The remainder, available for the consumption of the capitalists and workers, does not suffice. As a consequence an increasingly sharp struggle between workers and entrepreneurs over the level of wages necessarily flares up. If workers continue to receive the same wage, then nothing remains for the entrepreneurs. If, however, entrepreneurs maintain and where possible even increase their living standard, then they force down the level of wages, i.e. from this point on the impoverishment of the workers necessarily sets in. That, however, drives the workers to revolution...

Admittedly, nothing has yet been said about the <u>length of time</u> over which this tendency becomes apparent. The critique of Otto Bauer's equilibrium theory was made using his example and this showed that the tendency to break down emerged in 35 years. But the <u>length</u> of this period in itself has nothing to do with the idea I demonstrated and is a <u>coincidental</u> result of Bauer's concrete numerical example. This should go down on Otto Bauer's debit account, not mine. For, if Bauer's scheme is intended to illustrate contemporary capitalism, it shows an <u>entirely insufficient organic composition</u> of capital. It assumes as the social average a composition of 200,000c:100,000v; constant capital comprising only twice the value of yearly wages. Now <u>Engels</u> already gave 'an example of the <u>actual</u> composition of capital in large modern industries', from a cotton spinning factory in 1871 where a total capital of £12,500 was divided into £12,182

constant and £318 variable capital. In percentage terms the organic composition was 97½c+2½v=100C. The constant capital is 39 times larger than the variable. It is clear that today there is an even higher organic composition in large industries. For precisely this reason, Bauer's numerical example, with its unusually <u>low</u> organic composition is not a reflection of contemporary capitalism but expresses the low organic composition under capitalism in its early phases. And the long cycles of Bauer's scheme are precisely a consequence of this low composition, hence the necessity of calculations over 35 years. This is because the tendency to break down only takes effect in the late phase of accumulation when the organic composition is high. As a consequence <u>long</u> periods are necessary before Bauer's scheme, with its slow rate of accumulation, develops a high organic composition. With a higher organic composition assumed as a basis for the enquiry from the start, which would express reality, the cycles and with them the need for 'mathematical persistence' would be reduced. For this too O. Bauer is responsible, not I. I demonstrated my proof under conditions dictated by O. Bauer.

Let us assume that Br. does not hide behind the hardly valid proposition that Bauer's scheme is calculated 'indeed only for a short period', namely a period of 4 years (p. 300). In my critique of Bauer's equilibrium scheme, I give a variation of Bauer's scheme (on p. 225 of my book). It shows that with a higher organic composition of capital the reproduction process won't survive even for this 'short period' ...<sup>28</sup>

In *The law of accumulation*, Grossman's starting point was a variant of Bauer's scheme. As he now reiterated, he used this starting point precisely in order to refute Bauer's conclusions on the basis of Bauer's own assumptions. But Grossman proceeded by lifting Bauer's assumptions in order to generalize the argument and to indicate the consequences of the counter-tendencies to the tendency for the rate of profit to fall. In his correspondence with Paul Mattick, Grossman repeated this point, linking it to his conception of the relationship between capitalism's tendency to break down and revolutionary class struggles, and refuting the accusation that his account of capitalist collapse was mechanical.

But I did not want to give the impression that I derive the breakdown tendency from Bauer's scheme. Indeed, I emphasized in the book that Bauer's scheme is unrealistic. That position is a direct implication of my methodological piece on the 'Plan for Capital'; Bauer makes unrealistic, false assumptions and I just wanted to pursue his argument ad absurdam. Someone ironically said against me that in my book capitalism breaks down not as a result of the suffering of the workers but the suffering of the capitalists. This objection does not touch me but Bauer. That is a result of his scheme, as he assumes that capitalism at best accumulates at a rate of 10% a year and that workers, at best, receive a [total] wage that grows by 5% a year. In reality these assumptions do not apply. There are precisely struggles between workers and capitalists over the distribution of surplus value. It is insufficient for both an adequate level of wages and the required rate of accumulation. One can only be achieved at the expense of the other. Hence the intensification of class struggles. The development of the situation in the United States, England and Germany over the past two years confirms this diagnosis 100 per cent. I do not maintain that surplus value declines. It can grow. And nevertheless it is insufficient because accumulation (as it requires an ever greater organic composition) swallows a continuously larger part of the surplus value.<sup>29</sup>

If capitalists secure their income, then wages are insufficient and

an *objectively revolutionary* situation arises: the system shows that it cannot secure the living conditions of the population. From this *objective* situation and *through it* the class struggle *intensifies*. That is, the *subjective* factor, whether the working class through its struggles is capable of overturning the system, only becomes significant with the objective situation in this phase of development. Obviously the idea that capitalism must

break down 'of itself' or 'automatically', which Hilferding and other socialists (Braunthal) assert against my book, is far from being my position. It can only be overturned through the struggles of the working class.

But I wanted to show that the class struggle alone is *not* sufficient. The will to overturn capitalism is not enough. Such a will cannot even arise in the early phases of capitalism. It would also be [in]effective without a revolutionary situation.<sup>30</sup> Only in the final phases of development do the objective conditions arise which bring about the *preconditions* for the successful, victorious intervention of the working class. Obviously, as a dialectical Marxist, I understand that both sides of the process, the objective and subjective elements influence each other *reciprocally*. In the class struggle these factors fuse. One cannot 'wait' until the 'objective' conditions are there and only then allow the 'subjective' factors to come into play. That would be an inadequate, mechanical view, which is alien to me. But, for the purposes of the analysis, I had to use the process of abstract isolation of individual elements in order to show the essential function of each element. Lenin often talks of the revolutionary situation which has to be objectively given, as the precondition for the active, victorious intervention of the proletariat. The purpose of my breakdown theory was not to exclude this active intervention, but rather to show when and under what circumstances such an objectively given revolutionary situation can and does arise.

Bauer's scheme is insufficient on many grounds... I wanted to demonstrate that the result of even this, his mistaken scheme is breakdown and not equilibrium. I do not want, however, to identify myself with Bauer's scheme under any circumstances.<sup>31</sup>

The objections to *The law of accumulation* advanced by the social democrats Helene Bauer and Alfred Braunthal were more serious and thorough than those in reviews by Communists and Council Communists. A Council Communist critique, which Mattick had forwarded, Grossman dismissed, with justice, as 'thoughtless playing with words' and repetition of his own observations about the counter-tendencies to capitalist breakdown.<sup>32</sup> Mattick also arranged for the first issue of the Council Communist *Proletarier* to be sent to Grossman in 1933. It included a discussion of crisis theory by 'Ko' (Karl Korsch). To Ko's suggestion that crisis theory amounted to a Sorelian myth which gave heart to the proletariat, Grossman responded that the bourgeoisie 'will always remain the superior masters of this territory'.

Hitler showed exactly how far one can go with 'myths' alone and what one can achieve with them ... We, however, do not want to deceive ourselves or others. As a consequence, our activity has to be based on a theoretical understanding of the tendencies of development i.e. on the objective course of events.<sup>33</sup>

Grossman used a long essay in Elster's *Dictionary* to restate and clarify his innovations in Marxist economics. The essay was initially published as a pamphlet, in 1932, and is discussed below. In it and other, subsequent publications, Grossman emphasized that his analysis, far from denying the significance of the class struggle provided a context in which it could be understood and hence made more effective. But, in an unpublished note he made this point most concretely,

What was the year 1929 in the USA and the year 1931 in Germany and England if not a giant *breakdown*? The working class was not prepared for this. It did not have a Lenin, who awaited and worked towards such a moment. Rather, for decades it heard from Hilferding and Helene Bauer that a breakdown was impossible. Only such a disorientation of the working class made it possible for the ruling class to overcome the panic and to survive the breakdown.<sup>34</sup>

Grossman's personal situation gave him space to publicly advocate economic theories which did not accord with Stalinist orthodoxies and to articulate the kind of criticism of the Communist movement implied in this note. Thanks to the policies of the German and especially the Polish

authorities, Grossman, unlike Lukács who was still an important leader of the Hungarian Party (Löwy 1979 pp. 193-205, Arato and Breines 1979 pp. 190-200), was no longer a member of a Communist Party from about 1925. Although he was politically close to the KPD until 1933 and from the mid 1930s again an ardent supporter of the Soviet Union, he was therefore not exposed to the full blast of Communist discipline which suppressed all serious and open political discussion and debate in the ranks of the movement. Membership of the Institute, an apparently secure academic post in Germany and his certainly well-paid job insulated him from pressures to swallow Stalinist or social democratic orthodoxies in economics.

In *The law of accumulation*, Grossman disparaged 'Marx's epigones of all colors, from the reformists to the Communists' (Grossmann 1929a p. 326). But he did not use his considerable capacity for polemic and vituperation to respond to Varga in public. This was not out of sympathy for the newly anointed Tsar of Russian economics. In a letter to Mattick in mid 1931, the victim of Varga's onslaught explained that, incapable of responding to the criticisms of his own position in *The law of accumulation*, Varga had 'preferred to abuse me in a Communist journal. He hasn't gone into my argumentation and objections with a single word. As soon as I have the time, I will write a critique of Varga and illuminate this puffed up statistician from closer up.'35 The illumination never came. It was not difficult for Grossman to see that its publication would probably lead Communist officials to brand him as an enemy of the Soviet Union and the Communist movement, cut him off entirely from the political current with which he then sympathized and the largest audience of people who might be open to his ideas.<sup>36</sup>

The reason why Grossman did not respond to the criticisms Paul Sweezy made in 1942 were different. In the longer term, Sweezy's *The theory of capitalist development* did more than any other publication to popularize Grossman's work in English. It praised his treatment of finance capital and imperialism, but was very dismissive of his explanation of capitalism's breakdown tendency. Grossman did not think any of Sweezy's criticisms, some of which he had already dealt with in manuscript comments on Helene Bauer's and Braunthal's objections, undermined the argument in *The law of accumulation*. Bill Blake, a close friend, suggested that Grossman should publish a short reply. There wasn't much point, Grossman believed.

It is not so important for me to write a letter against the distortions of Mr Sweezy. If I will not be able to publish an English book on Marx, such a letter will not help. If I will publish a book, then I will crush him all bones and the reader will be able to judge himself which book give really superior interpretation of Marx theory.<sup>37</sup>

Unfortunately, a further forty five years elapsed before the appearance of an English translation *The law of accumulation*, with its refutations of underconsumptionist accounts of economic crises, like Sweezy's (Grossmann 1929b pp. 45-6, 105, 111, 132-133, 140).

# V. PUBLISHED RESPONSES

# A. The transformation problem

In a letter to Paul Mattick in 1931 and in notes on criticisms of his book, Grossman identified the question of the relationship between values and prices as an important issue in the theory of economic crises. During the summer semester of 1932, he pursued this issue in a course on 'The problem of the average rate of profit and modern economics'. Some of the results of this inquiry appeared in Grossman's essay in the first issue of the Institute's new journal, others remained unpublished.<sup>38</sup> The article, 'The value-price transformation' was, in part, a response to critics of *The law of accumulation*. In the essay Grossman again insisted that Marx's reproduction scheme served

**not to provide an image of concrete capitalist reality**, but is only a link in Marx's process of approaching it step by step which, together with the simplifying assumptions underpinning the scheme and the subsequent **modifications** in the sense of a progressive concretization, form an inseparable whole. (Grossmann 1932b p. 58)

Grossman's own treatment of the scheme had fully accorded with this conception. Its use by other Marxist economists had not.

The scheme assumed that commodities exchange between different departments of production (those producing means of production and means of consumption) at their value and, as a consequence, that there are different rates of profit in different departments, on the assumption that the rate of exploitation is the same in each. Thus the rate of profit will be lower in the more capital intensive department.

In reality profit rates tend to equalize, around a general, average rate of profit, across industries and departments. As a consequence, commodities do not exchange at their values. In the third volume of *Capital*, Marx accounted for this. He showed that market prices fluctuate around commodities' 'prices of production' and that these in turn can only be understood on the basis of the formation of the general rate of profit, which is underpinned by the value embodied in commodities. In other words, prices deviate from values, though in a systematic way. As a consequence, the process of reproduction and the proportions in which commodities are produced are governed by the general rate of profit and prices of production, and hence, indirectly, by their value.

The formation of the average rate of profit also has implications for the nature of the common interests of the capitalist class. Individual capitalists have an interest in the exploitation of the working class as a whole, as the profit they make is determined by the average rate of profit, not solely by the amount of surplus value extracted in their own enterprise (Grossmann 1932b pp. 59-63).

The general rate of profit is established through competition. Capitalists in capital intensive industries, that therefore have lower rates of profit if commodities are sold at their value, will tend to shift their capital and curtail their production. Shortages of the commodities they produce will lead to a deviation between these commodities' values and prices of production, which are bid up. As a consequence more surplus value is realized in such industries than was produced there and their profitability improves. The opposite process takes place in labor intensive industries. Overall, prices of production tend to deviate from values to the extent necessary to equalize the rate of profit. Grossman pointed out that, in thirty years of discussion of the problems of accumulation and crisis, no-one had taken account of this role of competition in Marx's theory. Here was a persuasive response to Sternberg's contention that Grossman had overlooked the importance of competition.

The efforts to account for economic crises in terms of disproportion between spheres of production, from Mikhail Tugan-Barnovsky's early discussion through to Nikolai Bukharin and Sternberg, Grossman noted, were all couched in terms of a reproduction scheme in which commodities exchanged at their values before the introduction of the general rate of profit. Yet the proportionality necessary to sustain capital accumulation is a proportionality established on the basis of prices of production/market prices.

It is different in my book, which is concerned with explaining the primary, general crises of overaccumulation that embrace all spheres of production at the same time. For society as a whole 'the distinction between values and prices of production loses all significance' ... as in this case they are of the same magnitude. (Grossmann 1932b pp. 63-64)<sup>39</sup>

Grossman now pointed out that he had demonstrated that the tendency to collapse was a feature of capitalism at a high level of abstraction, that of capital in general. His most abstract model incorporated the fundamental consequences of competition as the drive to accumulate in order to sustain the production of surplus value. But it abstracted from competition in the sense of market fluctuations in prices and, more profoundly, the mechanism of competition which establishes the average rate of profit and hence the deviation of prices of production from values. This was a tacit response to Gurland and Neisser, who had objected that Grossman had based his argument on Bauer's faulty reproduction scheme and failed to take the equalization of profit rates and hence the

transformation of values into prices of production into account (Gurland 1930 p. 79, Neisser 1931 p. 74). Theirs was a valid criticism of Bauer's original schemes. But, Grossman noted in 'The Value-Price Transformation', his own, modified version of Bauer's scheme did not include separate departments of production (Grossmann 1932b pp. 63-64). The different rates of profit in the two departments of Bauer's original meant that it was only applicable at the value level of analysis. Grossman's more abstract scheme, in contrast, was capable of representing developments in value or price of production terms.

## B. Marxism after Marx

One of Grossman's contributions to Ludwig Elster's *Dictionary of economics* was a survey of Marxism after Marx. The sections of 'Further developments in Marxism to the present' which dealt with 'The problems of imperialism and war' and 'The end of capitalism' included recapitulations and elaborations of Grossman's arguments in *The law of accumulation*. He again acknowledged the importance of Luxemburg's insistence, against the revisionists, that there were limits to capitalism's capacity to grow, while criticising her specific explanation of capitalism's breakdown tendency. Lenin's study of imperialism and critique of underconsumptionism, Grossman asserted, refuted her analysis. The pursuit of monopoly profits rather than markets explained imperialism (Grossmann 1932a pp. 318-322).

In the concluding section of his survey, Grossman counterposed his own account of capitalist crises and breakdown, deriving from the tendency for the rate of profit to fall, to Bukharin's general comments, the focus on problems of realization by Luxemburg and others, and the disproportionality school, deriving from Tugan-Baranovsky. At high levels of capital accumulation, Grossman pointed out, even if the absolute mass of surplus value was still rising, the decline in the *relative* mass of surplus value would eventually reach a point where, if the accumulation of constant capital was to be maintained, capitalists would have to try to reduce their outlays on variable capital or their own consumption. This would provoke sharp class struggles. If bosses were generally successful in these, labor power would not be fully reproduced, i.e. the working class would be paid less than the value of its labor power. If workers maintained their living standards, then the rate of accumulation would slow and technological change would stagnate. Because accumulation takes the form of investment in concrete use values, it will also ultimately become impossible to invest the arbitrarily small fragment of additional surplus value produced as the rate of profit declines (Grossmann 1932a pp. 328-333).

Counter-tendencies, Grossman explained, can temporarily off-set the decline in the rate of profit and moderate crises so that they do not result in total economic collapse. But the counter-tendencies become progressively weaker. 'If crisis, for him [Grossman], is a tendency to break down that has not fully unfolded, *then the breakdown of capitalism is nothing but a crisis that has not been limited by counter-tendencies*' (Grossmann 1932a pp. 332-335). He went on to emphasize, in what was clearly a response to critics of his book, that

for the proletariat, it can never be a matter of a fatalistic policy of waiting, that is, without actively intervening, for the 'automatic' collapse. Old regimes never 'fall' by themselves, even during periods of crisis, if they are not, precisely, 'overturned' (Lenin). The point of a Marxist theory of breakdown, according to Grossmann, consists only in the need to reject voluntarism and putschism, which regard revolution as possible at any time, dependent only on the subjective desire of revolutionaries, without considering whether the *situation is objectively revolutionary*. The meaning of a Marxist theory of breakdown is that the revolutionary action of the proletariat receives its strongest impulse only when the existing system is objectively shaken. This, at the same time, creates the conditions for successfully overcoming the resistance of the ruling classes. (Grossmann 1932a pp. 335-336)

#### C. The evolutionist revolt

Several of Grossman's later works clarified the originality of Marx's contribution to social theory. In 'The evolutionist revolt against classical economics', published in 1943, he argued that one of Marx's most important contributions was his demonstration that capitalism necessarily declines and disintegrates (Grossman 1943a, Grossman 1943b).<sup>40</sup> This Grossman identified with his account of Marx's theory of economic crisis. Recapitulating his Leninist analysis, he maintained

that no economic system, no matter how weakened collapses by itself in automatic fashion. It must be 'overthrown' ... 'Historical necessity' does not operate automatically but requires the active participation of the working class in the historical process.

. . .

The main result of Marx's doctrine is the clarification of the historical role of the proletariat as the carrier of the transformative principle and the creator of the socialist society ... In changing the historical *object*, the *subject* changes himself. Thus the education of the working class to its historical mission must be achieved not by theories brought from outside but by the everyday practice of the class struggle. (Grossman 1943b pp. 520-521)

As a young revolutionary leader, almost four decades earlier, Grossman had emphasized the centrality of class struggle to both the formation of working class consciousness and revolution (Grossman 1907 p. 45). Here, however, the relationship was formulated in particularly clear, Lukácsian/Hegelian terms. In his dialectical concept of history, Marx, Grossman insisted, 'follows Hegel, for whom history has both an objective and a subjective meaning, the history of human activity (historia rerum gestarum) and human activity itself (res gestas)' (Grossman 1943b p. 521).

#### VI. GROSSMAN RECOVERED

From 1927, at the latest, until the end of his life, Grossman regarded Marx's analysis of the relationship between the rate of profit and capitalist crises, to which he drew attention, as corollaries of and tools for understanding the working class's condition and promoting its struggle for human emancipation. He attributed capitalism's tendency to break down to the contradiction between the use value and exchange value aspects of commodities and capitalist production, ultimately to capitalism's creation of wealth in order to make profits rather than to satisfy human needs. Unlike underconsumptionist theories, this explanation also located the mechanisms responsible for crises in the production process itself. It was also compatible with a different obstacle to crisis-free accumulation, that Grossman identified: the importance of simultaneously maintaining proportional investment and output in both use value and exchange value terms.

For polemical purposes, Grossman used a version of Bauer's model of capital accumulation which had originally been developed to show that crisis-free growth was possible under capitalism, to demonstrate the opposite. His own version was specified so that it, unlike Bauer's original, would not be disturbed by the transformation of values into prices of production.

Bauer's assumptions were unrealistic and Grossman knew it. For this reason, he progressively relaxed them to make his analysis more concrete, applying the method Marx had employed in *Capital*. Far from neglecting countertendencies to the tendency for the rate of profit to fall, Grossman provided a far more systematic account of them than any of his critics. He discussed the impact of different rates of accumulation; cheapening of constant and variable capital; increases in the rate of surplus value; raising the turnover time of capital; lower deductions (in the form of commercial profit, groundrent and interest) from the profits of productive capital; and reduced outlays on unproductive services needed by capital. In his notes on Helene Bauer's and Braunthal's criticisms, he again addressed the question of the devaluation of constant capital, arguing that,

despite the fact that it undoubtedly occurred, it had proved insufficient to prevent the organic composition of capital from rising in the longer run.

Grossman highlighted the various mechanisms through which imperialist policies, in particular, could bolster the rate of profit in developed capitalist countries. They included the destruction of value through war; access to cheaper raw materials; monopolizing resources; and unequal exchange.

There will, no doubt, be further debate about the validity and applicability of Marx's and Grossman's theory of capitalist crises. But a serious appreciation of Grossman's work is incompatible the argument that his approach neglected or forgot the devaluation of constant capital in the course of the accumulation process and a range of other mechanisms which may offset the tendency for the rate of profit to fall.

There is no room for debate about a different aspect of Grossman's theory.

Grossman consistently emphasized that his economic analysis should be understood in the context of the Marxist theory of working class struggle and organization, revived and developed by Lenin. The work of Lenin, Lukács and Grossman were complementary efforts to recover Marxism from the orthodoxies of the Second International. Grossman sought to elucidate the conditions under which a revolutionary working class challenge to capitalist power could arise and be successful, so long as the movement was effectively organized and led. He regarded the Depression as a capitalist breakdown and therefore an opportunity for socialist revolution. The opportunity was missed because the working class lacked an effective revolutionary leadership.

The defenders of social democratic parties' and union movements' accommodation to capitalism and Stalinist apologists for counter-revolution in Russia who first reviewed Grossman's book had material interests in distorting his position. It is time to bury their spurious criticism that there was no place for the class struggle in his analysis.

# **ACKNOWLEDGMENTS**

I am grateful to Sam Pietsch, Rakesh Bhandari and Paul Zarembka for their insightful advice and comments on drafts of this article. Gerda and Kurt Kuhn, Mary Gorman and Alex Kuhn-Gorman have supported and tolerated my work on Grossman for a decade.

#### **NOTES**

- 1 He generally signed himself 'Henryk Grossman'. This was how his name appeared in Polish publications and those of his works whose appearance in English he oversaw himself. 'Henryk Grossmann' was the most common German rendition of his name and the one used in most of his own publications in German. In what follows the name under which each publication originally appeared is used.
- 2 'Arbeitsgemeinschaft zum Studium sowjet-russischer Planwirtschaft ("Arplan")' 1942-43, IV A 1 b 4764/42 Berlin 30.12.42, Reichssicherheitshauptamt, R59 St 3443 I, Bundesarchiv, Berlin.
- 3 See Grossman (1922) and Henryk Grossman 'Die Entwicklungstendenzen des "reinen" und des empirischen Kapitalismus', in original Folder 41 'Alte Mauskripte', 'Henryk Grossman', III-155, Archiwum Polskiej Akademii Nauk (APAN), with a preface dated 1926.
- 4 Here and elsewhere in this article the emphasis is in the original; in this case only the ellipses are also in the original. The Lenin quotations are from Lenin (1916 pp. 213-214, 228, 240); Grossman used the version in *Against the Stream*, a collection of Lenin's writing in 1915-1916.
- 5 On Oppenheimer's ideas see Preiser (1964 pp. 11-25).
- Henryk Grossman Curriculum vitae, January 1927, 'Heinrich Grossmann', Akten der WiSo Fakultät, Sig 45<sup>2</sup> Abt 150 Nr 376, Archiv der Johann Wolfgang Goethe Universität, Frankfurt am Main (UFM), p. 198; Carl Grünberg 'Gutachtlicher Bericht. Betr. Habilitation des Dr Heinrich Grossman. 27 Januar 1927', UFM, pp. 212-215.
- 7 The final chapter of Grossman's book is missing from the English edition, which is in any case a (generally good) condensation rather than a full translation.

8 Grossman's critique of the neglect of the use value side of the organic composition of capital by the 'epigones of Marx', in a page long footnote, is missing from the English translation, see Grossmann (1929a pp. 326-327, also p. 330).

- 9 Sam Pietsch pointed out to me that two steps in the derivation of Grossman's formula are misspecified in the translation of his book, Grossmann (1929b p. 97); cf. Grossmann (1929a pp. 184-185).
- Henryk Grossmann, "Das Problem der Durchschnittsprofitrate in der modernen volkswirtschaftlichen Theorie" von: Professor Henryk Grossmann', original Folder 37, in 1997 Folder 62, APAN, pp. 34-35.
- 11 Most of the empirical material is not in the English translation, see Grossmann (1929a pp. 450-470, 527-528).
- 12 A compressed version of Grossman's critique of the literature is in Grossmann (1929b pp. 179-185).
- For an illuminating account of Grossman's position that includes a translation of a section not included in Grossmann (1929b), see Lapides (1994).
- Lenin's recovery of Marxist politics was assisted by his engagement with Hegel (Lenin 1922 pp. 233-234, Lenin 1981 pp. 114, 130, 180, 182, 208, Rees 1998 pp. 184-194).
  - An interpretation of Grossman's work, originating with Martin Jay, has entirely misunderstood his perspective. Jay argued, in his influential and path-breaking account of the Frankfurt School, that Grossman 'had, however, absorbed his Marxism in the years when Engels's and Kautsky's monistic materialistic views prevailed. He remained firmly committed to this interpretation and thus largely unsympathetic to the dialectical, neo-Hegelian materialism of the younger Institut members' (Jay 1973 p. 17).
- Grossman foreshadowed this synthesis in the previous chapter of his book, 'The fundamental idea underlying Marx's scheme is the immanent contradiction between the drive towards an unlimited expansion of the forces of production and the limited valorization possibilities of accumulated capital' (Grossmann 1929a p. 190).
- 16 In addition to repeating Korsch's quotations and arguments about Grossman's position on class struggle, Pannekoek reiterated, also without acknowledgement, Varga's arguments and quotations from Grossman and Marx on imperialism.
- 17 Paul Mattick's review of *Das Akkumulations- und Zusammenbruchsgetz des kapitalistischen Systems* in *Chicagoer Arbeiter Zeitung* 5 1931, which I have not been able to read, was mentioned in a letter from Grossman to Mattick 21 June 1931 (Grossmann 1969 p. 89). Mattick soon reviewed Grossman's essays on Marx's plan for *Capital*, (Mattick 1931) then Grossman's 1932 essay on Marx's and Luxemburg's different accounts of the significance of gold production (Mattick 1932). Grossman mentioned a favorable article in *Modern Monthly* which Mattick had sent (and either written or inspired), letter from Grossman to Mattick 7 May 1933 (Grossmann 1969 p. 98).
- 18 'This method of criticising Marx only shows the unparalleled "thoughtlessness and superficiality" of Muhs himself' (Grossmann 1929a p. 158); 'There is not the least trace of any theory in Muhs' (Grossmann 1929b p. 94).
- 19 Grossman also mocked Varga for reproducing Böhm-Bawerk's fable that Marx skipped over the influence of competition on prices (Grossmann 1929a p. 438).
- Only one, favorable, reference to Nakhimson remains in the English translation of Grossmann's book (Grossmann 1929b pp. 199-200).
- Henryk Grossman 'Lebenslauf', 'Henryk Grossmann', Universitätsarchiv Leipzig, PA 40, pp. 64-66; letters from Grossman to Walter Braeuer 13 January 1948 and 25 June 1948, Braeuer Nachlaß, Johann-Heinrich von Thünen Museum, Tellow (Braeuer Collection). Grossman's correspondence with Braeuer is published in Scheele (1999 pp. 244-265).
- 22 Christina Stead notes, Box 6 Folder 45, Christina Stead Collection MS4967, National Library of Australia (Stead Collection).
- Henryk Grossman, manuscript starting 'Die Entwertung sollen die Zusammenbruchstendenz aufheben ...' in original Folder 45 'Stellungnahme zur Kritik am Hauptwerk', APAN (Entwertung). The emphasis is Grossman's rather than Bauer's.
- 24 Entwertung.
- 25 Entwertung.
- 26 Entwertung, cf Grossman (1922 and 1924).
- Henryk Grossman, manuscript starting 'Nach Braunthal, ging Marx von der Beobachtung aus...', in original Folder 45 'Stellungnahme zur Kritik am Hauptwerk', APAN.

Henryk Grossman, manuscript starting 'Br. verweist ...', in original Folder 45 'Stellungnahme zur Kritik am Hauptwerk', APAN.

- 29 Letter from Grossman to Mattick, 21 June 1931 (Grossman 1969 pp. 86-87).
- From the sense of this paragraph (and consistency with his argument elsewhere), Grossman seems to have left out a negative particle from this sentence.
- 31 Letter from Grossman to Mattick, 21 June 1931 (Grossman 1969 p. 88).
- 32 Letter from Grossman to Mattick, 7 May 1933 (Grossman 1969 pp. 98-99). Grossman was commenting on Grundlagen 1973.
- 33 Letter from Grossman to Mattick, 1 November 1933 (Grossman 1969 pp. 105-106).
- 34 Manuscript fragment, Original Folder 32, 'Henryk Grossman', III-155, Archiwum Polskiej Akademii Nauk (APAN), cited Scheele (1999 pp. 66-67).
- 35 Letter from Grossman to Mattick 21 June 1931 (Grossman 1969 p. 92).
- For recognition of the dangers of being identified as a heretic by the Communist movement, see letter from Grossman to Blake 10 July 1947, Box 17 Folder 125, Stead Collection.
- 37 Letter from Grossman to Bill Blake, 10 July 1947, Box 17 Folder 125, Stead Collection.
- Letter from Grossman to Mattick, 16 September 1931 (Grossman 1969 pp. 93-95). For Grossman's work on the transformation problem, also see Universität Frankfurt am Main 1932 p. 56; Grossmann 1932b; Henryk Grossman "Das Problem der Durchschnittsprofitrate in der modernen volkswirtschaftlichen Theorie" von: Professor Henryk Grossmann' original Folder 37, in 1997 Folder 62, APAN. There is also a manuscript presentation of the content of Grossman's course. The style, the way Grossman is referred to in the title and text, the presentation of Marx's arguments as Grossman's and the translation of Latin phrases, all indicate that the manuscript was a typed-up version of a student's notes, Henryk Grossman 'Zum Abschluss des Streites um die Wert-Preisrechnung im Marxschen System' original Folder 40, in 1997 Folder 63, pp. 36-44, APAN. Longer summaries of 'Zum Abschluss des Streites um die Wert- Preisrechnung' and 'Das Problem der Durchschnittsprofitrate' can be found in Scheele (1999 pp. 85-96).
- The first location Grossman refers to in *Das Akkumulations- und Zusammenbruchsgesetz* is missing from the English translation, the second has been edited down (Grossmann 1929a pp. 107, 211; Grossman 1929b p. 129). Howard and King apparently overlooked or did not understand the significance of this argument both in Grossman's book and this essay when, following Neisser (1931), they suggested that he should have conducted his own analysis of crises in terms of prices of production, (1989 p. 330).
- 40 This study was reprinted in Jessop (1990 pp. 253-74) and Blaug (1991, pp. 1-16).

#### REFERENCES

For a bibliography of Grossman's work see the Appendix to Kuhn (2000).

Arato, Andrew and Paul Breines, 1979. *The young Lukács and the origins of western Marxism*. Pluto, London, 190-200.

Bauer, Helene, 1929. 'Ein neuer Zusammenbruchstheoretiker'. Der Kampf, June 22 (6), 270-280.

Bauer, Otto, 1907. *The question of nationalities and social democracy*. University of Minnesota Press, Minneapolis, 2000.

Bauer, Otto, 1913. 'The accumulation of capital'. *History of Political Economy*, 18 (1), Spring, 1986, 88-110.

Benedikt, Otto, 1929. 'Die Akkumulation des Kapitals bei wachsender organische Zusammensetzung'. *Unter dem Banner des Marxismus*, 3 (6), 869-911.

Bernstein, Eduard, 1899. *The preconditions of socialism*. Cambridge University Press, Cambridge, 1993.

Blaug, Mark (ed.), 1991. *Thomas Tooke (1774-1858), Mountifort Longfield (1802-1884), Richard Jones (1790-1855)*. Elgar Reference Collection Pioneers in Economics, volume 18, Aldershot.

Brauer, Theodor, 1929. Review of *Das Akkumulations- und Zusammenbruchsgetz. Literarischer Handweiser: Kritische Monatsschrift*, July, columns 766-767.

Braunthal, Alfred, 1929. 'Der Zusammenbruch der Zusammenbruchstheorie'. *Die Gesellschaft: Internationale Revue für Socialismus und Politik*, 6, 2 (10), 280-304.

Caspary, Adolf, 1930. Review of *Das Akkumulations- und Zusammenbruchsgetz*. *Weltwirtschaftliches Archiv*, 32 (2), 81.

Cliff, Tony, 1975. *Lenin, volume 1: Building the party*. Pluto. London.

Day, Richard, 1981. The 'crisis' and the 'crash: Soviet studies of the West (1917-1939). NLB, London.

Duret, Jean, 1933. Le Marxisme et les Crises, Éditions d'aujourd'hui, Paris, 1977.

Gangl, Manfred, 1987. Politische Ökonomie und Kritische Theorie: Ein Beitrag zur theoretischen Entwicklung der Frankfurter Schule. Frankfurt/New York.

Grebing, Helga, 1977. Der Revisionismus von Bernstein bis zum 'Prager Frühling', Beck, München.

Greenspan, Alan, 1997. 'Turbulence in world financial markets'. Testimony before the Joint Economic Committee, U.S. Congress, 29 October.

Grossman, Henryk, 1905. *Proletariat wobec kwestyi żydowskiej z powodu niedyskutowanej dyskusyi w "Krytyce"* Drukani Wladyslawa Teodorczuka, Krakow.

Grossman, Henryk, 1907. Der Bundizm in Galitsien. Ferlag der Sotsial-democrat, Krakow.

Grossman, Henryk, 1922. 'The Theory of economic crises'. *Research in Political Economy*, 2000, 171-180.

Grossman, Henryk, 1924. Simonde de Sismondi et ses theories economiques. Une nouvelle interpretation de sa pensee. Bibliotheca Universitatis Liberae Polniae, fasc. 11, Warsaw.

Grossman, Henryk, 1932. Shihon no chikuseki narabi ni hokai no riron. Kaizosha, Tokyo.

Grossman, Henryk, 1943a. 'The evolutionist revolt against classical economics. I. In France-Condorcet, Saint-Simon, Simonde de Sismondi'. *The Journal of Political Economy*, 51 (5), October, 381-396.

Grossman, Henryk, 1943b. 'The evolutionist revolt against classical economics. II In England-James Steuart, Richard Jones, Karl Marx'. *The Journal of Political Economy*, 51 (6), December, 506-522.

Grossmann, Henryk, 1914. Österreichs Handelspolitik mit Bezug auf Galizien in der Reformperiode 1772-1790 Konegen, Wien.

Grossmann, Henryk, 1928. 'Eine neue Theorie über Imperialismus und die soziale Revolution'. *Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung*, 13, 141-192.

Grossmann, Henryk, 1929a. Das Akkumulations- und Zusammenbruchsgetz des kapitalistischen Systems (zugleich eine Krisentheorie). Verlag Neue Kritik, Frankfurt am Main, 1970.

Grossmann, Henryk, 1929b. *The law of accumulation and breakdown of the capitalist system: Being Also a theory of crises.* Pluto Press, London, 1992.

Grossmann, Henryk, 1929c. 'Die Änderung des ursprünglichen Aufbauplans des Marxschen "Kapital" und ihre Ursachen'. *Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung*, 14, 305-338.

Grossmann, Henryk, 1932a. 'Die Fortentwicklung des Marxismus bis zur Gegenwart', in Henryk Grossmann and Carl Grünberg, *Anarchismus, Bolschewismus, Sozialismus*. Europäische Verlaganstalt, Frankfurt am Main, 1971, 281-336.

Grossmann, Henryk, 1932b. 'Die Wert-Preis-Transformation bei Marx und das Krisenproblem', *Zeitschrift für Sozialforschung*, 1 (1), 55-84.

Grossmann, Henryk, 1969. 'Briefe Henryk Grossmanns an Paul Mattick über Akkumulation', in Henryk Grossmann, *Marx, die klassische Nationalökonomie und das Problem der Dynamik*. Europäische Verlaganstalt, Frankfurt am Main, 85-113.

Grundlagen, 1933. 'Die Grundlagen einer revolutionären Krisentheorie', in Karl Korsch, Paul Mattick and Anton Pannekoek, *Zusammenbruchstheorie des Kapitalismus oder revolutionäres Subjekt*. Karin Kramer, Berlin, 1973, 71-90.

Gurland, Arkadij, 1930. 'Absatz und Verwertung im Kapitalismus: Zur neueren Diskussion des Zusammenbruchsproblems'. *Der Klassenkampf*, 4 (3), 1 February, 75-83.

Hansen, F. R., 1985. *The breakdown of capitalism: A History of the idea in western Marxism, 1883-1983*. Routledge & Kegan Paul, London.

Harman, Chris, 1993. 'Where is capitalism going? Part II'. *International Socialism*, 58, Spring, 3-57.

Harman, Chris, 1984. Explaining the crisis. Bookmarks, London.

Haupt, Georges, 1972. *Socialism and the Great War: The collapse of the Second International.* Clarendon Press, Oxford.

Hilferding, Rudolf, 1927. 'Die Aufgaben der Sozialdemokratie in der Republik', in Rudolf Hilferding Zwischen den Stühlen oder über die Unvereinbarkeit von Theorie und Praxis: Schriften Rudolf Hilferdings 1904 bis 1940. J. H. W. Dietz, Bonn, 1982, 214-236.

Howard, M. C. and J. E. King, 1989. *A history of Marxian economics: volume 1. 1883-1929*. Macmillan, London.

Jay, Martin, 1973. The dialectical imagination. University of California Press, Berkeley, 1996.

Jessop, Bob (ed.), 1990. *Karl Marx's social and political thought: Critical assessments* volume 1. Routledge, London and New York.

Kautsky. Karl, 1899. Bernstein und das sozialdemokratische Programm: Eine Antikritik. Dietz, Berlin 1976

Kautsky, Karl, 1909. The road to power. Bloch, Chicago.

Kautsky, Karl, 1915. 'Ultra-Imperialism'. New Left Review, 59 January-February, 1970, 41–46.

Korsch, Karl, 1933. 'Über einige grundsätzliche Voraussetzungen für eine materialistische Diskussion der Krisentheorie', in Karl Korsch, Paul Mattick and Anton Pannekoek *Zusammenbruchstheorie des Kapitalismus oder Revolutionäres Subjekt*. Karin Kramer Verlag, Berlin, 1973, 91-98.

Kraus, 1930. 'Die marxistische Zusammenbruchstheorie' *Die Internationale*, 13 (1/2), 53-59, 13 (3), 89-96, 13 (4), 122-125.

Kuhn, Rick, 2000. 'Henryk Grossman, a Marxist activist and theorist: On the 50th anniversary of his death'. *Research in Political Economy*, 18, 111-170.

Kuhn, Rick, 2001. 'The Jewish Social Democratic Party of Galicia and the Bund', in Jack Jacobs (ed.) *Jewish Politics in Eastern Europe: the Bund at 100*. Palgrave, Basingstoke, 133-154.

Lapides, Kenneth, 1994. 'Henryk Grossmann on Marx's wage theory and the "increasing Misery" controversy'. *History of Political Economy*, 26 (2), Summer, 239-266.

Lenin, Vladimir Ilych, 1915. 'The collapse of the Second International'. *Collected works volume 21*, Progress Publishers, Moscow, 1980, 205-251.

Lenin, Vladimir Ilych, 1920a. 'Report on the international situation and the fundamental tasks of the Communist International', *Collected works volume 31*. Progress Publishers, Moscow, 1982, 215-234.

Lenin, Vladimir Ilych, 1920b. *Leftwing Communism-an Infantile Disorder*, *Collected works volume* 31. Progress Publishers, Moscow, 1966, 13-118.

Lenin, Vladimir Ilych, 1922. 'On the Significance of militant materialism', *Collected works volume* 33. Progress Publishers, Moscow, 1980, 227-236.

Lenin, Vladimir Ilych, 1981. 'Conspectus of Hegel's book *The science of logic'*. *Collected works volume 38*, Progress Publishers, Moscow, 85-241.

Löwy, Michael, 1979. Georg Lukács: from Romanticism to Bolshevism. NLB, London.

Lukács, Georg, 1923. History and class consciousness. Merlin, London, 1971.

Lukács, Georg, 1924. Lenin. NLB, London, 1970.

Luxemburg, Rosa, 1898-1899. Reform or revolution. Bookmarks, London, 1989.

Luxemburg, Rosa, 1913. The accumulation of capital. Routledge, London, 1963.

Marramao, Giacomo, 1975. 'Political economy and critical theory'. Telos, 24, Summer, 56-80.

Marramao, Giacomo, 1975-1976. 'Theory of the crisis and the problem of constitution'. *Telos*, 26, Winter, 143-164.

Marx, Karl, 1894. Capital volume 3 Penguin, Harmondsworth, 1981.

Mattick, Paul, 1931. Review of Henryk Grossman 'Änderung der ursprünglichen Aufbauplans'. *Chicagoer Arbeiter-Zeitung*, 1 (10), December, 3.

Mattick, Paul, 1932. Review of Henryk Grossmann 'Die Goldproduktion im Reproduktionsschema von Marx und Rosa Luxemburg'. *Der Freidenker*, 62 (24), 12 June, 5.

Mattick, Paul, 1933. 'Die Todeskrise des Kapitalismus' in Karl Korsch, Paul Mattick and Anton Pannekoek *Zusammenbruchstheorie des Kapitalismus oder Revolutionäres Subjekt*. Karin Kramer Verlag, Berlin, 1973, 100-112.

Mattick, Paul, 1934a. 'The permanent Crisis: Henryk Grossmann's interpretation of Marx' Theory of capitalist accumulation'. *International Council Correspondence*, 1 (2,) November, 1-20.

Mattick, Paul, 1934b. 'Zur Marx'schen Akkumulations- und Zusammenbruchstheorie'. in Karl Korsch, Paul Mattick and Anton Pannekoek *Zusammenbruchstheorie des Kapitalismus oder Revolutionäres Subjekt*, Karin Kramer Verlag, Berlin, 1973, 47-70.

Mattick, Paul, 1974. Marx and Keynes, Merlin, London.

Miksch, Leonhard, 1930. 'Zusammenbruch des kapitalistischen Systems?'. Frankfurter Zeitung, 75 (610), Sunday, 17 August, 7.

Muhs Karl, 1934. Spengler und der wirtschaftliche Untergang Europas. Junker und Dunnhaupt, Berlin.

Muhs, Karl, 1931. 'Das Gesetz der fallenden Profitrate und die Zusammenbruchstendenz des Kapitalismus'. *Jahrbuch für Nationalökonomie und Statistik*, 135 (1), July, 9, 13-14.

Neisser, Hans, 1931. 'Das Gesetz der fallenden Profitrate als Krisen- und Zusammenbruchsgesetz', *Die Gesellschaft*, 8 (1), 72-85.

Oppenheimer, Franz, 1930-1931. Review of *Das Akkumulations- und Zusammenbruchsgetz. Archiv für Rechts- und Wirtschaftsphilosophie*, 24, 402-406.

Otto, Hans, 1929. 'Zusammenbruch des Kapitalismus?'. *Rote Revue: Sozialistische Monatsschrift*, 8 (12), August, 388-392.

Pannekoek, Anton, 1934. 'The theory of the collapse of capitalism'. *Capital and Class*, 1, 1977, 59-81.

Preiser, Erich, 1964. 'Franz Oppenheimer: Gedenkrede zur 100. Wiederkehr seines Geburtstages', in *Franz Oppenheimer zum Gedächtnis*, Frankfurter Universitätsreden 35, Frankfurt am Main 11-25.

Rees, John, 1998. *The algebra of Revolution: The dialectic and the classical Marxist Tradition*. Routledge, London.

Salvadori, Massimo, 1979. *Karl Kautsky and the socialist revolution 1880-1938*. New Left Books, London.

Scheele, Jürgen, 1999. Zwischen Zusammenbruchsprognose und Positivismusverdikt: Studien zur politischen und intellektuellen Biographie Henryk Grossmanns (1881-1950). Lang, Frankfurt am Main.

Schmidt, Conrad, 1929. 'Zusammenbruchstheorie'. Sozialistische Monatshefte, 35, 638-641.

Schorske, Carl, 1983. *German Social Democracy, 1905-1917: The development of the great schism.* Harvard University Press, Harvard.

Shepard, Stephen B., 1997. 'The new economy: What it really means'. *BusinessWeek*, 17 November, http://www.businessweek.com/1997/46/b3553084.htm.

Sternberg, Fritz, 1926. Der Imperialismus. Verlag Neue Kritik, Frankfurt, 1971.

Sternberg, Fritz, 1930. Eine Unwältzung der Wissenschaft? Kritik des Buches von Henryk Grossmann 'Das Akkumulations- und Zusammenbruchsgesetz des kapitalistischen System'. Zugleich eine positive Analyse des Imperialismus, Prager, Berlin.

Tazerout, Mohan, 1932a. 'Théorie économique et sociologie économique'. *Revue Internationale de Sociologie*, 40 (5-6), May-June, 303-320.

Tazerout, Mohan, 1932b. 'Politique ou économique'. *Revue Internationale de Sociologie*, 40 (11-12), November-December, 613-619.

Universität Frankfurt am Main, 1932. Verzeichnis der Vorlesungen Sommer-Halbjahr 1932 und Personalverzeichnis. Verlag Universitätsbuchhandlung Blazek u. Bergmann, Frankfurt am Main.

Varga, Eugen, 1930. 'Akkumulation und Zusammenbruch des Kapitalismus'. *Unter dem Banner des Marxismus*, 4 (1), pp. 60-95.

Vogel, Emanuel Hugo, 1931. Review of *Das Akkumulations- und Zusammenbruchsgetz*. *Vierteljahresschrift für Sozial und Wirtschaftschaftsgeschichte*, 23, 389-391.

Yaffe, David, 1973. 'The Marxian theory of crisis, capital and the state'. *Economy and Society* 2, 186-232.